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SAN FRANCISCO

Academic Divisions of the University
Arthur A. Dugoni School of Dentistry
Benerd College
College of the Pacific (Arts and Sciences)
Conservatory of Music
Eberhardt School of Business
Graduate School
McGeorge School of Law
School of Engineering and Computer Science
School of Health Sciences
School of International Studies
Thomas J. Long School of Pharmacy

Accreditation
University of the Pacific is accredited by the Accrediting Commission for WASC Senior College and University Commission (WSCUC), located at 985 Atlantic Ave., Suite 100, Alameda, CA 94501; (610)748-9001.

University Campuses
Procedures, rules, regulations, services, tuition, etc. vary on the three campuses of University of the Pacific. This catalog states those for the schools and colleges listed in this catalog. The university reserves the right to change fees, modify its services or change its programs at any time and without prior notice being given.

Statement of Non-discrimination
Pacific does not discriminate on the basis of race, color, religion, national origin, ancestry, age, genetic information, sex/gender, marital status, veteran status, sexual orientation, medical condition, pregnancy, gender identity, gender expression or mental or physical disability.

In accordance with the above university policy and in compliance with all applicable laws, all educational services will be provided and all employment decisions (including recruitment, training, compensation, benefits, employee relations, promotions, terminations) will be made without regard to the individual's status protected by law. To the extent provided by law, the university will reasonably accommodate qualified individuals with disabilities that meet the legal standards for documentation, whenever the individual is otherwise qualified to safely perform all essential functions of the position.

This notice is given pursuant to the requirements of Title IX of the Educational Amendments of 1972, Title VII of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973 and amendments and other laws, orders and regulations governing discrimination. University of the Pacific has designated the Director of Human Resources to coordinate the university's efforts to comply with laws, orders and regulations governing discrimination. Any person having a complaint should contact in writing:

Director of Human Resources
University of the Pacific

About University of the Pacific
Pre preparing Our Students: Success After Graduation
University of the Pacific provides a superior, student-centered learning experience that integrates liberal arts and professional education to prepare students for lasting achievement and responsible leadership in their careers and communities.

At six months after graduation, more than 90 percent of class of 2019 survey respondents reported being employed or accepted to a graduate or professional school, completing a post-graduate internship or fellowship, or serving in a military or community service experience. In 2019, Pacific ranked No. 7 for graduation rate among among similar-sized public and private nonprofit colleges in California, according to the U.S. Department of Education Scorecard. The Wall Street Journal and Times Higher Education ranked Pacific No. 21 in the West for 2020 and the 2019 U.S. News & World Report Best Colleges ranking placed Pacific at No. 7 for Best Ethnic Diversity among private California universities.

Looking Back: Our Unique History
University of the Pacific was established in 1851 as California's first chartered institution of higher learning. It was founded by pioneering Methodist ministers and remains the only Methodist-related university in California. Originally located in Santa Clara, the university later moved to San Jose, and in 1924, moved to Stockton making it the first private four-year university in the Central Valley.

An innovator and leader in higher education, Pacific provided California with its first chartered medical school in 1858, its first coeducational campus in 1871, and its first conservatory of music in 1878. It was the nation's first to offer an undergraduate teacher corps program, the first to send an entire class to an overseas campus, the first to establish a Spanish-speaking inter-American college, and the first to offer a four-year graduation guarantee.

Pacific has enjoyed extraordinary stability in administration. Provost Maria Pallavicini currently serves as interim president following the retirement of Pamela A. Eibeck, the university's 24th and first female president. On Nov. 21, 2019, Pacific announced Christopher Callahan was chosen to become the university's 26th president. Callahan was selected after a nationwide search and a unanimous decision by the Board of Regents. His tenure begins July 1, 2020.

Looking Forward: Innovating with the Times
Today, University of the Pacific is a highly ranked national university that remains deeply committed to its personal, student-centered approach. Campuses in Stockton, Sacramento and San Francisco strategically position Pacific in three of California’s, and the nation’s, most important and dynamic markets. The university earns widespread recognition for its deep commitment to teaching and learning, its history of innovation and the accomplishments of its alumni.

Pacific has added more than a dozen new academic programs across its three campuses over the last three years. Once the exclusive homes
to Pacific’s law and dental schools, the Sacramento and San Francisco campuses now reach new students with graduate programs in data science, physician assistant studies, audiology, music therapy, education, public policy and public administration. These programs help address the region’s critical need for leaders in technology, health care, education, government and nonprofit sectors.

In fall 2019, Pacific launched the School of Health Sciences that includes four new programs—accelerated master’s degrees in clinical nutrition, nursing and social work, and a doctor of occupational therapy—as well as existing popular health programs. The university also introduced Benerd College, a merger of the Gladys L. Benerd School of Education and University College, to enhance access to education by providing innovative, flexible online and hybrid educational programs.

Beyond Academics: Pacific’s Community Impact
In addition to academics, Pacific is making a positive community impact across the Northern California region through tens of thousands of hours of public outreach, innovative new programs and the efforts of students, faculty and staff across the university.

For example, the Thomas J. Long School of Pharmacy has provided more than a decade of outreach events through its Mobile Medicare Clinics that have saved more than 8,695 Medicare recipients nearly an estimated total of $8.65 million in prescription drug costs. Since 2010, more than 3,000 of the most vulnerable and underserved in our communities have received health care services through our Virtual Dental Home program, a revolutionary new care delivery system developed by Pacific’s Center for Special Care. And, McGeorge’s legal clinics on important topics, such as immigration law, benefit the community while preparing students through meaningful experiential learning.

Our Schools, Majors and Programs
Pacific’s 11 schools and college on its three campuses offer students their choice of 80-plus programs of study, including 30 graduate programs and 10 accelerated program options. For example, students can go directly into certain professional programs, including pharmacy, dentistry and law, while accelerated programs in business, engineering and education make it possible to earn both undergraduate and graduate degrees in five years.

College of the Pacific (1851)
The College of the Pacific is the oldest and largest academic unit, encompassing 18 departments and 31 majors in the natural sciences, social sciences, humanities, and the fine and performing arts. Based upon its foundation of a rigorous liberal arts curriculum, the College champions experiential learning through undergraduate research and creative activity, fieldwork, internships, and study abroad. The College prepares graduating students to command a broad perspective in their professional careers, ready to assume the responsibilities of leadership.

Conservatory of Music (1878)
Pacific’s Conservatory of Music has been delivering an outstanding music education for more than 140 years. Degree programs are offered in performance, composition, jazz, education, music industry studies, music therapy and history. Conservatory faculty artists/scholars provide a rigorous and supportive learning environment. Students have access to a recording studio and technology and composition labs. Seminars and master classes with accomplished alumni and visiting artists along with numerous performance and other experiential opportunities help prepare graduates for professions in music.

Arthur A. Dugoni School of Dentistry (1896)
The nationally renowned Arthur A. Dugoni School of Dentistry, named in honor of its dean of 28 years, is committed to providing a world-class dental education for its students and comprehensive, affordable patient care for adults and children. The Dugoni School is highly regarded for its humanistic model of education that respects the dignity of each individual and for innovation in dental curriculum, including comprehensive patient care and competency-based education. Its programs include an accelerated year-round pre-doctoral DDS program that enables students to complete four academic years of instruction in three calendar years and a high-demand Master of Physician Assistant Studies program.

McGeorge School of Law (1924)
McGeorge educates lawyers for large and small law firms, government agencies and corporate legal departments around the world. McGeorge’s success is built on its distinguished faculty, high-quality students, committed and involved alumni, and beautiful, spacious campus with state-of-the art classrooms and student facilities. McGeorge is a dynamic law school that is changing and growing to meet the challenges of the global economy and to educate the lawyers of the future.

Benerd College (1924)
Benerd College, a merger of the Gladys L. Benerd School of Education and University College, is Pacific’s home for professional and continuing education. Students in Benerd College are prepared to deliver thoughtful, reflective, caring and collaborative services to diverse populations. The College offers relevant learning opportunities, flexible pricing and accessible program delivery to meet the needs of both the K–12 education community and adults across the region looking to advance their education and training.

Thomas J. Long School of Pharmacy (1955)
The Thomas J. Long School of Pharmacy is named in honor of the financial commitment of the Thomas J. Long Foundation and the Long family. The School offers a three-year accelerated pharmacy program. The School is committed to creating a leadership focused, success-centered environment for its diverse student body. Students are empowered to succeed through meaningful, experiential learning in state-of-the-art laboratories. The School’s programs have received continuous national accreditation.

Graduate School (1956)
The Graduate School collaborates with University of the Pacific’s academic schools and colleges to offer more than 30 master’s, doctoral, and graduate certificate programs, serving graduate students on Pacific’s Stockton, San Francisco and Sacramento campuses. The School serves as the central, student-centered resource for graduate admission, education and services at the university and works to promote and support the success and development of Pacific’s diverse graduate population.

School of Engineering and Computer Science (1958)
The School of Engineering and Computer Science empowers its students to solve problems by developing their own projects and working alongside professors on contemporary research. The School's faculty take each student's education personally and are committed to mentoring them both inside and outside of the classroom. With its distinguished cooperative education program, students also get to "learn and earn" through a paid professional internship, built right into the curriculum, with one of the School's 200-plus industry partners worldwide.

Eberhardt School of Business (1977)
The Eberhardt School of Business was renamed in 1995 in recognition of the Eberhardt family’s endowed gifts. Fully accredited by the Association to Advance Collegiate Schools of Business, the School boasts a $3 million Eberhardt Student Investment Fund, a dedicated Career Management Center, top-rated faculty, state-of-the-art classroom technology, and exceptional experiential learning opportunities. The School offers valuable leadership development and business resources through its centers and institutes, including the Center for Business and Policy Research, the Center for Entrepreneurship, the Westgate Center for Leadership and Management Development and the Institute for Family Business.

School of International Studies (1987)
A school within the College of the Pacific, the School of International Studies is devoted to the interdisciplinary study of international affairs. International, interdisciplinary and intercultural immersion, acquisition of at least one second language and at least a semester of study abroad prepare students to succeed in a variety of professions in industry, government, not-for-profit organizations and educational institutions. The School’s programs help students develop strong analytical reasoning ability and written and oral communication skills while building intercultural competence and personal confidence. Its students are frequent recipients of prestigious fellowships.

School of Health Sciences (2020)
Building on Pacific’s long-standing reputation for preparing health care professionals, the new School of Health Sciences meets the demands of a growing industry. New accelerated master’s degree programs in clinical nutrition, nursing and social work and a doctor of occupational therapy join existing popular programs in athletic training, audiology, physical therapy, physician assistant studies and speech-language pathology, with many offered in flexible formats. Housed at our Sacramento Campus, the new School of Health Sciences also includes programs at the San Francisco and Stockton campuses.

Academic Calendar

- Quarter Programs (p. 4)
- Semester Programs (p. 4)
- Semester Law Programs (p. 4)
- Trimester Programs (p. 4)

Quarter Programs
Arthur A. Dugoni School of Dentistry
Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

Semester Programs
Arthur A. Dugoni School of Dentistry
Dental Hygiene

Benerd College
All Programs

College of the Pacific
All Programs

Conservatory of Music
All Programs

Eberhardt School of Business
All Programs

School of Engineering and Computer Science
All Programs

School of Health Sciences
Athletic Training
Speech-Language Pathology

School of International Studies
All Programs

The Thomas J. Long School of Pharmacy
Pre-Pharm

Semester Law Programs

McGeorge School of Law
All Programs

Trimester Programs

School of Health Sciences
Master of Science in Clinical Nutrition (Sacramento)
Master of Science in Nursing (Sacramento)
Master of Physician Assistant Studies (Sacramento)
Master of Social Work (Sacramento)
Doctor of Audiology (San Francisco)
Doctor of Occupational Therapy (Sacramento)
Doctor of Physical Therapy (Stockton)

The Thomas J. Long School of Pharmacy
Pharmaceutical and Chemical Sciences
PharmD

The calendar on this page is for the following programs.

Arthur A. Dugoni School of Dentistry
Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

2020-2021
Summer 2020 Quarter

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<tr>
<td>Classes Begin</td>
<td>July 13</td>
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<tr>
<td>Labor Day Holiday</td>
<td>September 7</td>
</tr>
<tr>
<td>Last day to add classes (enrichment courses only)</td>
<td>September 21</td>
</tr>
<tr>
<td>*Last day to drop classes without record of enrollment</td>
<td>September 21</td>
</tr>
<tr>
<td>Study Day</td>
<td>September 22</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>September 23 - 25</td>
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<tr>
<td>Autumn Student Break</td>
<td>September 28 - October 2</td>
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<tr>
<td>Grades Due</td>
<td>September 30</td>
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Autumn 2020 Quarter

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<th>Date(s)</th>
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<td>Classes Begin</td>
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<tr>
<td>Thanksgiving Holiday Break</td>
<td>November 26 - 27</td>
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<tr>
<td>Last day to add classes (enrichment courses only)</td>
<td>December 14</td>
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<tr>
<td>*Last day to drop classes without record of enrollment</td>
<td>December 14</td>
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<tr>
<td>Study Day</td>
<td>December 15</td>
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<tr>
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<td>-------------------------------------------</td>
<td>------------------</td>
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<td>December 21 - January 1</td>
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<td><strong>Grades Due</strong></td>
<td>January 6</td>
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<tr>
<td><strong>Winter 2021 Quarter</strong></td>
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<tr>
<td><strong>Description</strong></td>
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<tr>
<td>Classes Begin</td>
<td>January 4</td>
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<tr>
<td>Martin Luther King Jr. Holiday</td>
<td>January 18</td>
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<tr>
<td>President’s Day Holiday</td>
<td>February 15</td>
</tr>
<tr>
<td>Last day to add classes (enrichment courses only)</td>
<td>March 15</td>
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<tr>
<td>*Last day to drop classes without record of enrollment</td>
<td>March 15</td>
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<tr>
<td>Study Day</td>
<td>March 16</td>
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<td>Final Examination Period</td>
<td>March 17 - 19</td>
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<tr>
<td>Spring Student Break</td>
<td>March 22 - 26</td>
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<td>Grades Due</td>
<td>March 24</td>
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<tr>
<td><strong>Spring 2021 Quarter</strong></td>
<td></td>
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<tr>
<td><strong>Description</strong></td>
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</tr>
<tr>
<td>Classes Begin</td>
<td>March 29</td>
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<td>Memorial Day Holiday</td>
<td>May 31</td>
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<tr>
<td>Last day to add classes (enrichment courses only)</td>
<td>June 7</td>
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<tr>
<td>*Last day to drop classes without record of enrollment</td>
<td>June 7</td>
</tr>
<tr>
<td>Study Day</td>
<td>June 8</td>
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<tr>
<td>Final Examination Period</td>
<td>June 9 - 11</td>
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<tr>
<td>Commencement</td>
<td>June 13</td>
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<tr>
<td>Summer Student Break</td>
<td>June 14 - July 9</td>
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<td>Grades Due</td>
<td>June 16</td>
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<td><strong>2021-2022 Summer 2021 Quarter</strong></td>
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<td><strong>Description</strong></td>
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<tr>
<td>Matriculation Week</td>
<td>July 6 - 9</td>
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<tr>
<td>Classes Begin</td>
<td>July 12</td>
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<tr>
<td>Labor Day Holiday</td>
<td>September 6</td>
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<tr>
<td>Last day to add classes (enrichment courses only)</td>
<td>September 20</td>
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<tr>
<td>*Last day to drop classes without record of enrollment</td>
<td>September 20</td>
</tr>
<tr>
<td>Study Day</td>
<td>September 21</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>September 22 - 24</td>
</tr>
<tr>
<td>Autumn Student Break</td>
<td>September 27 - October 1</td>
</tr>
<tr>
<td>Grades Due</td>
<td>September 29</td>
</tr>
<tr>
<td><strong>Autumn 2021 Quarter</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td></td>
</tr>
<tr>
<td>Classes Begin</td>
<td>October 4</td>
</tr>
<tr>
<td>Thanksgiving Holiday Break</td>
<td>November 25 - 26</td>
</tr>
<tr>
<td>Last day to add classes (enrichment courses only)</td>
<td>December 13</td>
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<tr>
<td>*Last day to drop classes without record of enrollment</td>
<td>December 13</td>
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<tr>
<td>Study Day</td>
<td>December 14</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>December 15 - 17</td>
</tr>
<tr>
<td><strong>Winter 2022 Quarter</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td></td>
</tr>
<tr>
<td>Classes Begin</td>
<td>January 4</td>
</tr>
<tr>
<td>Martin Luther King Jr. Holiday</td>
<td>January 17</td>
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<td>March 22</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>March 23 - 25</td>
</tr>
<tr>
<td>Spring Student Break</td>
<td>March 28 - April 1</td>
</tr>
<tr>
<td>Grades Due</td>
<td>March 30</td>
</tr>
<tr>
<td><strong>Spring 2022 Quarter</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td></td>
</tr>
<tr>
<td>Classes Begin</td>
<td>April 4</td>
</tr>
<tr>
<td>Memorial Day Holiday</td>
<td>May 30</td>
</tr>
<tr>
<td>Last day to add classes (enrichment courses only)</td>
<td>June 13</td>
</tr>
<tr>
<td>*Last day to drop classes without record of enrollment</td>
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<tr>
<td>Study Day</td>
<td>June 14</td>
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<td>Final Examination Period</td>
<td>June 15 - 17</td>
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<tr>
<td>Commencement</td>
<td>June 19</td>
</tr>
<tr>
<td>Summer Student Break</td>
<td>June 20 - July 15</td>
</tr>
<tr>
<td>Grades Due</td>
<td>June 22</td>
</tr>
</tbody>
</table>

* Dropping core curriculum courses is only possible as part of a complete withdrawal from the university.

**The calendar on this page is for the following programs.**

Arthur A. Dugoni School of Dentistry
Dental Hygiene

Benerd College
All Programs

College of the Pacific
All Programs

Conservatory of Music
All Programs

Eberhardt School of Business
All Programs

School of Engineering and Computer Science
All Programs

School of Health Sciences
Athletic Training
Speech-Language Pathology

School of International Studies
All Programs
The Thomas J. Long School of Pharmacy
Pre-Pharm

Fall 2020

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s)</th>
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</thead>
<tbody>
<tr>
<td>Orientation for New Freshmen and Transfer Students</td>
<td>Various Dates (see Pacific Orientation)</td>
</tr>
<tr>
<td>Payment Deadline for Fall 2019</td>
<td>August 1</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>August 24</td>
</tr>
<tr>
<td>Deadline for Application for Graduation Fall 2020 (Graduate)</td>
<td>September 2</td>
</tr>
<tr>
<td># Last Day to Add Classes</td>
<td>September 4</td>
</tr>
<tr>
<td># Last Day for Pass/No Credit or Letter Grade Option</td>
<td>September 4</td>
</tr>
<tr>
<td># Last day to drop classes without record of enrollment</td>
<td>September 4</td>
</tr>
<tr>
<td>Labor Day Holiday</td>
<td>September 7</td>
</tr>
<tr>
<td>Priority deadline, Application for Graduation Spring 2021/Summer 2021 (Graduate)</td>
<td>September 11</td>
</tr>
<tr>
<td>Census Date</td>
<td>October 1</td>
</tr>
<tr>
<td>Fall Student Break</td>
<td>October 2</td>
</tr>
<tr>
<td>Spring 2021 Schedule of Classes available Online</td>
<td>October 5</td>
</tr>
<tr>
<td>Homecoming (classes in session)</td>
<td>October 9 - 11</td>
</tr>
<tr>
<td># Advising for Spring 2020 Registration for continuing students</td>
<td>October 12 - 30</td>
</tr>
<tr>
<td>Last Day for Pro-Rated Refund</td>
<td>October 15</td>
</tr>
<tr>
<td>Last day to Withdraw</td>
<td>October 29</td>
</tr>
<tr>
<td>* Early Registration Appointments begin date for continuing students Spring 2020</td>
<td>November 2</td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td>November 25-27</td>
</tr>
<tr>
<td>Classes Resume</td>
<td>November 30</td>
</tr>
<tr>
<td>Classes End</td>
<td>December 4</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>December 7 - 11</td>
</tr>
<tr>
<td>Deadline for Application for Graduation Spring 2021/Summer 2021 (Graduate)</td>
<td>December 11</td>
</tr>
<tr>
<td>Deadline to file Petition to Walk in May 2021 (Summer 2021 Graduate)</td>
<td>December 11</td>
</tr>
</tbody>
</table>

Spring 2021

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Deadline for Spring 2021</td>
<td>January 1</td>
</tr>
<tr>
<td>New International Student Orientation</td>
<td>TBD</td>
</tr>
<tr>
<td>New Student/Transfer Orientation and Registration</td>
<td>TBD</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>January 11</td>
</tr>
<tr>
<td>Martin Luther King Jr. Holiday</td>
<td>January 18</td>
</tr>
<tr>
<td># Last Day to Add Classes</td>
<td>January 22</td>
</tr>
<tr>
<td># Last Day for Pass/No Credit or Letter Grade Option</td>
<td>January 22</td>
</tr>
<tr>
<td># Last day to drop classes without record of enrollment</td>
<td>January 22</td>
</tr>
<tr>
<td>President's Day Holiday</td>
<td>February 15</td>
</tr>
<tr>
<td>Census Date</td>
<td>March 1</td>
</tr>
<tr>
<td>Last Day for Pro-Rated Refund</td>
<td>March 4</td>
</tr>
<tr>
<td>Summer 2021/Fall 2021 Schedule of Classes Available Online</td>
<td>March 8</td>
</tr>
<tr>
<td>Spring Break</td>
<td>March 8 - 12</td>
</tr>
</tbody>
</table>

Classes resume                                      | March 15                 |
* Advising for Summer/Fall 2021 for continuing students | March 15 - April 2        |
Last day to withdraw                                | March 25                 |
* Summer 2021 registration opens for continuing students (no appointments) | March 29               |
* Early Registration Appointments begin date for continuing students - Fall 2021 | March 29                |
Deadline for Application for Graduation Fall 2021/ Spring 2022/Summer 2022 (Undergraduate) | April 2                 |
Classes End                                         | April 27                 |
Study Day                                           | April 28                 |
Final Examination Period                            | April 29 - May 5         |
Commencement                                        | May 8                    |

* Advisers should arrange to be available on this day.
* Limited to Currently enrolled students.

The calendar on this page is for the following programs.

McGeorge School of Law
All Programs

Fall 2020 & Spring 2021 Registration Dates

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Registration Begins (Seniors, LLM, M.S.L., MPA, MPP &amp; JSD)</td>
<td>Tuesday, June 16, 2020</td>
</tr>
<tr>
<td>Fall Registration Begins (Continuing Students)</td>
<td>Wednesday, June 17, 2020</td>
</tr>
<tr>
<td>Spring Registration Begins (Seniors, LLM, M.S.L., MPA, MPP &amp; JSD)</td>
<td>Thursday, June 18, 2020</td>
</tr>
<tr>
<td>Spring Registration Begins (Continuing Students)</td>
<td>Friday, June 19, 2020</td>
</tr>
<tr>
<td>(Schedules distributed during New Student Check In at Orientation and available on InsidePacific)</td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester 2020

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LLM Orientation Begins</td>
<td>Thursday, August 6, 2020</td>
</tr>
<tr>
<td>First-Year JD (Part-Time) and MSL Orientation Begins</td>
<td>Monday, August 10, 2020</td>
</tr>
<tr>
<td>First-Year JD (Full-Time) Orientation Begins</td>
<td>Tuesday, August 11, 2020</td>
</tr>
<tr>
<td>MPA and MPP First Year Orientation Begins</td>
<td>Friday, August 14, 2020</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Monday, August 17, 2020</td>
</tr>
<tr>
<td>Add/Drop Deadline (Last day without administrative approval)</td>
<td>Monday, August 24, 2020</td>
</tr>
<tr>
<td>Labor Day (holiday - no classes)</td>
<td>Monday, September 7, 2020</td>
</tr>
<tr>
<td>Study Day (classes are made up on the last Tuesday of semester)</td>
<td>Friday, October 2, 2020</td>
</tr>
</tbody>
</table>
Last day of Classes (Friday classes only-makes up Study Day) Tuesday, November 24, 2020

Thanksgiving Recess Wednesday, Thursday, Friday, November 25-27, 2020

Reading Period Saturday, November 28-Tuesday, December 1, 2020

Final Examination Period Wednesday, December 2- Wednesday, December 16, 2020

Winter Break Thursday, December 17, 2020 - Friday, January 1, 2021

Spring Semester 2021

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersession</td>
<td>Monday, January 4 - Friday, January 8, 2021</td>
</tr>
<tr>
<td>LLM, MPP, MPA, &amp; JSD Orientation Begins</td>
<td>Thursday, January 7, 2021</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Monday, January 11, 2021</td>
</tr>
<tr>
<td>Martin Luther King Day (holiday)</td>
<td>Monday, January 18, 2021</td>
</tr>
<tr>
<td>Add/Drop Deadline (Last day to add/drop classes without administrative approval)</td>
<td>Tuesday, January 19, 2021</td>
</tr>
<tr>
<td>President’s Day (holiday)</td>
<td>Monday, February 15, 2021</td>
</tr>
<tr>
<td>Study Day (classes are made up on the last Tues. of the semester)</td>
<td>Friday, February 26, 2021</td>
</tr>
<tr>
<td>Spring Break</td>
<td>Monday, March 22 - Friday, March 26, 2021</td>
</tr>
<tr>
<td>Last day of Classes (Monday classes-makes up President’s Day)</td>
<td>Monday, April 26, 2021</td>
</tr>
<tr>
<td>Friday Classes Only (makes up Study Day)</td>
<td>Tuesday, April 27, 2021</td>
</tr>
<tr>
<td>Reading Period</td>
<td>Wednesday, April 28 - Friday, April 30, 2021</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>Saturday, May 1 - Wednesday, May 12, 2021</td>
</tr>
<tr>
<td>Commencement</td>
<td>Saturday, May 22, 2021</td>
</tr>
</tbody>
</table>

Summer Sessions 2021

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Registration Begins</td>
<td>Tuesday, March 16, 2021</td>
</tr>
<tr>
<td>Memorial Day (holiday)</td>
<td>Monday, May 24, 2021</td>
</tr>
</tbody>
</table>

Session 1 Tuesday, May 25 – Saturday, May 29, 2021

Session 2 Monday, May 31 – Saturday, June 26, 2021

Session 3 Monday, June 28 - Saturday, July 31, 2021

Fourth of July (holiday) Friday, July 3, 2021

For information regarding tuition refunds, please refer to the McGeorge School of Law Refund Policy: https://www.mcgeorge.edu/policies/withdrawal-and-refund-policy

The calendar on this page is for the following programs.

School of Health Sciences
Master of Science in Clinical Nutrition (Sacramento)  
Master of Science in Nursing (Sacramento)  
Master of Physician Assistant Studies (Sacramento)  
Master of Social Work (Sacramento)  
Doctor of Audiology (San Francisco)  
Doctor of Occupational Therapy (Sacramento)  
Doctor of Physical Therapy (Stockton)

The Thomas J. Long School of Pharmacy
Pharmaceutical and Chemical Sciences
PharmD

Fall 2020

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Registration Fall 2019 - Incoming 1st year students</td>
<td>June 10 - September 4</td>
</tr>
<tr>
<td>Early Registration Fall 2019 - Incoming graduate students</td>
<td>June 10 - September 4</td>
</tr>
<tr>
<td>Payment deadline for Fall 2019</td>
<td>August 1</td>
</tr>
<tr>
<td>Advanced Pharmacy Practice Experiences</td>
<td>August 17 - December 18</td>
</tr>
<tr>
<td>Orientation</td>
<td>August 19 - 21</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>August 24</td>
</tr>
<tr>
<td>Labor Day Holiday</td>
<td>September 7</td>
</tr>
<tr>
<td>Last Day to Add Classes</td>
<td>September 4</td>
</tr>
<tr>
<td>Last Day to Drop Classes without record of enrollment</td>
<td>September 4</td>
</tr>
<tr>
<td>Census Date</td>
<td>October 1</td>
</tr>
<tr>
<td>Pharmacy Spring 2021 Schedule of Classes Available Online</td>
<td>October 5</td>
</tr>
<tr>
<td>Last Day for Pro-rated refund</td>
<td>October 15</td>
</tr>
<tr>
<td>Advising for Pharmacy Spring 2020</td>
<td>October 12 - 16</td>
</tr>
<tr>
<td>Early Registration Pharmacy Spring 2020</td>
<td>October 19 - January 15</td>
</tr>
<tr>
<td>Last Day to Withdraw</td>
<td>October 29</td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td>November 25 - 27</td>
</tr>
<tr>
<td>Classes Resume</td>
<td>November 30</td>
</tr>
</tbody>
</table>
Classes End: December 4
Final Examination Period: December 7 - 14

**Spring 2021**

<table>
<thead>
<tr>
<th>Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Payment deadline for Pharmacy Spring 2021</td>
<td>December 1</td>
</tr>
<tr>
<td>Deadline for Application for Graduation Spring 2021/Summer 2022 (Graduate)</td>
<td>December 11</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>January 4</td>
</tr>
<tr>
<td>Advanced Pharmacy Practice Experiences</td>
<td>January 4 - May 7</td>
</tr>
<tr>
<td>Last Day to Add Classes</td>
<td>January 15</td>
</tr>
<tr>
<td>Last Day to Drop Classes without record of enrollment</td>
<td>January 15</td>
</tr>
<tr>
<td>Martin Luther King Jr. Holiday</td>
<td>January 18</td>
</tr>
<tr>
<td>President's Day Holiday</td>
<td>February 15</td>
</tr>
<tr>
<td>Pharmacy Summer 2021 Schedule of Classes Available Online</td>
<td>February 15</td>
</tr>
<tr>
<td>* Advising for Pharmacy Summer 2021</td>
<td>February 22 - 26</td>
</tr>
<tr>
<td>Last Day for Pro-Rated Refund</td>
<td>February 23</td>
</tr>
<tr>
<td>Census Date</td>
<td>March 1</td>
</tr>
<tr>
<td>* Early Registration for Pharmacy Summer 2020</td>
<td>March 1 - May 7</td>
</tr>
<tr>
<td>Last day to Withdraw</td>
<td>March 11</td>
</tr>
<tr>
<td>Deadline for Application for Graduation Fall 2021/ Spring 2022/Summer 2022 (Professional)</td>
<td>April 2</td>
</tr>
<tr>
<td>Classes End</td>
<td>April 6</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>April 8 - 15</td>
</tr>
</tbody>
</table>

**Summer 2021**

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Payment deadline for Pharmacy Summer 2021</td>
<td>April 1</td>
</tr>
<tr>
<td>Deadline for Application for Graduation Fall 2020/ Spring 2021/Summer 2021 (Professional)</td>
<td>April 2</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>April 26</td>
</tr>
<tr>
<td>Last Day to Add Classes</td>
<td>May 7</td>
</tr>
<tr>
<td>Last Day to Drop Classes without record of enrollment</td>
<td>May 7</td>
</tr>
<tr>
<td>Commencement</td>
<td>May 15</td>
</tr>
<tr>
<td>Pharmacy Fall 2021 Schedule of Classes Available Online</td>
<td>May 17</td>
</tr>
<tr>
<td>Memorial Day Holiday</td>
<td>May 31</td>
</tr>
<tr>
<td>* Advising for Pharmacy Fall 2021 Term</td>
<td>May 25 - June 4</td>
</tr>
<tr>
<td>* Early Registration for Pharmacy Fall 2021</td>
<td>June 9 - September 3</td>
</tr>
<tr>
<td>Last Day for Pro-Rated Refund</td>
<td>June 15</td>
</tr>
<tr>
<td>Last Day to Withdraw</td>
<td>June 28</td>
</tr>
<tr>
<td>Fourth of July Holiday Observed</td>
<td>July 5</td>
</tr>
<tr>
<td>Classes End</td>
<td>July 27</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>July 29 - August 5</td>
</tr>
<tr>
<td>Census Date</td>
<td>September 1</td>
</tr>
</tbody>
</table>

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**Academic Regulations**

**Graduate**

**Conservatory of Music**
Music Therapy

**School of Engineering and Computer Science**
Data Science

**School of Health Sciences**
Audiology

**Professional**

**Arthur A. Dugoni School of Dentistry**
All regulations apply to the DDS and IDS Programs. Not all regulations apply to the Certificate or Dental Residency Programs. For more information, contact your program.

**Undergraduate**

**Arthur A. Dugoni School of Dentistry**
Dental Hygiene

The Academic Regulations on this page are for the following graduate programs on the San Francisco campus.

**Conservatory of Music**
Music Therapy

**School of Engineering and Computer Science**
Data Science

**School of Health Sciences**
Audiology

- Academic Standing (p. 9)
- Acquisition of Graduate Credit as an Undergraduate (p. 9)
- Changing Degree Programs (p. 10)
- Classification of Graduate Students (p. 10)
- Clinical Competency (p. 10)
- Commencement (p. 10)
- Continuous Registration (p. 10)
- Course Audits (p. )
- Course Loads (p. 11)
- Credit by Examination for Graduate Courses (p. )
- Credit Limitations (p. 11)
- Double-Listed Courses (p. 12)
- Grade Point Average (p. 12)
- Grading Policies (p. 12)
- Leave of Absence (p. 12)
- Registration (p. 13)
- Registration - Individualized Study (p. 13)
- Repeating of Courses and Grade Replacement Policy (p. 13)
- Requirements for the Master's degree (p. 13)
- Requirements for Terminal Degree Programs (Ph.D. and Ed.D.) (p. 13)
- Residence and Time Limits (p. 14)
- Thesis and Dissertations (p. 15)
- Thesis or Dissertation Committee (p. 14)
- Transfer Credit (p. 15)
All graduate students are urged to read these general regulations carefully. Failure to be familiar with this section does not excuse a student from the obligation to comply with all the described regulations.

Although every effort has been made to ensure the accuracy of this catalog, students are advised that the information contained in it is subject to change. The University reserves the right to modify or change the curriculum, admission standards, course content, degree requirements, regulations, tuition or fees at any time without prior notice. The information in this catalog is not to be regarded as creating a binding contract between the student and the school.

Academic Standing
All graduate students are expected to make satisfactory progress toward the academic degree for which they were admitted. Graduate students are required to maintain a cumulative minimum grade point average (GPA) of 3.0 and earn a grade of P (Passing) on all course work that does not affect grade point average to remain in good standing.

Minimum grade requirement
Only grades of A, B, C, and P are acceptable for graduate credit. N is considered acceptable with respect to the minimum grade requirement. Grades of C-, D, F, or NC (No Credit), are not accepted for graduate credit at University of the Pacific.

Students in a credential-only program must maintain a GPA of 2.5 and have a cumulative GPA of 2.5 or higher to clear their credential. Students in a basic teacher education credential only program who wish to do directed teaching in an internship must maintain a 3.0 GPA.

Students enrolled in the Master of Physician Assistant Studies, the Master of Laws (LLM), or the Juris Scientiae Doctor (JSD) programs, should refer to the program’s policies for academic standing. For all other students, academic standing is determined at the end of each term (or after completion of six units during summer) to be one of the following:

- good standing
- probation
- dismissal.

The criteria for these academic standings are based upon a combination of cumulative Pacific GPA and the term GPA. Criteria for the different academic standings are outlined below:

Probation:
Any graduate student who has completed six (6) or more course units of study and has a Pacific cumulative GPA below 3.0 or has earned a grade of NC in two separate terms is placed on academic probation. To be removed from probation, a student must achieve a cumulative 3.0 GPA (or higher GPA if required by the program) and not receive any grades of NC within completion of the next nine (9) units. The courses included in the nine units must be approved by the program faculty for degree-seeking students.

A student who is removed from probation is not eligible for placement on probation.

Dismissal:
Students will be dismissed from their graduate program if either of the following apply: (1) a student on probation fails to be removed from probation after the nine unit probationary period; (2) the GPA of a student who has previously been on probation falls below 3.0 or the student receives a grade of NC in any class.

A dismissed student may appeal for reconsideration and possible reinstatement on probation, within the same school. Students who wish to appeal must follow procedures outlined in each program’s policy. If no program-specific procedure is outlined, students must submit a written petition to the Dean of Graduate School. Enrollment eligibility during appeals process is determined at the program level.

A dismissed student may not enroll in any graduate program for a minimum of 12 consecutive months (waiting period). A student must reapply, meet current requirements for degree-seeking students, and be accepted by the University and the program to enroll for graduate studies following the waiting period. Schools or programs may develop additional procedures or requirements related to re-enrollment following dismissal. Some schools or programs may not permit reinstatement. Please see the appropriate school or program sections of the catalog for specific requirements.

In addition to the academic standing, other academic and non-academic reasons can result in a student’s dismissal from a graduate program. Refer to each school’s code of student conduct/responsibility or any program-specific guidelines. In the absence of a school-specific code of conduct, the Honor Code in Tiger Lore applies.

Acquisition of Graduate Credit as an Undergraduate
Undergraduate students meeting all of the following requirements may petition the Dean of the Graduate School by submitting the Application to Receive Graduate Credit as an Undergraduate Student to open a graduate transcript (i.e., receive credit in graduate-level courses toward a graduate degree) before the last day to add classes of the last semester as an undergraduate:

- The student must be within 9 units of completing the baccalaureate degree.
- The student must be in the last two semesters of the baccalaureate degree at University of the Pacific.
- An Evaluation of Degree Requirements form has been submitted to the Office of the Registrar prior to the last day to add classes. This must be submitted before or with the Graduate Credit as Undergraduate application. (This serves as permission by the undergraduate advisor for the student to take graduate-level coursework.
- The student has been accepted into a graduate or credential program.

Graduate credit can be received under the following guidelines:

- The total number of graduate credits for the semester, including coursework completed at other schools, cannot exceed the maximum graduate course load for the department providing the graduate coursework.
- The tuition rate for the entire semester is at the undergraduate rate.
- No more than 12 units (16 units for student teachers) can be transferred from an undergraduate transcript into a graduate degree program.
- Graduate credit will only be granted for graduate-level (200 numbered) courses and above.
• Units cannot be retroactively transferred from an undergraduate transcript to a graduate program. Approvals for graduate credit must be obtained prior to the last day to add classes of the student’s last semester.
• Coursework will not count toward graduate credit if the student fails to complete the bachelor’s degree by the second semester of taking graduate courses.
• Graduate courses completed under this agreement will not be recorded by the Registrar as graduate coursework until the baccalaureate degree has been completed and matriculation into the graduate program has commenced. Grades from these courses will not be accounted in the undergraduate grade point average, unless the bachelor’s degree is not completed.
• Students who do not complete the bachelor’s degree by the second term when graduate courses are taken cannot start a graduate program and cannot take additional graduate coursework until the bachelor’s degree has been awarded.
• Students bear the responsibility of assuring graduate credits earned as an undergraduate student will transfer to or be counted as post-baccalaureate units by other universities or school districts.

Students are not classified as graduate students until they register for and begin graduate courses following the receipt of their bachelor’s degree.

Changing Degree Programs
Graduate students are admitted to University of the Pacific for a specific degree program. With the exception of programs overseen by the same admission committee, if a student wishes to change a degree program, the student must submit a new application for admission, pay the application fee, and comply with all admission requirements. No more than nine (9) units of coursework taken in non-degree seeking, certificate-seeking, or previous degree-seeking status may be applied to any Master’s degree and no more than 12 units may be applied to any doctoral degree. Students who wish to change degree programs overseen by the same admission committee may do so by using the Change of Program form available in the Registrar’s Office.

Classification of Graduate Students
Full: All students admitted with full graduate standing.

Conditional Admission: Students may be admitted to some of the graduate programs on a conditional admission basis. See the Graduate Admission section of this catalog for additional information.

Credential: Students admitted to do post-baccalaureate work that leads toward an initial teaching credential, specialist instruction credential or services credential.

Clinical Competency
Many of the graduate programs offered at the University include experiential coursework. Prior to taking a course that includes an experiential component, students are required to demonstrate that they have the necessary skills, aptitude and competencies to successfully complete the course. Faculty of departments that offer experiential courses have the discretion of denying or terminating enrollment in these courses to students evaluated as not possessing the necessary clinical competencies. Procedures used to assess clinical competency vary across programs. Students may obtain additional information from their Graduate Program Director.

Students who do not demonstrate adequate clinical and experiential competency can be dismissed from a degree program, regardless of academic standing.

Commencement
Master’s degree students who are near completion of degree requirements are eligible to participate in the May commencement exercises under the following conditions.
• A completed Petition to Participate in Graduation Ceremonies has been submitted to the Graduate School by the fall deadline for filing the Application for Graduation form (see Graduate School Calendar). This petition must be signed by the student’s advisor and academic Dean (or Graduate Program Director if appropriate).
• All degree requirements will be met before the end of the summer session of the same year. An approved plan of study that specifies all degree requirements will be completed in time and must be on file in the Graduate School.
• The Master’s degree oral examination, which includes thesis defense or written examination (where applicable), will be successfully completed by the Spring semester deadline for Written/Oral Exam — Thesis/Dissertation Defense.
• The student is in good academic standing.

On a case-by-case basis, special consideration is given for international students who complete degree requirements during the fall semester of the same calendar year. Approved Degree Evaluations must be on file by the spring semester deadline and the student must state they are unable to return to campus to participate in ceremonies in the spring following degree completion.

Doctoral degree students are ineligible to participate in graduation ceremonies until all degree requirements are met and the final dissertation has been approved by the Graduate School. However, on a case-by-case basis, special consideration will be given for international and domestic doctoral students who will complete degree requirements by the end of the fall semester of the same calendar year. Approved programs of study must be on file by the spring semester deadline, and the student’s Graduate Program Director must approve of the request.

Continuous Registration
All graduate students in graduate degree or credential programs must satisfy the Continuous Registration Policy of their respective programs from the time of admission until all degree requirements are met or their status as a degree- or credential-seeking student is terminated. This includes students who are completing preliminary or final examinations, or presenting terminal projects. If degree or credential requirements are completed between terms, the student must have been registered during the preceding term. International students may have additional registration requirements depending on their visa status and should consult with the Office of International Programs and Services to obtain current information.

Continuous registration is intended for students who have completed all required coursework. The Continuous Registration Policy can be met by registering for GRAD 200 (master’s students) or GRAD 300 (doctoral students) through Inside Pacific (https://insidepacific.pacific.edu/cp/home/displaylogin/) at least one semester per academic year (Fall or Spring).

Students enrolled in GRAD 200/GRAD 300 may utilize library facilities, but are not entitled to:
• the use of other University facilities,
• receive a fellowship, assistantship, or financial aid, or
• take course work of any kind at the University of the Pacific.

Students should also be aware that registration in GRAD 200/GRAD 300 may cause existing student loans to come due.

Some programs may require courses other than GRAD 200/GRAD 300 to meet continuous registration requirements. Please consult individual program pages for additional information.

Failure to Meet Continuous Registration Requirements

A graduate student who fails to meet the continuous registration requirements will be inactivated. Students in good academic standing who were inactivated may petition for readmission to their original degree program by submitting a $50 reinstatement fee and the Application to Request Reinstatement to the Graduate School prior to the first day of classes.

Reinstatement will occur to current catalog. If reinstated, the student will be required to meet University and degree program admission and degree requirements that are in effect on the date of reinstatement, not the date of original admission.

Reinstatement requests must be accompanied by a plan for completing the degree within the maximum time allowed (see Residence and Time Limits).

A decision to reinstate a former student must be supported by the student's degree program. The continuous registration requirement does not apply to students on approved leaves of absence (see below).

Course Audits

Graduate courses may be audited only by students admitted to the Graduate School who have the approval of the student’s advisor and of the instructor and dean (or designate) of the academic department where the course is offered. Audits are not available for courses in first-professional programs, unless by written permission of the program's dean. Students auditing a course must pay an audit fee and any special fees associated with the course. Audited courses cannot be retroactively converted to course credit unless officially changed to credit before the “Add Classes” deadline of the semester.

Course Loads

Course load requirements are program-specific. The following are guidelines for non-lockstep programs. Course loads influence financial aid. The following course load categories correspond to financial aid categories.

• Full Time: 8 or more units per semester
• Half Time: 7 to 4 units per semester
• Less than Half Time: 3 to 1 units per semester

Students with teaching or other assistantships should check with their department for specific guidelines concerning unit requirements. Conditionally admitted students are not eligible for assistantships.

Credit-by-Examination for Graduate Courses

A graduate student in good standing, or a student who has been accepted into one of University of Pacific's graduate programs, may request, or be offered, to take an exam in order to receive "Credit by Examination” (CbE) for one or more courses offered by a graduate program. Departments have the right to designate which of their courses are appropriate for CbE. This policy is subject to the following restrictions.

1. A student may request CbE for a course covering material in which, through independent study, work experience, or work at another institution which was not accepted for transfer credit, the student feels prepared. It is the responsibility of the student to explain how the material was mastered.
2. Students wishing to pursue CbE should not expect preparation support (tutoring, office hours, etc.) beyond a statement of the scope of topic coverage and expectations for passing the exam(s).
3. A student wishing CbE for a course may not attend the class meetings of the course.
4. A student cannot receive CbE for a course which they have previously taken or audited.
5. A student may not get CbE for a course in a structured sequence if the student has received credit for a higher level course in the sequence.
6. A maximum of 9 units total may be earned by a student via CbE and/or transfer credit.

A student wishing to pursue the credit by examination option must:

1. complete the appropriate form from the office of the University Registrar;
2. obtain approval from his or her adviser, and the dean of the school or college offering the course;
3. pay the scheduled service fee.

Successful completion of the examination will be recorded on the transcript with a grade of Pass and will be made a part of the student's academic record. This will occur in the semester in which the exam is taken, or in a subsequent semester as directed by the student’s graduate program, especially in the case where a candidate takes the exam before being a full-time graduate student.

Pending credit for having successfully passed the exam, can be used as justification for prerequisite overrides for courses which require the course to which CbE was earned. Appropriate tuition fees will be assessed.

Credit Limitations

All courses countable for graduate degree credit must be either graduate-level courses (200 or 300 level) or, where allowable, advanced undergraduate courses (100 level). Students taking 100-level courses for graduate credit will be required to complete extra course assignments. A course can be applied toward only one degree objective, unless an exception is approved in writing by the Academic Affairs Committee on Graduate Studies and the Dean of the Graduate School.

Courses not applicable to graduate degrees:

• Lower division undergraduate courses (001-099)
• Courses in which a grade of C- or lower were received. Courses that receive a C- or lower must be repeated
• Courses for the improvement of English language skills of foreign students’
• Directed teaching or prerequisite courses for directed teaching except for the Master of Education degree or the Master of Arts in Special Education degree.

• Physical education activity courses.

• Unclassified Status: No more than 12 units, no matter when they are earned, can be transferred from an “Unclassified” transcript into a graduate program.

• Credit used toward a degree earned at another institution cannot be applied to a graduate degree at University of the Pacific.

### Double-Listed Courses

In order to differentiate graduate and undergraduate responsibilities in double-listed courses (100/200 levels), there must be significant differentiation between the two levels with the graduate level evidencing additional rigor as denoted by higher level student learning outcomes with corresponding assignments and grading criteria. Graduate students must register using the 200-level course number.

### Grade Point Average

The Pacific grade point average is determined by adding the total quality points and by dividing the resultant sum by the total number of quality hours. As a general rule, the ratio is based on the number of letter graded units completed.

### Grading Policies

**Symbols and Definitions**

Graduate students are assigned grades in keeping with the following provisions. Utilization of (+/-) is at the discretion of individual programs.

<table>
<thead>
<tr>
<th>Symbol GPA</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 4.0</td>
<td>Exemplary</td>
</tr>
<tr>
<td>A- 3.7</td>
<td></td>
</tr>
<tr>
<td>B+ 3.3</td>
<td></td>
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<tr>
<td>B 3.0</td>
<td>Satisfactory</td>
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<tr>
<td>B- 2.7</td>
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<tr>
<td>C+ 2.3</td>
<td></td>
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<tr>
<td>C 2.0</td>
<td>Marginal</td>
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<tr>
<td>C- 1.7</td>
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<tr>
<td>D+ 1.3</td>
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</tr>
<tr>
<td>D 1.0</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>F 0.0</td>
<td>Failing</td>
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</tbody>
</table>

**Incomplete work due to extenuating and hardship circumstances which prevent the completion of the work assigned within the regular time of the term. Each incomplete grade assigned must be accompanied with a contract statement agreed to by both instructor and student as to: a) what work remains to be completed, b) how it is to be evaluated, and c) a time indicated for completion within by no later than the following deadlines: for fall semester, by July 1 following; for spring semester, by November 1 following; for summer term, by January 1 following. If work is not completed within these stipulated times, the instructor can indicate a grade in lieu of the F/NC which automatically would be imposed with failure to complete the work. All incompletes must be made up before the last day of the semester in which the student intends to graduate.**

**Title IX regulations also require the university to treat pregnancy, childbirth, false pregnancy, termination of pregnancy, and recovery therefrom as a justification for a leave of absence for so long a period of time as is deemed medically necessary by the student’s physician. Students requesting leave of absence under this provision must submit their request to the Title IX Coordinator, who will initiate the process.**

Counting of the time to the completion of the degree ceases when a leave of absence is granted and resumes when the student re-enrolls to continue the program. A student who returns to the University after an approved leave of absence will not be required to submit an application for readmission.

Unapproved Leaves of Absence may result in the student being required to re-apply to their program. International student should visit the
International Programs and Services to find out how a Leave of Absence may impact their stay or re-entry into the U.S.

Registration
Registration is the means by which an individual officially becomes a student at Pacific. Registrants are further identified by school/college of the University, degree status, classification and major.

All students must register by the last day to add or drop. Students are held accountable to complete every course for which they register. If it is necessary to add or drop a course, the student must complete the appropriate registration transaction by the last day such activity is allowed as published in the University Calendar (http://www.pacific.edu/About-Pacific/Administration/Offices/Office-of-the-Registrar/Calendars/Academic-Calendar.html).

After the add/drop deadline dates has passed (but prior to the end of the term) requests to add or drop courses must be made by special petition to the student's respective school/college.

Requests to drop courses after the term must be made to the Academic Regulations Committee (ARC). In either case, petitions are only approved if it can be shown that the request is warranted due to some special situation or hardship. Courses approved to drop after the deadline appear on the student's transcript with the notation "W" but do not count in the units earned or in the calculation of the grade point average.

Any petitions approved after the deadline dates are subject to a service fee. Tuition and fee refunds are based on the date a withdraw form is initiated in the Office of the Registrar.

Registration - Individualized Study
To register for Individualized Study (Independent Study course, Internships, or Practicum) students must use the Individualized Study Request form. This form is a written contract between students and faculty that specifies the nature of the work to be undertaken and the method of evaluation. The form must have proper approval within the unit and be filed with the Office of the Registrar. An independent study course may not be taken in the same term in which a regular course in the same subject is offered.

Repeating of Courses and Grade Replacement Policy
For courses in which the grade earned is C- or lower, the units are counted for GPA purposes in a student’s degree program, and – if required for the degree – must be repeated. Some departments or programs have established higher grading standards which must be met by students in those programs. All grades earned in courses taken as a graduate student at the University are counted in the cumulative GPA.

Only courses with grades of “B-” or lower can be repeated. Once a course is completed with a grade of B or higher, the graduate student cannot repeat that course or any prerequisites for the course. When a course is repeated, grades from both the original and repeated attempt appear in the official records and transcripts. A course can only be repeated once and programs determine the exact number of courses that can be repeated (up to 25% of courses required for a degree). The grade received in the repeated course is used for calculation of the Pacific grade point average.

Requirements for the Master’s degree
In addition to the requirements above, the following requirements apply specifically to the Master’s degree.

Total Units
Most Master’s programs at University of the Pacific require a minimum of 30 units of approved graduate credit.

Degree Candidacy
Successful completion of 12 units with a cumulative GPA of 3.0 or better.

Grade Point Average
Students must maintain a minimum GPA of 3.0 in all work taken as a graduate student, either at the University of the Pacific or any other institution. See the Grading Policy and Academic Standing sections, in addition to program-specific guidelines. Students enrolled in the Master of Physician Assistant Studies program, should refer to the program’s GPA policies.

Exit Requirements
Comprehensive Examination/Capstone Experience/Creative Project/Thesis
Most programs have a culminating experience. In addition to successful completion of all courses required for graduation, students may be required to pass a comprehensive examination taken during their final semester of enrollment or, if specified by the program, successfully complete a capstone experience or creative project or defend a thesis.

The thesis must be checked for plagiarism and approved by the thesis committee prior to the defense.

Students must be enrolled the semester in which the defense/final examination occurs.

(See individual program sections for more information).

Requirements for Terminal Degree Programs (Ph.D., Ed.D, and JSD)
The goal of terminal degree programs at the University of the Pacific is to provide students with a comprehensive discipline-specific knowledge base and extensive training in the methods of research/creative activity. The programs are designed to encourage students to make contributions that advance their field of expertise.

Students are expected to demonstrate an ability to conduct independent research, and the ability to express thoughts clearly in both verbal and written and/or creative formats. In order to earn a terminal degree, candidates must successfully complete all degree requirements, demonstrate a high level of professional skill and performance in their academic work and their internship experience (if required), and submit a dissertation, acceptable to the student’s committee. Specific program requirements can be found in the appropriate sections of the catalog.

Degree Candidacy
Successful completion of approved candidacy requirements as defined by the degree program (e.g., qualifying scholarly activities or preliminary examinations). Doctoral degree program directors are responsible for written requests of advancement to candidacy when requirements are met, and final approval is the responsibility of the Dean of the Graduate School.
Grade Point Average

Students must maintain a minimum GPA of 3.0 in all work taken as a graduate student, either at the University of the Pacific or any other institution. See the Grading Policy and Academic Standing sections, in addition to program-specific guidelines. Students enrolled in the Juris Scientiae Doctor (JSD) program should refer to the program’s GPA policies.

Presentation of an acceptable Dissertation

In order to be accepted, the doctoral dissertation must be:

1. a significant contribution to the advancement of knowledge and
2. a work of original and primary research.

Final oral examination

When the dissertation is completed, candidates present themselves for the final examination to an examining committee, which consists of the candidate’s advisor (who shall act as chair) and such other examiners as the advisor shall approve. The examination is oral and deals intensively with the field of specialization in which the candidate’s dissertation falls, though it need not be confined to the subject matter of the dissertation. In order to be considered satisfactory, the report of the examining committee must be unanimously favorable.

(See individual program sections for more information).

Residence and Time Limits

The period of residence involves students in a total commitment to their graduate program.

Completion of a minimum of one academic year of “residence work” is required for all graduate programs; i.e., the student must be registered for at least 4 units per semester for two semesters. Two summer sessions of at least 4 units each are considered the equivalent of one-half year of residence.

Time Limits for Master’s Degrees

The requirements for a Master’s degree must be completed within five (5) years subsequent to admission to the program. The five-year period begins with the first semester students are enrolled and is calculated from the date of degree conferral. Credit that is more than five years old will not be counted toward a Master’s degree. Exceptions, provided the courses were completed at University of the Pacific are eligible for revalidation. Courses taken ten or more years prior to the comprehensive examination (terminal degree programs) do not apply towards the graduate degree and must be repeated or revalidated to satisfy the degree requirements.

Individual programs may have additional residency and time limit requirements.

Time Limits for Terminal Degrees

The requirements for a terminal degree must be completed within ten years subsequent to admission to the terminal degree program. The ten-year period begins with the first semester students are enrolled and is calculated from the date of degree conferral. Students have a maximum of five years to advance to candidacy and a maximum of five years from candidacy to successfully defend the dissertation. Students who exceed the candidacy deadline may request an extension. Candidacy extensions will require strong justification in writing from the student and should be accompanied by a plan of study for timely completion of all requirements for advancing to candidacy. The extension must be approved by the student’s advisor, the Program Director, and the Graduate Dean. Students enrolled in the Juris Scientiae Doctor (JSD) program should refer to the program’s time limits policies.

Courses taken ten or more years prior to the comprehensive examination (terminal degree programs) do not apply towards the graduate degree and must be repeated or revalidated to satisfy the degree requirements.

Individual programs may have additional residency and time limit requirements.

Revalidation Request

If revalidation of expired courses is requested, the faculty advisor or Program Director recommend a revalidation plan. Revalidation will verify that the student’s knowledge in a specific subject area is current and documented. Options for course revalidation include a written examination, a scholarly paper, a project, an annotated bibliography, a course retake, or other equally rigorous academic means appropriate to the discipline to determine the student learning outcomes have been met.

Revalidation request should be submitted on the Revalidation Request Form and accompanied by a written justification, revalidation plan, and documentation used for revalidation. All revalidation request and plans must be approved by the student’s advisor or Program Director, the School/College Dean, and the Graduate Dean. The student’s advisor/Program Director and College Dean are responsible for determining whether the student demonstrated sufficient course knowledge necessary for successful course revalidation. Successfully revalidated courses may be included in the student’s plan of study. Failure to follow all designated requirements of the revalidation agreement may result in dismissal from the program. Graduate students will not be permitted to submit more than 12 units of the program’s courses for revalidation. Courses beyond the 12-unit limit will need to be retaken. Only courses completed at University of the Pacific are eligible for revalidation.

Thesis or Dissertation Committee

This section outlines the general requirements for thesis or dissertation committees. Units and colleges may adopt additional program-specific criteria and guidelines.

Thesis or dissertation chair: Faculty chairing thesis or dissertation committees must be regular, full-time members of University of the Pacific’s faculty in the student’s graduate program, hold a terminal degree, and have demonstrated expertise to serve as a thesis or dissertation chair. Faculty members without supervisory experience must serve for at least one year as a co-chair with an experienced advisor before they may be recommended to independently supervise thesis or dissertation research. Exceptions to this policy must be approved by the college or school Dean and the Graduate Dean.

Thesis or dissertation committee: The Thesis or Dissertation Committee is composed of a Chair and a minimum of 1 (thesis) or 2 (dissertation) other committee members. The number of committee members depends on the degree objective. All members of the committee must hold degrees at least equivalent to the degree being sought or have demonstrated expertise in the student’s field of study. In addition to the committee chair, who must be a University of the Pacific faculty member, the committee member(s) may be selected from within the student’s school or college, from another school or college, or from another institution or organization with recognized expertise in the field or industry.

It is recommended that the committee be formed after a student selects a chair for their research and the faculty member agrees to chair. The
student, in consultation with the chair, is responsible for contacting potential members of the committee, inviting members to serve, and completing the Masters’ Thesis Committee form or the Doctoral Dissertation Committee form. Upon the approval of thesis or dissertation advisor, department chair, and college or school Dean, the form will be forwarded to the Graduate School. Committee members from outside the University of the Pacific must be approved by the Graduate Dean.

The responsibilities of the thesis or dissertation committee members are:

1. providing the student with guidance in their thesis or dissertation research,
2. monitoring the student’s research progress of their thesis or dissertation research, and
3. approving the content of the final thesis or dissertation.

In order to fulfill the above responsibilities, the committee should hold at least one meeting each semester.

Thesis and Dissertations

Many master’s degree programs and all doctoral programs in the Graduate School require the completion of a thesis (master’s degrees) or dissertation (doctoral degrees) as partial fulfillment of an advanced degree. The Graduate School makes available to faculty and graduate degree candidates instructions for the preparation of theses and dissertations. The instructions are to be applied to all theses and dissertations submitted at University of the Pacific. Theses and dissertations must be submitted by the deadline dates published in the Academic Calendar.

Graduate programs have specific courses that must be taken for work on a thesis or dissertation. These courses are numbered 299 (Master’s Thesis) and 399 (Dissertation), and are graded on a Pass/No Credit basis.

Transfer Credit

Coursework completed at University of the Pacific or at other regionally accredited institutions of higher education since completion of the baccalaureate can be evaluated for transfer credit work with the following restrictions:

• Up to nine (9) semester units can be transferred at the Master’s level and up to 12 semester units at the doctoral level.
• Only courses that qualify for graduate or first-professional credit by the transferring institution can be transferred.
• Only courses in which a grade of B or better are eligible for consideration of transfer credit. Some departments set higher standards and there are identified by individual program catalog sections.
• The course work must be less than five years old for Master’s degrees and less than 10 years old for Doctoral degrees at the time the University of the Pacific degree is awarded.
• Credit used toward a degree earned at another institution cannot be transferred to a graduate degree at University of the Pacific.
• Extension courses do not qualify for transfer credit with the exception of university-approved transfer agreements.

Grade points earned in those courses are not counted in the student’s Pacific grade point average. This process is initiated using the Degree Requirement Adjustment Form and must be approved by the Director of the Graduate Program and the Office of the Registrar.

Some programs may have more restrictive transfer credit policies.

Unclassified Graduate Students

Students may take graduate level courses as an unclassified graduate student if they meet the following:

• Have a bachelor’s degree or the equivalent from a regionally accredited institution or other international institution of acceptable standing
• Apply using the First Time Unclassified Application and submit it to the Office of the Registrar

A maximum of 12 units (16 units for student teachers) taken as an unclassified graduate student will count toward a graduate-level program at University of the Pacific. Upon acceptance to the university, resident and transfer coursework are evaluated by school/department for applicability to degree. Some programs/courses have restricted enrollment and are not open for enrollment for unclassified students.

Withdrawal from a Term or the University

Students who intend to completely withdraw from a term or from the university have to initiate the process in the Office of the Registrar. The withdrawal date used by Financial Aid for return of Title IV Aid calculation and the effective date used by Student Accounts for tuition refunds are based on the date of your notification to the Office of the Registrar. If a student intends to withdraw from a semester after the last day to withdraw, the withdrawal must be approved by the Academic Regulations Committee. Courses the student was registered for after the last day to drop appear on that student’s transcript with the notation “W” but do not count in the units earned or in the calculation of the grade point average. A student who only withdraws from a semester, has one more semester to remain in continuing active status. A student who has completely withdrawn from the University, must file a Petition for Reinstatement Form (with a $50 fee) available on the Graduate School web site. The deadline is August 1st for fall admission or December 1st for spring admission.

An official withdrawal from the University is the termination of rights and privileges offered to currently enrolled students, which include, but are not limited to, early registration.

Professional

The Academic Regulations on this page are for the following professional programs on the San Francisco campus.

Arthur A. Dugoni School of Dentistry

All regulations apply to the DDS and IDS Programs. Not all regulations apply to the Certificate or Dental Residency Programs. For more information, contact your program.

• Academic Good Standing (p. 18)
• Academic Performance (p. 17)
• Academic Probation (p. 18)
• Academic Progress (p. 17)
• Academic Standards for Holding Student Office (p. 19)
• Attendance Policy (p. )
• Awards (p. 20)
• Change of Grades (p. 17)
• Committees (p. 19)
It is the student's or resident's responsibility to regularly consult this site (e.g., the Dental Surgery Program), and MSD (27-month Master of Science in Dentistry) policies developed locally. The right to change academic programs, policies, and standards at any time without prior notice is reserved by the university. Unless otherwise noted, policies described below apply to all academic programs under the authority of the dean of the School of Dentistry: first-professional programs (36-month and 24-month Doctor of Dental Surgery), graduate programs (Master of Science in Dentistry in Orthodontics, Master of Science in Dentistry in Endodontontology), and undergraduate programs (Bachelor of Science in Dental Hygiene). All future programs housed in the School of Dentistry are governed by the policies presented here or, when warranted and approved by the dean, by policies developed locally.

Program abbreviations used in this section are: DH (dental hygiene), DDS (36-month Doctor of Dental Surgery program), IDS (24-month Doctor of Dental Surgery Program), and MSD (27-month Master of Science in Dentistry in Orthodontics or Endodontontology). The DDS and IDS programs are first-professional programs, DH is an undergraduate program, and the MSDs are graduate programs.

Registration
Registration at the School of Dentistry includes payment of tuition and fees, enrollment in courses, submission of all required application materials (including one official transcript of academic record from each college or university attended through the last completed quarter, semester, or summer session), and submission of required medical examination and clearance forms.

In order to receive credit for coursework taken during a particular term, a student or resident must be properly registered during that term. Barring a written notice of withdrawal or a dismissal from the school, registration is assumed for all students and residents.

All DDS, IDS, and MSD programs offered through the School of Dentistry are lock-step sequential cohort models: all students in a cohort are enrolled in the same “block” of courses each term. Because enrollees have no choice in selecting classes or sections of classes, dental school programs use a “block scheduling” process. Students enrolled in the DDS, IDS, and MSD programs are registered each term for the appropriate block of courses by the Registrar’s Office. DH students are block scheduled by the Academic and Career Advising Center, each of which also maintain the “block” schedule.

Similarly, and as a function of the lock-step curriculum model, students enrolled in programs under the umbrella of the School of Dentistry are not allowed to add or drop courses except in extreme cases (usually a complete withdrawal from the program, see Withdrawal policy). For this reason, the School does not use add/drop dates common in traditional graduate and undergraduate programs. The assistant or associate dean in the Office of Academic Affairs is authorized to approve student requests to drop selective (enrollment) courses after the established drop date. If approved, the assistant or associate dean will direct the San Francisco Registrar’s Office to drop the course from the student’s academic record.

Records & Transcripts
Upon written request by the student to the Office of the Registrar, an official transcript is issued to whomever is designated. Students can request a transcript online, in person, or by mail. The official transcript shows all work completed to date. On the dental school transcript the DDS program is divided into four program years (the structure of all other U.S. DDS programs) and the IDS program is divided into three program years; the MSD and DH programs reflect years of study in the traditional manner. Students can access their unofficial transcript any time through the San Francisco Registrar’s Office.

Official transcripts from other institutions become the property of the University and are not reissued or copied for distribution to other institutions. Copies of transcripts of work completed at other institutions must be obtained from the originating institution.

Operating and Instructional Hours
The instructional hour is 50 minutes, beginning on the hour and ending at ten minutes to the subsequent hour. The instructional day (for class, simulation lab, and patient care) is from 8:00 a.m. to 5:00 p.m. unless otherwise noted. Pre-doctoral dental clinic hours extend until 8:30 P.M. on Monday and Thursday. Departmental and administrative offices are open from 8:00 A.M. to 5:00 P.M. Monday through Friday.
Quarterly Class Schedule
The School of Dentistry curriculum committee approves class schedules for DDS and IDS students every quarter. Upon review and approval by the committee, class schedules are posted on the school website. Schedules for the MSD programs are approved annually by the associate dean of oral health education.

Attendance Policy
Students and residents at the School of Dentistry assume professional obligations which include regular and consistent attendance at all learning activities. This includes classroom, laboratory, seminar, and remedial instruction; written and oral examinations, quizzes, and practicals; and patient care experiences. Regular and consistent attendance is an essential qualification of all students and residents. A student or resident who in the judgment of the school fails to meet this qualification may be dismissed from school.

Course directors (or program directors of residency programs) determine a reasonable attendance policy specific to their course (or program), and must provide students or residents a written statement of such policy in the course syllabus. Attendance policies may vary by course and department, and even by course within department, and it is the student’s responsibility to be aware of and adhere to course attendance policies.

The student or resident is responsible for making up all work missed due to an absence. Faculty have sole discretion in determining whether and under what conditions missed work is to be made up. Faculty also decide if, when, and under what conditions a make-up exam or practical will be provided. It is expected that make ups will replicate the original assessment in difficulty and content coverage, although an alternative format may be used.

Notification of Absence from School
A student or resident who will be absent for all or part of an instructional day must notify the Office of Academic Affairs at dentalabsence@pacific.edu in advance of the absence or by 9:00 a.m. on the day of the absence. Absences must be communicated daily. In the event of an emergency, the student or resident must notify Academic Affairs as soon as reasonably possible. The Office of Academic Affairs will notify faculty promptly of the student’s or resident’s absence and will maintain a log of absences. The log will be circulated quarterly, or upon request, to course directors, program directors, and chairs.

Grades
Grades represent passing or failing performance: in general, grades of A, B, C, and D represent passing performance, and the grade of F represents failure. More specifically, grades of A (excellent performance); B (good performance); and C (acceptable performance) represent unconditional passing performance; the grade D indicates conditional passing performance that must be remediated. Special conditions on D grades must be specified in writing (disposition form) to the Office of Academic Affairs when grades are submitted. Conditions may include additional instruction or evaluation before advancement to clinical practice or eligibility for national or clinical board examinations. Course directors are required to provide a grade for every enrolled student at the end of each term of instruction.

Credit (CR)
A credit grade (CR) may be awarded in clinical courses to indicate overall satisfactory progress OR when it is determined that a student has not been assigned sufficient patients for clinical ability to be fairly assessed. A CR grade should also be used for DDS and IDS students to record satisfactory completion of the PIP experience. In clinical and nonclinical courses, CR signifies satisfactory completion of a course where reliable differentiation among passing grades is not possible.

Incomplete (INC)
An incomplete grade (INC) is given temporarily when a student or resident is progressing satisfactorily but the course director has insufficient information because the student or resident has not completed all assigned coursework for reasons beyond the student or resident’s control. The course director determines the conditions under which and the date by which the deficiency that caused the INC must be removed, and communicates that to the Office of Academic Affairs on the disposition form and to the Registrar’s Office. If no completion date is stipulated, by default the end date of the subsequent term is the completion date. Failure to comply with stated conditions by the stipulated date will result in the INC reverting to the grade F, failure.

Prior to posting an F grade, the Registrar’s Office sends to the dean the names of students whose grades will revert to F. The dean has seven calendar days in which to intervene to prevent the posting of a failing grade. No student may earn a diploma with a permanent INC or F in a core curriculum course.

Grade Point Average
In computing a grade point average (GPA) numerical values are: A, 4 points; B, 3 points; C, 2 points; D or INC, one point; and F, zero points. Credit (CR) notations do not affect the grade point average. Separate didactic and lab/clinic GPAs are used in the DDS and IDS programs. The dental school does not award “+” or “-” modification of grades and does not use the W grade.

Change of Grades
Final passing grades (A, B, C, D, CR) are not subject to change on the basis of second examination or additional work completed after grades are submitted. Passing grades may be changed to correct an error in computation or when some part of a student’s work has been overlooked within one term of issuing the final grade. A failing grade of F may be changed only on the basis of successful formal remediation or repeat of the course. The decision to remediate or repeat is at the discretion of the course director or the Student Academic Performance and Promotions Committee. Formal remediation requires enrollment in a dedicated, unit-bearing, transcripted remedial course created and managed by the Registrar’s Office. Upon successful completion of remediation, defined as a C or higher grade in the remedial course, the Registrar’s Office changes the F grade in the original course to a D (a pound symbol # precedes the D grade indicating the grade history in the course; see below). No formal change of grade form is required. The “^” is a temporary grade posted by the Registrar’s Office in cases where the grade submission deadline has not been met.

When a final grade is awarded to substitute for INC or when remediation has been successfully completed in a course where a failing grade of F was earned, this will be indicated on the transcript by an appropriate symbol denoting the change (* for grades changed from INC and # for grades changed from F).

Academic Performance
Academic Progress
The Office of Academic Affairs reviews academic performance for all DDS, IDS, and DH students each term. In a course that continues through two or more terms, a grade is awarded each term to indicate interim progress, and the final grade for the entire course is awarded at completion of the last term of the course. However, the Academic Advisory and Student Academic Performance and Promotions
Committees will regard an interim grade in the same manner as a final grade with respect to promotion.

**Academic Good Standing**

For DDS, IDS, and DH students academic good standing requires a grade point average (GPA) of at least 2.0 for all didactic courses attempted or completed and for all laboratory and clinic courses attempted and completed, and no permanent D or F grades. In some programs under the authority of the dean of the School of Dentistry, only a single term GPA may be used, in which case a minimum of 2.0 is required to be in good academic standing.

Students who are in good academic standing are automatically recommended to the dean for promotion by the Student Academic Performance and Promotions Committee. The committee may recommend that a student who is not in good academic standing be promoted on academic probation with conditions of the probation clearly outlined (see Academic Probation section below).

**Academic Probation**

Academic probation is accorded to a DDS, IDS, or DH student upon receipt of a GPA below 2.0 for all didactic courses attempted and completed OR a GPA below 2.0 for all laboratory and clinic courses attempted and completed OR both; OR to a student with a permanent D or F grade. (Program directors in graduate, postdoctoral, and other first-professional programs under the authority of the dean of the School of Dentistry may adopt these policies or determine an appropriate review process for their respective program, which must be approved by the dean and communicated to students.) The GPAs reflected on the term report card are cumulative and include all courses attempted and completed. Normally, the standard for good academic standing must be met within one term of being placed on academic probation. In circumstances where this time constraint cannot be met, e.g. for laboratory and clinic grades at the beginning of the second year, or when a course is being repeated to remove an F grade, a reasonable time period will be specified.

The committee may recommend that a student who is not in academic good standing be promoted on academic probation with conditions of the probation clearly outlined.

I. Phase One Academic Probation: Intervention

1. Cumulative didactic and/or lab/clinic GPA below 2.0 if the student was in good academic standing the previous term. (New students are assumed to be in good standing upon matriculation unless otherwise stipulated by the Office of Student Services or the program director.)
2. Repeating students are placed on intervention at the beginning of their repeat year.
3. Examples of interventions include:
   - meetings with advisor
   - assignment of tutors
   - inventory of outside activities, living conditions
   - diagnostic testing for suspected health, psychological, language, or learning problems
   - in-course remediation
   - evaluation by health care professional to determine fitness for student activities
   - alternative career counseling

II. Phase Two Academic Probation: Contract

1. Second consecutive term of a cumulative didactic and/or lab/clinic GPA below 2.0, or
2. Any permanent D or F grade.
3. Examples of contract conditions include:
   - required weekly meetings with faculty member, Group Practice Leader, or advisor
   - restrictions on outside activities, living conditions
   - required professional assistance with diagnosed health, psychological, or learning problems
   - tutors
   - assignment to scheduled supplemental courses
   - regular meetings with therapist
4. No student on contract is eligible to take National Dental Board Examinations without approval from the Student Academic Performance and Promotions Committee.

**Academic Disqualification**

Academic disqualification may be recommended to the dean by the Student Academic Performance and Promotions Committee for a student who has failed to meet any condition of phase two probation (contract). When a student’s cumulative academic record meets published criteria for academic disqualification, the SAPPC will provide an opportunity for the student to appear before it to ensure that all pertinent information is available before the committee makes its recommendation to the dean. This is the only opportunity for the student to present relevant information to the committee; if a student fails to provide all pertinent information at this opportunity, the student risks exclusion of information from the committee’s deliberations. A student appearing before the committee has the option to: (i) select a faculty advisor; (ii) request and receive assistance from that faculty advisor with preparation of a statement to the committee; and (iii) request the faculty advisor attend the committee meeting with the student as a silent observer. A student may, at their discretion, take advantage of all or none of these opportunities. During the committee meeting, the student is advised to read aloud their prepared statement, but is discouraged from circulating copies or presenting evidence of academic performance.

If, in the judgment of the committee and after consideration of the relevant information available to it, the student has the capacity and commitment to overcome his or her documented deficiencies and reach an acceptable level of patient care, the committee may recommend (i) continuation on academic contract; (ii) extension of the program; or (iii) re-enrollment in a subsequent cohort. The committee may also recommend re-enrollment only through the normal admissions process, after a careful review of the relevant information and as appropriate to the student’s potential. If a student is offered and elects to re-enroll in a subsequent cohort, the dean’s letter signed by the student electing the re-enrollment option suffices as evidence of readmission.

**Exemption from Courses**

If a student or resident has extensive educational preparation in a discipline, the student or resident may petition the appropriate course or program director for exemption from required coursework. Such exemption may be granted at the discretion of the course or program director who will award an appropriate final letter grade (A, B, C, D), or credit (CR) signifying completion of the required course.

**Examination Review Policy**

At a minimum, course directors in all programs housed in the School of Dentistry must report to students and residents their individual score, class average, distribution of grades, and the scale used for scoring. Course directors must make this information available to students within 7 calendar days following an examination, quiz, or practical examination. This may take one of three forms: release of the full examination to students; release of an individual Strength & Opportunities report (DDS,
Inform the Registrar's Office of the appropriate transcript designation.

Withdraw until the dean has rendered a final decision regarding promotion.

The published criteria for disqualification may not elect to voluntarily disqualify for unauthorized LOA. A student who has met permission will record a dismissal in the transcript note: e.g. Jun 15: The transcript of a student who withdraws without first requesting permission will record a dismissal in the transcript note: e.g. Jun 15: student disqualified for unauthorized LOA. A student who has met the published criteria for disqualification may not elect to voluntarily withdraw until the dean has rendered a final decision regarding promotion or academic standing. In these cases, the Office of Academic Affairs will inform the Registrar's Office of the appropriate transcript designation.

Leave of Absence

Requests for a leave of absence are submitted to the dean or program director, who will designate the appropriate administrator to evaluate and respond to the request. (A program director must consult with the Dean's Office before granting a leave of absence.) To request a leave of absence, the student must be in good academic standing and must submit a written request identifying persuasive reasons warranting the leave, together with documentation supporting the request. The dean or program director will notify the student in writing of the decision and, if approved, will stipulate the length of the leave and conditions for re-enrollment. The student assumes the responsibility of keeping the dean or program director informed of the intent to re-enroll by the specified date. Students with federally-guaranteed student loans whose leave of absence exceeds 180 days will be reported as withdrawn on the 181st day and federal loans will enter repayment (see Withdrawal process above). A student who does not re-enroll by the specified date will be considered to have withdrawn from the school. The decision to deny, grant, or set conditions for a request for leave of absence shall be in the sole discretion of the dean. Leaves of absence are rarely granted. The Office of Academic Affairs will notify the Registrar's Office of the details of an approved LOA so that an accurate transcript comment can be posted to the record.

The dean has the authority to unilaterally place a student on interim or indefinite leave of absence after careful review of the facts of a case.

Graduation

In addition to all other requirements for graduation, the candidate must demonstrate competence to discharge the duties required of a practitioner of general dentistry or a dental specialty (orthodontics, endodontology, oral surgery). In addition to the skills, knowledge, and values expected of a beginning general practitioner, this is interpreted to mean evidence of moral character compatible with the public interest and with the practice of the healing arts, completion of all technical and clinical requirements prescribed in the curriculum, good academic standing, a passing score on the National Board Dental Examination (DDS students only), and compliance with all relevant policies of the School of Dentistry. If, in the opinion of the Student Academic Performance and Promotion Committee or other certifying body, approved by the dean, the candidate for the degree has met all these requirements, it is authorized to recommend to the dean the graduation and conferral of the degree. The committee may also recommend delay in the individual's graduation date and will stipulate conditions necessary to bring the student or resident to a competent level. Students and residents who have met all degree requirements receive their diploma at commencement.

Graduation Honors

Upon recommendation of the Student Academic Performance and Promotion Committee, students who complete the didactic, clinical, and national board requirements for graduation and whose academic record qualifies them for election to Tau Kappa Omega are graduated with honors. Those who complete graduation requirements and whose record qualifies them for election to Omicron Kappa Upsilon are graduated with high honors. The valedictorian is graduated with highest honors.

Committees

Student Academic Performance and Promotions Committee (SAPPC)

Functions: reviews the academic performance and progress of students in the 24- and 36-month DDS program and dental hygiene program every quarter; determines satisfactory progress, overall competency, and eligibility for graduation; recommends to the dean students who are not eligible to graduate or should be dismissed for academic reasons with or without the option of automatic re-enrollment; meets with students who
have met grounds for academic dismissal, and evaluates the student's capacity to continue in the program and likelihood for success; and proposes and causes to be designed and implemented remediation, enrichment opportunities, and assessment methodology geared toward supporting student learning and assessing overall competency. The committee helps ensure enforcement of academic standards described in this catalog.

Membership includes: the associate dean of oral health education (chair), the associate dean for clinical services, the assistant dean for academic affairs, all Group Practice Leaders, and all department chairpersons, and a representative of the DH program. Should a clinical department chair be unable to attend the meeting, a single co- or vice-chair is invited.

**Academic Advisory Committee (AAC)**

Functions: reviews report cards of students on academic probation and determines appropriate intervention strategies; devises conditions of academic intervention and contract documents; and, when a student meets the published grounds for academic dismissal, make a recommendation to the Student Academic Performance and Promotion Committee on continued enrollment status.

Membership includes: the associate dean of oral health education, the assistant dean for academic affairs (chair), two Group Practice Leaders, one representative each of the biomedical science courses and preclinical technique courses, a representative of the DH program and one predoctoral student.

**Student Appeals Committee**

Functions: Reviews student-initiated challenges to faculty action on grading and promotion decisions. In academic matters related to promotion and dismissal, the Student Appeals Committee's inquiry will be limited to review of compliance with the due process components of policy and will not constitute an attempt to substitute its judgment for the academic judgment of faculty or of the administration.

Membership includes: four elected faculty members and three elected students, one each from the two senior classes and the junior class.

**Awards**

Awards and prizes are presented annually at the Graduate/Alumni Association banquet honoring the graduating classes or similar venue. A detailed description of each award, including selection criteria, is available in the Office of Academic Affairs.

**Academic Achievement**

Dean’s Valedictorian awards (DDS, IDS)
Dean’s Salutatorian awards (DDS, IDS)
Dean’s Award (third highest GPA)
Inesi Award in Physiology
OKU-Sutro Clinical Excellence

**Leadership, Professionalism, Scholarship, and Service**

Dr. Sigmund Abelson Endowment award Academy of General Dentistry award
American College of Dentists, Northern California Section award
American Student Dental Association Award of Excellence
Dr. Thomas R. Bales Family Endowment Good Samaritan Award
California Dental Association award
Delta Dental Plan of California Student Leadership award
Dr. Deric Desmarateau Endowment award
Dr. Kevin Campbell Alumni Association Service award
F. Gene and Rosemary Dixon IDS Endowment award
Pierre Fauchard Academy awards

**Outstanding Performance**

Academy of Osseointegration award
Advanced Education in General Dentistry Outstanding Resident award
Dr. Eric B. Bystrom Memorial award
Academy of Operative Dentistry award
American Academy of Implant Dentistry award
American Academy of Oral and Maxillofacial Radiology award
American Academy of Oral Medicine award
American Academy of Oral and Maxillofacial Pathology award
American Academy of Oral and Maxillofacial Radiology award
American Academy of Esthetic Dentistry award
American Academy of Pediatric Dentistry award
American Academy of Periodontology award
American Association of Endodontics award
American Association of Oral and Maxillofacial Surgeons Dental Student awards
American Association of Oral Biologists award
American Association of Orthodontics award
American Association of Public Health Dentistry award
American College of Prosthodontists award
American Dental Society of Anesthesiology award
Oral and Maxillofacial Surgeons of California award
Dentsply/American Dental Association Student Research Program award
Dr. Charles A. Ertola award (for removable prosthodontics)
Dr. Thomas B. Hartzell award (for periodontics)
International Congress of Oral Implantologists award
Lasky Family Endowment Pediatric awards
Oral and Maxillofacial Pathology award
Quintessence Publishing Co. awards (one each for research achievement, periodontics, and restorative dentistry)
Warren Family Endowment award (for pediatric dentistry)

**Honor Societies**

*Phi Kappa Phi*
Each year DDS, IDS, and DH students who demonstrate the highest academic achievement are inducted into Phi Kappa Phi, a national multi-disciplinary honor society.

*Omicron Kappa Upsilon*
The Delta Delta chapter of the national dental honor fraternity, Omicron Kappa Upsilon, was organized at the dental school in 1934. Its purpose is to encourage scholarship and to advance ethical standards of the dental profession. Membership is limited to twelve percent of the graduating DDS and IDS classes, selected by a faculty vote on the basis of scholarship and character.

*Tau Kappa Omega*
In 1927, the Alpha Chapter of an undergraduate honor society, Tau Kappa Omega, was organized for promotion of honor and service to the school. DDS, IDS, and DH students are elected to the fraternity on the basis of ideals and scholarship.

**Reservation of Powers**
The School of Dentistry reserves the right to modify or change the curriculum, admission standards, course content, degree requirements, regulations, policies, procedures, tuition, and fees at any time without
prior notice and effective immediately. Students who join a subsequent cohort for any reason are governed by the policies, requirements, and curriculum of the catalog in effect at the time of re-entry.

The information in this catalog is not to be regarded as creating an express or implied agreement between the student (or applicant) and the school, nor does its content limit the academic and administrative discretion of the school’s administration.

The Academic Regulations on this page is for the following undergraduate program on the San Francisco campus.

Arthur A. Dugoni School of Denistry
Dental Hygiene

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All students are urged to read these general regulations carefully. Failure to be familiar with this section does not excuse a student from the obligation to comply with all the described regulations.

Although every effort has been made to ensure the accuracy of this catalog, students are advised that the information contained in it is subject to change. They should therefore consult the Registration Information section of the Office of the Registrar web page for any term to relate these regulations to calendar dates. The University reserves the right to revise its regulations and programs in accord with sound academic standards and requirements.

Academic Residence Requirement

The minimum residence requirement for a bachelor’s degree program requires 32 out of the last 40 units to be earned in residence at University of the Pacific. This means once a student has reached 40 units less than what is required for his/her degree only 8 more units may be accepted from a four year accredited institution. Additional community college or four year institution courses satisfy content requirements only and do not apply to the minimum units required for the degree. Example: If 124 units are required for the degree once a student has reached 84 units, only 8 more units can transfer in (from a four year accredited institution). If 128 units are required for the degree once a student has reached 88 units, only 8 more units can transfer in.

Normally these 32 units must be taken on the Stockton campus, but study in Pacific-affiliated programs elsewhere in the United States or abroad may count toward the residency requirement if the student has taken at least 32 units on the Stockton campus at the time of graduation.

The school or college from which the student is to graduate may stipulate that the units in residence must include certain specific requirements in the major program and/or a certain minimum of units within the school or department of the major.

Academic Standing

At the end of each semester, an undergraduate or professional pharmacy student’s academic standing is designated as one of the following: good standing, good standing with warning, probation, subject to disqualification (temporary status) or disqualification. The criteria for these academic standings are based upon a combination of the cumulative Pacific GPA and the term GPA and vary according to a student’s classification. Unless admitted on probation, a student is in good standing during the first semester of attendance. Students who are subject to disqualification are reviewed by an appropriate committee and are either disqualified from further enrollment at the University or are allowed to continue for the next semester on probation. The criteria for the different academic standings are outlined below:

Good Standing:

- term GPA of 2.00 or higher and a cumulative Pacific GPA of 2.00 or higher

Good Standing with Warning:

- term GPA below 2.00 and a cumulative Pacific GPA of 2.00 or higher.
Academic Regulations

Prohibition:

If prior semester is ‘Good Standing’:

• Freshman-Junior term GPA is below 2.00 and cumulative Pacific GPA below 2.00

If prior semester is ‘Good Standing with Warning’ or ‘Probation’:

• Freshman: term GPA is below 2.00 and cumulative Pacific GPA between 1.50 and 1.99
• Sophomores: term GPA below 2.00 and cumulative Pacific GPA between 1.80 and 1.99
• Juniors: term GPA below 2.00 and cumulative Pacific GPA between 1.95 and 1.99
• All undergraduates: term GPA of 2.00 or higher and cumulative Pacific GPA below 2.00

Subject to Disqualification (temporary status):

If prior semester is ‘Good Standing’:

• Seniors: term GPA below 2.00 and cumulative Pacific GPA below 2.00

If prior semester is ‘Good Standing with Warning’ or ‘Probation’:

• Freshmen: term GPA below 2.00 and cumulative Pacific GPA below 1.50
• Sophomores: term GPA below 2.00 and cumulative Pacific GPA below 1.80
• Juniors: term GPA below 2.00 and cumulative Pacific GPA below 1.95
• Seniors: term GPA below 2.00 and cumulative Pacific GPA below 2.00

Disqualified:

Each school determines whether a student subject to disqualification is disqualified. If not disqualified, a student subject to disqualification is placed on probation for the following term. If disqualified, a student is not allowed to register for further study at the University during a regular term while disqualifed, but may attend the “open enrollment” summer sessions.

A student who has been disqualified may appeal immediately for reconsideration and possible reinstatement on probation within the same school or college or in another school or college of the University. A disqualified student who has been out of the University for one semester or more, excluding summer terms, may apply for readmission to the University through the Office of Admission. If readmitted, such a student enters on probation and needs to make up the earlier deficiency in order to attain good academic standing.

Acquisition of Graduate Credit as an Undergraduate

Undergraduate students meeting all of the following requirements may petition the Dean of the Graduate School by submitting the Application to Receive Graduate Credit as an Undergraduate Student to open a graduate transcript (i.e., receive credit in graduate-level courses toward a graduate degree) before the last day to add classes of the last semester as an undergraduate:

• The student must be within 9 units of completing the baccalaureate degree.
• The student must be in the last two semesters of the baccalaureate degree at University of the Pacific.

Graduate credit can be received under the following guidelines:

• The total number of graduate credits for the semester, including coursework completed at other schools, cannot exceed the maximum graduate course load for the department providing the graduate coursework.
• The tuition rate for the entire semester is at the undergraduate rate.
• No more than 12 units (16 units for student teachers) can be transferred from an undergraduate transcript into a graduate degree program.
• Graduate credit will only be granted for graduate-level (200 numbered) courses and above.
• Units cannot be retroactively transferred from an undergraduate transcript to a graduate program. Approvals for graduate credit must be obtained prior to the last day to add classes of the student’s last semester.
• Coursework will not count toward graduate credit if the student fails to complete the bachelor’s degree by the second semester of taking graduate courses.
• Graduate courses completed under this agreement will not be recorded by the Registrar as graduate coursework until the baccalaureate degree has been completed and matriculation into the graduate program has commenced. Grades from these courses will not be accounted in the undergraduate grade point average, unless the bachelor’s degree is not completed.
• Students who do not complete the bachelor’s degree by the second term when graduate courses are taken cannot start a graduate program and cannot take additional graduate coursework until the bachelor’s degree has been awarded.
• Students bear the responsibility of assuring graduate credits earned as an undergraduate student will transfer to or be counted as post-baccalaureate units by other universities or school districts.

Students are not classified as graduate students until they register for and begin graduate courses following the receipt of their bachelor’s degree.

Auditing a Class

Auditing of a course is an option that allows exposure to a course with no course credit awarded. To audit a course, approval must be granted by both the instructor and the chair of the department in which the course is offered via an add/drop form. Auditing is not available in participation courses such as applied music, physical education, art courses of an applied nature, etc. Students auditing a course must pay an auditing fee. Courses taken through auditing may not subsequently be converted to a course credit or grade. The student must indicate at the time of registration if they wish to audit a course, and pay the appropriate fee. An audited course and grade AU (Audit) may not be used to fulfill or waive any degree requirements. An AW (Audit Withdrawal) grade will be assigned for withdrawals.

Cancellation

If you are a newly admitted and confirmed student and do not wish to attend Pacific for a semester and instruction has not yet begun, you must formally request a cancellation of your registration from the university.
To cancel your registration (prior to the start of the term) contact the Office of Admission. If you are a continuing student and need to drop your last class after the add/drop deadline you must visit the Office of the Registrar and obtain a date of notification recorded on the Withdrawal form. The notification date is your official withdrawal date used by Financial Aid in the Return of Title IV Aid calculation and the effective date used by Student Accounts for tuition refunds.

**Catalog Expiration and Requirements Policy**

The catalog lists requirements for active degrees offered by the university. Each catalog goes into effect at the beginning of the fall term the academic year of issue. It expires at the end of summer session the seventh academic year after publication for students maintaining attendance. Advisors and other university employees are available to help, but students have final responsibility for satisfying degree requirements for graduation.

Students are held to program requirements (general education and major/minor) in effect at the time of first enrollment. Students who change their program/major are held to degree requirements in effect at the time of the change of program. Students may, using a Change of Program form, elect to graduate under degree requirements specified in subsequent catalogs; under no circumstances are the requirements from an earlier catalog applied.

**Change of Address**

All students must notify the Office of the Registrar immediately of any change in their addresses or those of their parents or guardians. The University assumes no responsibility for materials sent through the mail not received.

**Change of Program Objectives**

A student who has been admitted to one degree program and who later desires to change to another degree, major, concentration, or subsequent catalog must submit an approved Change of Program form with the Office of the Registrar.

**Class Attendance**

Students are expected to attend classes regularly. Specific attendance policies are determined and provided by individual instructors in their course syllabus at the beginning of the semester.

**Class Standing**

Undergraduate students are designated freshmen, sophomores, juniors or seniors by the number of units which have been completed toward graduation as follows:

- 1 – 27.99 units designates a freshman.
- 28 – 55.99 units designates a sophomore.
- 56 – 91.99 units designates a junior.
- 92 – up units designates a senior.

Post Baccalaureate

Other students are classified as Undergraduate Unclassified. See the Undergraduate Unclassified section of this catalog.

**Commencement**

Commencement exercises to honor students who have earned baccalaureate and professional pharmacy degrees are held each year in May. Students who have earned their degrees in the previous Fall or Summer terms are welcome to participate.

Undergraduate students who have not completed all their degree requirements may participate in commencement if they have accumulated 92 units by the end of the Fall semester prior to May commencement. Students with deficiencies who plan to participate in the May commencement ceremony must apply for graduation by the April deadline.

**Course Loads**

Fall and Spring Semesters (Undergraduate and Professional Pharmacy students)

- Full Time: 12 or more units a semester
- Half Time: 6 -11.9 units a semester
- Less than Half Time: 5.9 or less a semester

Twelve units constitute a minimum full-time program of studies during a semester for the regular undergraduate and first professional level student and is the minimum required for participation in intercollegiate activities. If a student registers for fewer than 12 units or drops below 12 units financial aid may be reduced. (Students who are less than half-time are not eligible for financial aid.)

The maximum study load during a semester for undergraduates without special permission is 18 units and 19 units for first professional level students. Students who wish to enroll for units in excess of the maximum study load must petition their school/college in advance. Approval is based to a great extent upon the student’s past academic record and results in additional tuition charges. If a student is approved to take courses concurrently at another institution, the units at Pacific and the other institution may not exceed 18 units during Fall and Spring or 8 units during each Summer Sessions.

Minimum and maximum study loads for graduate students are defined in the Graduate Catalog.

**Course Numbering System**

*Undergraduate Courses:*

Lower Division courses. Courses, numbered 001 – 099, are primarily designed for freshmen and sophomores.

Upper Division courses. Courses, numbered 100 – 199, are typically open to students who have met the necessary prerequisites as indicated in the catalog course description. These courses are designed primarily for juniors and seniors but exceptions may be appropriate for qualified sophomores.

*Graduate Courses:*

Courses numbered 200 – 399 are primarily designated for graduate students. 300 and above are primarily for students admitted to a doctoral program.

Courses numbered in the 9000 series are used for specific professional development courses that are graduate level, non-degree courses in the Center for Professional and Continuing Education.
Credit by Examination
An undergraduate student in good standing and currently enrolled for four or more units may “challenge” by examination certain courses offered in the current term by the University. Departments have the right to designate which of their courses are appropriate for credit by examination. This policy is subject to the following restrictions:

1. A student may challenge a course covering material in which, because of independent study since high school graduation, or because of work at another college or university which was not accepted for transfer credit, the student feels prepared. It is the responsibility of the student to explain how the material was mastered.
2. A student who wishes to challenge a course should not expect the instructor of the course to provide assistance beyond an explanation of the scope of the examination.
3. A student who wishes to challenge a course may not attend the class meetings of the course.
4. A student may not receive credit by examination in the semester in which the student intends to receive his or her baccalaureate degree.
5. A student may not get credit by examination for a course which the student has already audited or failed with a grade of F or NC.
6. A student may not get credit by examination for a course in a structured sequence if the student has received credit for a higher level course in the sequence.
7. Credit earned by a challenge examination may not be used to meet the University residency requirement.

A student pursues the credit by examination option must obtain a Credit by Examination form from the Office of the Registrar and pay the scheduled $50.00 service fee (non-refundable).

Successful completion of the examination is then recorded on the transcript with a grade of pass and is made a part of the student’s academic record in the term in which the examination is requested. Students who pass the exam are charged an additional $200.00 for the course credit. Such credit is not considered to generate an overload.

Credit Limitations
Undergraduate students can apply a combined total of eight units of ACTY 002-049 General Activity, ACTY 050-099 - Intercollegiate Sports and THEA 005 in the Theatre Arts Department toward graduation. Up to 8 units of activity and intercollegiate sports classes may count toward the COP breadth requirement.

A total of no more than 20 units may be applied toward a degree from any or all of the following: courses taken in accredited correspondence schools, extension correspondence schools, extension courses, and/or courses taken credit by examination. None of these credits, except extension courses taken at the University, is accepted during the term in which the student is completing requirements for graduation in this University.

A total of no more than 30 units of coursework in business administration may be applied toward a degree, except in the case of students majoring in business administration.

A total of no more than 28 units may be applied towards a degree from Advanced Placement (AP), International Baccalaureate (IB), DANTES and/or CLEP tests.

Cross Listed Courses
A cross-listed course is one that carries credit in more than one department or program.

Dean’s Honor Roll
Each undergraduate student currently enrolled in the University who achieves a 3.5 grade point average or above at the close of a term in which twelve or more units of letter-graded (A through F) work have been completed is designated as being on the Dean’s Honor Roll for that term. A notation is indicated on the student’s academic record of this achievement.

Degree Types
Second Bachelor’s Degree (consecutively or concurrent):

Second Bachelor’s degrees are awarded under the following conditions:

1. The student does complete 32 units beyond those required for the degree that has the highest credit requirement. These units must be completed in residence at Pacific.
2. The student does complete all specific requirements of both programs (both general educations and majors).
3. Both degrees must be completed at the same time under the same catalog requirements when earned concurrently.

Multiple Majors:
Students may obtain a baccalaureate degree with multiple majors by completing the requirements for all majors under the same catalog requirements. Majors may consist of departmental majors, interdepartmental majors or majors in different schools. Multiple majors are recorded on the student’s permanent record, but only one degree is awarded. The degree is issued by the student’s primary declared school.

Diplomas
Diplomas are not awarded at Commencement but are available approximately three to four months afterward. Diplomas are mailed to the permanent address on file. Diplomas are not issued if you have outstanding financial obligations to the University. Diplomas left unclaimed are destroyed after five years. Students must re-order and pay for new or replacement diplomas.

The student’s diploma lists the degree, the school/college, and, if applicable, major and academic honors. The official academic transcript also lists the major(s), concentration(s) minor(s) and academic honors. Graduation dates posted on the diploma coincide with the last day of the semester. Degrees are posted Fall, Spring and Summer I, II and III. The official graduation date reflects the completion of all academic requirements for the degree and not necessarily the last term of enrollment.

Enrollment Verification
Students who need enrollment verification from the Office of the Registrar must be registered in the term to be verified. Students should print enrollment verifications by logging onto insidePacific, then selecting the National Student Clearinghouse (NSC) Link and print Enrollment verification. Students can also obtain their good student standing certificate here.
Final Examinations
Students are required to take all scheduled exams. Matters of grading and testing procedures are the responsibility of individual instructors. If the instructor chooses to give a final examination, it must be scheduled during the time specified by the University Registrar for the final examination for that course. No student is allowed to take a final examination before the scheduled time.

Grade Point Average
The Pacific grade point average is determined by adding the total quality points and by dividing the resultant sum by the total number of quality hours. As a general rule, the ratio is based on the number of letter graded units completed; e.g., if a student repeats a course both courses will be considered in the overall grade point average.

Grading Policies
Symbols and Definitions:

Undergraduate and first professional level students are assigned grades in keeping with the following provisions. (Grading policies for graduate students are defined in the Graduate Catalog.)

<table>
<thead>
<tr>
<th>Symbo GPA</th>
<th>Definition</th>
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<tbody>
<tr>
<td>A</td>
<td>4.0</td>
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<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
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<tr>
<td>B</td>
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<tr>
<td>B-</td>
<td>2.7</td>
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<tr>
<td>C+</td>
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<tr>
<td>C-</td>
<td>1.7</td>
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<td>D</td>
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<table>
<thead>
<tr>
<th>AU/AW</th>
<th>Audit/Audit Withdrawal</th>
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<tbody>
<tr>
<td>I</td>
<td>Incomplete work is work not complete due to extenuating and hardship circumstances which prevent the completion of the work assigned within the regular time of the term. Each incomplete grade assigned must be accompanied with a contract statement agreed to by both instructor and student as to: a.) what work remains to be completed, b.) how it is to be evaluated, and c.) a time indicated for completion within but no later than the following deadlines: for fall semester, by July 1 following; for spring semester, by November 1 following; for summer term, by January 1 following. If work is not completed within these stipulated times, the instructor can indicate a grade in lieu of the F/NC which automatically would be imposed with failure to complete the work. All incompletes must be made up before the last day of the semester in which the student intends to graduate.</td>
</tr>
<tr>
<td>N</td>
<td>Deferred grading</td>
</tr>
</tbody>
</table>

NC No credit recognition. Represents unsatisfactory work under pass/no credit option. It is not assignable in the Conservatory of Music.

NG No credit recognition. Represents unsatisfactory work under pass/no credit option. It is not assignable in the Conservatory of Music.

P Passing work on the pass/no credit system. P grade is approved only for certain courses and programs of a college or school. Beginning Fall 2016, the University requires a minimum of C- or better to pass a course with a ‘Pass/No Credit Grading Option’.

W Authorized withdrawal from courses after the prescribed period.

Graduation Requirements for Bachelor’s Degrees
Candidates for undergraduate degrees must adhere to all of the University’s regulations. In particular they must have:

1. Completed the major requirements specified by the school/college/department with a minimum grade point average of 2.0. At least 16 units of the major requirements must be completed at Pacific;
2. Completed a minimum of 30 units in general education including Pacific Seminars 1, 2 and 3 and a path of six or nine courses as specified by the school or college (transfer students should refer to the General Education section for GE requirements);
3. Met Fundamental skills requirements;
4. Achieved a grade point average of at least 2.0 on all letter-graded work completed at Pacific. On non-letter-graded work, the faculty will determine the equivalency;
5. Fulfilled the minimum residence requirement of 32 out of the last 40 semester units prior to receiving the degree; and
6. Accumulated the appropriate number of program units specified by the particular school or college.

Filing for Graduation
Application for Graduation: An Application for Graduation must be filed with the Office of the Registrar as an indication of intent to graduate at a specific term by the April deadline. For undergraduate students, it should be filed upon completion of 92 units (senior standing) and for professional pharmacy students who expect to fulfill degree requirements during the next academic year. This allows time for a review of studies completed and to enable the students to enroll for any requirements not yet completed.

Degree Check: After a student files their Application for Graduation both the program and Office of the Registrar check for the fulfillment of course and GPA requirements, i.e. university wide, major, department, college/school, general education.

Honors at Graduation
University wide honors at graduation for undergraduates and professional pharmacy are awarded on the following criteria. The student must have completed a minimum of 54 letter-graded units at Pacific and will be based on the student’s final overall institutional (Pacific) grade point average. The requirements are: Cum Laude (honors) 3.5, Magna Cum Laude (high honors) 3.7, and Summa Cum Laude (Highest Honors) 3.9.

Because Commencement occurs prior to spring semester grading, the commencement program indicates honors as of fall semester grades.
The student must have completed a minimum of 36 letter graded units at Pacific at this time. Actual honors confirmed, as shown on diplomas and transcripts, is determined once all coursework has been completed and graded.

Major
A major represents the area of study a student has chosen to pursue for a degree. A student who has not chosen a major are designated as ‘exploratory’. A student who decides to change a major or to declare one must submit an approved Change of Program form with the Office of the Registrar. Course and unit requirements for each of the majors offered are in the department’s section of the General Catalog.

Minor
A minor represents a prescribed group of courses in a subject area other than the major. A minor is not required for a degree, but may be elected to strengthen preparation in areas related to the major. To earn a minor a minimum of five courses and 20 units and a minor GPA of 2.00 is required. At least a minimum of 10 units must be taken at Pacific. Course requirements for each of the minors offered are in the department’s section of the General Catalog. Students who wish to have a minor posted to their academic record must submit an approved Change of Program form with the Office of the Registrar.

Official Grades
Official grades are available to students via insidePacific approximately two weeks after the end of the term. Unofficial grades are available on insidePacific after the end of the faculty grade deadline. The grades posted at that time are merely an indication of grades submitted, and grades still missing. They do not show a GPA, or academic standing.

Pass/No Credit Grading System
Depending upon the regulation of a particular college or school, students may request to receive pass or no credit grades rather than the traditional letter grades. This is available to encourage enrollments in courses outside the student’s area of major or specialization and thus to help broaden the student’s general education.

Normally this freedom is limited to one course per student per term and does not include courses within a student’s major field. Students must submit an approved Add/Drop form to the Office of the Registrar prior to the add/drop deadline. Beginning Fall 2016, the University requires a minimum grade of C- or better to pass a course with a ‘Pass/No Credit Grading Option’.

Prerequisites
Prerequisites for courses are listed in each course description; the responsibility for meeting these requirements rests on the student. The instructor, chair or dean’s office may request that a student who has not completed the prerequisites be dropped from the course.

Regression Rule
Students who complete coursework at an intermediate or advanced level without first completing the lower level introductory courses may not then go back and take the lower level courses for credit. This rule applies primarily to coursework in mathematics, the sciences, and foreign language. It may also apply in other departments in which there is a clear content sequence between courses.

Returning to Pacific
After Cancellation
New Students: If new students cancel their registration and wish to attend Pacific in a future term, they must submit a new application for admission. Previous admission status has no bearing on the decision for admission in the future.

Continuing Students: If continuing students cancel their registration, have been gone from the university for two or more consecutive semesters (excluding summer) and wish to attend Pacific in a future term, they must submit an Application for Return to Active Status (Re-admission), available through the Office of Admission.

After Withdrawal: If students completely withdrew from the University and wish to return in a future semester, they must submit an Application for Return to Active Status (Re-admission).

Registration
Registration is the means by which an individual officially becomes a student at Pacific. Registrants are further identified by school/college of the University, degree status, classification and major.

All students must complete registration activity by the add/drop or withdrawal dates published in the University Academic Calendar and Term Calendars (http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-the-Registrar/Calendars/Academic-Calendar.html). Students are held accountable to complete every course for which they are registered.

Additional registration activity past these deadlines must be requested by the student and approved through a petition. Petitions may include a service fee. Petitions are normally approved only if it can be shown that the request is warranted due to some special situation or hardship. Approved late withdrawals appear on the student’s transcript with the notation “W” but do not count in the units earned or in the GPA.

Registration - Individualized Study
Individualized study courses are designed for special educational needs which are not met by the available curriculum. Students must submit and approved Individualized Study Request form with the Office of the Registrar. Note: Students on academic probation may not register for Individualized Study. Unclassified students must obtain special permission from the school/college dean’s office of which the course is housed.

Repetition of a Course
In order to repeat a course at the undergraduate or first professional (PharmD) level, students must have received a C- or lower the first time the class was taken. Once a course is completed (with a grade of C or higher) the student may not repeat any prerequisites for that course. The grading option, when repeating a course, must be the same as the one used originally. Any given course can be repeated one time only. Fundamental Skills courses are exempt from the one time repeat rule.

Students must have both a 2.00 cumulative Pacific GPA and a 2.00 major/minor/program Pacific GPA to graduate. Prior to Fall Semester 2015, the grades received for courses repeated were averaged. Beginning Fall Semester 2015, the best institutional grade attempted when repeating a course is used to calculate the cumulative Pacific GPA and the major/minor/program GPA. Both the initial and subsequent repeat grade will remain on the academic record.
Students may exercise their grade replacement rights up to a maximum of the first three repeated courses, while enrolled in undergraduate degree programs at Pacific. Any additional course repeats will be ‘grade averaged’ for the cumulative Pacific GPA and the major/minor/program GPA. Basic skills are exempt from the three times rule.

A student's Major/Minor/Program GPA is calculated in the following manner:

- When multiple courses can be used to complete a particular requirement, the course with the best grade will be used in the calculation.
- Transfer/Test articulated work will not be used in the calculation.

Additionally for Major and Minor GPA calculations:

- Only courses currently completing the requirements up to the total number of units required for that particular major or minor are used.
- Successfully completed major and minor courses in excess of what is required to complete it are not used in the calculation.

Transcripts

Upon request by the student to the Office of the Registrar, an official transcript of his or her academic record is issued to whomever he or she designates. A service fee per transcript is charged for processing the record. Students can request a transcript online, in person or by mail.

Official transcripts from other institutions become the property of the University and are not reissued or copied for distribution to other institutions. Copies of transcripts of work completed at other institutions must be obtained from the originating institution.

Transfer College Credit Limitations

The complete Transfer Credit Policy can be found on the Office of the Registrar website (http://www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-the-Registrar/Undergraduate-Transfer-Credit-Policy.html).

Units are granted in chronological order of when courses were taken. The maximum number of combined units acceptable from community colleges is 70 semester units. After a student has a total of 70 units, including those from Pacific, those accepted in transfer, AP, IB, or CLEP exam scores and additional lower level military course work, no additional units can be earned and applied to the minimum units required for graduation. Once a student has reached 40 units less than what is required for his/her degree, only 8 more units may be accepted from a four year institution. Courses taken after these limits are reached do not have to be repeated at Pacific since the content of the course may fulfill a requirement, even though no units are allowed in transfer.

Courses that a student takes at other colleges or universities in programs not affiliated with Pacific are not counted in the student’s cumulative grade point average.

A current student who is working toward a degree at Pacific and who wants to take a course or courses at another college or university must obtain approval prior to enrolling in such courses. In addition, students must be approved by the deans designee of their school/college to take units at other institutions if those outside units, when combined with Pacific courses in a semester, exceed 18 units.

The Transfer Course Approval form is available on the Office of the Registrar’s web site and must be completed to obtain the necessary approval to transfer course units back to Pacific. It is the student's responsibility to have an official transcript sent to the Office of Admission once courses are completed.

Undergraduate Unclassified Students

Undergraduate Unclassified students, who do not hold a Bachelor’s degree, may complete up to 27.9 units prior to being required to formally apply for admission to the university. Upon admittance to the university, resident and transfer coursework will be evaluated.

University of the Pacific’s Four-Year Guarantee

The purpose of the Four-Year Graduation Guarantee (“Guarantee”) is to facilitate a student’s goal to graduate in four years with a Bachelors degree. To be eligible for the Guarantee, a student must satisfy each of the following conditions:

1. Declare and be admitted to a major by the beginning of the sophomore year by filing a Change of Program form. You may change majors if, at the time you make a change, you can still meet the requirements of the new major and graduate within four calendar years.
2. Remain in good academic standing (2.00 GPA - major and institutional) at the University.
3. Complete 32 semester hours of units each year for four years as required by the college and major, and meet all degree progress checkpoints.
4. Meet with your faculty advisor prior to registration each term to review your course plan and monitor progress.
5. Register for courses within two days of the assigned early registration appointment. Enroll in available courses needed for the program of study; accept any available section that can be accommodated in your course schedule. Sole exceptions: Students who are on Study Abroad or off campus participating in a full-time co-op may require a few additional days to register.
6. Make timely annual application for all necessary financial assistance, to avoid registration problems.
7. Apply for graduation by the stated deadline published in the academic and/or term calendars.
8. Monitor your own progress toward degree using the electronic degree check audit system (DegreeWorks) and ROAR (Roam On Line Articulation Reports) regarding transfer work to help you stay on track.
9. Notify faculty advisor if unable to register for a required course needed in the major or for graduation.

Special exclusions: Five year programs and students following individualized learning programs.

If the student satisfies all of the foregoing conditions, but is unable to graduate due to unavailability of a course, the University will offer one of the following remedies:

1. Enable the student to graduate in four years by substituting a different course or an independent study assignment, as determined by the department and the college offering the student's major.
2. Allow the unavailability of the course to delay the student from graduating in four years, in which case the University will waive Pacific tuition and mandatory fees in order for the student to graduate within the next academic year.

The University may choose, in its sole discretion, which of the two foregoing remedies it will offer the student under this Guarantee, and the
remedy chosen by the University will be the student's sole remedy under this Guarantee. The University is under no obligation to provide one of the foregoing remedies unless the student submits a written request for an accommodation to the Provost prior to beginning of classes in the last term of the student's four year plan.

**U.S. Military Mobilization**

All students who are called to active duty must start the process by providing a copy of the military summons to the Office of the Registrar's Veterans Affairs (VA) Coordinator, Knoles Hall, first floor, 209-946-2135. Cancellations processed during the first twelve weeks receive a 100% refund and all course sections are dropped before the student leaves for active duty. It is essential that a copy of the military summons be delivered to the Office of the Registrar before departure from campus. This ensures that classes are dropped and that grades of ‘W’ are not issued.

Students called to active duty toward the end of the semester, who are short submitting final papers or cannot take final examinations, are entitled to receive Incompletes (I) for the semester. Arrangements to receive Incompletes must be made with each instructor and copies of the military summons must be left with the Office of the Registrar. Students receiving incompletes under these conditions are given four semesters to complete the work and remove the marks of 'I'. If the work is not completed during this special four semester period, the marks of I are automatically converted to marks of W. If the military service period extends beyond the special four semester period, students can file an Academic Regulations Committee (ARC) petition for extension of this special incomplete time period.

Students who leave the University for U.S. military service and follow the procedures outlined above are eligible to re-enroll as returning students. Returning students must file a ‘Return to Active Status’ application with the Office of Admission. Returning students who have questions about Veterans Affairs benefits should contact the VA Coordinator in the Office of the Registrar at 209-946-2135.

**Variable Unit Courses**

Some course numbers are used to describe specific types of courses, as follows:

- **087/187/287** – Internship study. Work experience conducted off campus, under the supervision of a non-full time Pacific faculty member.
- **089/189/289** – Practicum. Work experience conducted on campus, under the direction of a faculty member.
- **092/192/292** – Cooperative education. Work experience on a full-time or part-time basis. The Cooperative Education Program in each school or college differs in unit allowance. See the appropriate school for unit specifics in the general catalog.
- **093/193/293/393** – Special Topics. Departments may offer, on occasion, special topic courses. Courses may reflect the current research of the instructor or the needs and interests of a group of students. Detailed descriptions can be obtained from the chair in which the courses are being offered.
- **191/291/391** – Independent Study
- **195/295/395** – Seminar. Undergraduate/Graduate/doctoral
- **197/297/397** – Independent Research.

**Graduate/Doctoral**

- **299** – Master’s Thesis
- **399** – Doctoral Dissertation

**Withdrawal From a Semester or the University**

Students who intend to completely withdraw from a semester or from the university have to initiate the process in the Office of the Registrar. The withdrawal date used by Financial Aid for the Return of Title IV Aid calculation and the effective date used by Student Accounts for tuition refunds are based on the date of your notification to the Office of the Registrar. If a student intends to withdraw from a semester after the last day to withdraw, it must be approved by the Academic Regulations Committee. Courses the student was registered for after the last day to drop appear on that student’s transcript with the notation “W” but do not count in the units earned or in the calculation of the grade point average. If a student only withdraws from a semester, he/she has one more semester to keep his/her continuing active status. If the student has completely withdrawn from the University, he/she must file a Return to Active Status application with the Office of Admission.

An official withdrawal from the University is the termination of rights and privileges offered to currently enrolled students which includes, but not limited to, early registration.

**Academic Units**

**Arthur A. Dugoni School of Denistry**

The Arthur A. Dugoni School of Dentistry has an annual enrollment of approximately 470 predoctoral and international students enrolled in DDS degree programs and about 50 post-doctoral residents enrolled in Master’s degree and certificate programs.

**Benerd College**

Benerd College (BC) offers a full spectrum of educational opportunities for students from traditional undergraduates to returning adult students to members of the community seeking opportunities for professional and personal development. The Education Division of the College prepares students for careers in teaching, school psychology and educational administration, offering bachelor’s degrees, teaching credentials and doctoral degrees. The Innovative Academic Programs Division offers degree and certificate programs designed to meet the ever-evolving needs of the regional workforce, including Bachelor’s degree completion programs in hybrid formats to allow students to earn a bachelor’s degree while working full-time. The Professional and Continuing Education Division serves as a major regional center for continuing education units, professional development and customized workforce training.

Benerd College is also home to the Osher Lifelong Learning Institute (OLLI) providing intellectual engagement for older community members, and to Pacific’s International Programs and Services, which includes administering the UOP International partnership designed to help develop a vibrant international student presence at Pacific.

**College of the Pacific (Liberal Arts and Sciences)**

At the center of the broad range of educational opportunities open to students on the Stockton campus is the College of the Pacific, the core division of arts and sciences. Some 1,400 students pursue at least one of the more than 50 major and minor programs offered by the College, and...
most students in the professional schools also take varying amounts of
work within the college of arts and sciences. College of the Pacific offers
majors in most of the traditional areas of the physical and life sciences,
the humanities and arts and the social and behavioral sciences, as well
as a number of inter-disciplinary programs which cut across traditional
fields of knowledge.

Conservatory of Music
The Conservatory of Music offers undergraduate degrees in composition,
jazz studies, music education, music history, music industry studies,
music management, music therapy, and performance, and graduate
degrees in music therapy and music education. In addition to these
majors, the Conservatory offers minors in jazz studies, music, and music
management. Additionally, the Conservatory provides opportunities for
students throughout the University via participation in ensembles and in
general education courses.

Eberhardt School of Business
Students in the Eberhardt School of Business are educated for
management positions in business, government and not-for-profit
organizations. Approximately 600 students are enrolled in the School's
undergraduate and graduate programs in accounting and business
administration.

Graduate School
The Graduate School supports and oversees Pacific's approximately 1150
graduate students pursuing Master's and doctoral degrees in more than
30 graduate programs on all three campuses. Areas of responsibility
include graduate admission processing, graduate student support
services, recruitment and marketing strategies, review of graduate
policies, and new program development. In addition, the Graduate School
provides financial assistance to qualified students through its graduate
assistantship program.

McGeorge School of Law
The McGeorge School of Law, located in Sacramento, has nearly 550
students who are enrolled in the full-time and part-time J.D. programs and
graduate programs.

School of Engineering and Computer Science
The School of Engineering and Computer Science, with some 650
students, offers eight baccalaureate programs: bioengineering, civil
engineering, computer engineering, electrical engineering, mechanical
engineering, engineering physics, engineering management, and
computer science. All engineering degree programs combine academic
and practical training with the engineering curricula that require a
minimum of seven months of paid engineering related work experience.
The school also offers a Master of Science in Engineering Science
degree with four different concentrations: civil engineering, computer &
electrical engineering/computer science, engineering management or
mechanical engineering. A Masters of Science degree is also offered in
Data Science.

School of Health Sciences
The School of Health Sciences prepares students for patient care across
the lifespan. The School has innovative, accelerated curriculums,
empowering students to contribute to the lifelong wellness of the
communities it serves through their professional practice. The School
is administratively located on the Sacramento campus with academic
programs on all three of Pacific's campuses. The academic programs
include: Audiology (San Francisco); Athletic Training, Physical Therapy,
and Speech-Language Pathology (Stockton); and Clinical Nutrition,
Nursing, Occupational Therapy, Physician Assistant Studies and Social
Work (Sacramento). The intentional emphasis on interprofessional
education and practice emphasis in all programs in the School prepares
graduates to provide patient care as integral members of the health care
team.

School of International Studies
The School of International Studies is devoted to the interdisciplinary
study of international affairs and offers students a BA in International
Relations and minors in International Studies and Anthropology. Study
abroad and competency in at least one second language are central
to the curriculum. Students benefit from the School's internationally
recognized cross-cultural training program. Graduates pursue a wide
range of careers that includes positions in government, business, non-
governmental organizations, and academe.

Thomas J. Long School of Pharmacy
The School of Pharmacy offers the Doctor of Pharmacy degree.
Some 1,025 students are enrolled in the School, including about 350
undergraduates who pursue pre-pharmacy studies in preparation for
beginning the professional program.

Admission Requirements
Graduate
Conservatory of Music
Music Therapy
School of Engineering and Computer Science
Data Science
School of Health Sciences
Audiology
Professional
Arthur A. Dugoni School of Dentistry
Dental (DDS, IDS, Certificates, and Dental Graduate Programs)
Undergraduate
Arthur A. Dugoni School of Dentistry
Dental Hygiene

The Admissions Requirements on this page are for the following
graduate programs on the San Francisco campus.
Conservatory of Music
Music Therapy
School of Engineering and Computer Science
Data Science
School of Health Sciences
Audiology
University of the Pacific believes in giving a high priority to the enrollment of students from different backgrounds and demographic groups.

Admission decisions are based on the quality of the applicant’s academic degrees and record, the personal statement of purpose, letters of recommendation from professors or others familiar with the applicant’s academic work, performance in aptitude and achievement tests, relevant work experience, preparation in the proposed field of study, and on the appropriateness of the applicant’s goals to the graduate program and of the applicant’s research interests to those of its faculty. Some graduate programs have additional admission criteria that applicants must meet; visit the individual program catalog pages for program admission requirements. Satisfaction of minimal standards does not, however, guarantee admission.

International applicants or non-U.S. citizens who did not receive their bachelor’s degree in the United States, should consult the information for international students at the end of this section regarding additional admission.

An application for admission made through the Office of Graduate Admission implies a student’s intention to work toward an advanced degree. An applicant may apply to more than one graduate program; however, they must choose only one program upon confirmation of their intent to attend Pacific.

Types of Admission

Full Admission

A student that meets all the admission criteria of a program will be classified as a student in full standing. Students are advanced from this classification to candidacy for advanced degree upon formal notification from the department.

Conditional Admission

This classification includes students who have been admitted into a particular degree program but have not yet met all admission requirements. Reasons for conditional status may include:

- Incomplete application materials
- Bachelor’s degree not posted at time of admission

All conditions will be listed on an applicant’s decision letter. A student will have no more than one term to meet all conditions. If conditions are not met by the end of the first term enrolled, the student will be subject to disqualification. Once all conditions are met, the student will be classified as full standing.

Unclassified Student Admission

Students who have a bachelor’s degree but do not plan to work for an advanced degree may take classes as an unclassified student. No more than 12 credits earned as an unclassified student may be applied toward an advanced degree. Unclassified students are required to meet the same academic standards as other graduate students. Unclassified students who later wish to work toward an advanced degree must make a formal application to the appropriate department or interdepartmental program and be formally admitted by the Office of Graduate Admission as a student with full admission status.

General Admission Requirements for All Applicants

To be considered for admission with full standing, applicants must have:

- a bachelor’s degree or the equivalent from a regionally accredited institution of higher education in the United States, or an foreign institution of acceptable standing,
- adequate undergraduate preparation in the proposed major field or equivalent evidence of an appropriate background for undertaking as an advanced degree program, and
- a cumulative GPA of 2.65 or better in all post-secondary coursework or in the last 60 units of baccalaureate and/or post-baccalaureate work.

Some programs may have higher GPA requirements; review specific program information in the catalog for additional GPA requirements.

Applicants must complete a University of the Pacific Graduate Admission application. All applications must be complete, which typically includes: the online application, essay, official transcripts from each college or university attended, letters of recommendation, and test scores appropriate to the program. For transcripts to be considered official, they must be in an envelope that has been sealed by the issuing institution. Recommendations must be written within the last year. For detailed information on required graduate entrance examinations and recommendations, see the program-specific pages.

Note:

- Applications submitted or completed after the posted deadlines may be evaluated and students will be admitted on a space-available basis (depending upon the program).
- Students are not permitted to register until they have submitted their confirmation of enrollment, and have satisfied all admission requirements.
- Admission will be denied to applicants possessing bachelor’s degrees with a significant amount of credit awarded for work experience that was not supervised by a faculty member of an accredited university or evaluated in units which identify the academic content.

Application Fee

Each applicant must submit the appropriate application fee in U.S. dollars; the application fee is submitted as part of the online graduate application. Application fees vary by program.

Testing Requirements

Some programs may require a graduate entrance examination as part of the application requirements; refer to the relevant program pages for more information. All test scores must be official, less than five years old, and received by the Office of Graduate Admission prior to an admission decision.

Deferral of admission

Students who wish to enroll in a different semester from which they were admitted, must contact the Office of Graduate Admission to defer their application. Deferral of application is subject to program approval. Applications will only be deferred for up to one academic year. If a student does not begin coursework within one year of your original application for admission, they must submit a new graduate application for admission. Previous admission status has no bearing on the decision for admission in the future.

GPA Waiver Policy

Students who do not meet the GPA requirement for admission to a graduate program at University of the Pacific may petition for admission
by submitting the GPA Forgiveness Form to the Graduate School. In order to qualify, applicants must meet the following:

- Have a minimum of five (5) years of professional experience after completion of the baccalaureate degree
- Have the support of the Program Director and the Dean of the school in which the degree program is housed
- Submit a letter of recommendation addressing their potential for success as a graduate student from their current or most recent supervisor

Submission of this form does not guarantee approval. Final approval is granted by the Dean of the Graduate School.

International Applicants

In addition to the application materials required for domestic students, international applicants must supply the following information to be considered for admission to University of the Pacific's graduate programs six weeks prior to the program admission deadline:

Transcript Evaluation: A course-by-course foreign transcript evaluation is required for all institutions attended outside of the United States. Transcripts must be reviewed by one of the following approved foreign credential evaluation services:

- World Education Services (https://www.wes.org/), Inc. (WES)
- Educational Credential Evaluators (https://www.ece.org/ECE/), Inc. (ECE)
- Foundation for International Services (https://www.fis-web.com/), Inc. (FIS) Note: We will only allow evaluations done on photocopied transcripts on a case-by-case basis.
- International Education Research Foundation (http://www.ierf.org/), Inc. (IERF)
- Transcript Research (https://transcriptresearch.com/)
- Josef Silny & Associates (http://www.jsilny.com/)

Certification of Finances: Government regulations require that international students provide evidence that they are able to meet the financial requirements of their education, living expenses, and miscellaneous costs. This requires the submission of the "Certification of Finances" form (found here (http://www.pacific.edu/Documents/school-graduate/acrobat/Certification_of_Finances2.pdf)) in the amount to cover all of the aforementioned costs for one year.

English Proficiency Examination Results: Applicants whose native language is not English must submit official results (taken within the last two years) of one of the following in order to receive consideration for admission:

- Test of English as a Foreign Language (TOEFL)
- International English Language Testing System (IELTS)

Information about TOEFL can be located online at http://www.ets.org/toefl (http://www.ets.org/toefl/); information about IELTS can be located at http://www.ielts.org. The University of the Pacific's TOEFL Code is 4065.

Minimum Score for Admission:

- Internet-based TOEFL: 80
- Paper-based TOEFL: 550
- IELTS score: 6.5

Some programs require higher scores; please contact specific departments for further information.

Minimum Score for Teaching Assistants:

- Internet-based TOEFL: 90
- Paper-based TOEFL: 577
- IELTS score: 7.0

Some programs require higher scores; please contact specific departments for further information.

The Admission Requirements on this page are for the following professional programs on the San Francisco campus.

Professional

Arthur A. Dugoni School of Dentistry

Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

- Accelerated Programs (p. 33)
- Admission with Advanced Standing (p. 32)
- Advanced Education in General Dentistry (p. 35)
- Application Materials (p. 32)
- Bachelor of Arts in Applied Sciences (p. 31)
- Dental Shadowing and Research Experience (p. 32)
- Doctor of Dental Surgery (p. 32)
- Doctor of Dental Surgery Requirements (p. 31)
- Endodontics (p. 34)
- Five-Year Program Leading to a DDS Degree (2+3) (p. 33)
- International Dental Studies (p. )
- Number of Required Pre-Dental Courses (p. )
- Orthodontics (p. 34)
- Personal Interview (p. 33)
- School of Dentistry Expectations for Admission (p. 33)
- Selection Factors (p. 33)
- Seven-Year Program Leading to a BA or BS Degree and a DDS Degree (4+3) (p. 33)
- Six-Year Program Leading to a BA or BS Degree and a DDS Degree (3+3) (p. 33)
- The Dental Admission Test (p. 32)

Admission Requirements

Doctor of Dental Surgery Requirements

Details on admissions requirements for the Doctor of Dental Surgery degree are found here (http://dental.pacific.edu/academic-programs/doctor-of-dental-surgery/dds-admissions-requirements/). From here (http://dental.pacific.edu/academic-programs/) you can navigate to admissions requirements for all degrees offered at the School of Dentistry.

Bachelor of Arts in Applied Sciences

In conjunction with the School of Pharmacy, students who matriculate at the School of Dentistry without a baccalaureate degree can apply for the degree of Bachelor of Arts in Applied Sciences. Transcripts of interested students are sent to the associate dean in PHS for evaluation. Students
who meet the requirements for the BAAS will be notified and are eligible to receive the diploma upon successful completion of dental school.

**Admission with Advanced Standing**

Only under unusual and compelling circumstances does the School of Dentistry accept transfer students. Incompatibility of dental education programs generally inhibits transition from another dental school to the University of the Pacific’s program. Students requesting such classification must reapply and resubmit an application through the American Dental Education Association’s Application Service (AADSAS) to join the first-year class if a transfer is approved and granted. No student will be admitted to advanced standing beyond the second year. Special action regarding transfer is required.

**Doctor of Dental Surgery**

Basic requirements for admission to the course of study that leads to the degree of Doctor of Dental Surgery: completion of required pre-dental education, minimum 40 hours of dental shadowing experience, completion of the Dental Admission Test (DAT), submission of complete application materials through the American Dental Education Association’s Application Service (AADSAS), and appearance at the school for a personal interview.

The Dugoni School utilizes a holistic application review process where it considers not only an applicant’s academic performance, GPA and DAT scores, but also personal characteristics, leadership/life experiences, extra-curricular activities, and potential for academic, clinical, and professional success as determined by the admissions interview and information provided in the AADSAS application.

Pre-dental education must be completed at a college or university from which subject matter is accepted for credit toward advanced standing at University of the Pacific or universities with equal standing. At least three years of collegiate work, including 135 quarter or 90 semester units, is recommended. Courses from a community college are acceptable if they are transferable as equivalent to pre-dental courses at a four-year college. Students are encouraged to develop their course of study with the assistance of a pre-dental advisor. Pre-dental advisors can identify courses that meet School of Dentistry requirements and help prepare individuals for the rigors of professional education and practice. They are also aware of courses that would best prepare a student for competitive scores on the Dental Admission Test (DAT).

**Number of Required Pre-dental Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences with Laboratory*</td>
<td>4</td>
</tr>
<tr>
<td>General Physics with Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Inorganic Chemistry with Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>Organic Chemistry*</td>
<td>2</td>
</tr>
<tr>
<td>English Composition, Communication or Speech **</td>
<td>2</td>
</tr>
</tbody>
</table>

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* Predental students are strongly advised to complete one course in anatomy and physiology as part of the biological sciences requirement. The admissions committee requires applicants to complete two semesters of organic chemistry or, upon direction of the predental advisor, one semester each of organic chemistry and biochemistry. In addition to the aforementioned recommended courses, students are highly encouraged to take histology / cell biology and microbiology.

** One course in composition or technical writing is required. Other courses should develop written or verbal communication skills. Courses in English as a Second Language (ESL) do not meet this requirement.

Pass/Fail evaluations in required subjects are unacceptable unless accompanied by a narrative transcript provided by the awarding school.

Although it is recommended that applicants have a baccalaureate degree, no specific major is required or preferred. Upper-division courses that extend knowledge of required subjects and/or those in areas such as statistics, economics, computer science, business administration and the humanities are recommended.

**The Dental Admission Test**

The DAT is available year round at testing centers around the country. To be considered for admissions, the exam must have been taken within 24 months of the date of the application. Information and applications are available from the Dental Admission Test Program, Division of Education, American Dental Association at 800-621-8099 or online at www.ada.org (http://www.ada.org/).

**Dental Shadowing and Research Experience**

Applicants are required to have a minimum of 40 hours of dental shadowing experience. Research is not required for admission, but strongly recommended.

**Application Materials**

The School of Dentistry participates in the American Association of Dental Schools Application Service (AADSAS). AADSAS is an information clearinghouse which transmits to a dental school the biographical and academic data required by admission committees, thereby relieving the applicant of the burden of completing multiple and repetitious individual applications. All AADSAS applicants must submit an online application at the ADEA web site, www.adea.org/aadsas (http://www.adea.org/aadsas/).

You will need to read/complete the following sections of the AADSAS application:

1. Fee Assistance Program (optional),
2. Add Programs, Submit Application and Check Status tabs,
3. Personal Information,
4. Academic History,
5. Supporting Information, and

You will need to submit the following documents:

1. Official transcripts from each college and university attended
2. Three letters of evaluation or committee letter*

Payment for the ADEA AADSAS application is by credit card (VISA, MasterCard, American Express or Discover) only.

Completed application materials must be received by AADSAS no later than February 1 for an applicant to be considered for the class entering in July; however, it is recommended that students apply as early as June. A nonrefundable online payment (https://sfdental.pacific.edu/admissions1/DDS/secure/appFee.aspx) of $75 is required by the school before the processing of an application is initiated. The University of the Pacific does not require any secondary application.
To be admitted to the School of Dentistry, accelerated students must:

1. meet all course requirements for the pre-dental programs, including Grade Point Average standards;
2. achieve scores of 18 or above in all categories on the Dental Admission Test (DAT);
3. successfully complete an interview at the School of Dentistry;
4. file a competitive and complete AADSAS application by September 1;
5. submit the $75 application fee; and
6. obtain at least three letters of evaluation from science faculty, including one from a pre-dental faculty advisor.

International Dental Studies

Through the Division of International Dental Studies (IDS), qualified internationally-educated dentists will have the opportunity to earn the Doctor of Dental Surgery degree from this 24-month, eight-quarter program that provides practical and comprehensive training in dental technique as practiced in the United States. The program’s admission process is described more fully on the school website. For additional information you may also contact the IDS program at:

University of the Pacific, Arthur A. Dugoni School of Dentistry
The IDS curriculum includes pre-clinical and clinical instruction in dental subjects presented in the traditional DDS program, as well as instruction in clinical pharmacology and pathology, differential diagnosis of oral diseases, facial pain, special needs patients, hospital dentistry, and preparation for regional and state licensure; the behavioral sciences include basic management science, introduction to geriatric dentistry, fundamentals of dental practice, and jurisprudence. IDS students begin clinical patient care in the second quarter and spend the greater portion of their second year in clinical practice.

Required documentation for admission consideration:
1. copy of a dental diploma (any degree in a language other than English must be accompanied by a certified translation from a bona fide translator);
2. copy of successful completion of Parts I & 2 of the National Dental Board Examination (NBDE-1, NBDE-2);
3. copy of a score of 92 or above on the internet-based version of the Test of English as Foreign Language (TOEFL); and if applicable, an English proficiency examination will be administered at the School of Dentistry;
4. copy of a course-by-course transcript evaluation from Educational Credential Evaluators (ECE) with a minimum U.S. grade point average of 2.0;
5. copies of two recent letters of recommendation written in English by U.S. or international dental professionals (dentists, dental school faculty);
6. copy of a curriculum vitae (CV) that describes the applicant’s dental experience and additional academic accomplishments since receiving the initial dental degree.

Provisional degrees are not accepted.

The IDS admissions committee considers the following factors in selecting applicants for admission: dental school achievement, pass results on the National Dental Board Examination Parts 1 & 2, English language proficiency, professional experience and advanced degrees. Applicants invited to the technique exam and interview are selected from those who meet preliminary admissions requirements. Applications must be made through the American Dental Education Association (ADEA) Centralized Application for Advanced Placement for International Dentists (CAAPID) at http://www.adea.org/caapidapp/. Factors considered for possible admission include:

- Possession of a doctoral degree in dentistry (DMD, DDS, BDS);
- Excellence in predental and dental school academic achievement;
- Dental class standing;
- Advanced Dental Admissions Test (ADAT);
- Practice, teaching and research experience;
- Possession of advanced academic degree(s);
- Dental National Board Examination scores; and
- Letters of recommendation.

Disclaimer
The school reserves the right to modify or change admission standards or requirements at any time without prior notice and effective immediately. The information provided on this site cannot be regarded as creating a binding contract between the student and the school.

Contact:
Gloria Sue, Admissions Coordinator
415.929.6677 / gsue@pacific.edu

Oral and Maxillofacial Surgery
How to Apply
The Department of Oral and Maxillofacial Surgery participates in the American Dental Education Association’s Postdoctoral Application Support Service (PASS), a centralized application service for more than 400 participating postdoctoral dental education programs. Applicants can complete an online application or download a copy of the application form from the PASS Web site (https://www.adea.org/dental_education_pathways/pass/Applicants/Pages/default.aspx).

- Completed application materials must be received by PASS prior to their deadline. Check their Web site for the application deadline.
- The completed PASS application and all supporting documents must be received by the admissions committee for the Advanced Education Program in Endodontontology before August 1, 2020.
- A non-refundable fee of $75 must be submitted along with your application. Pay application fee here (https://sfdental.pacific.edu/secure/EndoAppFee.aspx)

Factors considered by the Graduate Orthodontics Program Admissions Committee include:

- Possession of the doctoral degree in dentistry;
- Excellence in predental and dental school academic achievement;
- Dental class standing;
- Graduate Record Examination (GRE) score (Institutional Code 4065 / Department Code 0604);
- Advanced Dental Admissions Test Scores will be accepted but not required;
- Dental Match Program code;
- Practice, teaching and research experience;
- Possession of advanced academic degree(s);
• TOEFL scores (for international students only — Institutional code 4892 / Department Code 38)
• Dental National Board Examination scores;
• Letters of recommendation; and
• Course by Course evaluation of dental school transcripts — for international applicants (only evaluations by ECE will be accepted).

Disclaimer
The school reserves the right to modify or change admission standards or requirements at any time without prior notice and effective immediately. The information provided on this site cannot be regarded as creating a binding contract between the student and the school.

Contact:
Gloria Sue, Admissions Coordinator
415.929.6677 / gsue@pacific.edu

Advanced Education in General Dentistry
Applicants must show record they have graduated from North American dental school. There is no tuition to participate in the program; residents receive an educational stipend. The program uses the American Dental Education Association's PASS/MATCH application service to receive application materials. For further information on the Pacific AEGD program application process, please click here (http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/advanced-education-in-general-dentistry/application-process/). To learn more about the Union City Dental Care Center, please click here (http://www.unioncitydentalcare.com/).

The Admission Requirements on this page is for the following undergraduate program on the San Francisco campus.

Arthur A. Dugoni School of Denistry
Dental Hygiene

University of the Pacific seeks applications from students who have shown by past achievement that they have attained a high level of scholarship, initiative and maturity, possess good character, and have a serious interest in learning. Admission is selective and each applicant is considered on the basis of a variety of factors which are evaluated through a very personalized review. The University is interested in a student body characterized by diverse ethnic, religious, economic and geographic backgrounds.

Please refer to the Office of Admission website for the most current policies regarding all subjects in the following section of this catalog. The website address is www.pacific.edu/admission.html (http://www.pacific.edu/Admission.html).

Undergraduate Admission
www.pacific.edu/admission.html (http://www.pacific.edu/Admission.html)

Application Priority Dates
www.pacific.edu/admission/important-dates.html (http://www.pacific.edu/Admission/Important-Dates.html)
procedure when such an interview appears appropriate and would assist in determining the applicant's qualifications for admission.

**Campus Visits**
[www.pacific.edu/visitus](http://www.pacific.edu/visitus/)

Prospective students are invited to visit the campus as guests of the University. It is recommended that prospective students visit the campus when classes are in session, avoiding weekends or University vacation periods. (See Academic Calendar).

For individuals or small groups, student-led tours are available most days, Monday through Friday, morning and afternoon as well as some Saturday mornings. Tours and informational sessions for larger groups are also available, but must be planned at least two weeks in advance with the Office of Admission. During the academic year the Office of Admission is open most days Monday through Friday from 8:30 a.m. to 5:00 p.m. and on selected Saturdays from 9:00 a.m. to noon. Summer hours may differ. Saturday visits and tours are by appointment only. Please go to [www.pacific.edu/visitus](http://www.pacific.edu/visitus/) or call the Office of Admission to schedule a visit to campus.

**Appointments, Information and Forms**

For information on an area of specific interest, for application forms, or for an admissions appointment, use any of the following information to reach the Office of Admission:

Office of Admission  
University of the Pacific  
3601 Pacific Avenue  
Stockton, CA 95211

Telephone: (209) 946-2211  
Fax: (209) 946-2413  
Website: [www.pacific.edu/admission](http://www.pacific.edu/admission/)  
E-mail: admission@pacific.edu

**Admission of Freshman Students**

**Regular Admission**

Freshman applicants are those who are either applying while seniors in high school or those who have not taken any college courses since earning their high school diploma or its equivalent. Verification of graduation from an accredited secondary school is required prior to the beginning of the first term of attendance. Exceptions may be made for those who have passed either the General Education Development (GED) Test or the High School Proficiency Exam.

Special emphasis is placed on the coursework selected, the grades achieved in those courses, and the cumulative grade point average. Supporting recommendation from a school counselor or teacher is also important. In addition, the Admission Committee reviews the results of either the SAT or the ACT.

The essay submitted with the University of the Pacific Application is carefully read, and the committee looks at co-curricular activities. Applicants are selected for admission only after a careful review of the entire application file.

**A Completed Freshman Application Includes:**

1. Form and Fee: [www.pacific.edu/apply](http://www.pacific.edu/apply/)  
   - On-line application. The application must be filled out and submitted by the applicant.

2. Transcripts: An official copy of transcripts for all high school and/or college coursework including courses offered by extension or correspondence, is required. Failure to acknowledge and submit all records is grounds to deny or revoke admission, or for dismissal from the University or revocation of degrees earned. Applicants must also submit transcripts for any college work taken while still in high school. Transfer applicants do not need to have high school transcripts sent, unless requested. Final official transcripts must be submitted prior to the first day of classes, and must show satisfactory work or the University has the right to revoke the offer of admission.

3. Test Score Policies for Applicants

4. Freshman applicants must submit scores from the SAT and/or ACT. If the applicant has taken the SAT or ACT multiple times, Pacific accepts the highest combination of sub scores from all SAT attempts and highest combination of all sub scores from all ACT attempts.

5. Scores received in January from the December SAT or ACT tests are the last scores that are used for admission or scholarship consideration for fall applicants, except Pre-Dentistry and Pre-Pharmacy applicants for whom the November test scores will be accepted. Students for whom later tests are the first and only test taken are exempt from this policy.

**Optional:**

- Recommendation: [www.pacific.edu/recommendation](http://www.pacific.edu/recommendation/). One academic recommendation from an academic teacher, counselor or advisor is recommended. Those recommending an applicant may use the online form at [www.pacific.edu/recommendation](http://www.pacific.edu/recommendation/) or send a written recommendation on official letterhead.
- Essay: A personal statement as part of the application.

**Special Admission Requirements**

- Music Applicants: [www.pacific.edu/music](http://www.pacific.edu/music/)
  - In addition to academic requirements, who apply for admission to the Conservatory of Music must present evidence of music talent and achievement by performing an audition on the principal performing medium. Those who plan to major in composition must also submit an original composition. Auditions are held at the Conservatory at regular intervals throughout the academic year. Students unable to appear in person may substitute a recorded audition. Audition information is available at [www.pacific.edu/music](http://www.pacific.edu/music/) or by calling the Conservatory of Music at (209) 946-2418.

**Recommended High School Preparation**

Although University of the Pacific does not require a fixed pattern of secondary school courses, applicants are expected to complete a solid college preparatory program. Generally speaking, preparatory courses are those in the fields of English, social sciences, foreign languages, laboratory sciences and mathematics.

It is strongly recommended that the following be included in the secondary school program: four years of English; three years of mathematics including algebra I, II and geometry; at least two years of laboratory science in at least two disciplines (biology, chemistry, earth science or physics); at least two years of the same foreign language; three years of social science; one year of fine or performing arts; and
additional academic courses – all aimed at improving analytical abilities, promoting artistic development and strengthening written and oral skills.

Students interested in economics or business administration should take advanced mathematics in high school. Students interested in mathematics, science, engineering, dentistry or pharmacy should include biology, chemistry and physics as well as advanced mathematics in their secondary school program. (See chart for recommended course of study.)

Recommended Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Science &amp; Technical</th>
<th>All Majors</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Fine Arts/Performing Arts</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Foreign Language (one)</td>
<td>2 units</td>
<td>2 years</td>
</tr>
<tr>
<td>Social Science</td>
<td>2 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Mathematics*</td>
<td>4 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Laboratory Science**</td>
<td>3 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Academic Electives***</td>
<td>1 year</td>
<td>1 year</td>
</tr>
</tbody>
</table>

* Suggested math sequence for science and technical majors: algebra, geometry, algebra II, trigonometry or calculus. Minimum suggest math sequence for all other majors: algebra, geometry, algebra II.

** Biology, chemistry and physics are recommended for all students pursuing science and technical disciplines.

*** Academic elective courses should be in advanced foreign languages, mathematics, laboratory sciences or other solid preparatory courses.

Since the senior year in high school is perhaps the most important in preparing for college, a minimum program of four academic courses per semester is particularly recommended for that year.

Students are also encouraged to take honors and advanced placement courses whenever possible. In reviewing applications, the Office of Admission gives favorable consideration, not only to the overall strength of the academic program, but to the fact that honors and advanced placement courses have been taken.

Advanced Placement, International Baccalaureate and College Credits Earned While In High School

Please see www.pacific.edu/advancedcredit for the latest policies regarding granting of advance credit. College credit (four units per examination) may be granted to students who achieve scores of a four and five on Advanced Placement examinations and/or scores of five through seven on International Baccalaureate exams taken at the higher level. A maximum of 28 units total from Advanced Placement, International Baccalaureate, DANTES and/or CLEP test results may be applied toward a Pacific degree including General Education and major requirements.

In addition, students who have taken college courses prior to high school graduation receive credit toward University of the Pacific graduation, as long as the credit is transferable, is earned at an accredited college and is awarded college credit on a transcript generated by that college. The purpose is to recognize advanced work of quality already accomplished by certain students, to preclude duplication of courses, and to provide increased opportunity for exceptional students to take elective work in their undergraduate programs. (See also the CLEP information below.)

College-Level Examination Program (CLEP)

College credit may be granted, within certain limitations, for the General and Subject Examinations offered through the College-Level Examination Program (CLEP) of the College Board when satisfactory scores have been earned. This program may be utilized by entering freshmen who take the tests prior to matriculation for the purpose of earning advanced standing credit, by regularly enrolled students for accelerating their programs or demonstrating competency in certain subjects, or by candidates for transfer who desire advanced credit or present the tests in support of applications for admission. Further details can be obtained from the Office of Admission.

A total of no more than 20 units may be applied toward a degree from any or all of the following: courses taken in accredited correspondence schools, extension correspondence schools, extension courses, and/or courses taken credit by examination. None of these credits, except extension courses taken at the University, is accepted during the term in which the student is completing requirements for graduation in this University.

A total of no more than 28 units may be applied towards a degree from Advanced Placement (AP), International Baccalaureate (IB), DANTES and/or CLEP tests.

Admission of Undergraduate Transfers

www.pacific.edu/transfer

To be considered for admission a transfer applicant must:

- Be in good academic standing at the college in which he/she/they are currently enrolled
- Have demonstrated academic ability in his/her/their selected major

A Completed Transfer Application Includes:

1. Form and Fee: www.pacific.edu/apply
2. Official application. The application must be filled out and submitted by the applicant.
3. Official Transcripts from all colleges attended

If transferable credits are less than 30 semester units:

1. High School Transcripts
2. SAT-I or ACT scores
3. Recommendation: www.pacific.edu/recommendation

Optional:

- Music Applicants: www.pacific.edu/music

Special Admission Requirements

- Music Applicants: www.pacific.edu/music

In addition to academic requirements, who apply for admission to the Conservatory of Music must present evidence of music talent and achievement by performing an audition on the principal performing medium. Those who plan to major in composition must also submit an original composition. Auditions are held at the Conservatory at regular intervals throughout the academic year. Students unable to appear in person may substitute a recorded audition. Audition information is available at www.pacific.edu/music
Admission of International Students

University of the Pacific welcomes applications from international students and provides complete support services for them through International Programs and Services. The University is authorized to issue appropriate immigration documents to international students for immigration purposes and provides immigration services to enrolled students.

In order to comply with regulations of the United States Citizenship and Immigration Service, University of the Pacific requires international applicants who are not citizens or permanent residents of the United States to submit a detailed Certification of Finances showing sufficient financial resources for study at the University. Other special information and instructions regarding the admission of international students is provided upon request.

Special Requirements for Non-Native Speakers of English

Applicants who are not native speakers of English are expected to provide evidence of proficiency in the English language. Such proficiency may be demonstrated through the academic record, or by means of an English Language Proficiency Exam like the IELTS or TOEFL. For the most current English Proficiency review criteria please visit http://go.pacific.edu/international/ The University reserves the right to administer its own English language test to new students and to adjust a student’s academic program on the basis of test results.

Admission of Veterans

University of the Pacific encourages veterans to apply for admission and is approved under Federal and State laws for the training of veterans. Satisfactory completion of a period of military service is taken into consideration in the evaluation for admission.

Accelerated Programs

Pre-Pharmacy Advantage Programs

Freshmen are admitted directly into the Pre-Pharmacy Program in the School of Pharmacy. After two years, they advance into the PharmD Program if they have fulfilled all pre-pharmacy advantage requirements.

Six-Year (3+3) Pre-Pharmacy/PharmD Option

Freshmen are admitted directly into the Pre-Pharmacy Program in the School of Pharmacy. After three years, they advance into the PharmD Program if they have fulfilled all pre-pharmacy advantage requirements.

Seven-Year (4+3) Bachelor’s/PharmD Option

These Pre-Pharmacy applicants are admitted to any major at Pacific and pursue a Bachelor’s degree, while also completing the pre-requisites
for the Doctor of Pharmacy Program. If they complete their Bachelor's degree in four years (but no more than five years) they are eligible to advance into the PharmD Program if they have fulfilled all of the same Pre-Pharmacy advantage requirements. This option ensures that these students are on track from the beginning of their college careers to earn, at least, a Bachelor's degree.

Please note: There is no formal Pre-Pharmacy Advantage available to a student who attends another institution for a semester or a year or two and then transfers as a science major into Pacific's Arts and Sciences division. We have excellent undergraduate programs to which transfers are welcome to apply, but once here, these students compete with those who apply from other institutions for space in the PharmD Program.

Accelerated Dental Programs
www.pacific.edu/predent (http://www.pacific.edu/predent/)

Pacific offers three accelerated dental programs to first-time freshmen which combine undergraduate preparation with the only three-year DDS program in the country. Students admitted to any of these programs are admitted to Pacific's Arthur A. Dugoni School of Dentistry if they meet the requirements outlined on the Pre-Dental Advantage website. Students complete their pre-dental courses at Pacific's main campus in Stockton and their professional courses at Pacific's Arthur A. Dugoni School of Dentistry in San Francisco.

Any freshman applicant who selects “pre-dental” from the list of majors on his/her/their application for undergraduate admission is automatically considered for all three programs. Please note that students admitted to the 2+3 program are also automatically admitted into the 3+3 and the 4+3 programs, and those students admitted to the 3+3 program are also admitted to the 4+3 program. It is also important to note that the 2+3 and 3+3 programs do not “accelerate” four years worth of undergraduate study into two or three years. Students in these two programs take the same course load as most students on campus, they simply take only those specific courses which meet the requirements to advance to the Arthur A. Dugoni School of Dentistry after two or three years.

The following minimum criteria for consideration are valid for students entering in the Fall semester. Pacific reserves the right to change criteria for students entering in subsequent years.

Five-Year (2+3) Pre-Dental/Doctor of Dental Surgery (DDS)

Program allows completion of two years (four regular semesters) of specific Pre-Dental and general education courses on Pacific's Stockton campus. This is then followed by three years (eight semesters in 36 months) at the Arthur A. Dugoni School of Dentistry in San Francisco. Upon successful completion of the five-year program, the student earns a DDS degree.

Six-Year (3+3) Bachelor's/DDS

Program allows for completion of all Pre-Dental and general education requirements, and the courses for a major in either Biological Sciences or Chemistry in three years (six regular semesters). The credit from the first year of dental school can then be used to earn a bachelor's degree, and the DDS degree is earned upon completion of the third year of dental school.

Seven-Year (4+3) Bachelor's/DDS

Program allows students to major in almost any discipline, while they complete all Pre-Dental and general education requirements, prior to entering the DDS program.

Pacific Legal Scholars
Six-Year (3+3) Bachelor's/Juris Doctorate (JD)
http://go.pacific.edu/LegalScholars

This program permits highly qualified students to enroll at University of the Pacific's McGeorge School of Law during the fourth year of study at the University and complete a bachelor's degree at the end of the first year of law school. Students must apply for admission to the Pacific Legal Scholars program and meet program admissions requirements, including an admissions interview. To move on to the McGeorge School of Law, students must complete all general education and major course requirements, complete three seminars and an upper division law course to prepare for law school and participate in a number of off-campus law-related activities. They must also complete the application for admission to University of the Pacific's McGeorge School of Law and meet all admissions criteria including the median LSAT score and undergraduate GPA for the prior year's matriculating students. The Pacific Legal Scholars Program is open to students in any major, but some majors may not be possible to complete in three academic years. A 4+3 version of the program is also available.

Admission of Professional PharmD Students
www.pacific.edu/pharmd (http://www.pacific.edu/pharmd/)

Students who seek admission to the Doctor of Pharmacy degree program who did not enter Pacific as a freshman through the pre-pharmacy advantage program must have completed a minimum of 64 transferable units prior to matriculation. These units must be in specific courses which meet University of the Pacific Thomas J. Long School of Pharmacy requirements. Therefore, no application to the Doctor of Pharmacy program is accepted unless the applicant has taken, is taking, or plans to take, all of these pre-pharmacy courses prior to enrollment (see specifics in School of Pharmacy section). Students who have not taken organic chemistry or biology within the last seven years must enroll in refresher courses before entering.

Admission to the Doctor of Pharmacy degree program is competitive. Factors considered in the application review include overall grades, math/science grades, difficulty of course loads, academic performance trends, curriculum selection, recommendations, involvement in clubs, organizations and community service, demonstrated leadership positions, pharmacy work experience, communication skills, and a mandatory interview.

All students applying to the Doctor of Pharmacy program must apply through the Pharmacy College Application Service (PharmCAS): www.pharmcas.org (http://www.pharmcas.org). Pacific's application deadlines, and all instructions for applying for this program, is found at www.pacific.edu/pharmd (http://www.pacific.edu/pharmd/). It is critical that candidates submit all required information in a timely manner. Applications are not reviewed until they are complete. Students who complete their files after published deadlines are considered on a space available basis only. A completed application includes: PharmCAS application and fee, supplemental application form and fee, two recommendations (on required forms), Educational Background Chart, resume, and official transcripts from all colleges and universities attended. International students must also supply an official letter on bank stationary that verifies funding for at least one full year, a copy of their I-20 form, and a copy of their I-94 form, and furnish an international address. Some documents must be sent to PharmCAS and some to Pacific. Students with international coursework are required to submit an evaluation from Educational Credential Evaluators (ECE). Students whose native language is not English may be requested to submit scores from the Test of English as a Foreign Language (TOEFL). The minimum acceptable TOEFL score for admission consideration is 550 (paper-
based), 213 (computer-based), or 80 (Internet Based). An IELTS score of 6.5 is acceptable in place of the TOEFL.

All admitted students are required to grant consent for a background investigation and to read and agree to the Technical Standards for Pharmacy Admission and Graduation prior to matriculation. Final approval for admission will not be granted until the background investigation results are reviewed. Additional information on the Technical Standards for the Doctor of Pharmacy program can be found at: http://www.pacific.edu/Admission/Graduate-Professional/Pharmacy/Pharm-D-Technical-Standards.html (http://web.pacific.edu/Admission/Professional/Pharmacy/Pharm-D-Technical-Standards.html).

Please visit www.pacific.edu/pharmd (http://www.pacific.edu/pharmd/) for details on application requirements. Direct any questions about the Thomas J. Long School of Pharmacy to the Coordinator for Pharmacy Admission at (209) 946-2211.

Enrollment Deposit
An enrollment deposit is required of all admitted applicants to hold the applicant’s space in the academic program. This enrollment deposit is nonrefundable, unless otherwise noted, and is applied toward the student’s first-term tuition upon matriculation to the University. Deposit amounts may vary depending upon the academic program.

Campus Map

Location
University of the Pacific
155 Fifth Street
San Francisco, CA 94103
415.929.6400
Map >> (http://maps.google.com/maps?ll=37.774428,-122.389628&z=13&t=m&hl=en-US&amp;gl=US&amp;mapclient=embed&amp;q=155%205th%20St%20San%20Francisco,%20CA%2094103/)

BART
Take BART to Powell Street Station. Exit at the Fifth Street exit. Walk to the corner of Market and Fifth Street and turn left. The school is located at the corner of Fifth and Minna. For more information about BART, please visit http://bart.gov.

Bus Lines (MUNI)
For information about bus, streetcar and light rail routes and schedules in the area, please visit www.sfmuni.com (http://www.sfmuni.com).

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CalTrain
The nearest Caltrain station is the San Francisco Station located at 700 Fourth Street. From there, patients and visitors may either walk to the dental school or transfer to Muni lines 30, 45, N or T.

Parking
We recommend public transportation, as street parking is very limited. If you chose to drive, please allow yourself plenty of time to find parking.

The nearest garage is the Fifth and Mission/Yerba Buena Garage (http://www.fifthandmission.com/), and its entrance is on Mission Street.

There are also several parking garages nearby for longer visits. Details about meter rates and tips about parking in the city are available here:

- http://www.cityparksf.com

Traveling by Car
From the Bay Bridge
Take the Fifth Street exit to Fifth Street and proceed north to Mission Street. The campus is located at 155 Fifth Street (between Howard and Mission Street).

From the Golden Gate Bridge
After crossing the bridge to San Francisco, proceed to the Lombard Street exit. Follow Lombard to Van Ness (101 South) go right on Van Ness, continue on to O’Farrell Street. Left on O’Farrell Street, right on Hyde Street (becomes Eighth Street as it crosses Market Street). After crossing Market proceed one block to Mission, left on Mission Street to Fifth Street, turn right on Fifth Street, and 155 Fifth Street will be on your left.

From 101 North
Exit at the Seventh Street exit, Seventh Street north to Mission Street, turn right on Mission, turn right on Fifth Street.

From 280 North
Exit at Sixth Street, continue north on Sixth Street to Mission Street, go right on Mission one block, and turn right at Fifth.

For information about airport transportation services to the dental school, please visit the San Francisco International Airport (http://www.flysfo.com), Oakland International Airport (http://www.oaklandairport.com) or San Jose International Airport (http://www.sjc.org/).

Division of Student Life
- Graduate/Undergraduate (p. 40)
- Professional (p. 40)

Graduate/Undergraduate
Arthur A. Dugoni School of Dentistry
Dental Hygiene

College of the Pacific
Food Studies

Conservatory of Music
Music Therapy

School of Engineering and Computer Science
Data Science

School of Health Sciences
Audiology

Professional
Arthur A. Dugoni School of Dentistry
Dental (DDS, IDS, Certificates, and Dental Graduate Programs)
The mission of Student Life is to provide transformative educational experiences and essential services that advance student success. Through innovative thinking and dynamic programs, each Student Life member focuses on students' personal growth and educational experience. These values inform our individual roles and departmental functions and unify us as a Division. We realize our mission through:

- **Potential** - We are committed to providing a living, learning, and working environment that encourages both our students and our staff to reach their full potential;
- **Student Development** - We believe in educating the whole student by developing and supporting their emotional, environmental, financial, ethical, intellectual, physical, and social needs;
- **Meaning and Purpose** - We believe in the importance of providing opportunities to those seeking meaning and purpose in one's life and value the various activities and practices associated with a religious or spiritual tradition including, but not limited to, meditation, reflection, or prayer;
- **Responsible Leadership** - We believe that leadership manifests itself in many forms. It can be taught, developed, and nurtured and is a tool that encourages success throughout a student's education, lives', and future careers;
- **Achievement** – We believe that each student is unique and deserves a comprehensive system of support services that will assist in meeting their educational and personal goals;
- **Diversity and Inclusion** - We are committed to social justice, diversity, and challenging forms of hate and exclusion, and;
- **Community Involvement** - We believe in the value of community service, volunteerism, and the importance of civic engagement, connection, and participation.

**Student Outreach and Academic Support Services**

**Community Involvement Program**

The Community Involvement Program (CIP), established in 1969, is a comprehensive need-based scholarship and retention program for first-generation college students from the Stockton community who have demonstrated the potential for sustainable leadership, community awareness, and involvement. The Community Involvement Program is only for new incoming University of the Pacific students. Once in the program, students are offered leadership training and various opportunities for students to return to the community as leaders and agents of social change.

Students in the Community Involvement Program are selected based on their participation in the Stockton community, maturity, and potential to contribute his/her time and energy to the Community Involvement Program. CIP students contribute a significant amount of time in the Stockton community through volunteering at various community organizations. For more information contact the CIP Office at:

Center for Student Success  
McCaffrey Center, First Floor  
Telephone: (209) 946-2436  
Fax: (209) 946-2176  
Email: cip@pacific.edu

**The Women’s Resource Center**

The Women’s Resource Center (WRC) aims to increase awareness and scholarship regarding women’s and gender issues, to celebrate and cultivate leadership on campus and beyond, and to empower students to be active participants in bringing about social change. Annual events hosted by the WRC include the Women of Distinction Awards Luncheon as well as programming for Women’s History Month, Sexual Assault Awareness, and Domestic Violence Awareness. In partnership with the Office of Title IX, the WRC runs the Title IX Peer Education Program to encourage students to help end gendered violence in our community. Located inside the Intercultural Student Success Center, the WRC is a welcoming space for students to study, relax, and find community.

**Military and Veteran Student Support Center**

Proud of its designation as being a military friendly institution, the University of the Pacific is dedicated to serving the needs of those who previously were in, or currently are serving in, the United States armed services and their qualified dependents. The Military and Veteran Student Support Center is the hub Veteran student life and offers help and assistance in the application, certification, and coordination of military and veteran educational benefits, the synchronization of University support services with the needs of Veteran students, and in being a liaison between Veteran students and the Department of Veterans Affairs.

**Intercultural Student Success**

Intercultural Student Success (http://www.pacific.edu/Campus-Life/Diversity-and-Inclusion/Multicultural-Affairs.html) strives to provide enriching educational opportunities for students of all backgrounds. ISS is an inclusive community that advances student success by helping students navigate their identity development and build intercultural competence. The department includes the ALANA (African, Latinx, Asian Pacific Islander, Native American) Center, Black Student Success, El Centro (Latinx Outreach), The Pride Resource Center, and the Women’s Resource Center. Together, these areas work to help support students’ intersectional identities through building community, capacity, and advocacy.

The Pride Resource Center (http://www.pacific.edu/Campus-Life/Diversity-and-Inclusion/Pride-Resource-Center.html) provides holistic and identity conscious support services to the lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual (LGBTQQIA+) community at Pacific. Signature programs and events include: Safe Zone LGBTQ+ Awareness & Allyship Training, National Coming Out Day, Pacific Pride Week, and Lavender Graduation. The PRC strives to be a leader and...
advocate for LGBTQ+ inclusion and equity within the University of the Pacific and the greater Stockton community.

### El Centro (Latinx Outreach and Academic Resource Center)

El Centro’s mission is to assist in recruiting new undergraduate students, retain current students, build mutual beneficial partnerships with community organizations, connecting students to internal and external resources, advising Latinx-focused student groups, and in planning and developing rich and relevant programming around Latino/a/x themes and issues. El Centro also helps the University’s commitment to diversity, inclusivity, national/ international education and cross-cultural understanding. El Centro is a home away from home for all students on or off campus.

Some of our annual events include Bienvenidos Week, Student Financial Aid and College Awareness Workshop, Raza Unida Conference, Pozole for the Academic Soul, Latinx Heritage Month, and Latinx Graduation.

We are located at Raymond Lodge (El Centro) between Casa Warner and Price House Residence Halls and across from the Vereschagin Alumni House. For more information call 209.946.7705 or check out our website for upcoming events and activities at 

http://www.pacific.edu/Campus-Life/Diversity-and-Inclusion/Latino-Outreach.html

### Black Student Success

Black Student Success offers programs and support services to students of African descent. Throughout the school year, Black Student Success hosts receptions, academic workshops, networking events with members of the Black Alumni Club, and social events. Black Student Success also offers book scholarships of up to $250 for students in need. A signature program of Black Student Success is Students Emerging as Pacificans (STEPS) program. STEPS is a 4-day retreat that assists incoming students of African descent with their transition to college life. Pacific faculty, staff, current students, and alumni work directly with STEPS participants, introducing them to University and community resources to enhance their academic and co-curricular success.

### Pacific Health Services

Pacific Health Services is available Monday, Wednesday and Thursday on the San Francisco campus. The on-site nurse practitioner is supported by an extended professional staff that includes a supervising physician, other nurse practitioners, and a registered dietician. Services available to students include health education, wellness information, and direct care during illness. Visit the health services website (http://www.pacific.edu/healthservices/) for more information.

### Health Insurance

Health insurance is a mandatory non-academic condition for enrollment. To ensure that all students have adequate health care coverage, including ongoing primary and specialty care, and to satisfy the mandatory health insurance requirement, Pacific automatically enrolls all registered students listed below into the Anthem Blue Cross of CA PPO, Student Health Insurance Plan (SHIP).

- Undergraduate and Pharmacy Students enrolled in 9 or more units
- Dental Students, International Students, and Graduate Students enrolled in 1 or more units
- Law Students enrolled in 6 or more units
- Advanced Education in General Dentistry (AEGD): all residents

This policy excludes distance learning, off-campus, and external programs, and therefore students are not eligible to enroll in SHIP.

Each term that a qualified student is enrolled in classes at Pacific, the student account is automatically charged the fee for SHIP and you will be enrolled automatically*. The fee will appear on your e-bill statement as a separate charge.

Qualified students who have their own comprehensive health insurance coverage and do not wish to be enrolled in Anthem Blue Cross PPO may apply to waive out of the Student Health Insurance Plan (SHIP).

### Health Insurance Waiver Requirements: Your health insurance plan must include ALL of the following in order to qualify for a waiver (Domestic and International Students)

- The plan must provide coverage for medical evacuation of $50,000 and repatriation of remains of $25,000 (International Students)
- coverage for the entire academic year
- must be a U.S. based insurance company
- coverage for inpatient and outpatient hospitalizations
- coverage to local doctors, specialists, hospitals, and other health care providers in emergency and non-emergency situations within your campus area
- coverage for lab work, diagnostic x-rays, emergency room treatment, and prescription coverage within your campus area
- coverage for inpatient and outpatient mental health, substance abuse and counseling services in your campus area

The following types of insurance plans are NOT acceptable and will NOT be considered:

- Non-ACA (Affordable Care Act (https://www.healthcare.gov/where-can-i-read-the-affordable-care-act/)) compliant health care plan
- Short Term Medical Plans that are available to purchase on a weekly or monthly basis
- Insurance Plans that are underwritten in a Country outside of the United States
- California Medi-Cal Health Plans that do NOT have assigned benefit coverage in your UOP campus area
- Out of State Medicaid Insurance does not cover students in California

All waivers must be submitted during the open waiver period. For the waiver period and more information please visit: https://www.pacific.edu/healthservices

### Counseling and Psychological Services (CAPS)

The CAPS mission is to promote student growth and development, with regard to both personal characteristics and interpersonal competencies. We do this in the service of enabling students to benefit from and maximize their educational experience at Pacific. We also consistently strive to integrate multiculturalism into the everyday functioning and structure of our agency. Through the broad range of therapeutic services that we offer, persons may come to appreciate the uniqueness of their personalities and discover new ways to develop their potential. We have seen students make personal progress through the therapeutic process and tools provided by CAPS. We utilize a stepped care model to provide students with the tools they need to be academically successful.

- Services on the Sacramento campus are located in Halbert Hall. CAPS services are confidential and are funded, in part, by the Wellness Fee. We do not bill insurance. Students have access to individual and couples therapy on Monday, Tuesday, and Friday of
Pacific PROMISE Scholars

The University of the Pacific is proud to be a private institution of higher education to provide a support program to assist its students who are former foster care students and others from similar backgrounds. Eligible students can receive many services to assist in their successful transition to Pacific including mentoring, social events, college starter kits and finals baskets. In addition, scholarships may be available for eligible students.

For more information, contact: Pacific PROMISE Scholars
McCaffrey Center, First Floor
Phone: (209) 946-3917
Email: abautist@pacific.edu

Religious and Spiritual Life

Our goal is to cultivate and support religious and spiritual life at Pacific in all its many forms. We serve the needs of all students, no matter what one's religious tradition, or if you don't consider yourself religious or spiritual at all. While we make no claim to have all of life's answers, we can help point you in the right direction, provide resources for you, and work with you through the questions that will inevitably arise as you grow during your time at university. We can also help you find people or groups who share your interests. Our hope is that in doing so you will find a level of fulfillment, understanding, and perhaps meet other people who you can journey with in the questions of life.

The multifaith Chaplain's Office in Religious and Spiritual Life provides spiritual care and support for all students. Visit Sears Hall (connected to Morris Chapel) to meet the Chaplains and Affiliate Campus Ministers. Pacific has many active religious, faith, and spiritually-based student organizations including (among others): Asian American Christian Fellowship, Black Campus Ministries, Chi Alpha Christian Fellowship, Fellowship of Christian Athletes, Health Sciences Christian Fellowship, Hillel Jewish Student Club, Indian Student Association, Interfaith Council, Muslim Student Association, Newman Catholic Community, Nest Prayer Family, Open Door Methodist Student Ministry, Orthodox Christian Fellowship, Pacific Christian Fellowship (Intervarsity), Secular Student Alliance, and Sikh Student Association. There are also over 160 different churches, synagogues, and other places of worship and religious organizations in the greater Stockton area. Go to www.pacific.edu/religiouslife for more information.

Academic Standards

Student Conduct and Community Standards

The Office of Student Conduct and Community Standards manages the student conduct process for students, including but not limited to, undergraduate and graduate students on Pacific's three campuses. In addition to the Code of Conduct, specific schools and programs may have policies and procedures that apply to students enrolled in a specific program of study. Pacific has developed policies and procedures to clarify the expectations and standards for students. Each student is responsible for knowing and adhering to all University policies and procedures. These policies are explicitly outlined in the Tiger Lore Student Handbook and on the web site at http://go.pacific.edu/tigerlore (http://www.pacific.edu/Campus-Life/Safety-and-Conditions/Student-Conduct/TigerLore-Student-Handbook-.html). Policies and procedures specific to a course of study are available through the respective school or program.

Honor Code

The Honor Code at the University of the Pacific calls upon each student to exhibit a high degree of maturity, responsibility, and personal integrity. Students are expected to:
1) Act honestly in all matters;
2) Actively encourage academic integrity;
3) Discourage any form of cheating or dishonesty by others;
4) Inform the instructor and appropriate university administrator if she or he has a reasonable and good faith belief and substantial evidence that a violation of the Academic Honesty Policy has occurred.

Conduct Standards

Student Code of Conduct, University Policies, and Local, State, and Federal Laws

The violation of established policies and procedures and local, state, and federal laws may constitute a violation of the Student Code of Conduct or other policies and procedures specific to a course of study, school, or program. Such violations may include conduct occurring off-campus when students are participating, attending, or in some manner connected to a University-related activity. Please refer to http://go.pacific.edu/tigerlore (http://www.pacific.edu/Campus-Life/Safety-and-Conditions/Student-Conduct/TigerLore-Student-Handbook-.html) for additional information and definitions.

Campus Behavior Standards

Rather than publish in this catalog a complete and detailed code of the laws, rules, and regulations that students are required to follow, the University declares its intention to uphold all federal, state and municipal laws applicable and expects all students to abide by the Student Code of Conduct and university policies. At the time of admission, each student agrees to follow such standards. Accordingly, any conduct not consistent with responsible and lawful behavior may be considered cause for the University to take appropriate administrative, disciplinary, or legal action.

In addition, the University acknowledges and actively upholds the adult status of each student with all the rights pertaining thereto and, in accordance with that status, considers each student responsible for their own actions. With regard to conduct, "student" is defined as full and part-time undergraduate, professional, and graduate students from the time of application for admission to the time of the conferral of a degree and includes periods prior to the start of classes, after classes have ended, between terms, and when a student is not officially enrolled but has an ongoing relationship with Pacific.

University policies and regulations are published in the Student Code of Conduct and available online go.pacific.edu/tigerlore (http://www.pacific.edu/Campus-Life/Safety-and-Conditions/Student-Conduct/TigerLore-Student-Handbook-.html). Statements pertaining to or clarification of student rights is also published in this document. Additional policies for specific schools and programs are respectively available from each school or program.
Alcohol and Other Drugs Policy

All students, faculty, and staff must comply with all federal, state, and local laws and University policies governing the consumption, possession, distribution, and sale of alcoholic beverages and drugs on University property; at any activity or event on and off the campus sponsored by Pacific; or where a campus community member is representing Pacific as part of an off-campus program, activity, or event.

This notice is provided as a requirement of the Drug-Free Schools and Communities Act of 1990, and the Drug-Free Workplace Act of 1988. Universities that receive federal/state funds in any form are required to comply with the above acts. We must take affirmative steps to prohibit the unlawful possession, use, and/or distribution of illicit drugs and alcohol.

Description of Health Risks

The misuse of alcohol and/or prescription drugs or use of illicit drugs can result in overdose, death, violence, incarceration, loss of a driver’s license, failed relationships, petty property crime, school dropout, lowered productivity and quality, increased absenteeism and tardiness, serious psychobiological and neurobiological problems, reduced concentration, impaired judgment, loss of short term and long term memory, diminished reasoning skills, strained family relationships, damaged fetuses, and other serious life-altering effects. Additional information regarding health risks is available from the Cowell Wellness Center or at DrugAbuse.gov

Criminal Penalties

Federal penalties for the trafficking of controlled substances are dependent upon several conditions including the substance, amount, and whether the matter is a first offense or repeated offense for an individual or other legal entity.

For a detailed list of penalties>>

For information on California DUI penalties>>

For information on California underage drinking laws>>

Resources for Assistance

- Alcohol Abuse 24 Hour Action Helpline 800.234.0420
- Alcohol & Drug Treatment Center 24 Hour Helpline 800.711.6375
- Counseling and Psychological Services 209.946.2315 ext. 2
- Employee Assistance Program 877-595-5281
- Pacific Health Services 209.946.2315 ext. 1

Pacific’s alcohol and drug policies are available online:

- Students: Student Code of Conduct>>
- McGeorge School of Law students: McGeorge Substance Abuse Policies and Procedures>>
- Dugoni School of Dentistry students: Dugoni Alcohol Consumption and Drug Use Policy>>
- All University employees>>

Pacific Alumni Association

The Pacific Alumni Association (PAA) includes all alumni of the University of the Pacific. There is no membership fee and services are available to all members. An elected Board of Directors (30) develops programs and benefits with the Office of Alumni Relations staff. Opportunities provided to alumni through PAA include Regional Pacific Clubs, class reunions, special events, communications and a variety of benefits.

The Pacific Alumni Association encourages all alumni to maintain their relationship with the University of the Pacific and with one another. For more information call (209) 946-2391.

Student Academic Support Services

Office of Services for Students with Disabilities in the Division of Student Life

The University does not discriminate against students and applicants on the basis of disability, in the administration of its educational and other programs. The University reasonably accommodates qualified students (including applicants) with disabilities as defined by applicable law, if the individual is otherwise qualified to meet the fundamental requirements and aspects of the program of the University, without undue hardship to the University. Harassment on the basis of disability issues is prohibited by the University’s policies.

For purposes of reasonable accommodation, a student or applicant with a disability is a person who: (a) has a learning, physical or psychological impairment which limits one or more major life activities (such as walking, seeing, speaking, learning, or working); or (b) has a record with the University by which the University has officially recognized such impairment. To be eligible to continue at the University, the student or applicant must meet the qualifications and requirements expected generally of its students, and must also be able to perform the requirements of the individual major or program in which s/he is enrolled.

A qualified student or applicant is an individual with a disability as defined by this policy and applicable law who meets the academic and technical standards requisite to admission and participation in the educational program or activity. Accommodations are such modifications to the course, program or educational requirements as are necessary and effective for the individual, if reasonable to provide at the University and do not alter the fundamental nature of programs. Accommodations do not include exemption from academic evaluation standards or from the code of student conduct.

Pacific expects that, if a student has a disability, the student gives sufficient notice of the need for assistance (preferably prior to the start of the semester) although the University does fully consider the merits of each request at the time it is received. Upon receiving a request for assistance as well as appropriate documentation, the Director of the Office of Services for Disabilities considers the student’s need for assistance as it relates to the documented disability. If appropriate, the University may choose to consult with such individuals, internal or external to the University, to provide further assistance needed to evaluate the request for accommodation. The following list is an example of the types of reasonable accommodations and services that the university may provide, on a case-by-case basis, to assure equal access:

- Academic adjustments and curricular modifications
- Assistive technology
- Consultation with faculty and staff
- Registration assistance and classroom rescheduling
- Readers, scribes, note-taking, and library assistance
- Test proctoring services

Please note the university does not provide or subsidize personal care devices or services such as ambulatory devices or assistance with bathing, dressing, laundry, etc. Referrals to external agencies, however, are available upon request.

For additional information, please contact:
International Programs and Services (IPS)

Located on the Sacramento campus, IPS offers comprehensive services to international students and scholars coming to the United States as well as to Pacific students interested in studying, interning or volunteering abroad. IPS serves as a liaison between University schools, departments, and offices, collaborating with them to enhance international education across campuses.

International Students and Scholars Services

IPS offers a variety of services, including immigration advising, to international students and scholars at Pacific, supporting and enhancing their social and cultural integration into the Pacific community. IPS also administers Pacific’s Exchange Visitor Program. The objective of this U.S. Department of State effort is to facilitate and increase mutual understanding between Americans and citizens of other countries through educational and cultural exchanges. For more information, call (916) 739-7019.

Division of Student Life on this page are for the following professional programs on the San Francisco campus.

Professional

Arthur A. Dugoni School of Dentistry
Dental (DDS, IDS, Certificates, and Dental Graduate Programs)

- American Dental Education Association (ADEA) (p. 48)
- American Student Dental Association (ADSA) (p. 48)
- Associated Student Body (p. 47)
- California Dental Association (CDA) (p. 48)
- Code of Ethics and Adjudication of Ethics Violations (p. 46)
- Dental Mission Trips and Community Outreach (p. 48)
- Determination of Accommodation Requests and Right to Obtain Further Review (p. 46)
- Equal Educational Opportunity (p. 45)
- First-Year Retreat and Counseling (p. 47)
- National Dental Fraternities (p. 48)
- Pacific Health Services (p. 47)
- Policy Statement on Alcohol Consumption and Drug Use (p. 47)
- Policy on Accommodations for Students with Disabilities (p. 45)
- Procedure for Seeking Accommodations (p. 46)
- Professional and Fraternal Organizations (p. 47)
- Prohibited Sexual and Other Unlawful Harassment Policy (p. 47)
- Responsibility of Student, Resident, or Applicant (p. 46)
- School Policies (p. 45)
- Student Services and Housing (p. 47)
- Student Store (p. 47)
- Study Clubs (p. 48)
- Security and Anti-Violence Policy (p. 46)

School Policies

Students and residents who enroll in programs under the authority of the dean of the School of Dentistry agree to adhere to the school’s policies and procedures and to conform their conduct to the standards of the school and of the law. Students and residents who fail to do so are subject to all sanctions or other appropriate action by the school, up to and including interim or indefinite suspension, interim or indefinite involuntary leave of absence, or final dismissal.

In cases where the school determines in its judgment that a student’s or resident’s continued enrollment at the School of Dentistry would not be prudent, for reasons including but not limited to the student’s or resident’s violation of standards of conduct, inadequate academic performance, and/or a judgment that the student has failed to demonstrate attributes of character which the school believes are necessary to qualify students and residents to practice in their chosen profession, the school may terminate the student’s or resident’s enrollment and/or refuse to award a degree.

Equal Educational Opportunity

The school is an equal opportunity institution of higher learning and is firmly committed to nondiscrimination in its delivery of educational services and employment practices. In compliance with all applicable federal and state laws, such decisions will be made irrespective of the individual’s race, color, religion, religious creed, ancestry, national origin, age (except for minors), sex, marital status, citizenship status, military service status, sexual orientation, medical condition (cancer-related or genetic condition), disability and/or any other status protected by law. When necessary, the School will reasonably accommodate an individual (including students) with disabilities if the educational program of the school is not compromised and the individual can safely perform all essential functions without undue hardship to the school and without altering fundamental aspects of its educational program. See also: https://webshare.pacific.edu/sites/policies/Pages/Non-Discrimination%20and%20Non-Retaliation%20Policy.aspx

Other school policies

Please click on the link below for select additional policies: https://webshare.pacific.edu/sites/policies/SitePages/Policies%20by%20Category.aspx?Category=Human%20Resources%20and%20Labor%20Relations.

Disclaimer

All claims against the school or university for loss or damage arising from acts, omissions, or contingencies beyond the control of the university and its employees are hereby expressly waived. The waiver includes loss by fire, theft, or natural catastrophe of any materials belonging to a member of the student body, whether such loss occurs on or off the school premises. Students agree to these conditions when they register.

Policy on Accommodations for Students with Disabilities

The school grants otherwise qualified students, residents, and applicants all the rights, privileges, programs, and activities generally accorded or made available to students at the school and does not discriminate on
the requested implementation date.

The school will reasonably accommodate individuals with disabilities when the individual so presents a request in accordance with this policy and the individual is qualified to safely and effectively perform all essential functions of the position unless there is undue hardship in doing so. Reasonable accommodations do not include a modification of the fundamental requirements and elements of the program (e.g., behavior and conduct standards, attendance and grading policies, academic and patient-care standards, etc.)

If the individual student, resident, or applicant is otherwise qualified, in response to a request for accommodation the school will offer to make an accommodation if the accommodation is reasonable, effective, does not alter a fundamental aspect of the program, will not otherwise impose an undue hardship on the school, and/or there are no equivalent alternatives. If appropriate, the school may choose to consult with such individuals, internal or external to the school, to provide further assistance needed to evaluate the request for accommodation.

For purposes of reasonable accommodation, a student, resident, or applicant with a disability is a person who: (a) has a physical or mental impairment which limits one or more major life activities (such as walking, seeing, speaking, learning, or working); or (b) has a record with the school by which the school has officially recognized such impairment. To be eligible to continue at the school, the student, resident, or applicant must meet the qualifications and requirements expected generally of its students, and must also be able to perform the requirements of the individual major or program in which s/he is enrolled, with or without reasonable accommodation.

Note: In the event that a request for reasonable accommodation is denied, the school may occasionally choose to afford the student some temporary measure or flexibility, which is not based on the asserted disability issue, but which otherwise is considered appropriate, if it does not alter a fundamental element of the program and is not viewed by the School as inequitable toward other students. In such few cases, such temporary measure or flexibility will not be a precedent, nor will be a reasonable accommodation, and the student thereby will not be regarded as an individual with a disability.

Procedure for Seeking Accommodations
A student, resident, or applicant who requires an accommodation aid or assistance (“accommodations”), whether for academic or other uses, and who believes s/he is qualified under the school’s policy, should contact the Assistant Dean of Academic Affairs, who serves as coordinator of disability accommodations and services. Individuals who may apply for accommodation and will do so in a manner consistent with the policy. If the student, resident, or applicant agrees with the response, faculty and staff members who will be involved in providing or facilitating the accommodation will be informed of the accommodation, but the Assistant Dean of Academic Affairs will not provide medical or health-related information, unless such information is appropriate in order to allow them to assist in implementing the accommodation.

Responsibility of Student, Resident, or Applicant
Each student, resident, or applicant requesting accommodation bears the responsibility for initiating, documenting and communicating promptly with the school regarding a disability-related request for accommodation. Timely communication between the student and the Assistant Dean of Academic Affairs and/or individual faculty members is critical. Requests for information and details on accommodations will generally be communicated via confidential email, and student, resident, or applicant replies to such communications, be they from the assistant dean or a faculty member, should be in writing within 72 hours. Students must contact course directors at least one week in advance of an assessment for which accommodation is requested. Once an accommodation has been agreed upon by the student or resident and a faculty member, the student or resident must adhere to the accommodation, barring a significant and unforeseen event (e.g., sudden serious illness). Last-minute requests for or cancellations of previously agreed upon accommodations are prohibited by this policy. Furthermore, a student or resident who appears late for an assessment for which accommodations have been arranged forfeits the time lost due to tardiness.

The student, resident, or applicant will provide to the Assistant Dean of Academic Affairs the documentation to support the request. Documentation from the appropriate health professional(s) should reflect the nature of and present level of disability, how the disability affects the student’s, resident’s or applicant’s needs in a collegiate setting, and how the requested accommodation will resolve the needs. Because the provision of all reasonable accommodations and services is based upon assessment of the current impact of the disability on current academic performance, it is in an individual’s best interest to provide recent and appropriate documentation, generally no more than three years old.

Earlier documentation regarding learning disabilities will be reviewed, if it is supplemented by more recent materials.

The Assistant Dean of Academic Affairs has discretion to determine what type of professional documentation is necessary, and this may vary depending on the nature of the disability and/or accommodation. The assistant dean has discretion to seek independent medical assessment if in his/her judgment it is appropriate in some circumstances.

Code of Ethics and Adjudication of Ethics Violations
All allegations of unethical student behavior are investigated by a senior faculty member appointed by the Dean to serve as an Initial Reviewer. If there is sufficient evidence to support the allegations and the student agrees to the proposed sanction, the Initial Reviewer recommends the appropriate disciplinary action to the Dean. If the student disagrees
with the findings of the Initial Reviewer or the proposed sanction, the allegation will then be forwarded to the full Ethics Committee.

The Ethics Committee conducts hearings on matters related to student behavior and violations of the Code of Ethics. The committee is a joint faculty-administrative committee comprised of a chair selected by the Dental Faculty Council, three elected faculty members, and five elected students, one from each DDS and IDS class. In addition, four elected faculty members and three elected students, one from each class, act as alternates, and may be called to serve during committee review of a complaint that may involve an elected member or when an elected member is unable to be present. Recommendations of the Ethics Committee are submitted to the Dean for action. The decision of the Dean can only be appealed through University channels (Office of the Provost). Privileged information related to petitions, petitioners, and all deliberations and recommendations of the committee are treated as confidential and will remain "in committee" except as reported through appropriate channels.

Please click here (http://sfdental.pacific.edu/docs/Code_of_Ethics.pdf) to see the Code of Ethics.

Policy Statement on Alcohol Consumption and Drug Use

Security and Anti-Violence Policy

Prohibited Sexual and Other Unlawful Harassment Policy

Student Services
Under direction of the assistant dean of Admissions, Student Affairs and Diversity, this office is responsible for recruiting and advising potential students, coordinating admissions and pre-dental programs, managing admissions committee activities and directives, and providing consultation and assistance in nonacademic areas including student retreats, government, clubs and organizations, financial aid, health, insurance, and housing.

The school maintains a listing of off-campus, privately-owned apartments for interested students. The school does not endorse, investigate, or guarantee the tenability of listings or suitability of those responding to any off-campus listing.

First-Year Retreat and Counseling
During matriculation week, all first-year students attend a one-day retreat in San Francisco. During the retreat, students meet with student leaders from the second-year and third-year classes to discuss student experiences and leadership opportunities. Several activities are planned to encourage interaction between students and faculty, such as team building activities and a social mixer.

Many faculty members who teach first-year courses serve as advisors to new students to provide friendly ears and sounding boards for their concerns and to assist them in the transition from undergraduate to professional education. Students are assigned an advisor at the beginning of their first year. Second- and third-year students have access to their assigned group practice leader as well as course directors and other faculty members.

Academic counseling is provided by advisors as well as course directors, faculty members, the associate dean of oral health education, and the assistant dean for academic affairs. Referral to professional health care counseling is available; however, the school cannot warrant the services of external health care providers. (Students should become familiar with the procedures of such counselors before engaging the services.) The university's Counseling and Psychological Services (CAPS) offer on-campus services to students by appointment and on an on-call, emergency and drop-in basis.

Pacific Health Services
Pacific Health Services (PHS), part of the university’s Division of Student Life, maintains a clinic at the School of Dentistry. Dental and dental hygiene students who are enrolled full-time and have submitted the required health history form and immunization records are eligible for care at any PHS clinic. The on-site nurse practitioner is supported by an extended professional staff that includes a supervising physician, other nurse practitioners, and a registered dietitian. A full-time staff psychologist is also available for individual appointments or ongoing therapeutic intervention. Services available to students include health education, wellness information, and direct care during illness.

All dental students are charged a health service fee of $124.00 each quarter. The fee covers nurse practitioner services, nutritionist services (mostly by phone), and health and wellness management. The health services fee does not cover student health insurance, the cost of some procedures, the cost of medications, or costs incurred as a result of outside referrals.

Student Store
The student store stocks equipment, books, and supplies for the educational program. It is available for students, faculty, and staff. Merchandise is also available from the store’s website, www.dentalstudents.com (http://www.dentalstudents.com).

Professional and Fraternal Organizations
Social, fraternal, and professional organization memberships are open to all students in the doctoral program. Opportunities to establish associations that will endure throughout graduates’ lifetimes are described in the groups.

Associated Student Body
The Associated Student Body of the University of the Pacific, Arthur A. Dugoni School of Dentistry is composed of all students enrolled in the doctoral program. Business affairs of the organization are conducted by the Student Executive Council which consists of the elected student body officers, the president and vice president of each class, and elected representatives to selected agencies of organized dentistry. Any student may meet with the Student Executive Council, but only duly elected officers may vote on issues under consideration. Students are represented on the following school committees: Curriculum; Faculty Appointment, Promotion, and Tenure; Student Appeals; Ethics; Museum; Postgraduate Studies; Safety; Store; Student Clinic Advisory; Infection Control; Clinical Quality Assurance; and Academic Advisory.
• Academy of General Dentistry (AGD)
• Academy of LDS Dentists
• The American Association of Developmental Medicine and Dentistry (AADMD)
• American Association of Women Dentists (AAWD)
• Chinese American Student Dental Association
• Christian Medical and Dental Association (CMDA)
• Dugoni Business Club
• El Dentista Club
• Global Relations Club
• Hispanic Student Dental Association (HSDA)
• Iranian-American Student Dental Association (IASDA)
• Military Dental Club
• Peer Support Program
• Performing Arts Club
• Pre-Dental Bootcamp
• Student National Dental Association (SNDA)
• Student Professionalism and Ethics Association (SPEA)

National Dental Fraternities
• Alpha Omega: Founded in Baltimore, Maryland in 1907 by a group of dental students, Alpha Omega's mission is to promote the profession of dentistry and establish a spirit of fellowship among members. Alpha Omega has about 6,000 active dentists worldwide.
• Delta Sigma Delta: Founded in 1882 in Ann Arbor, Michigan, Delta Sigma Delta is an international organization designed to encourage scholastic achievement for dental students, foster high professional standards in dentistry and cultivate outstanding teachers and practitioners. The Nu Nu Chapter at the Dugoni School supports professional camaraderie, student research and network development for young professionals.

Study Clubs
• Aesthetics Study Club
• Dentist Anesthesiologist Deliberation Club
• Endodontics Study Club
• Oral Surgery and Maxillofacial Surgery Study Club
• Orthodontics Study Club
• Pacific Implant Continuum
• Pediatric Obstructive Sleep Apnea Study Club
• Pediatrics Study Club
• Periodontal Study Club
• Student Research Group (SRG): The Student Research Group (SRG) works to enhance the research culture at the Dental School by supporting collaboration between students and faculty members in current research projects. The goal of SRG is to promote the advancement of dental research and evidence-based practice. The SRG is a chapter of the National Student Research Group (NSRG)/American Association for Dental Research (AADR) and the International Association for Dental Research (IADR). Group members are encouraged to participate in various school events, attend the NSRG meeting and the annual AADR/IADR meeting. A member of the student group also represents Pacific each year at the ADA-sponsored Annual Dental Student Conference on Research in the Washington DC area.

Dental Mission Trips and Community Outreach
• Guatemala Dental Mission
• Jamaica Dental Mission
• Mexico Dental Mission
• Philippines Dental Outreach
• Student Community Outreach for Public Education (SCOPE): The SCOPE organization provides students professional development projects focused on community oral health. The student-directed public health organization utilizes the peer-mentoring model. At the School of Dentistry, SCOPE's mission is to engage students and faculty in volunteer oral health projects directed toward community health needs. Created in 1994 by innovative students and a faculty mentor, thousands of students and underserved public members have benefitted. Today, SCOPE exemplifies several of the school's strategic priorities, including: to provide inter-professional opportunities to support readiness for practice in integrated health systems; and to serve unmet oral healthcare needs in our community.

Clinical extramural externships on Saturdays and academic break periods, form an experiential component of the SCOPE Community Health Programs. Externships and SCOPE Health Projects provide the major components of Pacific's Community-Campus Partnership Programs (CCPP). This CCPP partnership links Dugoni students' oral health community projects to key community stakeholders and agencies.

Inter-professional projects, leadership development, and evidence-based best practices form the foundation of CCPP and SCOPE programs. SCOPE student officers take an active role in designing, leading, and evaluating health projects such as screenings, prevention services, group presentations and educational sessions. Health services are directed toward culturally diverse children, families and senior citizens in the Bay Area. SCOPE officers and faculty strive to sponsor inter-professional projects with audiology, pharmacy, nursing, physical therapy, social service and physician assistant students and schools.

Organized Dentistry
American Student Dental Association (ASDA)
All University of the Pacific dental students are members of ASDA and, concurrently, student members of the American Dental Association with all the rights and privileges of such membership. Benefits are detailed in publications distributed by these organizations.

California Dental Association (CDA)
University of the Pacific dental students were the first in California to avail themselves of the student membership category offered by the California Dental Association. Modest annual dues provide each student member with CDA publications, access to CDA meetings without charge, and other benefits.

American Dental Education Association (ADEA)
All enrolled predoctoral students are members of ADEA.

The Council of Students is one of several councils of ADEA. The school’s elected representatives to the council participate in the ADEA annual session and regional meetings. The Council of Students has an administrative board consisting of a vice president who serves on the ADEA executive committee, and a chair, vice chair, secretary, and member-at-large. The council elects several student delegates who have full voting privileges in the ADEA House of Delegates.
American Dental Hygienists' Association (ADHA)
The ADHA provides personal and professional development for enrolled
dental hygiene students. Students can participate in the annual
county, community involvement, and networking opportunities.
ADHA offers preparation for the National Dental Hygiene Board Exam,
scholarships and grants, publications and leadership opportunities.

California Dental Hygienists' Association (CDHA)
The CDHA represents the student voice in the dental hygiene profession.
Annual dues provide each dental hygiene student scholarship and
networking opportunities. They can participate in conferences and
activities throughout the state which includes the annual regional
conference, Student House of Representatives and the CDHA Table Clinic
Competition.

Emeritus Faculty/Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Year and Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glen A. Albaugh</td>
<td>1971, Professor of Sport Sciences, Emeritus, 1999.</td>
</tr>
<tr>
<td>Leigh Charles Anderson</td>
<td>2000, Professor of Biomedical Sciences, Emeritus, 2017</td>
</tr>
<tr>
<td>Steven C. Anderson</td>
<td>1970, Professor of Biological Sciences, Emeritus, 1997</td>
</tr>
<tr>
<td>Harriett Arnold</td>
<td>1994, Director, Early Childhood Development Projects, Associate Professor of Education, Emerita, 2014.</td>
</tr>
<tr>
<td>Roger Barnett</td>
<td>1965, Professor of Geography, Emeritus, 1999.</td>
</tr>
<tr>
<td>Marlin Bates</td>
<td>2004, Associate Professor of Communication, Emeritus, 2019</td>
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<tr>
<td>Robert Benedetti</td>
<td>1989, Dean of the College of the Pacific, 2002, Executive Director of the Jacoby Center, Professor of Political Science, Emeritus, 2013.</td>
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<tr>
<td>Roy C. Bergstrom</td>
<td>1980, Associate Professor of Mathematics, Assistant Dean for Administration, Emeritus, 2018</td>
</tr>
<tr>
<td>David F. Besch</td>
<td>1985, Assistant Professor of Electrical and Computer Engineering, Emeritus, 2002.</td>
</tr>
<tr>
<td>Diane M. Borden</td>
<td>1971, Professor of English, Director of Film Studies, Emerita, 2014.</td>
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<tr>
<td>Dennis Brennan</td>
<td>1978, Assistant Dean and Associate Professor of Education, Emeritus, 2012.</td>
</tr>
<tr>
<td>Ashland O. Brown</td>
<td>1991, Dean of the School of Engineering, Professor of Mechanical Engineering, Emeritus, 2016</td>
</tr>
<tr>
<td>Dorothy Burk</td>
<td>1979, Professor of Biomedical Sciences, Emerita, 2020</td>
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<tr>
<td>Gaylon L. Caldwell</td>
<td>1970, Dean of Elbert Covell College and Professor of Political Science, Emeritus, 1982.</td>
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<tr>
<td>Gerald Caplan</td>
<td>1992, Dean of the McGeorge School of Law, Professor of Law, Emeritus, 2014</td>
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<tr>
<td>William H. Carpenter</td>
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<td>Linda Carter</td>
<td>1985, Distinguished Professor of Law, Emerita, 2016</td>
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<td>Kishori Chaubal</td>
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<td>Roy Childs</td>
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<td>Lee Christianson</td>
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<td>Robert Coburn</td>
<td>1993, Professor of Music Composition and Theory, Emeritus, 2019</td>
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<td>Joel A. Cohen</td>
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<td>Raymond Coletta</td>
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<td>Thomas A. Coyne</td>
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<tr>
<td>Donald DaGrade</td>
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<td>1996, Emerita</td>
</tr>
<tr>
<td>Gary Martin</td>
<td>1983, Emeritus</td>
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<td>Alice Jean Matuszak</td>
<td>1963, Emeritus</td>
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<td>Charles A. Matuszak</td>
<td>1963, Emeritus</td>
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<tr>
<td>Maurice L. McCullen</td>
<td>1970, Emeritus</td>
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<td>Dale W. McNeal</td>
<td>1969, Emeritus</td>
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<td>Denis Meerdink</td>
<td>1990, Emeritus</td>
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<td>Lawrence Meredith</td>
<td>1966, Emeritus</td>
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<td>Doris C. Meyer</td>
<td>1956, Emeritus</td>
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<tr>
<td>David Wilkinson Miller</td>
<td>1981, Emeritus</td>
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<tr>
<td>James P. Morrali</td>
<td>1961, Emeritus</td>
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<tr>
<td>Roger C. Mueller</td>
<td>1969, Emeritus</td>
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<tr>
<td>Alexander Murphy</td>
<td>1972, Emeritus</td>
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<tr>
<td>Fred Muskal</td>
<td>1970, Emeritus</td>
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<td>John Myers</td>
<td>1984, Emeritus</td>
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<tr>
<td>John M. Nagle</td>
<td>2000, Emeritus</td>
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<tr>
<td>Thomas Nelson</td>
<td>1995, Emeritus</td>
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<tr>
<td>George L. Nemeth</td>
<td>1970, Emeritus</td>
</tr>
<tr>
<td>David Nielsen</td>
<td>1986, Emeritus</td>
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<tr>
<td>Name</td>
<td>Years</td>
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<tr>
<td>Robert Oprandy</td>
<td>2000</td>
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<tr>
<td>Elizabeth Rindskopf Parker</td>
<td>2002</td>
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<tr>
<td>Bruce Peltier</td>
<td>1994</td>
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<tr>
<td>Larry L. Pippin</td>
<td>1965</td>
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<tr>
<td>Virginia L. Puich</td>
<td>1969</td>
</tr>
<tr>
<td>Jan (Ellen) Rein</td>
<td>1989</td>
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<tr>
<td>Claude D. Rohwer</td>
<td>1964</td>
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<tr>
<td>Jennifer Ross</td>
<td>1993</td>
</tr>
<tr>
<td>Merrill Schleier</td>
<td>1982</td>
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<tr>
<td>Glendalee Scully</td>
<td>1976</td>
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<tr>
<td>John Sims</td>
<td>1986</td>
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<tr>
<td>Anthony Skrocki</td>
<td>1973</td>
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<tr>
<td>Timothy J. Smith</td>
<td>1993</td>
</tr>
<tr>
<td>Simaee Smith-Stubblefield</td>
<td>1983</td>
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<tr>
<td>Christopher Snell</td>
<td>1990</td>
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<tr>
<td>Louise Stark</td>
<td>1992</td>
</tr>
<tr>
<td>William T. Stringfellow</td>
<td>2009</td>
</tr>
<tr>
<td>S. Thomas Stubbs</td>
<td>1963</td>
</tr>
<tr>
<td>Henghu (Henry) Sun</td>
<td>2008</td>
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<tr>
<td>J. Connor Sutton</td>
<td>1963</td>
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<tr>
<td>Joseph Taylor</td>
<td>1993</td>
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<tr>
<td>Richard Tenaza</td>
<td>1975</td>
</tr>
<tr>
<td>Paul Turpin</td>
<td>2007</td>
</tr>
<tr>
<td>Name</td>
<td>Title/Department</td>
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<td>-----------------------------</td>
<td>--------------------------------------------------------</td>
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<tr>
<td>Richard H. Turpin</td>
<td>1984, Professor of Electrical and Computer Engineering</td>
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<tr>
<td>Darcy Umphred</td>
<td>1987, Professor of Physical Therapy</td>
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<tr>
<td>Warren van Bronkhorst</td>
<td>1967, Professor of Violin</td>
</tr>
<tr>
<td>Judith L. Van Hoorn</td>
<td>1982, Professor of Education</td>
</tr>
<tr>
<td>Richard J. Vargo</td>
<td>1981, Professor of Accounting</td>
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<tr>
<td>Ray VarnBuhler</td>
<td>1980, Professor of Art</td>
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<tr>
<td>Ravindra C. Vasavada</td>
<td>1973, Professor of Pharmaceutics</td>
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<tr>
<td>William H. Wadman</td>
<td>1955, Professor of Chemistry</td>
</tr>
<tr>
<td>Joel Wagner</td>
<td>1998, Clinical Professor of Pharmacy</td>
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<tr>
<td>Suzanne Walchli</td>
<td>2000, Associate Professor of Marketing</td>
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<tr>
<td>Coburn C. Ward</td>
<td>1977, Professor of Mathematics</td>
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<tr>
<td>Lori D. Warner</td>
<td>1987, Associate Professor of Economics</td>
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<tr>
<td>Paula Watson</td>
<td>2004, Associate Professor of Periodontics/Dental Hygiene</td>
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<tr>
<td>Gregory Weber</td>
<td>1990, Professor of Law</td>
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<tr>
<td>Donald K. Wedegaertner</td>
<td>1963, Professor of Chemistry</td>
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<tr>
<td>Cynthia Wagner Weick</td>
<td>1990, Director of the Powell Scholars Program and Professor of Management</td>
</tr>
<tr>
<td>Brian Weick</td>
<td>1995, Professor of Mechanical Engineering</td>
</tr>
<tr>
<td>Stephen Wheeler</td>
<td>1994, Visiting Professor of Accounting</td>
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<tr>
<td>Roy A. Whiteker</td>
<td>1976, Dean of the College of the Pacific</td>
</tr>
<tr>
<td>William P. Whitesides</td>
<td>1978, Professor of Voice</td>
</tr>
<tr>
<td>Keith Whittington</td>
<td>1987, Professor of Mathematics</td>
</tr>
<tr>
<td>Frank Wiens</td>
<td>1976, Professor of Piano</td>
</tr>
<tr>
<td>Lynelle Wiens</td>
<td>1976, Professor and Program Director</td>
</tr>
<tr>
<td>Philip Wile</td>
<td>1987, Professor of Law</td>
</tr>
<tr>
<td>John S. Williams</td>
<td>1965, Professor of English</td>
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<tr>
<td>Christine R. Wilson</td>
<td>2003, Associate Professor of Physical Therapy</td>
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<tr>
<td>Joseph A. Woelfel</td>
<td>2006, Professor of Pharmacy Practice</td>
</tr>
<tr>
<td>William Wolak</td>
<td>1975, Professor of Theatre Arts</td>
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<tr>
<td>David E. Wolfe</td>
<td>1987, Professor of Music Therapy</td>
</tr>
<tr>
<td>Kojo Yelpaala</td>
<td>1981, Professor of Law</td>
</tr>
<tr>
<td>Douglas Young</td>
<td>1996, Professor of Diagnostic Sciences</td>
</tr>
<tr>
<td>Walter Zimmermann</td>
<td>1970, Professor of Mathematics</td>
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</table>

**Financial Aid**

**Graduate**

**Conservatory of Music**

**Music Therapy**

**School of Engineering and Computer Science**

**Data Science**

**School of Health Sciences**

**Audiology**

**Professional**

**Arthur A. Dugoni School of Dentistry**

All information applies to the DDS, IDS and Dental Graduate Programs. Not all information applies to the Certificate Programs. For more information, contact your program.

**Undergraduate**

**Arthur A. Dugoni School of Dentistry**

**Dental Hygiene**

Financial Aid on this page is for the following graduate programs on the San Francisco Campus.

**Conservatory of Music**

**Music Therapy**

**School of Engineering and Computer Science**

**Data Science**

**School of Health Sciences**

**Audiology**

Many programs offer graduate assistantships each year for students based on academic quality and experience in research. Graduate assistantships are available each year in many of the departments and schools where advanced degrees are offered. These graduate assistantships may be in the form of scholarship, tuition waiver, cash stipends for services performed, or a combination of those, depending upon each student’s program and department recommendations. Please contact your program director(s) for details on graduate assistantships or other forms of financial aid.

Research awards are available for departmental or contract research in some fields. From time to time, fellowships are offered in certain federally-supported programs in which University of the Pacific participates.

University of the Pacific 53
Graduate students who are U.S. citizens or eligible non-citizens may apply for federal student loans. For information, visit www.pacific.edu/financialaid (http://www.pacific.edu/financialaid/) or contact the:

Financial Aid Office  
University of the Pacific  
Stockton, CA 95211  
(209) 946-2421 or financialaid@pacific.edu

Financial Aid on this page is for the following professional programs on the San Francisco campus.

Professional

Arthur A. Dugoni School of Dentistry  
All information applies to the DDS, IDS and Dental Graduate Programs. Not all information applies to the Certificate Programs. For more information, contact your program.

It is important to know that all applicants are considered for admission regardless of their financial circumstances. Financial aid is awarded on the basis of financial need as long as the student is a U.S. citizen, permanent resident or eligible non-citizen. The financial aid office emails application materials beginning in January to those who are accepted for admission. An applicant must be approved for admission before financial aid can be awarded.

Loans and scholarship funds are available from private, state, and federal sources. The financial aid office assists students in managing their financial resources and their indebtedness in school and after graduation. Staff members conduct a needs analysis and provide comprehensive financial guidance for every student applying for financial aid. Complete information about the types of financial aid available and the application process can be obtained from our website at www.dental.pacific.edu (http://www.dental.pacific.edu) or from the financial aid staff in the Office of Student Services.

Financial Aid on this page is for the following undergraduate program on the San Francisco campus.

Arthur A. Dugoni School of Denistry  
Dental Hygiene

The University maintains a substantial student financial assistance program that includes scholarships, grants, loans and job opportunities. Detailed financial aid information and application instructions are available at www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-Financial-Aid.html (http://www.pacific.edu/financialaid/).

Students who wish to be considered for academic merit-based scholarships are advised to complete the admission application process by the appropriate deadline or priority date. Students who seek other University scholarships, grants, work-study, or loans or whose parents wish to apply for a Federal Direct PLUS Loan must also file a Free Application for Federal Student Aid (FAFSA) and complete other application procedures as instructed by the Financial Aid Office. In addition, financial aid applicants who are legal residents of California and do not already have a bachelor’s degree are expected to apply for a Cal Grant. High schools and colleges have information about the Cal Grant programs and application procedures.

Students are advised to file the FAFSA electronically at the Federal Student Aid Web site. A worksheet and instructions may be downloaded from the Web site, or may be secured at a high school or college or from the University. The priority FAFSA filing date for entering Pacific students is January 15. Pacific awards financial aid to students who apply after the admission and financial aid priority dates; however, late awards may be less favorable.

A student must be approved for admission as a regular student to an eligible degree or certificate program before financial aid can be awarded. Students must enroll on at least a half-time basis to qualify for most financial aid and some awards require full-time enrollment. Aid is usually awarded for the entire school year, with the full-year amount divided equally among the semesters or trimesters of enrollment. Please note that financial aid eligibility is re-evaluated when a student completes pre-professional work and enters a professional program.

Financial aid at the University is available only to U.S. citizens, permanent residents and other eligible non-citizens.

When a financial aid recipient withdraws during a semester, the student’s financial aid is adjusted according to federal and state regulations and University policy. Details are available on the Financial Aid website under Student Consumer Information.

Academic Requirements

Federal regulations require the Financial Aid Office to ensure that financial aid recipients maintain acceptable academic standing and make satisfactory progress in their programs of study.

Students placed on academic probation may receive financial aid, but students who are academically disqualified are placed on financial aid disqualification. Financial aid recipients are also expected to complete satisfactorily at least 67% of all units attempted and to obtain their degrees within a specified maximum period of full-time study. Access to financial aid to pay for repeated courses is limited by federal regulations.

For further information, please refer to the Academic Probation and Disqualification Policy Statement in this catalog and the Satisfactory Academic Progress Policy Statement available from the Financial Aid Office.

Educational Equity Programs: Community Involvement Program (CIP)

History

The Community Involvement Program (CIP) was established in 1969 by a group of students, community members, faculty and staff who wanted to provide educational opportunities to the local community. Since implementation of the scholarship program there have been over 1000 CIP Alumni. This program serves the educational needs of students who demonstrate low income and first generation college status.

Purpose

The Community Involvement Program is limited to new incoming freshman or transfer students to the university. The review process for the scholarship places a substantial emphasis on the applicant’s educational and financial background. It also examines the applicant’s community involvement and awareness, maturity, and potential to
contribute his/her time and energy to the Community Involvement Program.

Qualifications

- Demonstration of financial need. Must be eligible for Cal and Pell Grants at the University of the Pacific, and meet the Free and Reduced Lunch income guidelines.
- Clear demonstration of community involvement, volunteerism, and awareness of social issues prior to acceptance at the university.
- Stockton resident (must have resided in Stockton, i.e. Census Tracks #1-38 boundaries) for the past three years. (Does not apply to transfer students from San Joaquin Delta College)
- First generation college student (neither parent/guardian has earned a bachelor's degree from an accredited university).
- Accepted for admission at Pacific.
- U.S. citizen or permanent resident.

For additional information, please contact:

Community Involvement Program
Bannister Hall, First Floor
Phone (209) 946-2436
E-mail: cip@pacific.edu

Student Complaint Procedure Notice

The United States Department of Education requires institutions of higher education to publish and comply with policies regarding student complaints that address the school's program of education.

Any student at Pacific who wishes to bring a formal complaint to the administration regarding a significant problem that directly implicates a) University of the Pacific's program of education and its compliance with the WASC Standards; b) University of the Pacific's policies or protocols; or c) California state laws, should do the following:

1. Submit the complaint in writing to the Vice President for Student Life. The complaint may be sent via email, U.S. Mail, facsimile, or in person to the Office of the Vice President for Student Life (Hand Hall).
2. The complaint should describe in detail the behavior, program, process, or other matter that is at issue, and should explain how the matter directly implicates the student's program of education and the University's compliance with a specific, identified WASC Standards*, University policy/procedure, or state law.
3. The complaint must contain the complaining student's name, student ID#, official Pacific email address, and current mailing address. This information will be kept confidential, but there must be an identifying name for a response to take place.

A complaint may also be pursued in the following manner(s):

1. If your complaint concerns the institution’s compliance with academic programs, academic quality and/or accrediting standards, you may submit your complaint to the Western Association of Schools and Colleges (WASC), University of the Pacific's accrediting agency, at www.wascsenior.org/comments (http://www.wascsenior.org/comments/).
2. If you believe that your complaint warrants further attention or is related to alleged violation of state law, you may contact the Bureau for Private Postsecondary Education for review of a complaint. The bureau may be contacted at:

Most complaints made to media outlets or public figures, including members of the California legislature, Congress, the Governor, or individual Regents of University of the Pacific are referred to the Office of the President.

Nothing in this disclosure limits any right that the student may have to seek civil or criminal action to resolve the complaint.

University of the Pacific has provided this disclosure to you in compliance with the requirements of the Higher Education Act of 1965, as amended, as regulated in CFR 34, Sections 600.9 (b) (3) and 668.43(b). If anything in this disclosure is out of date, please notify the Vice President for Student Life, 3601 Pacific Avenue, Stockton, CA 95211, 209.946.2365.

Scholarships and Grants

University of the Pacific students who demonstrate financial need may qualify for federal and state grants. In addition, Pacific offers scholarships and grants from income provided by gifts, endowments and the University’s general fund, which includes Pacific Fund gifts. Qualifications vary according to conditions stipulated by donors, but attention is usually given to some or all of the following: academic record, special talents, leadership abilities, vocational objectives and financial need. Academic scholarships may be renewed for full-time enrollment in a bachelor’s degree or pre-professional program.

Detailed information about scholarships and scholarship renewal is available from the Financial Aid Office and online at www.pacific.edu/About-Pacific/AdministrationOffices/Office-of-Financial-Aid.html (http://www.pacific.edu/financialaid/).

Academic Merit-Based Scholarships

Entering freshmen who demonstrate superior leadership ability and a commitment to academic excellence and meet minimum academic criteria may be recommended by their high schools for the Powell Scholarship, valued at $40,000 per academic year. An application form is available on the Financial Aid website.
Entering students who complete the admission application process by January 15 are automatically considered for the merit-based scholarships listed below.

Freshmen entering the University directly from high school may be considered for Regents Scholarships, valued at $22,000 per academic year, President’s Scholarships, for $18,000 per academic year, Provost’s Scholarships, for $14,000 per academic year, and Pacific Scholarships, for $10,000 per academic year. Recipients are selected on the basis of grade point average, test scores, and other criteria.

Transfer Academic Distinguished Scholarships, for $16,000 per academic year, are awarded to applicants with a college GPA of 3.50 or above, Transfer Academic Excellence Scholarships, for $14,000 per academic year are awarded to transfer students with college GPAs of 3.00 to 3.49, and Transfer Merit Scholarship of $12,000 are awarded to applicants with college GPAs of 2.80 to 2.99.

A student who qualifies for more than one academic scholarship receives the most advantageous award.

**General Academic Endowed Scholarships**

Many of the scholarships listed below provide funding for the Regents’, President’s, Provost’s, Pacific and Bishop’s Scholarship programs. Scholarships are also available for students regardless of major. A student is considered an eligible candidate via his/her application for financial aid and maintaining a 3.0 GPA.

Anne and Ray Arnold Endowed Memorial Scholarship. Established by Mrs. Anne Brady Arnold of Stockton in memory of her husband, a former Tracy banker. Augmented by gifts in memory of Mrs. Arnold.

Laura Tull, Walter Pike Austin, and Henrietta T. Austin Endowed Scholarship.

John N. and Jessie L. Ballantyne Endowed Memorial Scholarships. Established during their lifetimes by these Lodi friends of Pacific.

Grace Burns Baun Endowed Scholarship. Established with gifts from her estate.

Gertrude Moore Beans and William Know Beans Endowed Memorial Scholarship. Established by a bequest from an alumna of the Class of 1920.

Lonzo and Julie Beck Endowed Scholarship. Established in memory of her husband.

Henry and Elsie Bell Memorial Endowed Scholarship. Established with gifts from her estate.


William and Dorothy Biddick Endowed Scholarship. Established by William and Dorothy Biddick.

Bishop’s Endowed Scholarship.

William M. Black Endowed Scholarship. Established by the bequest of a faculty member’s father.

Constance Bowen Endowed Scholarship.

Anton Brawthen Endowed Memorial Scholarship. Established by his daughter Clara Brawthen.

Seba M. Bronson Endowed Scholarship. Established with a trust.

Dahl Burnham Endowed Scholarship.

Robert E. Burns Endowed Scholarship. Established in memory of Robert E. Burns, 20th president of the University, by his widow Grace Weeks Burns Baun.

Norman J. Cain Endowed Memorial Scholarship. Established by Dr. Harvey D. Cain in memory of his son.

Central United Methodist Church Endowed Scholarship.

Class of 1927 Endowed Scholarship. Established and supplemented by members of the class of 1927.

Classes of ’49, ’50, and ’51 Endowed Scholarship. Established by the members of these three classes.

Class of 1965 Endowed Scholarship. Established by various gifts from members of the Class of 1965.

Claypool Endowed Scholarship. Established by an estate gift given in memory of Jane Singleton Claypool and Rosa Shambeau Claypool.

Herman A. and Margaret P. Clover Endowed Memorial Scholarship. Established by Dr. Haworth A. Clover and his wife Carol in memory of his parents.

Robert L. and Lucy S. Colthart Endowed Scholarship. Established with gifts received from their trust.

Elmer C. and Lena E. Courtney Endowed Memorial Scholarship. Established by Lena C. Courtney.

Grace Covell Endowed Scholarship.


Juanita and Earnie Cronkite Endowed Scholarship. Established with their estate gift.

Paul L. Davies, Sr. Endowed Memorial Scholarship. Funded by a gift from a special friend.

Hugh and Esther Davis Endowed Scholarship. Established with an estate gift.

Robert C. and Olive V. d’Erlach Endowed Memorial Scholarship. Funded by their bequest.

Clifford L. Dochterman Endowed Scholarship. Established to honor him upon his retirement.

Coach Don Edwards Endowed Scholarship. Established with a gift from Mr. Cecil Harp in memory of his wife Joan E. Harp.

Christopher A. and Cora S. Elliott Endowed Scholarship.

Charles Sumner Esrey Endowed Scholarship.

Fiftieth Reunion Class Endowed Scholarship. Established in 1991 and supplemented annually by each 50th reunion class.

Elliott L. Fisher Endowed Memorial Scholarship. Established by his family and friends.

Samuel Jacob and Gertrude Alice Fox Endowed Scholarship. Established by a gift from his estate.

56 Financial Aid
Emery and Susie Freeman Endowed Scholarship. Established by a bequest from the Susie Freeman estate.

Friedberger Endowed Educational Scholarship. Established by the bequest of Dr. William Friedberger, in memory of his parents, Arnold and Lotta Friedberger.

David Friedrich Memorial Endowed Scholarship. Established by parents, family and friends in memory of David, class of 1988, who lost his life in a water skiing accident in his senior year at U.O.P.

A. P. Giannini Endowed Scholarship. Established by a bequest.


Mildred Woodward Graham Endowed Scholarship. Established with a gift from the National Society of Colonial Dames.

Virginia Graves Endowed Middle Income Scholarship.

Sarah Elizabeth Riley Harris Endowed Memorial Scholarship. Established by the will of Grace Dell Stuart in memory of her mother.

Hearst Foundation Endowed Scholarship. Established by The Hearst Foundation.

Ruth M. Heath Scholarship. Established through her bequest.

Francis W. and Mary V. Hellman Endowed Scholarship. Established through their bequest.

Ruth Templeton Henney Endowed Memorial Scholarship. Established through her bequest.

Hoefer Foundation.

Claude H. Hogan Endowed Memorial Scholarship. Established through his bequest.

The Honey Family Endowed Scholarship.

John and Ruth Bay Hoobyar Endowed Scholarship. Established with an estate gift.

Cecil and Alberta Humphreys Endowed Scholarship. Established by a distinguished alumnus and long-time member of Pacific's Board of Regents and his wife, an alumna.

Ruth and Francis H. Jackson Endowed Memorial Scholarship. Established in his memory by his wife Ruth M. Jackson.

Harriot West Jackson Endowed Memorial Scholarship. Established by the late Mrs. Winifred Cumming of Washington, D.C., and Frank West of Pebble Beach, in memory of their aunt.

Clarence and Martha Jones Endowed Scholarship. Established by Clarence and Martha Jones.

Donald S. Jones Memorial Scholarship. Established through an estate gift.

Fletcher Jones Endowed Scholarship.

Dorothy Lea and Anthony J. Ketman Memorial Endowed Scholarship. Established with an estate gift.

Fay Wallace Kiser Endowed Memorial Scholarship. Established by his wife, Beulah Lee Watson Kiser, who served the University as Dean of Women from 1940 to 1948.

Edith E. Knoles Endowed Scholarship. Established through her estate.

Emily Knoles Centennial Endowed Scholarship. Created on her 100th birthday by family and friends, and augmented by gifts in memory of the wife of former Pacific President Tully C. Knoles.

Samuel Kress Endowed Scholarship.

Dr. Harry W. Lange and William H. Pfund Endowed Scholarship.

La Quinta Inns Inc. Endowed Scholarship. Originally established by La Quinta Inns Inc. and augmented by a portion of the rooms rented by Pacific visitors.

Elizabeth Laskin Endowed Memorial Scholarship. Established and supplemented by her parents, Mr. and Mrs. Myron Laskin of Milwaukee, WI, and many friends in memory of this 1956 graduate.

The Leatherby Family Endowed Scholarship. Established with a gift from Russell and Susie Leatherby.


Bessie Lenvig Endowed Scholarship.

William and Carol Linee Endowed Scholarship. Established through the bequest of these long-time Stockton residents.

Garth Rodrick Lipsky Endowed Memorial Scholarship. Established by his mother, Edna Lipsky.

Lenora M. Magee Endowed Memorial Scholarship.

George H. Mayr Endowed Scholarship. Established by the George H. Mayr Foundation in honor of their founder.

Erford and Dorothy Knole McAllister Endowed Scholarship.


John A. McCarthy Memorial Endowed Scholarship.

Robert T. Monagan Endowed Scholarship. Established with honorary gifts from Omega Phi Alpha and Delta Upsilon donors.

Wert E. and Viola Moore Endowed Scholarship. Established by a bequest of long-time Stockton resident, Viola Moore.

Timothy Patrick Murphy Endowed Memorial Scholarship. Established by the parents and many friends of Tim Murphy, class of 1978, whose life at Pacific left an indelible impression.


Orange Aid Endowed Scholarship. Established by community members and friends of the University who volunteered their services. Funded by the sale of student “survival kits” and membership dues.

Pacific Alumni Board Endowed Scholarship. Established by the Alumni Board in honor of Kara Brewer, past Alumni Director.

Pacific Co-op House Endowed Scholarship. Established by former students who resided in Pacific's Co-op House during the 1930s and '40s.
Doris and Frank Peirano Endowed Scholarship. Established by an estate gift.

Irma E. Pennycook Endowed Scholarship. Established by a bequest from this University friend.

Marion Pope Endowed Scholarship. Established by a bequest.

Powell Scholars Endowment Scholarship Program. Established with a gift from the Robert C. and Jeannette C. Powell Trust.

Nina Reid Prather Endowed Scholarship.

Chalmers Price Endowed Scholarship. Established with gifts from his estate.

Sandy Price Endowed Memorial Scholarship. Established by the Caldor Lumber Company and the Mildred Kellogg estate.

Alstyne E. and Frances A. Pruner Endowed Scholarship. Established with an estate gift.

Rhizomia Endowed Scholarship. Established by members of Rhizomia Fraternity.

Lincoln and Stella Ruggles Endowed Memorial Scholarship. Established by Lottie Ruggles in memory of her parents and later supplemented through her will.

Joseph Robert Rupley Endowed Memorial Scholarship. Established by his parents. He was accidentally shot to death in 1965 by Venezuelan police while serving in the Peace Corps.

Rupert and Philamena Russell Endowed Scholarship. Established by the bequests of Mr. and Mrs. Russell.

Walter B. Sampson Endowed Scholarship. Established by a bequest.

George and Georgia Sanderson Endowed Scholarship. Established with gifts from their son Robert E. Sanderson.

William and Jeanne Sanford Endowed Scholarship. Established by friends and members of the Paradise United Methodist Church in honor of their minister and his wife.

Audrey and Henry Schwerin Endowed Scholarship. Established by a bequest.

Charles Schiffman Endowed Memorial Scholarship. Established with an estate gift. Delete scholarship from here.

Dorothy J. and Daniel H. Singleton Endowed Scholarship. Established by a bequest.

J. W. and Florence E. Smith Endowed Memorial Scholarship.

Mary Leach Smith Endowed Memorial Scholarship. Established by Onnie Smith in memory of her mother.


Southeast Asian Endowed Scholarship. Established by memorial gifts and proceeds from benefit performances. In memory of the five children killed at Cleveland Elementary School in 1989.

Mary Lou Spiess Scholarship. Established by her son.

R. & R. Stuart Endowed Scholarship.

Esther J. Tarr Endowed Scholarship. Established by Curtis W. Tarr, in honor of his mother and augmented by gifts in her memory.

Elliott J. Taylor and Burta M. Taylor Endowed Scholarship. Established with gifts from their estate.

Charles A. and Harriette E. Thomas Endowed Scholarship. Established by bequest and given in loving memory of their parents.

Thomas S. and Margaret A. Thompson Endowed Scholarship. Established by Mr. and Mrs. Thompson. Mr. Thompson served as Vice President for Development from 1963-1969.

Guy P. and Grace Tucker Endowed Scholarship. Established by a bequest from these University friends.

Twenty-fifth Class Reunion Endowed Scholarship. Established by various 25th Reunion classes.

Alex and Jeri Vereschagin Endowed Scholarship. Established by Mr. and Mrs. Vereschagin, both loyal Pacific alumni and parents.

Zana Taylor Weaver Endowed Scholarship. Established by her will.

Wendy Webb Endowed Memorial Scholarship. Established by her parents, Mr. and Mrs. J. S. Webb of Calabasas, and many friends in memory of a former student.

Dr. Gustav A. and Ellen M. Werner Endowed Memorial Scholarship. Established by family and friends in memory of a popular history professor and his wife.

Steven G. Werner Endowed Scholarship.

Ed and Joan Westgate Endowed Scholarship.

Gene and Arlene Weston Endowed Scholarship.

Robert and Margaret Wicker Endowed Scholarship.

Wickert Memorial Endowed Scholarship. Established by the Carol Wickert Raab Trust.

Wightman Memorial Endowed Scholarship. Established in her brother’s memory by Mrs. Bessie Jasmann.

Norma H. Williams Endowed Scholarship.

Theresa Woo Scholarship. This scholarship was established by her estate.

Carlos and Madeline Wood Endowed Scholarship.

Zeta Phi Scholarship. Established by Zeta Phi alumnae.

**Annually Funded Academic Scholarships**

In addition to the endowed scholarships, the University receives both restricted and un-restricted scholarships annually from a variety of sources.

**School and Departmental Scholarships**

The scholarships listed below are granted to students who meet major requirements and/or other criteria as well as a minimum GPA of 3.0. It is NOT necessary to submit a separate application form unless specifically noted. Many of these scholarships provide funding for the Regents’, President’s, and Bishop’s Scholarship programs.
Center for Professional and Continuing Education
Osher Reentry Scholarship Program Endowed Scholarship. Established by gifts from the Osher Foundation

College of the Pacific
A. S. H. Graduate Research Endowed Biology Award. Established by Dr. Alice S. Hunter, a respected faculty emeritus.

Art Award Endowed Scholarship. Established by sale of University art holdings and friends of the Art Department.

Julian Smith Bacon, Jr. and Jedediah Smith Society Scholarship. Established with gifts from the Jedediah Smith Society.

Barker-Knoles Endowed Scholarship.

Jess A. Berger Endowed Memorial Scholarship. Established by Dr. Evelyn Berger Brown in honor and memory of her husband.


Frank Black Endowed Memorial Scholarship. Established in memory of a former student.

Maynard A. Bostwick Endowed Scholarship. Established by an alumnus.

Erma Boyce Endowed scholarship.

DeMarcus Brown Endowed Drama Scholarship. Established by Elinor P. Canedy, class of 1944, in honor of the emeritus drama chairman.

Leslie M. Burwell Endowed Memorial Scholarship. Established by Mrs. Leslie M. Burwell.

William P. Christiansen Endowed Award.

Howard and Emma Churchill Endowed Scholarship. Established by a bequest.

Eva and Stout Clack Endowed Scholarship.

Emerson and Edith Cobb Endowed Scholarship. Established by faculty, alumni and friends in honor of long-time chairman (1948-78) of the Chemistry Department and his wife.

Iva B. Collier Endowed Scholarship. Established by her bequest.

Roselyn J. Cook Endowed Scholarship.

Corson Family Endowed Scholarship. Established with gifts from the Corson family members

Ray and Ruby Dami Endowed Scholarship.

Ellen Deering Endowed Senior Award.

Ellen Deering Endowed Senior Art Award.

Helen B. Dooley Endowed Scholarship.

Max and Victoria Dreyfus Foundation Endowed Award.

Helene and Jack Drown Endowed Scholarship.

Fred J. Early, Jr. and Marguerite C. Early Science Research Endowed Award.

Marie Easterbrook Endowed Scholarship.

Fred L. Farley Endowed Scholarship. Established by Erwin and Tom Farley.

David Friedrich Memorial Endowed Scholarship.

Fresno Methodist Foundation Endowed Scholarship. Established in 1970 from a transfer of the Foundation’s assets to the University.

Martin T. Gipson Endowed Memorial Scholarship. Established by friends wishing to memorialize a former Psychology Department Professor.

Jan Good Endowed Award. Established by Janice E. Good for outstanding students majoring or minoring in French or Spanish.

Ralph Guild Endowed Communication Scholarship. Established by Ralph Guild, radio major, class of 1951 and president of INTEREP National Radio Representatives in appreciation to the University and Professor John Crabbe.

Clifford J. Hand Endowed Scholarship.

Clarence Hinkle Endowed Art Scholarship. Established through the estate of Mable Bains Hinkle.

Kathryn Gehlken Howe Endowed Memorial Scholarship. Established by Edna Gehlken, former chair of the Home Economics Department, in memory of her sister.

Wesley O. Janzen Endowed Theology Scholarship. Established with an estate gift from Alicia “Alice” M. Powell.


Harold Klose, Jr. Endowed Scholarship. Established with various memorial gifts.

Sharon Brookhart Krakora Endowed Scholarship. Established by a gift from her husband as a loving tribute to her lifetime achievements.

Geraldine Scott Krause Endowed Scholarship. Established by this alumna of the class of 1936.

Allen and Helen Laursen Scholarship. Established by a stock gift.

F. Melvin and Verna Kopka Lawson Endowed Scholarship.

Los Angeles Pacific Club Pantheon of the Arts Endowed Scholarship. Established by a gift from the Los Angeles Pacific Club.

Bryon R. Meyer Endowed Theatre Scholarship honoring DeMarcus Brown ’23. He was a very active and respected professor in the Theatre Arts Dept. at Pacific from 1924-1968.

Charles B. Norman Endowed Economics Scholarship. Established in memory of Dr. Charles B. Norman, who taught economics at Pacific for 32 years.

Doris E. Osborn Endowed Scholarship.

Dr. Vincent D. Panico Endowed Scholarship. Established with gifts from family and friends.

Mr. and Mrs. Michael A. Pappas Endowed Scholarship. Established to support biology students.

Irving Pasternak Endowed Memorial Scholarship.

Margaret S. Payne Endowed Scholarship. Established by memorial gifts from her husband Dr. Herbert Reinelt & friends.

Walter Arville Payne Endowed Memorial Scholarship. Established by family, colleagues, friends and former students in memory of a long-time member of the history department faculty.

Barbara Bodley Reinelt Endowed Scholarship. Established with a gift from Dr. Herbert Reinelt.

San Joaquin County Medical Society Pre-Medical Endowed Scholarship. Established with a gift from the society.

Karma Cundell Schad Endowed Scholarship. Established in memory of a former art student by her husband.

Arnold C. Scott Endowed Scholarship. Established through his estate.

John E. Seaman Endowed Scholarship. Established with a gift from Leeyee J. Su.

Dr. Benjamin Smith Endowed Memorial Scholarship. Established by relatives and friends in recognition of this former Lodi-Stockton minister who was the recipient of an honorary degree from Pacific in 1937.

John D. Smith Endowed Scholarship. Established with a gift from Leeyee J. Su.

Doris Reyburn Lathy, Margaret Reyburn Collis and Adda Reyburn Thompson Endowed Scholarship.

Esther Myers Umhalt Class of 1918 Endowed Scholarship. Established by a bequest.

Stanley G. Volbrecht Endowed Scholarship.

John D. Valentine Endowed Scholarship for Writing Excellence. Established by a gift from Russell E. and Mary S. Leatherby.


Marjorie Webster Williams Endowed Art Scholarship.

Paul Winters Endowed Forensics Scholarship. Established to honor Paul Winters on the occasion of his retirement in the spring of 1989.

R. Coke Wood Memorial Endowed Scholarship. Established with memorial gifts.

Community Involvement Program
The S. H. Cowell Foundation. Established by the Foundation and a combination of estate gifts.

Conservatory of Music
Marietta Atherton Endowed Scholarship. Established by a bequest from a University friend and Stockton patroness of the arts.

Allan Bacon Endowed Memorial Scholarship. Established by Mrs. Allan Bacon and friends and former students of Professor Bacon. He was a professor of organ from 1922 until he retired in 1956.

Dr. J. Russell Bodley Endowed Scholarship. Established by former students and friends and augmented by memorial gifts. Dr. Bodley was associated with Pacific for over 60 years as a student, faculty, Dean of the Conservatory and Emeritus Dean. In 1986, the American Cinema Awards Foundation made a special gift to this fund in honor of actress Janet Leigh, one of his former students.

Maynard A. Bostwick Endowed Scholarship. Established by an alumnus.

Alix E. and Horace I. Brown Endowed Scholarship. Established in memory of these music professors.

Buck Family Young Musicians Endowed Scholarship. Established by a gift from Mrs. Eva Buck.

Roberta Burland Endowed Scholarship.

Ruth J. Camp Scholarship. Funded annually from an outside endowment.

Chrisie W. Collins Endowed Vocal Scholarship. Established by various family gifts.

Elford-Roy Endowed Scholarship. Established by Mr. and Mrs. Robert Elford in honor of their parents.

Calla Guild Music Endowed Scholarship. Established by Ralph Guild to honor his wife, Calla.

Wilhelmina Harbert Music Therapy Endowed Scholarship.

Evelyn Ashmore Heath Endowed Scholarship.

P. Maddux Higin Endowed Memorial Scholarship. Established by a bequest from Gwen Higin in memory of her husband, a 1937 alumnus.

Gladys Thelma Ryan King Endowed Scholarship. Established by her bequest.

Lenora M. Magee Endowed Scholarship.

Virginia Short McLaughlin Endowed Scholarship.

Dr. Lawrence H. McQuerrey Endowed Memorial Scholarship. Established in memory of this former music education professor and chair of the department, with gifts from his family, friends, colleagues and students.

Edna B. Meyerholz Endowed Scholarship. Established by the bequest of Mrs. Meyerholz, class of 1911.

Jules F. Moullet Endowed Memorial Scholarship. Established by an estate gift from Louis F. Moullet.


Pooled Endowed Scholarship. Established and augmented by alumni, parents and friends of the Conservatory.

William H. and Pauline Crawford Ramsey Endowed Scholarship.

Elizabeth E. Rice Endowed Memorial Scholarship. Established by Mrs. Marion V. Neufeld in memory of her mother.

Rosalie C. Rohr Scholarship. Established and funded annually by a distribution from her estate.
Bernice L. Rose Endowed Scholarship. Established by a 1925 Conservatory alumna.

Margaret Michael Saladana Endowed Scholarship.

Mildred Murphy Scott Endowed Scholarship. Established by Oliver D. Scott in honor of his wife.

Lawrence and Marilyn Short Endowed Scholarship.

John W. Sloss Endowed Conservatory Scholarship. Established by William and Joseph Sloss in memory of their father.

Doenda Hammond Smith Endowed Piano Scholarship. Established to assist Conservatory Students.

Faye Spanos Endowed Scholarship. Established by her children and proceeds from the Faye Spanos Concert Hall dedication benefit, in honor of the wife of Alex G. Spanos, Pacific alumnus and business leader.

Dr. Lucas and Kathe Underwood Endowed Scholarship.

Richard Van Alstyne Endowed Scholarship.

Eva Varnum Endowed Memorial Scholarship.

Jack and Eleanor Vogel Endowed Scholarship.

C. A. Webster Foundation Endowed Stringed Instrument Scholarship.


Steven and Maureen Wincor Family Endowed Scholarship. Established to assist Jazz Studies Students.


**Eberhardt School of Business**

Bank of America Foundation Endowed Scholarship.

Charles and Carolyn Bloom Endowed Scholarship.

Chambers Family Endowed Scholarship. Established by the Chambers Family Charitable Trust.

Credit Bureau of San Joaquin County Endowed Scholarship.


Joseph Kaeslin Endowed Memorial Scholarship.

George B. Lagorio Endowed Scholarship.

Daisy Lum Lee Endowed Scholarship. Established in her memory by family.

Marian and George Malloy Endowed MBA Scholarship.

John and Rhonda Minges Endowed Scholarship.

Andrew and Helen Neumann Endowed Scholarship. Established with their estate

Gregory A. and Amy Lonegran Mitchell Endowed Scholarship.

Andrew and Helen Neumann Endowed Scholarship. Established with an estate gift.


Jack and Eleanor Vogel Endowed Scholarships.

Robert R. Winterberg Outstanding Senior Award.

Thomas W. Witter Endowed Scholarship. Awarded to needy and deserving School of Business students.

**Benerd College**

William P. Bacon Endowed Scholarship.

Barker-Knoles Endowed Scholarship.

Benerd School of Education Graduate Student Endowed Scholarship. Established through the Gladys L Benerd Estate.

Benerd School of Education Pooled Endowed Scholarships. Established and augmented by alumni, parents and friends of the School of Education.

Esther Berchtold Endowed Scholarship. Established by this alumna, class of 1926.

Melvin and Jayne Bernasconi Endowed Graduate Scholarship. Established by Mr. and Mrs. Bernasconi.

R. John, Jr. and Margaret Wennhold Charles Endowed Scholarship. Established through their estate.

Clare Ann Christian Memorial Endowed Scholarship. Established in the memory of this 1967 alumna by her husband, family and friends.

Armando B. Flores Endowed Scholarship. Established to honor his years of services with APS Company.

Quintard and Patricia Gregory Endowed Scholarship.

Al and Lois Erwin Family Endowed Scholarship.

J. Marc and Ruth P. Jantzen Endowed Scholarship. Established in honor of the retired dean of the School of Education.

Susie Leatherby Endowed Scholarship. Established by Russell and Susie Leatherby.

Hilga G. Lister Endowed Scholarship. Established by Dr. and Mrs. Cy Coleman in memory of her mother.

The John and Elizabeth Nagle Family Endowed Scholarship. Do not delete this scholarship

Pedro and Edna Osuna Endowed Graduate Scholarship. Established by Professor and Mrs. Osuna.

Alexandra Green Ottesen and Peter Ottesen Endowed Scholarship.

Glen Ainslee Payne Endowed Memorial Scholarship. Established by the Walter A. Payne family.

Marion Pease Endowed Scholarship. Established by several local groups in honor of Pacific emeriti professor of education.

Phi Delta Kappa Endowed Scholarship.

Willis N. and Viola Potter Endowed Scholarship.

Janet Rose Baker Robinson Endowed Scholarship. Established by bequest from a 1936 School of Education graduate.
Victor Russell Robinson Endowed Scholarship.

Tony and Dorothy Rodina Endowed Scholarship.

Barbara Ratto Rosemond Endowed Memorial Graduate Scholarship. Established from memorial gifts.

Charles Schiffman Endowed Memorial Scholarship. Established with an estate gift from Charlie class of `40, who was a generous local teacher and administrator for over 40 years. Charlie believed in the power of education and provided guidance; support and intellectual challenges to all knew him.

J. A. and Mary Thomason Endowed Scholarship. Established by Mr. and Mrs. Thomason.

Bonnie Jean Thompson Endowed Scholarship. Established by Mary Middleton Cunningham, class of 1957.

Virginia Sadler Toomay Memorial Endowed Scholarship. Established with a gift from General John C. Toomay.

Rebecca L. Troutner Memorial Endowed Scholarship. Established by family, friends, and faculty in memory of a 1985 School of Education graduate, an elementary school teacher who died in an automobile accident.

Milton M. Tyler Endowed Scholarship. Established in memory of the former special education professor by his family and friends.

Chuck Verduzco Endowed Memorial Scholarship.

Phyllis L. Vince Endowed Memorial Scholarship. Established by her husband, Mr. Robert Vince.

School of Engineering and Computer Science

Andrew C. Ausman Memorial Endowed Scholarship. Established in memory of this son, a former student at Pacific.

James F. Baun Family Endowed Scholarship. Established with a trust.

Charles and Carolyn Bloom Endowed Scholarship.

Chambers Family Endowed Scholarship. Established by the Chambers Family Charitable Trust.

Glady's and John de Arieta Endowed Scholarship. Established by an engineering graduate and his wife, both alumni, class of 1940.

Robert H. and Margaret E. Edwards Endowed Scholarship. Established through their estate.

General Mills Endowed Scholarship Fund.

Jack C. Goble Endowed Scholarship. Established with memorial gifts from family and friends.

Roy S. Hamma Family Endowed Scholarship. Established by an estate gift in honor of himself and his three siblings, all of whom received baccalaureate degrees from Pacific.

Robert L. Heyborne Endowed Scholarship. Established in memory of a former dean of the School of Engineering from 1969-1990 with memorial gifts from family, friends, alumni and faculty.

Robert C. Johanson Endowed Scholarship. Established with memorial gifts from family and friends.

Robert and Emily Lovell Endowed Scholarship.


Henderson E. Mcgee Endowed Fund.

Herman G. and Myrtle E. Nelson Endowed Scholarship. Established through their estate.

Laurie Ann Pecoraro-Nemetz Endowed Scholarship. Established with memorial gifts.

Andres Rodriguez Endowed Scholarship. Established with memorial gifts.

Paul M. Sensibaugh Endowed Scholarship. Established with various gifts in his honor.

Teichert Foundation Endowed Scholarship.

Elsa and David Wheeler Endowed Scholarship.

School of International Studies

Kirk and Laura Bowman Endowed Scholarship.

Arthur J. Cullen Endowed Scholarship.

Rom Landau Endowed Scholarship. Established by Professor Landau through life-time gifts and by his will.

George and Isabelle Wilson Endowed Scholarship. Established by a gift from Mrs. Isabelle Wilson.

Thomas J. Long School of Pharmacy

Gregory Bard, M.D., Endowed Physical Therapy Scholarship. Established in his honor by his wife.

Donald Y. Barker Endowed Scholarship. Established in honor of a 32-year member of the School of Pharmacy’s faculty on his retirement by faculty, friends, family and former students.

Ocea McMurray Brooksbank Endowed Scholarship.

Allen and Hazel M. Caldeira Endowed Scholarship. Established with a gift from her estate.

The Catania Family Endowed Scholarship. Established with a gift from Patrick and Harriet Catania.

H. R. Cenci Family Endowed Scholarship. Established with a family trust.

Charles T. Countryman Endowed Memorial Scholarship. Established by his family and friends in memory of this distinguished pharmacy graduate.

Ray and Ruby Dami Endowed Scholarship. Established through the bequest of Mrs. Ruby Dami.

Mabel and Charles P. Dezzani Endowed Scholarship.

Ted and Georgia Econome Endowed Scholarship. Established with memorial gifts from family and friends.

The Lucy and Joseph Floriddia Memorial Endowed Scholarship. Established by Dr. Donald Floriddia in honor and memory of his parents.

The Flowers Foundation Endowed Scholarship.

Joseph S. Gee Endowed Scholarship.
Jay Patrick Gould Endowed Memorial Scholarship. Established by friends and family.

James C. King Endowed Scholarship.

Steven Edward Lancaster Endowed Scholarship. Established with gifts from Miyuki Lancaster.

J. M. Long Foundation Endowed Scholarship.

Thomas J. and Muriel T. Long Endowed Scholarships. Established by gifts from the co-founder of Long's Drug Stores and emeritus Regent of the University.

Charles Magnasco Endowed Memorial Scholarship. Established by Andrew Magnasco in memory of his brother.

Marvin Malone Endowed Memorial Scholarship. Established with memorial gifts in memory of Marvin Malone.

Erin Michael McGreevy Endowed Memorial Pharmacy Scholarship. Established with a gift from the estate of his wife Lucille McGreevy.

Janet Nimtz Endowed Scholarship. Established by the Dept. of Speech Language Pathology in recognition of her 19 years service to Pacific.

Pacific Golf Tournament Endowed Scholarship. Funded by proceeds from annual tournament.

Mr. and Mrs. Michael Pappas Endowed Scholarship.

Virginia Puich Endowed Scholarship for Academic and Clinical Excellence.

Rexall Pharmacy Endowed Scholarship.

Carl C. Riedesel Endowed Scholarship.

Emmons E. Roscoe Endowed Memorial Scholarship. Established with memorial gifts from family and friends.

Ivan W. and Helen T. Rowland Endowed Scholarship. Established in their honor.

George H. Sanderson Endowed Scholarship for Physical Therapy. Established with an estate gift from his son Robert E. Sanderson.

Charlotte and George Saroyan. Established by a gift from their son, Ralph L. Saroyan, Professor Emeritus, Thomas J. Long School of Pharmacy and Health Sciences.

Ralph L. Saroyan Endowed Scholarship. Established in his honor by various donors.

Warren J. Schneider Endowed Memorial Scholarship.

John H. Shinkai Endowed Graduate Pharmacy Student Scholarship.

John H. Shinkai Endowed Pharmacy Scholarship.

Masao and Ayako Shinkai Endowed Memorial Scholarship. Established by Dr. John H. Shinkai in memory of his parents.

Sixties Alumni Memorial Endowed Pharmacy Scholarship.

Florence Scott Van Gilder “The Tolley Award” Endowed Award.

Richard C. Vessey Endowed Memorial Scholarship. Established by his family and augmented by gifts from his friends in memory of this 1975 School of Pharmacy graduate.

Walgreen Company Endowed Pharmacy Scholarship. Awarded to needy and deserving pharmacy students to assist in finishing their professional studies or participating in vital research within the school.

Bryant Kerry Wong Endowed Memorial Scholarship. Established in memory of Mr. and Mrs. Wong's 4-year-old son who was killed in an auto accident in 1965. Both parents are pharmacists.

University Library

Gladys L. Benerd Student Employee Endowed Scholarship.

Intercollegiate Athletics

Athletic Grants are awarded to qualified student athletes according to the regulations of the National Collegiate Athletic Association (NCAA).

Jim and Lois Berens Endowed Athletics Scholarship. Established by a gift from James and Lois Berens.

Chester Caddas Family Endowed Scholarship. Established by gifts from various donors.

Ellen L. Deering Endowed Athletic Scholarship. Established by bequest.

Marilyn E. Field Endowed Scholarship. To support Women's Athletics.

Jessie Murphy Grogan and Robert Grogan Endowed Memorial Softball Scholarship. Established in her memory by her family and friends.

Larry E. Heller Endowed Scholarship.

Al and Lois Irwin Family Endowed Scholarship.

Bing and Jody Kirk Endowed Athletic Scholarship. Established by a gift from E. Bing and Jody Kirk.

Claudine and Jerald Kirsten Endowed Athletic Scholarship. Established with estate and various memorial gifts.

Chris Kjeldsen Endowed Memorial Scholarship. Established in honor of an alumnus and long-time member of the University faculty.

Ted and Stefanie Leland Endowed Scholarship.

Justin and Shirley Marshall Endowed Scholarship.

Tunney McClendon Endowed Memorial Tennis Scholarship. Established by her husband, Dwayne McClendon and her many friends in loving memory of her life and love for the game of tennis.

Warren T. McNeil Endowed Memorial Scholarship.


Jean Rule Sanders Endowed Women's Tennis Scholarship. Established by her daughters. Awarded to a female member of the team who has excelled in scholastic endeavors and has high moral character.

Doug Scovil Memorial Endowed Scholarship. Established with memorial gifts.

Tom Stubbs Endowed Baseball Scholarship. Established by gifts honoring him as baseball coach, assistant football coach, and professor at Pacific for 33 years.
Bert I. Van Gilder Memorial Endowed Scholarship. Established through a gift from Marian Schroven ’29 in memory of her husband.

Student Loans
Loan funds may be used to pay tuition, fees, room, board and other related educational expenses. Information about federal loans is available at the Financial Aid website or may be obtained in the Office of Financial Aid.

Federal Direct Ford Loans, Federal Direct PLUS Loans and Federal Grad PLUS Loans
Under these programs, the U.S. Department of Education makes loans available through the University, directly to students and parents. The University of the Pacific Financial Aid Office determines eligibility and provides application instructions. Students may be eligible for Federal Direct Ford Loan funds. Parents of dependent students may apply for the PLUS Loan, while graduate students and professional Pharmacy students may qualify for the Graduate/Professional PLUS.

Health Professions Student Loan
The HPSL program is sponsored by the U.S. Department of Health and Human Services and is administered by the University Student Loan Department. This loan offers a five percent, fixed interest rate and is available for eligible students enrolled full-time in the University’s professional pharmacy and dental programs.

Herbert E. and Lillian E. Burbank Memorial Student Loan Fund
Established with an estate gift from their daughter Jeanne C. Burbank.

Robert and Merle Carter Student Loan Fund
Established by two long-time friends of the University whose belief in Pacific and its students motivated them to provide this opportunity for worthy and needy young men and women.

Juanita and Earnie Cronkite Loan Fund
Established with an estate gift to assist deserving students with their education.

Lloyd Ivan Gerry Memorial Loan Fund
Established from the estate of Isa Spencer Gerry in memory of her husband.

Claude H. Hogan Revolving Loan Fund
Established to provide emergency loans, supplemental loans and summer study loans for non-traditional students.

Clara and Frank Mayo Student Loan Fund
Established from a trust to assist students with interest-free loans.

Blanche Pope Neal Student Loan Fund
Established with a gift to assist students.

Ralph M. Parsons Revolving Loan Fund
Established by a gift from the Ralph M. Parsons Foundation to assist sophomores, juniors, and seniors who meet GPA and other eligibility requirements. Preference is given to engineering and science majors.

Edna Ormsby Proctor Endowed Memorial Loan Fund
Established by a gift from her estate to assist the University in training students for full-time Christian service in the area of religious education, preparing for directorships, conference executive work, and other related professions.

SIS Tenth Anniversary Loan Fund
Established to assist students with the cost of attending Pacific.

Francis A. Wagstaff Loan Fund
Established with an estate gift to assist students with expenses.

Methodist Student Loan Fund
A limited number of students who are active members of the United Methodist Church may obtain loans from the Student Loan Fund administered by the Board of Education of that church. Information is obtained from the University of the Pacific Financial Aid Office.

Federal Work-Study Program
University of the Pacific participates in the Federal Work-Study program, which provides employment opportunities for students who demonstrate financial need.

General Education
All accredited universities require that undergraduate students complete not only a major but also a program of general education to broaden their education. At Pacific, the general education program exposes students to areas of study outside of their major, and it develops essential knowledge and skills that are transferable to students’ other courses at Pacific as well as to their personal and public lives. It is thus the liberal arts foundation of a Pacific undergraduate education.

The general education program has three main components: the Pacific seminars, the breadth program, and fundamental skills. Refer to the general education section for additional information.

The Pacific Seminars
All students who enter the University as freshman must complete the three Pacific Seminars. Freshmen are required to take PACS 001 and PACS 002 in their first year, and PACS 003 in their last year. Students who enter Pacific having completed 28 or more units of transferable, classroom college work that appear on a college transcript, except for units earned through a dual enrollment high school program, are exempt from taking PACS 001 and PACS 002 but must complete PACS 003. Students participating in the Freshman honors program should complete the honors section of PACS 001 regardless of the number of college units completed.

Students are not allowed to drop PACS 001 or PACS 002 for any reason, even if they plan to transfer to another college or university. Students who would benefit from special attention to writing skills or who place into WRIT 001 are deferred from the Pacific Seminar sequence until their sophomore year.

If students fail PACS 002, they can repeat a different PACS 002 course. However, students must pass PACS 001 and PACS 002 in order to graduate. There are no substitutions. The Pacific Seminars cannot be repeated if students earn a “D” or higher and they must be taken for a letter grade.

PACS 003 may be taken when students achieve senior standing and/or have completed 92 or more units to take the course. Students in accelerated programs must take PACS 003 in their last year as undergraduates.
Transfer and Post Baccalaureate students must complete PACS 003.

**The Breadth Program**

In addition to the Pacific Seminars, students must complete between six to nine courses in the breadth program. Students should check with their school or college dean’s office for specific breadth program requirements. With the guidance of their advisor, students select courses from the categories below:

1. **Social and Behavioral Sciences**
   - a. Individual and Interpersonal Behavior
   - b. U.S. Studies
   - c. Global Studies
2. **Arts and Humanities**
   - a. Language and Literature
   - b. Worldviews and Ethics
   - c. Visual and Performing Arts
3. **Natural Sciences and Mathematics**
   - a. Natural Sciences
   - b. Mathematics and Formal Logic
   - c. Science, Technology and Society

Students can take a maximum of two courses from a single department (as defined by subject code, e.g., HIST or ENGL or MPER) to satisfy the breadth requirement; however, there is an exception for area IIC since students may take three 1-unit courses in the same discipline of applied music or dance to meet the requirement. All bachelor’s and first professional degree students on the Stockton campus must complete a minimum of two courses in each category. All students must complete a course in categories IIIA and IIIB. Independent study courses cannot be used to satisfy general education requirements.

Catalog year determines degree requirements; however, general education (GE) courses and transfer course articulations are subject to change. It is the responsibility of the student to be informed of any GE or transfer course articulation changes.

**Fundamental Skills**

The University evaluates students to identify those with deficiencies in written expression and quantitative skills. These students are required to take courses designed to improve their understanding and performance in these areas. The writing and quantitative skills requirements are part of the University-wide general education program that must be met before a student graduates with a bachelor’s degree or a first professional degree.

**Elective Courses**

Students in most academic programs at the University find that in addition to the courses required for their major and for general education they have space in their schedules for a number of elective courses. The diversity of academic fields and specialties represented on the Stockton campus provides the student with a wide choice in the selection of electives. The University’s policy is to allow students in any program to take courses in any other school or college on campus. Some students use this freedom primarily to explore unfamiliar academic areas, some to pursue a variety of secondary intellectual interests, and some to develop another area of emphasis as an academic minor or even a formal second major.

**Accelerated Programs**

The University offers joint-degree programs between liberal studies, graduate and professional programs that result in accelerated learning. Requirements include varying degrees of demands on the student to take certain courses and maintain grade point averages. This educational linking is offered through the School of Engineering and Computer Science with a blended BS/MSES program, the School of Pharmacy and Health Sciences offers a Pre-Pharmacy Advantage Program, the School of Dentistry offers a Pre-Dental/DDS accelerated program, and the McGeorge School of Law offers a JD/MPA and an accelerated JD program. Details on these programs are found in each school’s section later in this publication. Graduate program details are found in either the Sacramento, San Francisco or Stockton Graduate catalogs.

**Diversity Requirement**

**Mission**

**Self-Understanding**

One goal of Pacific’s general education program is fundamentally personal: to enrich students’ self-understanding and expand their interests in preparation for a fulfilling life. Students are exposed to new intellectual, moral, spiritual, and aesthetic possibilities. Through the interaction with others from different backgrounds and the study of different disciplines, students come to understand who they are and the sources of their beliefs. They thus gain the skills to identify, express and analyze their beliefs and to fashion a philosophy of life that can guide them in their future endeavors. Students may also find lifelong pleasure in learning, self-reflection, and conversation.

**Diversity Requirement**

The diversity course requirement serves as a key curricular component of the University of the Pacific’s commitment to diversity and inclusive excellence. The diversity requirement contributes to students’ intercultural competencies and to an understanding of the complex connections among domestic diversity, globalism, and democracy.

The University of the Pacific requires that all students who earn a bachelor’s degree must successfully complete at least one 3-unit officially designated diversity course. [Exception: the two-unit INTL 151 and INTL 161 Cross Cultural Training courses may be combined to meet the diversity requirement.] This requirement is applicable to all students who have enrolled at Pacific on or after fall 2010.

**Transfer Students**

Students who transfer into the university on or after fall 2011 are required to complete a designated diversity course prior to graduation. Transfer students are defined in the General Education section of the catalog.

**Post Baccalaureate**

Students who completed a Bachelor’s degree elsewhere and who are seeking an additional Bachelor’s degree at Pacific are exempt from this requirement.

**Transfer Courses**

The University diversity requirement can be met entirely, or in part, by the successful completion of an approved course at Pacific or at an approved college and university. Students who wish to meet this requirement by taking a course at a different college or university must first complete a Transfer Course Approval Request form, available at the Office of the Registrar in Knoles Hall or online at http://web.pacific.edu/x7909.xml.
Objectives of the Diversity Course Requirement

Students who complete any approved diversity course are able to articulate, in both written and oral forms, how notions of difference work within frameworks of social hierarchy. (Difference may be defined by such notions as age, class, citizenship, disability, ethnicity, gender identity, language, nationality, race, religion, sexual orientation, and/or socioeconomic status.)

Students who complete an approved “diversity course” are also able to do at least three of the following four tasks:

1. Articulate their own developing understanding of social difference and its impact on their discipline(s), personal life and society as a whole;
2. Express, in both written and oral forms, their understanding of how ideas and beliefs about diversity and difference in the United States have changed over time, identifying relevant historical movements and players;
3. Demonstrate a satisfactory understanding of how social institutions and individuals respond to issues of difference;
4. Apply their understanding of relevant theory and/or historical analysis of diversity to a specific “societal problem” for the purpose of developing solutions.

The full text of the Diversity Course Requirement can be found at: http://web.pacific.edu/Documents/provost/acrobat/DiversityCR.pdf

Diversity Courses

The courses listed below are approved to count toward the diversity course requirement which are infused throughout the General Education and major curricula.

The listing of diversity courses being taught during a particular term can be found using the search for class by attribute function on insidePacific.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 020</td>
<td>United States History I</td>
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</tr>
<tr>
<td>HIST 021</td>
<td>United States History II</td>
<td>4</td>
</tr>
<tr>
<td>HIST 050</td>
<td>World History I</td>
<td>4</td>
</tr>
<tr>
<td>HIST 112</td>
<td>History of the Holocaust</td>
<td>4</td>
</tr>
<tr>
<td>HIST 120</td>
<td>Native American History</td>
<td>4</td>
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<tr>
<td>HIST 123</td>
<td>Civil War Era</td>
<td>4</td>
</tr>
<tr>
<td>HIST 132</td>
<td>American Immigration</td>
<td>4</td>
</tr>
<tr>
<td>HIST 133</td>
<td>Women in United States History</td>
<td>4</td>
</tr>
<tr>
<td>HIST 135</td>
<td>Women in Time and Place</td>
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<td>HIST 167</td>
<td>Gender in the History of Science/Medicine/Technology</td>
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<td>INTL 151</td>
<td>Cross-Cultural Training I</td>
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<td>INTL 161</td>
<td>Cross-Cultural Training II</td>
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<td>MHIS 006</td>
<td>Music of the World’s People</td>
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<tr>
<td>MMGT 111</td>
<td>Music Industry Analysis</td>
<td>4</td>
</tr>
<tr>
<td>PHRM 111</td>
<td>Pharmacy Practice and Professionalism</td>
<td>3</td>
</tr>
<tr>
<td>POLS 104</td>
<td>Urban Government</td>
<td>4</td>
</tr>
<tr>
<td>POLS 134</td>
<td>American Political Thought</td>
<td>4</td>
</tr>
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<td>PSYC 017</td>
<td>Abnormal and Clinical Psychology</td>
<td>4</td>
</tr>
<tr>
<td>PSYC 129</td>
<td>Advanced Lab in Developmental Psychology</td>
<td>4</td>
</tr>
<tr>
<td>RELI 035</td>
<td>Judaism</td>
<td>4</td>
</tr>
<tr>
<td>RELI 104</td>
<td>Religion of the Pharaohs</td>
<td>4</td>
</tr>
<tr>
<td>RELI 128</td>
<td>Social Topics in Early Christianity</td>
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</tr>
<tr>
<td>RELI 143</td>
<td>Religion, Race, Justice in US</td>
<td>4</td>
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<tr>
<td>SLPA 143</td>
<td>Multicultural Populations</td>
<td>3</td>
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<tr>
<td>SOCI 021</td>
<td>Culture and Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 031</td>
<td>Deviant Behavior</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 041</td>
<td>Social Problems</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 051</td>
<td>Introduction to Sociology</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 108</td>
<td>Food, Culture and Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 111</td>
<td>Environment and Society</td>
<td>4</td>
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<tr>
<td>SOCI 123</td>
<td>Sex and Gender</td>
<td>4</td>
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<tr>
<td>SOCI 125</td>
<td>Sociology of Health and Illness</td>
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<td>SOCI 141</td>
<td>Race and Ethnicity</td>
<td>4</td>
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<td>SOCI 172</td>
<td>Social Inequality</td>
<td>4</td>
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<tr>
<td>SPAN 124</td>
<td>Escritores hispanos en los Estados Unidos</td>
<td>4</td>
</tr>
<tr>
<td>THEA 113</td>
<td>What’s Past is Prologue: Practice and Perspective in Theatre History</td>
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</tr>
<tr>
<td>THEA 115</td>
<td>What’s Past is Prologue: Practice and Perspective in Theatre History</td>
<td>4</td>
</tr>
</tbody>
</table>

General Education Program

“After taking some of these general education courses, I have found new and unexpected interests. I found that I love to learn not only how the world works, but also how belief systems direct people’s perceptions of the world, as I explored in my religious studies classes; or how the knowledge people gain impacts their choices, as I discussed with my Pacific Seminar I class; or how the arts confound and beautify a mechanistic and scientific perception of the world, as I learned in my art history and music appreciation class. The topics I explored in each of my classes helped me cultivate a larger depth and scope of knowledge.”

—Cassie Karambela,
Biological Sciences major
At Pacific, the general education program exposes students to areas of study outside of their major, and they develop essential knowledge and skills that are transferable to other courses at Pacific as well as to their personal and public lives. The exposure to different areas of study and the development of intellectual and practical skills promote the mission of Pacific’s general education: self-understanding, citizenship, and career development.

Mission
Self-Understanding
One goal of Pacific’s general education program is fundamentally personal: to enrich students’ self-understanding and expand their interests in preparation for a fulfilling life. Students are exposed to new intellectual, moral, spiritual, and aesthetic possibilities. Through the interaction with others from different backgrounds and the study of different disciplines, students come to understand who they are and the sources of their beliefs. They thus gain the skills to identify, express and analyze their beliefs and to fashion a philosophy of life that can guide them in their future endeavors. Students may also find life-long pleasure in learning, self-reflection, and conversation.

Citizenship
Another goal is to produce engaged and informed citizens who advance a democratic society by contributing to political and civil life and by committing themselves to the service of others. General education fosters the skills to evaluate complex social and political issues and teaches the moral and political grounds that inform political action and service in a democracy. The health of a society depends on informed and active citizens who can balance the public good and self-interest.

Career Development
Finally, the general education program prepares students to enter professional life by developing practical skills that are valuable to employers and essential to civil society. These skills include the abilities to express oneself clearly and cogently in writing and orally, to be diligent and careful in the preparation of one’s work, to interpret and evaluate information, to think creatively in order to solve problems, to work independently as well as collegially in groups with a sensitivity toward cultural differences, to use technology, and to treat others ethically in their professional interactions.

Outcomes
Pacific’s general education mission of fostering self-understanding, citizenship and career development is advanced by the completion of three Pacific Seminars and the breadth program courses, all of which introduce students to the natural sciences, social sciences, humanities and arts and which develop the following intellectual and practical skills:

- written communication
- oral communication
- critical thinking
- research skills
- quantitative thinking
- cross-cultural awareness
- ethical reasoning
- civic responsibility
- aesthetic judgment

Coursework
The course of study described below is required for all students completing a bachelor’s degree or a first professional degree from the University. Students must complete three Pacific Seminars and a breadth program that ranges from six to nine courses, depending on the academic unit. Students must also satisfy the fundamental skills requirements in writing and quantitative analysis.

The Pacific Seminars
The Pacific Seminars are the distinctive feature of Pacific’s general education program and have received national attention by the Association of American Colleges and Universities (AAC&U). They focus on the question, “What is a Good Society”? The seminars are taught by faculty from all academic divisions (humanities, social sciences, and natural sciences) and academic units. PACS 001 and PACS 002 are taken in sequence during the first year, and Pacific is one of only a few universities in the nation that has a full first-year general education experience. PACS 003 is taken in the senior year and serves as a culminating general education experience.

Pacific Seminar 1: What is a Good Society? (4 Units)
Pacific Seminar 1 (PACS 1) introduces students to the intellectual life of the University by exploring the intersection of who we are as individuals and who we are as communities. The course engages the critical tension between individual rights and social responsibilities as that tension manifests in issues such as identity, equality, and sustainability, among others.

PACS 1 is a shared intellectual experience, incorporating materials from the humanities, social sciences, and natural sciences. Students meet in small sections to discuss the readings and issues and develop their reading, writing, and critical thinking skills.

PACS 1 develops skills students will need to succeed in any field of study at the University and beyond. The course represents an introduction to general education in the best sense of the term: education for self-examination and engaged citizenship. Such grounding will help students develop the agency and flexibility necessary to navigate a rapidly changing political, social, and economic environment.

PACS 1 fulfills the University’s College Level Writing Requirement. It requires 6,000-7,000 words of edited composition.

Students entering Pacific as freshmen must pass PACS 001 and PACS 002. There are no substitutions. The Pacific Seminars cannot be repeated if students earn a "D" or higher.

Pacific Seminar 2: Topical Seminars (4 Units)
In the second semester of the freshman year, all students must take a Pacific Seminar II topical seminar. Whereas Pacific Seminar I (PACS 001) introduces students to aspects of the issue of a Good Society, the PACS 002 topical seminars focus in depth on a particular aspect of this issue. Some potential seminars are “War, Peace and Religion”, “Science and Pseudoscience”, “Catastrophes in World History”, and “Crime, Punishment and Justice”. The seminars are offered from virtually every department and academic unit on campus and will be some of the most innovative courses at Pacific. Students meet in small sections to discuss the readings and issues and develop their writing, critical thinking, and oral presentation skills. Students entering Pacific as freshman must pass PACS 001 and PACS 002. There are no
substitutions. The Pacific Seminars cannot be repeated if students earn a "D" or higher. Prerequisite: Fundamental Skills Writing.

**Pacific Seminar 3: What is an Ethical Life?**

(3 Units)

In their senior year, students take Pacific Seminar 3: What is an Ethical Life? This course is a culminating general education experience and the final component of the university writing requirement. Students learn about and analyze ethical concepts and theories to understand better their moral development, moral values, and behavior. Students will analyze ethical issues in the contexts of family and friends, work, and political life. Faculty use narrative media such as film, biography, and literature to illustrate ethical issues. Students write an ethical autobiography to reflect back on their ethical development and anticipate ethical decisions they may encounter in their future roles as family members and friends, as part of the workforce, and as citizens and members of local, national, and global communities. Students must have completed 92 units to take PACS 3. Students in accelerated programs take PACS 3 in their last year as undergraduates.

**Pacific Seminar Exemption Policy:**

All students who enter the University as freshman must complete the three Pacific Seminars. Freshmen are required to take PACS 001 and PACS 002 in their first year, and PACS 003 in their last year. Students who enter Pacific having completed 28 or more units of transferable, classroom college work that appear on a college transcript, except for units earned through a dual enrollment high school program, are exempt from taking PACS 001 and PACS 002 but must complete PACS 003. Students participating in the Freshman honors program should complete the honors section of PACS 001 regardless of the number of college units completed.

Students are not allowed to drop PACS 001 or PACS 002 for any reason, even if they plan to transfer to another college or university. Students who would benefit from special attention to writing skills or who place into WRIT 001 are deferred from the Pacific Seminar sequence until their sophomore year.

If students fail PACS 002, they can repeat a different PACS 002 course. However, students must pass PACS 001 and PACS 002 in order to graduate. There are no substitutions. The Pacific Seminars cannot be repeated if students earn a "D" or higher and they must be taken for a letter grade.

PACS 003 may be taken when students achieve senior standing and/ or have completed 92 or more units to take the course. Students in accelerated programs must take PACS 003 in their last year as undergraduates.

Transfer and Post Baccalaureate students must complete PACS 003.

**The Breadth Program 6-9 Courses**

(3 or 4 Units Each)

The general education program beyond the Pacific Seminars provides students with considerable choice but within a framework that ensures they gain essential knowledge and skills. With the help of their advisors, students choose courses in the breadth program that interest them or that relate to other courses in their planned course of study.

The Breadth Program requirements vary from School or College (see the table following the listing of the categories and sub-categories). All students must complete at least six courses, two from each of the three main categories listed below (I, II, and III); however, only one class can come from each subcategory or area (A, B, and C), and all students must complete a course in area III-A and in area III-B.

Students can satisfy subcategory IIIC by taking a second course in subcategory IIIA.

Students can take a maximum of two courses from a single department (as defined by subject code, e.g., HIST or ENGL or MPER) to satisfy the breadth requirement; however, there is an exception for area IIC since students may take three 1-unit courses in the same discipline of applied music or dance to meet the requirement. Courses in the breadth program component of the general education program normally have a value of three or four units.

Independent study courses cannot be used to satisfy general education requirements. Catalog year determines degree requirements; general education courses and transfer course articulations are subject to change. It is the responsibility of the student to be informed of any general education or transfer course articulation changes.

The structure of the breadth program is as follows:

**Social and Behavioral Sciences**

<table>
<thead>
<tr>
<th>Category/Sub-category</th>
<th>BUSI</th>
<th>CONSCOP</th>
<th>EDU</th>
<th>ENGR/COMP</th>
<th>PH</th>
<th>SIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.A Individual and interpersonal Behavior</td>
<td>X</td>
<td>Two of</td>
<td>Two of</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>I.B U.S. Studies</td>
<td>X</td>
<td>three X</td>
<td>three</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>I.C Global Studies</td>
<td>X</td>
<td>areas X</td>
<td>areas X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>II.A Language and Literature</td>
<td>X</td>
<td>Two of</td>
<td>Two of</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>II.B Worldviews and Ethics</td>
<td>X</td>
<td>three X</td>
<td>three</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>II.C Visual and Performing Arts</td>
<td>X</td>
<td>areas X</td>
<td>areas X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>III.A Natural Sciences</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>III.B Mathematics &amp; Formal Logic</td>
<td>X</td>
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</tr>
<tr>
<td>III.C Science, Technology, Society</td>
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<td>X</td>
<td>X</td>
<td>X</td>
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<td></td>
</tr>
</tbody>
</table>

The titles of the courses themselves are listed by category and subcategory later in this section.

The breadth program requirements for each School or College are listed in the table below. Contact the General Education Unit Coordinator in your unit for more information.
Students can satisfy GE requirements with a 4 or higher for Advanced Placement and a 5 or higher for Higher Level International Baccalaureate. A maximum of 28 units total from Advanced Placement, International Baccalaureate DANTES and/or CLEP test results may be applied toward a Pacific degree, including General Education breadth areas.

Fundamental Skills
As part of the general education program, all students are required to be competent in two fundamental skills at entrance: writing and quantitative analysis. Students may demonstrate competence in these skills in one of three ways:

1. Completion of approved, college-level courses at an accredited college or university;
2. Satisfactory performance on an approved, nationally administered examination; or
3. Satisfactory performance on examinations given at Pacific during new student orientation or shortly thereafter.

Students can meet these fundamental skills by taking course work to improve their skills as follows:

- Based on their writing placement, students will take a combination of writing courses (WRIT 001/WRIT 002 and/or PACS 001 with PACS 001P) to fulfill the writing requirement.
- To show competency in quantitative analysis (math), students must successfully complete MATH 005 (Intermediate Algebra), MATH 035 (Statistics) with a grade of C- or better, or complete an equivalent course from another accredited college or university with a grade of C or better during the first full year of study including summer sessions.
- Successful completion of course work in quantitative analysis and writing at Pacific requires a grade of C- or better. Course work taken in quantitative analysis or writing at another college or university requires a grade of C or better and must be approved in advance via a Transfer Course Approval form.
- Failure to make progress toward fulfilling Pacific’s fundamental skills requirements during the first year of study is grounds for being placed on academic probation. Failure to satisfy the fundamental skills requirements (as summarized in the three points above) by the end of four semesters of full-time study at the University is grounds for academic disqualification.
- Students with documented disabilities that directly affect their mastery of these skills or students concurrently enrolled in an approved English as a Second Language (ESL) Program of instruction in reading and writing may seek a written extension of the deadline for demonstrating competence.
- The quantitative analysis (math) and writing requirements must be met before a student graduates with a bachelor’s degree or a first professional degree.

Requirements for Transfer Students
Fundamental Skills Requirements
Fundamental skills requirements for transfer students include writing and quantitative analysis (math). Students may demonstrate competence in these skills in one of three ways:

1. Completion of approved, college-level courses at an accredited college or university;
2. Satisfactory performance on an approved, nationally administered examination; or
3. Satisfactory performance on examinations given at Pacific during new student orientation or shortly thereafter. Placement tests taken by transfer students at their previous institution do not replace Pacific’s assessments.

Breadth Program Requirements
Transfer students who completed the IGETC or CSU Breadth General Education requirements at a California Community College prior to enrolling at Pacific satisfy Pacific’s General Education program, though they must complete PACS 003. Students who have not completed the IGETC or CSU Breadth General Education requirements have their courses articulated for general education credit on a course by course basis. General education courses taken by these students at their previous institutions which are of the same quality and equivalency as courses offered at Pacific do apply for breadth program requirements at Pacific.

Pacific Seminar Requirements
Transfer students who have completed 28 or more units of transferable, classroom college work that appear on a transcript must only complete PACS 003.

Individual schools and colleges may impose general education graduation requirements, including skills requirements, beyond the University’s general education program.

Transfer students who entered the University prior to the 1993-94 academic year and who desire an evaluation of their records in regard to general education should contact the Office of the Registrar.

Requirements for Readmitted Students
Students who originally enter Pacific as a Freshman are required to complete PACS 001 and PACS 002, even if the student chooses to leave Pacific and applies for readmission at a later date. A student is held to the rules based on their original admission regardless of readmission at a later point in time. A freshman who leaves the university and applies for readmission later is not then treated as a transfer student, regardless of how many units the student is able to transfer to Pacific as part of their readmission. Students who withdraw from Pacific and complete either the CSU Breadth or UC IGETC General Education Program at a California community college will be exempt from PACS 001 and PACS 002, but they are required to complete PACS 003.

Requirements for Post Baccalaureate Students
Students who completed a Bachelor’s degree elsewhere and who are seeking an additional Bachelor’s degree at Pacific must only complete PACS 003 to satisfy the GE and Fundamental Skills requirements.

Breadth Course List for General Education
The courses listed below are approved as counting toward the breadth program requirement in each of the nine areas of the program. Students who satisfy II-C with one-unit dance or applied music courses must complete three courses in the same discipline. Although not always listed here, some “special topics” courses taught during a particular term may also be approved for general education. Some professional schools on campus have more restrictive requirements under which only some of the courses listed in each area count for students pursuing those professional programs.
The listing of general education courses being taught during a particular term can be found using the search for class by attribute function on Inside Pacific.

Catalog year determines degree requirements; however, general education (GE) courses and transfer course articulations are subject to change. It is the responsibility of the student to be informed of any GE or transfer course articulation changes.

### I-A. Individual and Interpersonal Behavior

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
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<td>COMM 043</td>
<td>Introduction to Interpersonal Communication</td>
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<tr>
<td>COMM 117</td>
<td>Public Advocacy</td>
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</tr>
<tr>
<td>ECON 053</td>
<td>Introductory Microeconomics</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 100</td>
<td>Introduction to Language</td>
<td>4</td>
</tr>
<tr>
<td>GEND 011</td>
<td>Introduction to Gender Studies</td>
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</tr>
<tr>
<td>HIST 064</td>
<td>A History of Alcohol and Intoxicants</td>
<td>4</td>
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<tr>
<td>PSYC 017</td>
<td>Abnormal and Clinical Psychology</td>
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</tr>
<tr>
<td>PSYC 029</td>
<td>Developmental Psychology</td>
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<td>PSYC 031</td>
<td>Introduction to Psychology</td>
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<td>PSYC 066</td>
<td>Human Sexuality</td>
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</tr>
<tr>
<td>SLPA 051</td>
<td>Introduction to Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 031</td>
<td>Deviant Behavior</td>
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<td>Criminology</td>
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### I-B. United States Studies

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>BUSI 053</td>
<td>The Legal and Ethical Environment of Business</td>
<td>4</td>
</tr>
<tr>
<td>COMM 031</td>
<td>Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>ECON 051</td>
<td>Economic Principles and Problems</td>
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</tr>
<tr>
<td>ECON 055</td>
<td>Introductory Macroeconomics: Theory and Policy</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 051</td>
<td>American Literature before 1865</td>
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<td>American Literature after 1865</td>
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</tr>
<tr>
<td>ENGL 160</td>
<td>Blues, Jazz, and Literature</td>
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<td>ENGL 161</td>
<td>Topics in American Ethnic Literature</td>
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<tr>
<td>ENGL 162</td>
<td>Diasporic Asian American Literature</td>
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<tr>
<td>ETHN 011</td>
<td>Introduction to Ethnic Studies</td>
<td>4</td>
</tr>
<tr>
<td>HESP 141</td>
<td>Sport, Culture and U.S. Society</td>
<td>4</td>
</tr>
<tr>
<td>HIST 020</td>
<td>United States History I</td>
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<td>HIST 021</td>
<td>United States History II</td>
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<tr>
<td>HIST 120</td>
<td>Native American History</td>
<td>4</td>
</tr>
<tr>
<td>HIST 133</td>
<td>Women in United States History</td>
<td>4</td>
</tr>
<tr>
<td>MGMT 011</td>
<td>Music, Entertainment in U.S. Society</td>
<td>4</td>
</tr>
<tr>
<td>POLS 041</td>
<td>U.S. Government and Politics</td>
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</tr>
<tr>
<td>RELI 143</td>
<td>Religion, Race, Justice in US</td>
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<tr>
<td>RELI 170</td>
<td>Bible in America</td>
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<tr>
<td>SOCI 021</td>
<td>Culture and Society</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 041</td>
<td>Social Problems</td>
<td>4</td>
</tr>
<tr>
<td>SOCI 051</td>
<td>Introduction to Sociology</td>
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<tr>
<td>SOCI 125</td>
<td>Sociology of Health and Illness</td>
<td>4</td>
</tr>
</tbody>
</table>

### I-C. Global Studies

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 053</td>
<td>Cultural Anthropology</td>
<td>4</td>
</tr>
<tr>
<td>ASIA 124</td>
<td>Society, Gender and Culture in East Asia</td>
<td>4</td>
</tr>
<tr>
<td>CHIN 023</td>
<td>Intermediate Chinese, Third Semester</td>
<td>4</td>
</tr>
<tr>
<td>CHIN 025</td>
<td>Intermediate Chinese, Fourth Semester</td>
<td>4</td>
</tr>
<tr>
<td>CHIN 125</td>
<td>Advanced Chinese I</td>
<td>4</td>
</tr>
<tr>
<td>CLAS 051</td>
<td>Classical Mythology</td>
<td>4</td>
</tr>
<tr>
<td>CLAS 100</td>
<td>History of Ancient Greece</td>
<td>4</td>
</tr>
</tbody>
</table>

### II-A. Language and Literature

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>CHIN 011A</td>
<td>First-Year Chinese, First Semester</td>
<td>4</td>
</tr>
<tr>
<td>CHIN 011B</td>
<td>First-Year Chinese, Second Semester</td>
<td>4</td>
</tr>
<tr>
<td>CLAS 110</td>
<td>Reading Greek Literature in English</td>
<td>4</td>
</tr>
<tr>
<td>CLAS 112</td>
<td>Reading Roman Literature in English</td>
<td>4</td>
</tr>
<tr>
<td>COMM 027</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 025</td>
<td>English 25</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 041</td>
<td>British Literature before 1800</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 043</td>
<td>British Literature after 1800</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 082</td>
<td>How English Works</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 130</td>
<td>Digital Chaucer</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 131</td>
<td>Shakespeare</td>
<td>4</td>
</tr>
<tr>
<td>FREN 011A</td>
<td>First-Year French, First Semester</td>
<td>4</td>
</tr>
<tr>
<td>FREN 011B</td>
<td>First-Year French, Second Semester</td>
<td>4</td>
</tr>
<tr>
<td>FREN 051</td>
<td>French Literature in English</td>
<td>4</td>
</tr>
<tr>
<td>GERM 011A</td>
<td>First-Year German, First Semester</td>
<td>4</td>
</tr>
<tr>
<td>GERM 011B</td>
<td>First-Year German, Second Semester</td>
<td>4</td>
</tr>
<tr>
<td>GREEK 011A</td>
<td>First-Year Ancient Greek, First Semester</td>
<td>4</td>
</tr>
<tr>
<td>GREEK 011B</td>
<td>First-Year Ancient Greek, Second Semester</td>
<td>4</td>
</tr>
<tr>
<td>HBRW 011A</td>
<td>First-Year Classical Hebrew, First Semester</td>
<td>4</td>
</tr>
<tr>
<td>HBRW 011B</td>
<td>First-Year Classical Hebrew, Second Semester</td>
<td>4</td>
</tr>
</tbody>
</table>
JAPN 011A  First-Year Japanese, First Semester 4
JAPN 011B  First-Year Japanese, Second Semester 4
LANG 011A  First-Year Language, 1st Sem 4
LANG 011B  First-Year Language, 2nd Sem 4
LATN 011A  First-Year Latin, First Semester 4
LATN 011B  First-Year Latin, Second Semester 4
RELI 023  Hebrew Bible 4
SLPA 053  Sign Language I 3
SPAN 011A  First-Year Spanish, First Semester 4
SPAN 011B  First-Year Spanish, Second Semester 4
SPAN 103  Introducción a la literatura hispánica 4
SPAN 133  Don Quijote 4
THEA 111  Script Analysis 3
THEA 113  What’s Past is Prologue: Practice and Perspective in Theatre History I 4
THEA 115  What’s Past is Prologue: Practice and Perspective in Theatre History II 4

II-B. Worldviews and Ethics

CLAS 120  Sexuality in Greek Society 4
CLAS 122  Sexuality in Roman Society 4
ENGL 141  Topics in British Literature Pre-1800 4
ENGL 144  Medieval Women Readers and Writers 4
ENGL 145  Romances of Magic in the West 4
ENGL 164  WAR 4
ENGR 030  Engineering and Computing Ethics in Society 3
HHUM 051  Introduction to Health & Humanities 4
HIST 010  Western Civilization I 4
HIST 011  Western Civilization II 4
HIST 050  World History I 4
HIST 051  World History II 4
HIST 052  John Muir’s World: Origins of the Conservation Movement 4
HIST 060  A History of Medicine 4
HIST 062  History of Warfare 4
HIST 100  Renaissance and Reformation 4
HIST 135  Women in Time and Place 4
INTL 081  Perspectives on World History 3
PHIL 011  Introduction to Philosophy 4
PHIL 021  Moral Problems 4
PHIL 025  The Meaning of Life 4
PHIL 027  Fundamentals of Ethics 4
PHIL 035  Environmental Ethics 4
PHIL 053  Ancient Greek & Roman Philosophy 4
PHIL 055  Science, Freedom & Democracy: History of Modern Philosophy 4
PHIL 124  God, Faith, and Reason 4
PHIL 127  Philosophy of Sport 4
PHIL 135  Political Philosophy 4
PHIL 145  Biomedical Ethics 4
POLS 021  Introduction to Political Theory 4
POLS 120  Ancient to Medieval Political Theory 4
POLS 132  Modern to Contemporary Political Theory 4
POLS 134  American Political Thought 4
RELI 025  New Testament and Christian Origins 4
RELI 027  Portraits of Jesus 4
RELI 030  Comparative Religion 4
RELI 034  Introduction to Religion 4
RELI 035  Judaism 4
RELI 043  Social Ethics 4
RELI 044  Sex, Sin, and Salvation 4
RELI 047  Unbelief: Atheism and Agnosticism 4
RELI 051  Classical Mythology 4
RELI 134  World Religions 4
RELI 135  Asian Religious Traditions 4
RELI 141  Animals, Religion, and Ethics 4
RELI 142  Business Ethics 4
RELI 145  Biomedical Ethics 4
RELI 154  Buddhist Traditions 4

II-C. Visual and Performing Arts

ARTH 007  Survey of World Art to 1400 4
ARTH 009  Survey of World Art After 1400 4
ARTH 101  Design Thinking 4
ARTH 108  Renaissance Art and Architecture 4
ARTH 112  19th Century European Art 4
ARTH 114  20th Century Art and Film 4
ARTH 116  Contemporary World Art 1945 to Present 4
ARTH 120  Chinese Art History 4
ARTH 122  Japanese Art History 4
ARTS 003  Visual Arts Exploration 4
ARTS 005  Drawing 4
ARTS 007  Principles of 2-D Design and Color 4
ARTS 009  Principles of 3-D Design 4
ARTS 023  Painting I 4
ARTS 037  Sculpture 4
ASIA 120  Asian Cinemas 4
CLAS 130  Greek Art and Architecture 4
CLAS 132  Roman Art and Architecture 4
EDUC 142  Visual Arts in Education 3
ENGL 031  Aesthetics of Film 4
ENGL 121  Major Filmmakers 4
ENGL 123  Film, Literature, and the Arts 4
FREN 120  Le Cinema Français/French Cinema in English 4
HIST 119  History Goes to Hollywood 4
MCOM 002  Music Fundamentals 3
MEDX 117  Film Production 4
MHIS 005  Music Appreciation 4
MHIS 007  Topics in American Popular Music 3
MPER 066  Jazz Ensemble (Note: 1 unit) 1
MPER 070  University Symphony Orchestra (Note: 1 unit) 1
MPER 072  Symphonic Wind Ensemble (Note: 1 unit) 1
MPER 073  Concert Band (Note: 1 unit) 1
MPER 082  The Oriana Choir (Women’s Choir) (Note: 1 unit) 1
MPER 083  University Chorus (Note: 1 unit) 1
MPER 084  Pacific Singers (Note: 1 unit) 1
MUJZ 008  Introduction to Jazz 3
RELI 171  Religion and Cinema 4
SPAN 114  Cine hispano/Hispanic Film 4
THEA 011  Introduction to the Theatre 4
THEA 051A Ballet (Note: 1 unit) 1
THEA 051B Jazz (Note: 1 unit) 1
THEA 051C Modern Dance (Note: 1 unit) 1
THEA 071 Beginning Acting 3
THEA 075 Expressive Movement 3
ENGL 112 Playwriting 3
THEA 134 Mask-Making 3

III-A. Natural Sciences
BIOL 011 Human Anatomy and Physiology 4
BIOL 041 Introduction to Biology 4
BIOL 051 Principles of Biology 5
BIOL 061 Principles of Biology 5
BIOL 076 Marine Biology 4
BIOL 079 California Flora 4
CHEM 023 Elements of Chemistry 4
CHEM 024 Fundamentals of Chemistry 4
CHEM 025 General Chemistry 5
CHEM 027 General Chemistry 5
GESC 043 Environmental Science for Informed Citizens 4
GESC 051 Dynamic Planet 4
GESC 053 Earth and Life Through Time 4
GESC 057 Earth Systems Science 4
GESC 061 Geology of California 4
GESC 065 Regional Geology 4
PHYS 017 Concepts of Physics 4
PHYS 021 Energy for Global Citizens 4
PHYS 023 General Physics I 5
PHYS 025 General Physics II 5
PHYS 039 Physics of Music 4
PHYS 041 Astronomy 4
PHYS 053 Principles of Physics I 5
PHYS 055 Principles of Physics II 5

III-B. Mathematics and Formal Logic
COMP 025 Computers and Information Processing 4
COMP 047 Discrete Math for Computer Science 4
COMP 051 Introduction to Computer Science 4
COMP 061 Introduction to Programming for Data Science 4
HIST 066 Ancient Arithmetic 4
INTL 101 Social Science Research Methods 4
MATH 033 Elements of Calculus 4
MATH 035 Elementary Statistical Inference 4
MATH 037 Introduction to Statistics and Probability 4
MATH 039 Probability with Applications to Statistics 4
MATH 041 Pre-calculus 4
MATH 045 Introduction to Finite Mathematics and Calculus 4
MATH 051 Calculus I 4
MATH 053 Calculus II 4
MATH 055 Calculus III 4
MATH 064 Ancient Arithmetic 4
MATH 072 Operations Research Models 4
PHIL 037 Introduction to Logic 4
POLI 133 Political Science Research 4
PSYC 101 Research Methods and Statistics in Psychology I 5

III-C. Science, Technology and Society
BIOL 035 Environment: Concepts and Issues 4
COMP 041 Great Ideas in Computing 4
ENGL 039 Introduction to Digital Humanities 4
ENGL 126 Environment and Literature 4
ENGL 128 Science and Literature 4
ENST 041 Introduction to Environmental Studies 4
GESC 045 Soil, Water, and War 4
HESP 041 Health and Wellness for Life 4
HESP 045 Nutrition for Health 4
HIST 063 History of Science and Technology 4
HIST 167 Gender in the History of Science/Medicine/Technology 4
PHIL 015 Introduction to Cognitive Science 4
PHIL 061 Philosophy of Science 4
PHIL 079 Sensation and Perception 4
PSYC 079 Sensation and Perception 4
RELI 039 Introduction to Digital Humanities 4
SOCI 111 Environment and Society 4

Any Second IIIA Course

Pacific Core Competencies

Core Competencies

The following are Pacific’s university-wide undergraduate core competencies adopted in 2016:

- Critical Thinking
- Information Literacy
- Oral Communication
- Quantitative Reasoning
- Written Communication

The primary purpose of the core competencies is to support undergraduate teaching and learning at all three campuses of the University. These undergraduate core competencies are required byWSCUC but are defined for Pacific by the University Assessment Committee (UAC). Definitions of the core competencies can be found here (https://www.pacific.edu/about-pacific/administrationoffices/office-of-the-provost/educational-effectiveness/assessment-of-student-learning/undergraduate-core-competencies.html) on Pacific’s website.

Pacific’s commitment to using this common set of core competencies in support of student learning will:

- Give students, faculty, administration and staff a clear and concise understanding of the essential competencies of an undergraduate Pacific education;
- Create a more coherent educational experience for students as schools and divisions align with these competencies;
- Enable Pacific to assess undergraduate outcomes at the university-level to continuously improve teaching and learning.

The UAC is charged with coordinating the assessment of these competencies; however, it is the responsibility of each School/College, General Education, and the Division of Student Life to report how learning outcomes for their programs align with these competencies. Each academic degree program will have additional learning outcomes beyond the university-wide undergraduate competencies stated here. Schools...
and Divisions may also have additional learning outcomes common to all its programs.

The Board of Regents

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Susanne T. Stirling
Bo Yu
Eve Zimmer Short

Tuition and Fees

• Graduate/Undergraduate (p. 73)
• Professional (p. 73)

Graduate/Undergraduate

Arthur A. Dugoni School of Denistry
Dental Hygiene

Conservatory of Music
Music Therapy

School of Engineering and Computer Science
Data Science

School of Health Sciences
Audiology

Professional

Arthur A. Dugoni School of Dentistry
All information applies to the DDS Program. Not all information applies to the IDS, Certificate or Dental Graduate Programs. For more information, contact your program.

Tuition and Fees on this page are for the following graduate and undergraduate programs on the San Francisco campus.

Arthur A. Dugoni School of Denistry
Dental Hygiene

Conservatory of Music
Music Therapy

School of Engineering and Computer Science
Data Science

School of Health Sciences
Audiology

The University of the Pacific is an independent institution. Each student is charged tuition that covers about three-fourths of the cost of services furnished by the University. The balance of these costs is met by income from endowment and by gifts from regents, parents, alumni, and other friends who are interested in the type of education this institution provides.

Overall Costs for the School Year

The annual expenses for a student at the University of the Pacific depends upon a variety of factors. Tuition and fees are the same for students regardless of their state or country of residence. Basic expenses are as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition (1) per academic year, enrolled in 12 to 18 units in each semester</td>
<td>$48,904</td>
</tr>
<tr>
<td>Wellness Center</td>
<td>$330</td>
</tr>
<tr>
<td>ASUOP Student Fee</td>
<td>$274</td>
</tr>
<tr>
<td>Activity &amp; Recreation Fee</td>
<td>$80</td>
</tr>
<tr>
<td>Room and Board</td>
<td>$13,408</td>
</tr>
<tr>
<td>Total per academic year</td>
<td>$62,996</td>
</tr>
<tr>
<td>School of Pharmacy Annual Tuition (Eleven-month program, three terms)</td>
<td>$78,354</td>
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</table>

1 Arthur A. Dugoni School of Dentistry and McGeorge School of Law tuition and fee schedules are available in the Sacramento and San Francisco catalogs.

There are other fees and charges unique to certain programs. These fees or charges may be determined by contacting Student Accounts or the University office that administers those programs or activities in which the student intends to enroll or engage.

Expenses for books and supplies, special fees, and personal expenses usually average approximately $5,157 annually.

The University reserves the right to change fees, modify its services or change its programs at any time and without prior notice.

Tuition – Undergraduate Students (per semester)

All schools except Pharmacy and Health Sciences
### Tuition and Fees

**Full-time (12 to 18 units)** $24,452
**Part-time (.5 to 11.5 units) per unit** $1,687
**Excess units above 18 units, per unit** $1,687
**Engineering Co-op (full-time) Admitted prior to Fall 2016 tuition rate** $12,226
**Engineering Co-op (full-time) Admitted Fall 2016 tuition rate** $6,114

**Tuition – School of Pharmacy (per term)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time (12 to 20 units)</td>
<td>$26,118</td>
</tr>
<tr>
<td>Part-time (.5 to 11.5 units) per unit</td>
<td>$1,800</td>
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<tr>
<td>Excess units above 20 units, per unit</td>
<td>$1,800</td>
</tr>
<tr>
<td>Pharmacy Clerkship Rotation (full-time)</td>
<td>$26,118</td>
</tr>
<tr>
<td>Pharmacy Technology Fee</td>
<td>$330</td>
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<tr>
<td>Pharmacy Professional Fee (1)</td>
<td>$325</td>
</tr>
<tr>
<td>Physical Therapy Fee</td>
<td>$150</td>
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</table>

$1 Required of all students enrolled in the professional program with 12 units or more.

**Tuition – Graduate Students (per semester)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>All schools (16 to 18 units) plus applicable fees</td>
<td>$24,452</td>
</tr>
<tr>
<td>All schools (.5 to 15.5 units) per unit, plus applicable fees</td>
<td>$1,528</td>
</tr>
<tr>
<td>Excess units above 18 units, per unit</td>
<td>$1,528</td>
</tr>
<tr>
<td>Physical Therapy (12 to 18 units), plus applicable fees (Fall, Spring, Summer Terms)</td>
<td>$24,334</td>
</tr>
<tr>
<td>Physical Therapy (1 to 11.5 units)</td>
<td>$1,520</td>
</tr>
</tbody>
</table>

**General Fees (per semester)**

**Student Health Insurance Plan**
- Undergraduate Students $1,260
- Graduate and Professional Pharmacy Students $1,671

Required for all students enrolled in 9 or more units and for all international students with an F-1 Visa taking .5 units or more. It is optional for students enrolled in .5 to 8.5 units. The Student Health Insurance can be waived with proof of own health insurance if provided by the deadline and if the coverage meets University requirements.

**Wellness Center Fee $165**
This fee is required for all students residing in University housing, and for all other students, both graduate and undergraduate, enrolled in 9 units or more.

**Wellness Center Fee $90**

**Course Audit Fee, per class $50**
Instructor permission is required. Auditing is not available in participation courses such as applied music, physical education, art courses of an applied nature, etc. The student must indicate a desire to audit the course at the time of registration.

**Engineering/Computer Science Fee $150**
This fee is required for all students enrolled in the School of Engineering and Computer Science. Students are exempt from the fee while enrolled full time in the off-campus cooperative education program.

**Business School Fee $20**
This fee is required for all Business Majors.

**Conservatory Fee $250**
This fee is required for all Conservatory Majors.

**Practice Room Fee $10**
This fee is required for all Conservatory Majors.

**Applied Music Fees**
Private lesson$1 fees vary by instrument and are based upon length of lesson. Fees range from $70 to $375. Please check with the Conservatory to determine appropriate charges. Applied music lessons must be arranged through the Conservatory Office.

$1 Private lessons and applied class lessons for non-music majors are available only if faculty loads permit and must be arranged through the Conservatory Office.

**Special Fees**

<table>
<thead>
<tr>
<th>Type</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcript Fee</td>
<td>$5</td>
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<tr>
<td>Matriculation Fee</td>
<td>$100</td>
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<tr>
<td>Petition Fee</td>
<td>$25</td>
</tr>
<tr>
<td>Graduate Continuing Education Fee</td>
<td>$50</td>
</tr>
<tr>
<td>Non-refundable, Credit by Exam Fee</td>
<td>$50</td>
</tr>
<tr>
<td>Additional fee for successful Credit By Exam results</td>
<td>$200</td>
</tr>
</tbody>
</table>
Undergraduate Confirmation Deposit
A deposit of $70 is required for all new students once notification of acceptance to the University has been received. The deposit is applied toward the student’s tuition and is nonrefundable after May 1.

Housing Deposit
A deposit of $200 is required for all new students who apply to reside in campus housing. This should be paid once notification of acceptance to the University has been received. The deposit is applied toward the student’s housing charges and is nonrefundable after May 1.

Financial Responsibility
Registration, when accepted by the University of the Pacific, constitutes a financial agreement between the student and the University. Registration is considered complete when the bill has been settled. Tuition, fees, and other charges the student incurs including but not limited to, housing, meal plans, and bookstore charges are added to the student account and are considered a loan for an educational benefit.

When you register for courses with the University of the Pacific, you are responsible for all “charges” as they become due. The charges include but are not limited to tuition, fees, room and board, meal plans, Laptop Agreement, bookstore charges and library charges (herein “charges”). These charges are for your educational benefit and if you fail to satisfy your financial obligation to the University you will not be provided any benefits from the University. The benefits which may be terminated include but are not limited to, course registration, housing and meal plans, transcripts and diplomas. Any outstanding charges due on your student account will be transferred to a Student Note Loan balance with the Student Loan Department, of the University of the Pacific for servicing. This Student Note Loan balance is subject to daily interest, late fees, collection fees, credit bureau reporting and any legal fees or costs associated with any bankruptcy. Failure to pay these charges when due will result in loss of housing, suspension of meal plans, termination of enrolled student status and will result in being denied access to the deferred payment plan options. It is your responsibility to ensure that all financial aid is properly credited to your account. The University reserves the right to increase their fees and charges. Registration constitutes my agreement to all the forgoing terms and conditions.

You agree, in order for us to service your account or to collect any amounts you may owe, we may contact you by telephone at any telephone number associated with your account, including wireless telephones, which could result in charges to you. We may also contact you by sending text messages or e-mails, using any e-mail address you provide to us. Methods of contact may include using pre-recorded/artificial voice messages and/or use of an automatic dialing device, as applicable. I have read this disclosure and agree that the University of the Pacific or its appointed agents may contact me as described above.

In order to receive a bill that includes tuition and fees prior to the payment deadline, you must early register for courses. Please note that students with delinquent accounts are not permitted to register.

It is the students’ responsibility to pay by the deadline, regardless of receiving a statement. Students can obtain their current account balance by logging into insidePacific. The University sends monthly electronic billing statements. Students receive a monthly email notifying them that their statement is ready for viewing. This statement notification email is also sent to any Authorized Users that the student establishes. Authorized Users do not have access to any other student information through this site. The billing statement can be printed from the computers located in the lobby of the Finance Center or by a request to the Student Accounts Office.

All electronic correspondence is sent to the student’s u.pacific.edu email address.

A dispute of any charge on your student account must be submitted in writing to the Student Accounts Office within sixty days from the date of billing. If you fail to comply within the sixty day time period, you may forfeit your rights to dispute the charge in the future.

Payment of Bills
Tuition, fees, and room and board, if applicable, are due in full by the payment deadline. The payment deadlines are August 1st for the fall semester and January 1st for the spring semester for general students. Payment deadline information for other programs is available online on the Student Business Services website located at go.pacific.edu/studentaccounts. Any outstanding balances from prior semesters must be paid in full as well as the current semester payment, by the deadline. Students who have not yet registered can estimate their payment amount by utilizing the Calculation Worksheets available at the Student Business Services website. Payments for the intended enrollment must be made by the deadline, even if the student has not completed their course registration. Late fees will be assessed for payments received after the deadline. Failure to complete financial obligations can result in the cancellation of registration.

The University offers two payment options. The first is payment in full of all charges, less any applicable financial aid, by the deadline. The second option is a four month payment plan. The Monthly Plan requires a 25% down payment in addition to a $75 non-refundable, deferred fee per semester. Those who utilize the monthly payment plan must enroll online through insidePacific by the payment deadline. In order for a parent or guardian to enroll in the monthly payment plan, their student must officially establish them as an Authorized User. Subsequent monthly payments are due by the first of the month.

International students may not utilize the monthly payment plan. Payment in full is required by the payment deadline.

It is the student’s responsibility to ensure that all financial aid is properly credited to his/her account.

Payments can be made by cash, paper check, money order, cashiers check, and electronic checks. Payments must be received by the deadline; postmarks are not acceptable. Payments by check or cash can be made in person at the Cashiers Office, located in the Finance Center. If making payment by mail, please send check or money order to the attention of Student Accounts. Please include the student’s university identification number or send a copy of the statement, which can be downloaded and printed, in order to ensure proper payment application.

Students who have not paid in full, completed all financial aid requirements and/or enrolled in the monthly payment plan by the payment deadline, are assessed a $150 late payment fee. A late fee of $50 is assessed for any payments made after the due date.

Failure to make payments as agreed can result in the University of the Pacific canceling all financial arrangements, a student’s registration, and denying all University services.

Any payment on the student account that is returned by a financial institution for any reason can lead to cancellation of registration. If registration is cancelled for the semester, the student will not receive credit for those courses. A returned payment fee of $25 is assessed.
for the first returned payment. Any payment returned subsequently is assessed a $35 returned payment fee. After two (2) returned payments, the University can suspend both electronic and paper check writing privileges and institute collection and/or legal actions against the payer. The student’s account is then placed on a finance hold thus preventing the student from receiving any services from the University.

The University requires that all accounts be paid in full by the end of the semester. Any account that remains delinquent is transferred to the Student Loan Department for servicing. Once the account is transferred, the Student Account Note or balance is subject but not limited to, principal, interest, late charges, collection fees, credit bureau reporting, and any legal fees associated with the collection of the debt. In accordance with California state law, all unpaid balances accrue 10% interest, per annum, on the balance remaining on the date of transfer. Students are responsible for all fees associated in the collection of the debt. A student with a balance due to the University is not allowed any benefits from the University including but not limited to, registration for courses, copies of transcripts or diplomas, and utilization of University housing and meals, until the balance is paid in full. In addition, all institutional loans or other loans guaranteed by the Federal Government must be in good (current) standing and exit interviews completed prior to the release of diploma or transcripts.

If payments exceed charges on a student account, the account is said to have a credit balance. Credit balances are to be returned to the student based upon the method of payment. The student account is not to be used as a means for cash advances or payments to third parties. Upon request, credit balances resulting from cash payments will be refunded to the student. A credit balance that results from a check payment is refunded after 14 business days. Credit balances that result from refundable student loans and scholarships are also refunded upon request. All financial aid must be disbursed on the student account before a refund is processed. Refunds are issued on a weekly basis.

Effective August 1, 2019, any student using CH31 (Vocational Rehabilitation and Employment benefits) or CH33 (Post-9/11 G.I. Bill) is protected from any penalties imposed by our University while waiting for the VA to make tuition and fee payments.

**Refund of Tuition and Fees**

The following refund schedule pertains only to tuition charges and is applicable when the student drops below full time enrollment or officially withdraws from the University. Students who intend to withdraw must notify the Office of the Registrar.

Refunds are based upon a percentage of calendar days. Calendar days of a semester may vary from semester to semester. For exact dates, please refer to the Student Accounts website or contact their office.

Notification and withdrawal before classes begin – No charge.

First day of classes until last day to add – $150 clerical charge.

After 50% of calendar days no refund, 100% penalty.

Fees are non-refundable after the last day to add courses for the semester.

Housing and meal plan charges are refunded on a prorated basis as determined by the Office of Residential Life & Housing. Refunds are based upon per diem charges and actual approved check out date.

If the student reducing units or withdrawing from the University is a financial aid recipient, the student’s financial aid award may be adjusted according to federal and state regulations and University policy. If the student has received more federal financial aid dollars than earned, the unearned aid must be returned to the federal financial aid program or programs from which it was paid. The funds remaining on the student account after federal financial aid is returned might not cover all the charges on the account. Any remaining balance is owed to the University and is due and payable immediately. The Financial Aid Office can provide additional information related to changes in financial aid awards.

**Tuition and Fees on this page are for the following professional programs on the San Francisco campus.**

**Professional**

Arthur A. Dugoni School of Dentistry
All information applies to the DDS Program. Not all information applies to the IDS, Certificate or Dental Graduate Programs.

University of the Pacific is a private institution with tuition and fees providing about two-thirds of the revenue necessary for the three-year doctoral program. Gifts from alumni, parents and regents, income from endowments, funds from private agencies and other revenue help meet program costs, but inflation and other factors may require annual increases in tuition and fees to provide necessary program revenue.

Because we offer the nation’s only dental program that can be completed in three calendar years, our dental students pay tuition for three years as opposed to four years at all other dental schools.

**Tuition**

Tuition for the 2020-2021 academic year for the DDS and IDS predoctoral programs and for the residency programs in orthodontics and endodontology programs is $117,020. The estimated annual fees for the Advanced Education in General Dentistry program are $3,246.00. The Oral and Maxillofacial Surgery program offers a stipend and does not charge tuition and fees.

**Estimated Educational Expenses**

<table>
<thead>
<tr>
<th>Type</th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
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<tr>
<td>Tuition</td>
<td>$117,020</td>
<td>$117,020</td>
<td>$117,020</td>
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<tr>
<td>Fees</td>
<td>$8,439</td>
<td>$9,172</td>
<td>$10,833</td>
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<tr>
<td>Kit</td>
<td>$11,385</td>
<td>$3,541</td>
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<tr>
<td>Books and Supplies</td>
<td>$2,795</td>
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<td>$800</td>
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<td>Estimated Total</td>
<td>$139,639</td>
<td>$130,533</td>
<td>$128,653</td>
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**Estimated Living Expenses**

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<tr>
<th>Category</th>
<th>Monthly</th>
<th>Quarterly</th>
<th>Annual</th>
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<tr>
<td>Rent</td>
<td>$1,770</td>
<td>$5,310</td>
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<tr>
<td>Food</td>
<td>$545</td>
<td>$1,635</td>
<td>$6,540</td>
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<tr>
<td>Transportation</td>
<td>$137</td>
<td>$411</td>
<td>$1,644</td>
</tr>
<tr>
<td>Personal/Misc.</td>
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<td>$822</td>
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<tr>
<td>Estimated Total</td>
<td>$2,726</td>
<td>$8,178</td>
<td>$32,712</td>
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</table>

Upon notification of acceptance, applicants are required to submit a nonrefundable $1,000 enrollment fee ($500 for the graduate programs) as directed in the acceptance letter in order to hold their place. The fee will be applied to first quarter tuition upon matriculation to the University of the Pacific.
the Pacific. First quarter tuition is due and payable before matriculation day. Subsequent payment of tuition is due by the first day of each quarter and is required for registration and continued enrollment.

**Tuition Refund**

Withdrawal: School policy provides that in response to written notice of withdrawal by a student or by an applicant, tuition credit shall be allocated as follows:

- Prior to matriculation: full credit less the enrollment fee.
- After matriculation: credit prorated according to calendar days after reduction by the enrollment fee (see below).
- After first day of class, second through final quarters: credit prorated according to calendar days as follows:
  
  - 1st through 7th day: 80% credit
  - 8th through 14th day: 60% credit
  - 15th through 25th day: 40% credit
  - 26th through 35th day: 20% credit
  - After 35th day: no refund

Dismissal: Upon dismissal for reasons other than misconduct, tuition credit is allocated according to the refund schedule above. When a dismissed student is readmitted, full tuition must be paid for each quarter repeated, or part thereof.

**Extended Program**

A student who has not fully demonstrated competency to the faculty in all clinical disciplines by the end of the final quarter of the program will be extended beyond graduation. An extended student is not charged tuition for one quarter. Tuition for subsequent quarter(s) or part(s) thereof is charged at 85% of the current rate. In every quarter of the extension, an extended student pays current rates for mandatory health and disability insurance. Upon notification to the dean that performance meets graduation standards, an extended student receives tuition credit of 10% for each full week of instruction remaining in the quarter.

**Readmission and Repeat**

Repeat students are charged 85% of the current tuition for any quarter repeated and 100% of the current rate thereafter. A student must pay any outstanding account balance to be eligible for readmission or to repeat all or part of an academic year.

**Diplomas**

A diploma will not be issued until a student’s account with the University is paid in full and in the judgment of the school all other requirements have been satisfied. If a diploma is held for financial reasons only, the original graduation date is retained on the record.

**Fees**

The enrollment fee described above is nonrefundable. The list of fees and expenses below should not be considered complete for all students, and includes anticipated costs for outside agencies listed as “special fees.” Fees listed below are for the DDS program and are estimates. Fees for the International Dental Studies and the Graduate programs are available from the Division of International Dental Studies, and the Department of Orthodontics and the Endodontics department, respectively.

**DDS Program Fees, 2020-2021**

*(partial listing; some fees subject to adjustment)*

- Application Fees: $75.00
- Instrument Management Fee: $3,346.00
- Student Doctoral Kit*: $11,385
- Student Body**: $89.00
- Health Insurance: TBD
- Disability Insurance: $54.00
- Technology Fee: $694.00
- Optical Loupes: $1,195.00
- Rental Kit: $165.00
- A.S.D.A.: $88.00
- California Dental Assn. Membership**: $5.00
- Laboratory Fee: $325.00
- Total: $17,421.00*

*The Student Doctoral Kit includes textbooks, instruments and supplies that are required by the school according to guidelines submitted by the Store Committee. These materials are issued in a kit on matriculation day to all registered students. Instruments and supplies should not be purchased in advance. Release from kit purchases will not be granted. Allowance should be made for additional supplies and instruments that will be required during the educational program.

**Fees for student body, class, ASDA and CDA memberships vary each year according to decisions of the student body and the respective classes.

**Store Refund Policy**

A full refund is provided on non-kit items returned within five school days of the date of purchase and within University policy.

**Student Accounts**

Student accounts are provided for payment of fees and student store charges. This privilege may be restricted for cause.

Student accounts are billed on a monthly basis and are due and payable prior to the next billing date to avoid a late fee.

Students who fail to make payments on accounts in a timely fashion and as billed are subject to suspension from the academic program without further action or procedures. In addition, a student will not be deemed to have met graduation requirements, nor will a diploma be issued, until a student’s account with the university is paid in full.

Effective August 1, 2019, any student using CH31 (Vocational Rehabilitation and Employment benefits) or CH33 (Post-9/11 G.I. Bill) is protected from any penalties imposed by our University while waiting for the VA to make tuition and fee payments.

**Business Office**

The business office manages student accounts, including posting of all charges; collecting payments; and issuing reimbursements.

**Patient Accounts**

The student is responsible for financial management of assigned comprehensive care patients. This responsibility includes charging correct fees for procedures authorized. Students will not receive credit for a procedure if financial arrangements have not been made prior to initiating care.

**Foreign Students**

In order to comply with regulations of the United States Immigration and Naturalization Service, the University of the Pacific requires applicants who are not citizens or permanent residents of the United States to submit a detailed certification of finances showing sufficient financial resources for study at the university. Other special information and
instructions regarding the admission of foreign students will be provided upon request.

Disclaimer
The school reserves the right to modify or change admission standards or requirements at any time without prior notice and effective immediately. The information provided on this site cannot be regarded as creating a binding contract between the student and the school.

University Administration

The Administration

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>President</td>
<td>Chris Callahan</td>
</tr>
<tr>
<td>Provost and Executive Vice President for Academic Affairs</td>
<td>Maria G. Pallavicini</td>
</tr>
<tr>
<td>Vice President for Business and Finance</td>
<td>Kenneth Mullen</td>
</tr>
<tr>
<td>Vice President for Student Life</td>
<td>Carrie Lovelace Petr</td>
</tr>
<tr>
<td>Vice President for University Development and Alumni Relations</td>
<td>Burnie Atterbury</td>
</tr>
<tr>
<td>General Counsel</td>
<td>Kevin Mills</td>
</tr>
<tr>
<td>Vice President for Technology and Chief Information Officer</td>
<td>Art Sprecher</td>
</tr>
<tr>
<td>Associate Vice President for Marketing and Communications</td>
<td>Marge Grey</td>
</tr>
<tr>
<td>Associate Vice President for External Relations, Strategic Partnerships and Presidential Initiatives</td>
<td>Stacy McAfee</td>
</tr>
<tr>
<td>Associate Vice President for Planning</td>
<td>TBD</td>
</tr>
<tr>
<td>Director of Institutional Research</td>
<td>Mike Rogers</td>
</tr>
<tr>
<td>Director of Intercollegiate Athletics</td>
<td>Janet Lucas</td>
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Office of the Provost

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
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<tbody>
<tr>
<td>Provost and Executive Vice President for Academic Affairs</td>
<td>Maria G. Pallavicini</td>
</tr>
<tr>
<td>Chief of Staff to the Provost</td>
<td>Jared B. Gaynor</td>
</tr>
<tr>
<td>Vice Provost for Faculty Affairs</td>
<td>Joan Lin-Cerighino</td>
</tr>
<tr>
<td>Vice Provost for Undergraduate Education</td>
<td>Edith Sparks</td>
</tr>
<tr>
<td>Vice Provost for Strategy and Educational Effectiveness</td>
<td>Cyd Jenefsky</td>
</tr>
<tr>
<td>Associate Provost</td>
<td>Elisa Anders</td>
</tr>
<tr>
<td>Associate Provost of Research</td>
<td>James Uchizono</td>
</tr>
<tr>
<td>Assistant Provost for Budget and Finance</td>
<td>Yuhang Shi</td>
</tr>
<tr>
<td>Director, Center for Teaching and Learning</td>
<td>Lott Hill</td>
</tr>
</tbody>
</table>

Director, International Programs and Services | Ryan Griffith               |

University Registrar | TBD

School and College Deans

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean, College of the Pacific</td>
<td>Rena Fraden</td>
</tr>
<tr>
<td>Senior Associate Dean</td>
<td>Gregg Jongeward</td>
</tr>
<tr>
<td>Associate Dean</td>
<td>Scott Jensen</td>
</tr>
<tr>
<td>Dean, Conservatory of Music</td>
<td>Peter Witte</td>
</tr>
<tr>
<td>Dean, Eberhardt School of Business (Interim)</td>
<td>Tim Carroll</td>
</tr>
<tr>
<td>Associate Dean, Academic Programs</td>
<td>Cynthia Eakin</td>
</tr>
<tr>
<td>Dean, Bened College</td>
<td>Patricia Campbell</td>
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<tr>
<td>Senior Associate Dean</td>
<td>Linda Webster</td>
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<tr>
<td>Associate Dean</td>
<td>Farley Staniec</td>
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<tr>
<td>Associate Dean</td>
<td>Rod Githens</td>
</tr>
<tr>
<td>Assistant Dean</td>
<td>Kyle Harkness</td>
</tr>
<tr>
<td>Dean, School of Engineering and Computer Science</td>
<td>Steven Howell</td>
</tr>
<tr>
<td>Associate Dean</td>
<td>Michael Doherty</td>
</tr>
<tr>
<td>Dean, School of Health Sciences</td>
<td>Nicoleta Burnariu</td>
</tr>
<tr>
<td>Dean, Thomas J. Long School of Pharmacy</td>
<td>Rae Matsumoto</td>
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<tr>
<td>Associate Dean for Academic Affairs</td>
<td>Eric Boyce</td>
</tr>
<tr>
<td>Associate Dean for Graduate Education and Research</td>
<td>Xiaoling Li</td>
</tr>
<tr>
<td>Associate Dean for Student Affairs Enrollment Management</td>
<td>Marcus Ravnan</td>
</tr>
<tr>
<td>Associate Dean for Professional Programs</td>
<td>Allen Shek</td>
</tr>
<tr>
<td>Assistant Dean for External Relations</td>
<td>Nancy DeGuire</td>
</tr>
<tr>
<td>Associate Dean for Operations</td>
<td>Linda Norton</td>
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<tr>
<td>Assistant Dean for Pre-Pharmacy and Pre-Health Affairs</td>
<td>Marcus Ravnan</td>
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<tr>
<td>Dean, Graduate School</td>
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<tr>
<td>Dean, Pacific McGeorge School of Law</td>
<td>Michael Schwartz</td>
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<tr>
<td>Associate Dean, Academic Affairs</td>
<td>Mary-Beth Moylan</td>
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<tr>
<td>Associate Dean, Faculty Scholarship</td>
<td>Rachel Salcu</td>
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<tr>
<td>Associate Dean of Administration</td>
<td>Jeff Prosker</td>
</tr>
<tr>
<td>Assistant Dean, Development</td>
<td>Mindy Danovaro</td>
</tr>
<tr>
<td>Assistant Dean, Law Library</td>
<td>James Wirrell</td>
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## Office of Vice President for External Relations

<table>
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<tr>
<th>Title</th>
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<tbody>
<tr>
<td>Associate Vice President for External Relations, Strategic Partnerships and Presidential Initiatives</td>
<td>TBD</td>
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<tr>
<td>Events Manager, Development</td>
<td>Steve Whyte</td>
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## Office of the Vice President for Development and Alumni Relations

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<tbody>
<tr>
<td>Vice President</td>
<td>Burnie Atterbury</td>
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<tr>
<td>Senior Associate Vice President, Development</td>
<td>Cathy Wooten</td>
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<td>Senior Associate Vice President, Leadership Initiatives and Planning</td>
<td>Scott Biedermann</td>
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<td>Assistant Vice President, Alumni Relations</td>
<td>Kelli Page</td>
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## Office of Vice President for Student Life

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<tr>
<td>Vice President for Student Life</td>
<td>Carrie Lovelace Petr</td>
</tr>
<tr>
<td>Associate Vice President for Student Well-Being/Dean of Students</td>
<td>Rhonda Bryant</td>
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<tr>
<td>Associate Vice President for Student Involvement and Equity</td>
<td>Allison Dumas</td>
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<tr>
<td>Associate Vice President/Executive Director, Career Development</td>
<td>Tom Vecchione</td>
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<tr>
<td>Executive Director, Public Safety</td>
<td>Grant Bedford</td>
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<td>Executive Director, Residential Life, Housing, and Dining Auxiliary</td>
<td>Joe Berthiaume</td>
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<td>Executive Director, Assessment and Student Development Services</td>
<td>Sandra Mahoney</td>
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<td>Executive Director, Campus Life</td>
<td>Marc Falkenstein</td>
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<td>Executive Director, Community Involvement &amp; Educational Equity Programs</td>
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<tr>
<td>Associate Dean of Students (Sacramento and San Francisco)</td>
<td>Heather Dunn-Carlton</td>
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<td>Director, Campus Career Partnerships</td>
<td>Deb Crane</td>
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<td>Director, Corporate &amp; Employer Engagement</td>
<td>Robin MacEwan</td>
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<td>Director, Counseling &amp; Psychological Services</td>
<td>Kimberlee DeRushia</td>
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<td>Director, Dining Services</td>
<td>Sia Mohsenzadegan</td>
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<tr>
<td>Director, Finance and Administration</td>
<td>Breann Northcutt</td>
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## Office of Vice President for Business and Finance

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<tr>
<td>Vice President for Business and Finance</td>
<td>Kenneth M. Mullen</td>
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<tr>
<td>Associate Vice President for Business and Finance</td>
<td>Ron Ellison</td>
</tr>
<tr>
<td>Assistant Vice President, Chief Investment Officer</td>
<td>Jol Manilay</td>
</tr>
<tr>
<td>Assistant Vice President, Chief Facilities Officer</td>
<td>Graeme Mitchell</td>
</tr>
<tr>
<td>Assistant Vice President, Human Resources</td>
<td>Linda Jeffers</td>
</tr>
<tr>
<td>Associate Controller</td>
<td>Audrey George</td>
</tr>
<tr>
<td>Executive Director, Facilities Planning and Construction</td>
<td>Priscilla Meckley-Archuleta</td>
</tr>
<tr>
<td>Director, Budget</td>
<td>Jonallie Parra</td>
</tr>
<tr>
<td>Director, Internal Audit</td>
<td>Randy Schwantes</td>
</tr>
<tr>
<td>Director, Procurement Services</td>
<td>Ronda Marr</td>
</tr>
<tr>
<td>Director, Risk Management</td>
<td>Roberta Martoza</td>
</tr>
<tr>
<td>Director, Sacramento Campus</td>
<td>Patrick Faverty</td>
</tr>
<tr>
<td>Director, San Francisco Campus</td>
<td>Kara Bell</td>
</tr>
<tr>
<td>Director, Student Business Services</td>
<td>Vacant</td>
</tr>
<tr>
<td>Director, University Payroll Services</td>
<td>Tara Juano</td>
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<tr>
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<tr>
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<td>Jennifer Carr</td>
</tr>
<tr>
<td>Assistant Dean, Admissions and Financial Aid</td>
<td>Tracy Simmons</td>
</tr>
<tr>
<td>Dean, Arthur A. Dugoni School of Dentistry</td>
<td>Nader A. Nadershahi</td>
</tr>
<tr>
<td>Dean Emeritus</td>
<td>Arthur A. Dugoni</td>
</tr>
<tr>
<td>Executive Associate Dean, Clinical Oral Health Care</td>
<td>Des Gallagher</td>
</tr>
<tr>
<td>Associate Dean, Clinical Services</td>
<td>Des Gallagher</td>
</tr>
<tr>
<td>Associate Dean, Fiscal Services</td>
<td>Edward Pegueros</td>
</tr>
<tr>
<td>Assistant Dean for Admissions, Student Life &amp; Diversity</td>
<td>Stan Constantino</td>
</tr>
<tr>
<td>Assistant Dean, Academic Affairs</td>
<td>Daniel J. Bender</td>
</tr>
<tr>
<td>Dean, University Library</td>
<td>Mary Somerville</td>
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<td>Dean Emeritus</td>
<td>Arthur A. Dugoni</td>
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<tr>
<td>Executive Associate Dean, Clinical Oral Health Care</td>
<td>Des Gallagher</td>
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<td>Associate Dean, Clinical Services</td>
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<td>Associate Dean, Fiscal Services</td>
<td>Edward Pegueros</td>
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<tr>
<td>Assistant Dean for Admissions, Student Life &amp; Diversity</td>
<td>Stan Constantino</td>
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<tr>
<td>Assistant Dean, Academic Affairs</td>
<td>Daniel J. Bender</td>
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<tr>
<td>Dean, University Library</td>
<td>Mary Somerville</td>
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University Policy on Disclosure of Student Records

Family Educational Rights and Privacy Act (Buckley Amendment)

The University of the Pacific complies with The Family Educational Rights and Privacy Act (abbreviated FERPA and formerly known as the Buckley Amendment). Educational institutions are required to annually notify enrolled students of their rights under the Federal Family Educational Rights and Privacy Act of 1974 (FERPA), as amended. This page fulfills this obligation and serves as the annual FERPA notification to students at the University of the Pacific, by providing information about the university policy and students’ rights with respect to their education records.

“Student” means an individual who is or who has been in attendance at the University of the Pacific. A student or resident’s FERPA rights begin when the student or resident registers and attends his/her first class. It does not include any applicant for admission to the university who does not matriculate, even if he or she previously attended the university. (Please note, however, that such an applicant would be considered a “student” with respect to his or her records relating to that previous attendance. Students or residents who originally sought admission to one program of study at the university and are denied, but subsequently are admitted and enrolled student is employed as a result of his or her status as a student; employment records, except where a currently enrolled student is employed as a result of his or her status as a student; records of a physician, psychologist, or other recognized professional or paraprofessional made or used only for treatment purposes and available only to persons providing treatment; records that contain only information relating to a person’s activities after that person is no longer a student at the university.

It is the policy of the university (1) to permit students to inspect their education records, (2) to limit disclosure of personally identifiable information from education records without students’ prior written consent, and (3) to provide students the opportunity to seek correction of their education records where appropriate. A student alleging university noncompliance with the Family Educational Rights and Privacy Act has the right to file a written complaint with the Family Policy Compliance Office:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-5920

1. Students have the right to inspect and review their education records within 45 days after the day that University of the Pacific receives the request for access.

Each student has a right of access to his or her education records, except confidential letters of recommendation received prior to January 1, 1975, and financial records of the student’s parents. A student may, by a signed writing, waive his or her right of access to confidential recommendations in three areas: admission to any educational institution, job placement, and receipt of honors and awards. The university does not require such waivers as a condition for admission or receipt of any service or benefit. If the student chooses to waive his or her right of access, he or she is notified, upon written request, of the names of all persons making confidential recommendations. Such recommendations are used only for the purpose for which they were specifically intended. A waiver may be revoked in writing at any time, and the revocation applies to all subsequent recommendations, but not to recommendations received while the waiver was in effect.

Procedure to be Followed:
Requests for access should be made in writing to the Office of the Registrar, and should specify the record(s) the student wishes to inspect. The University complies with a request for access within a reasonable time, at least within 45 days. The Registrar’s Office will make arrangements for access and notify the student of the time and place where the records may be inspected.

2. University of the Pacific limits disclosure of personally identifiable information from education records unless it has the student’s prior written consent, subject to the following limitations and exclusions.

Directory Information. In accordance with the FERPA, the University has the right to release Directory Information without the student’s or resident’s prior written consent. The University gives annual public notice to students of the categories of information designated as directory information. This information may appear in public documents or otherwise be disclosed even in the absence of consent unless the student files written notice requesting the University not to disclose any of the categories by the opt-out date, which is three weeks after the first day of the first term of enrollment. While students may opt out at any point subsequent to the opt-out date, late opt-outs will not apply retroactively to information previously released. To block the release of this information ("opt out"), a student must submit a Request for Non-Release of Directory Information (https://www.pacific.edu/Documents/registrar/acrobat/Non-Release%20of%20Directory%20Information7112018.pdf) Form (http://www.pacific.edu/Documents/registrar/acrobat/ferpa-non-release-directory-info.pdf). The University of the Pacific has designated as “directory information” the following items.

- Student’s name
- University ID number
- Mailing and local address
- Telephone number
University Officials. One exception, which permits disclosure without consent, is disclosure to University officials with legitimate educational interests. At Pacific, "University official" is defined as (1) a person employed by the University or in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); (2) a person or company with whom the University has contracted (such as an attorney, auditor, or collection agent); (3) a person serving on the Board of Regents; (4) a student serving on an official University committee (academic, grievance, or disciplinary) or assisting another University official in performing his or her tasks. A university official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for University of the Pacific.

Prior Consent Not Required. FERPA allows additional exceptions to the written consent requirement for disclosure of education records to third parties. Some of these exceptions are listed below:

- To officials of another school in which a student seeks or intends to enroll, or where the student is already enrolled so long as the disclosure is for purposes related to the student's enrollment or transfer.
- To an alleged victim of any crime of violence of the results of any institutional disciplinary proceeding against the alleged perpetrator of that crime with respect to that crime.
- In response to a court order or subpoena, the University makes reasonable efforts to notify the student before complying with the court order.
- Appropriate parties in connection with an emergency, where knowledge of the information is necessary to protect the health or safety of the student or other individuals;
- Parents of a student who is a dependent for income tax purposes. (Note: The University may require documentation of dependent status such as copies of income tax forms.)
- Accrediting organizations for purposes necessary to carry out their functions;
- Organizations conducting educational studies for the purpose of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction. The studies are conducted so as not to permit personal identification of students to outsiders, and the information is destroyed when no longer needed for these purposes;
- State and local officials to which such information is specifically required to be reported;
- Authorized persons and organizations that are given work in connection with a student's application for, or receipt of, financial aid, but only to the extent necessary for such purposes as determining eligibility, amount, conditions, and enforcement of terms and conditions;
- Authorized representatives of the Comptroller General of the U.S., the Secretary of Education, the Secretary of the Department of Health and Human Services, the Director of the National Institute of Education, the Administrator of the Veterans' Administration, but only in connection with the audit or evaluation of federally supported education programs, or in connection with the enforcement of or compliance with Federal legal requirements relating to these programs. Subject to controlling Federal law or prior consent, these officials protect information received so as not to permit personal identification of students to outsiders and destroy such information when it is no longer needed for these purposes;

Prior Consent Required. Where FERPA does not allow exceptions to the written consent requirement, the University does not release personally identifiable information in education records or allow access to those records without prior consent of the student. Unless disclosure is to the student himself or herself, the consent must be written, signed, and dated, and must specify the records to be disclosed, the identity of the recipient, and the purpose of disclosure. A copy of the record disclosed is provided to the student upon request and at his or her expense.

The University, along with the student's education records, maintains a record for each request and each disclosure, except for the following:

1. disclosures to the student himself or herself;
2. disclosures pursuant to the written consent of the student (the written consent itself suffices as a record);
3. disclosures to school officials of the University.
4. disclosures of directory information.

This record of disclosures may be inspected by the student, the official custodian of the records, and other university and governmental officials.

3. University of the Pacific provides students the opportunity to seek correction of their education records.

A student who believes that information contained in his or her education records is inaccurate, misleading, or violative of privacy or other rights may submit a written request to the Office of the Registrar specifying the document(s) being challenged and the basis for the complaint. The request will be sent to the person responsible for any amendments to the record in question. Within a reasonable period of time of receipt of the request, the University decides whether to amend the records in accordance with the request. If the decision is to refuse to amend, the student is so notified and is advised of the right to a hearing. He or she may then exercise that right by written request to the Office of the Registrar. Within a reasonable time of receipt of the request, the student will be notified in writing of the date, place, and time reasonably in advance of the hearing. The hearing will be conducted by a university official who does not have a direct interest in the outcome. The student will have a full and fair opportunity to present evidence relevant to the issues raised and may be assisted or represented by individuals of his or her choice at his or her own expense, including an attorney. Within a reasonable period of time after the conclusion of the hearing, the University will notify the student in writing of its decision. The decision will be based solely upon evidence presented at the hearing and will include a summary of the evidence and the reasons for the decision. If the University decides that the information is inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student, the University will amend the records accordingly. If, as a result of the hearing, the University decides that the information is not inaccurate, misleading, or otherwise in violation of the student's rights,
the University will inform the student of the right to place in his or her record a statement commenting on the information and/or explaining any reasons for disagreeing with the University’s decision. Any such explanation will be kept as part of the student’s record as long as the contested portion of the record is kept and will be disclosed whenever the contested portion of the record is disclosed.

**Work Study**

University of the Pacific participates in the Federal Work-Study program, which provides employment opportunities for students who demonstrate financial need.

**Arthur A. Dugoni School of Dentistry**

**Purpose**

**Our Purpose is to Help People Lead Healthy Lives**

We grow and inspire a diverse community of learners through our humanistic culture. Building on a distinguished tradition, we provide exceptional education; offer personalized quality patient care; support collaborative research; and foster commitment to service.

**Vision**

**Improving Health and Wellness through Innovation in Programs, Partnerships and People**

The University of the Pacific Arthur A. Dugoni School of Dentistry is an innovative and renowned leader in health and wellness. As a leader, our programs prepare healthcare providers for current, future and evolving practice models. The Dugoni School integrates inter-professional education with patient care, keeping humanism at its core. We educate beginning and established healthcare professionals for an array of career paths.

Signature partnerships support our programs and enhance health, education, research, and service. Partnerships reduce tuition dependence and create opportunities for students, faculty, and staff development.

Powered by its people, the Dugoni School sets the standard for humanistic education and leadership that serve the needs of its students, patients, alumni, the organized profession, and the public.

**Commitments**

We commit to the following values to support the defining characteristic of our education model — humanism.

**By accentuating the positive, setting high standards, and respecting the individual, we provide the best possible learning, working and healthcare environment for every member of our community.**

- **Courage** — willing to take risks, doing what is right not easy
- **Empowerment** — supporting and inspiring individuals to fulfill their potential
- **Excellence** — achieving the highest quality in all that we do
- **Innovation** — imagining and applying bold, creative approaches
- **Integrity** — exemplifying the highest personal and professional ethical principles
- **Leadership** — inspiring through vision and challenging others to effect positive change

**Clinic Mission Statement**

The mission of the school's clinics is to provide patient-centered, evidence-based, quality oral healthcare in a humanistic educational environment.

The goal of the clinic mission statement is to focus faculty, staff, and students on the delivery of excellent patient care. In all clinical interactions we will strive to provide excellent care to our patients and excellent educational experiences for our students. At those times when we must make a choice between patient care and teaching effectiveness, patient care will take precedence.

There are four parts to the mission statement. Patient-centered care means being prompt, efficient, responsible, engaging, focused, and adaptable, among other things. The private practice model is the patient care model to which we aspire. Evidence-based decision making involves the use of scientific evidence to help make treatment decisions. It is used in conjunction with individual patient values to determine the best course of action for each patient. Quality oral healthcare involves providing treatment to our patients that meets community standards of care in all disciplines. It means providing that care to patients of varying needs and expectations. Humanistic education is based on honest communication of clear expectations along with positive support for diligent effort.

Faculty and staff must be models of the profession’s highest standards. Students are expected to set equally high standards for their behavior. The educational environment will be intellectually stimulating, progressive in scope, outcomes-focused, and competency-based.

**History of Arthur A. Dugoni School of Dentistry**

One of the world’s most distinctive metropolitan centers, San Francisco has been the home of the School of Dentistry since its incorporation in 1896 as the College of Physicians and Surgeons. The school has been recognized since its inception as a major resource for dental education in the Western states.

- In 1962 the College of Physicians and Surgeons joined the University of the Pacific.
- In 1967 an eight-story building was completed for the teaching of clinical dentistry and for conducting dental research.
- In 1996 the school opened a state-of-the-art preclinical simulation laboratory combining the latest in educational technology with a simulated patient experience.
- In 2002 three new state-of-the-art classrooms were completed.
- In 2003 a new Health Science Center was opened on the Stockton campus combining facilities for dentistry, dental hygiene, physical therapy, and speech pathology.
- In 2004 the university named the dental school in honor of its long-standing dean, Dr. Arthur A. Dugoni.
- In 2011 the school was awarded the prestigious Gies Award for Vision by the American Dental Education Association.
- In 2014 the dental school moved to a completely renovated and updated facility in downtown San Francisco, setting the pace for new and better methods of educating students and providing care to patients.
- In 2015 the dental school became the first school in California and in the United States to have students be licensured through a portfolio exam process.
The Alumni Association provided a twelve operatory dental clinic which has served as the school's major extended campus in southern Alameda County since 1973. The clinic currently serves as the clinic site for the school's Advanced Education in General Dentistry residency program.

**Accreditation**

The University of the Pacific is fully accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges (WASC). The dental educational programs are fully accredited by the Commission on Dental Accreditation (CODA). The School of Dentistry is a member of the American Dental Education Association (ADEA).

CODA will review complaints that relate to a program's compliance with accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeal for treatment received by patients or individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students.

A copy of accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by calling 1-800-621-8099, extension 4653.

**Humanistic Education**

It is the goal of the School of Dentistry to educate the highest quality practitioners who can practice independently and successfully in their patients' best interests. It is our belief that a humanistic approach to education best accomplishes this goal. Our view of humanism is based upon honest communication of clear expectations along with positive support for diligent effort. Although kindness is valued, humanism is not interpreted to mean softness, weakness, or superficial niceness. In fact, humanism places great responsibility on each member of the dental school community.

In order for this approach to work, faculty members must be models of the profession's highest standards, and they must teach in a way that encourages and energizes students. Students, in turn, are expected to set very high standards, to work hard, and to take personal responsibility for their own learning process.

Examples of humanistic student-faculty interaction at the Dugoni School:

**Includes**
- Good work ethic
- Constructive feedback
- Maintaining confidentiality
- Addressing the issue
- Celebrating achievement
- Excellence
- High ethical standards
- Professional responsibility
- Increasing independence
- Attainment of competency

**Excludes**
- Minimum effort
- Authoritarian behavior
- Public criticism

**Standing Committees**

In keeping with sound shared governance principles, the School of Dentistry incorporates the expertise and perspective of students, faculty, and administrators in the decision-making process through use of the committee system. Committees are designated according to areas of concern and authority as "faculty," "administrative," or "joint faculty-administrative" committees. Standing committees are listed below.

**Faculty Committees**

The faculty has primary responsibility for recommending policy in the following areas: curriculum, subject matter and methods of instruction, research, faculty status, and those aspects of student life which are related to the educational process. Final review and decision rest with the dean, president, and Board of Regents.

- Academic Advisory Committee
- Admissions Committee, DDS
- Admissions Committee, IDS
- Curriculum Committee
- Dental Faculty Council
- Faculty Appointment, Promotion, and Tenure Committee
- Research Committee
- Student Academic Performance and Promotions Committee
- Advisors Committee

**Joint Faculty-Administrative Committees**

Joint committees consider areas of major importance to faculty and administration. Administrative officials hold ultimate authority, but faculty members’ and students’ consultation and advice are of great importance.

- Ethics Committee
- Clinical Quality Assurance Committee
- Student Appeals Committee

**Administrative Committees**

The administration has primary responsibility for maintenance of existing institutional resources and the creation of new resources. The dean plans, organizes, directs, and represents the School of Dentistry with general support from the faculty, the president, and the Board of Regents. The dean initiates, innovates, and assures that School of Dentistry standards and procedures conform to policy established by the Board of Regents and to standards of sound academic practice. Administrative committees are those in which administrative responsibility is primary and members appointed by the dean serve in an advisory capacity.

- A. W. Ward Museum Committee
- Infection Control Committee
- Managers and Directors Committee
- Strategic Plan Outcomes Committee
- Committee on Continuing Dental Education
- Store Committee
School of Dentistry Alumni Association

The Alumni Association of the University of the Pacific, Arthur A. Dugoni School of Dentistry, has five membership categories:

1. Alumni Members — all graduates of the dental school, including dental hygienists and post-doctoral program graduates
2. Associate Members — dentists and hygienists who graduated from other schools and who join the Association
3. Dugoni School Family Members — non-dentists who are valued members of our community
4. Life Members - Members who have attained their 50th graduation anniversary and who have been active dues-paying members for 30 years, or who were designated this distinction prior to 1976
5. Honorary Members - non-Alumni Members and non-Associate Members who are recipients of the Medallion of Distinction Award

The Alumni Association’s mission is to engage and inspire its members in meaningful relationships with students, the School of Dentistry and with each other for life. The purpose of the Association is to promote the welfare of the School, the graduates of the School, and the profession of dentistry. The excellent reputation of our school and its unequaled physical facilities are the direct result of the loyalty and active support of its alumni and the Alumni Association.

The Alumni Association sponsors, or co-sponsors, many educational and social events throughout the year for alumni and students, and additionally supports students at events such as the city softball league and golf, basketball, and softball tournaments.

2020-2021 Officers

Alan W. Budenz, Associate President
Richard F. Creahe ’86 President-Elect
Jamie J. Sahouria ’04 Vice President
Peter C. Liu ’89 Secretary
William A. van Dyk ’73 Treasurer
David Ehsan ’95 Immediate Past President
Arthur A. Dugoni ’48 Dean Emeritus
Joanne Fox Director

Board of Directors

Carsen J. Bentley ’11
Gina S. Chann ’89
Shareen Char-Fat ’86
Amro A. H. Elkhatieb ’16 IDS
Jasmine R. Flake ’19
William D. Gilbert ’85
Amanda Rae Kronquist ’15

Marc H. Lai ’13
Kimberly Mahood ’10 Ortho
Mustafa S. Radif ’12 DH
Akhil S. Reddy ’08
Michael R. Ricupito ’83
R. Alexander Schmotter ’15
Roxanna R. Shafiee ’09 Ortho
Tracey A. Taddey ’98
Lynn E. Watanabe ’95
Wesley E. Wong ’98

Student Representatives

Marwa Elkharsity ’20 DDS
Stephanie Tu ’20 DH
Timothy S. Yu ’20 Ortho

Ex-Officio

Lory Laughter, RDH, MS
Director, Dental Hygiene Program
Nader A. Nadershahi ’94
Dean
Dr. Craig S. Yarborough
Associate Dean for Institutional Advancement
Elizabeth J. Fleming ’84
Chair, Annual Meeting Committee

Foundation Representative

Steven E. Tiret, CPA
Dental Foundation President

Staff

Anastasia Damyan
Administrative Assistant, Alumni and Development
Rowena R. O’Connor
Manager
Andrea J. Woodson-Davis
Coordinator

Dugoni School Foundation

The Dugoni School Foundation is a group of volunteers working closely with the Dean and the Development team to promote philanthropy at the School of Dentistry. The mission of the Foundation is to ensure that the University of the Pacific, Arthur A. Dugoni School of Dentistry has the resources it needs to realize its visions and goals.

The Foundation shares the school’s commitment to excellence and measures success by the joy it brings to donors, by the funds it raises, by the fundraising programs it initiates, and by the continuing recruitment and retention of new, effective board members.

Dugoni School Foundation Executive Committee

Mr. Steven Tiret
President
Dr. Nader Nadershahi ’94
Dean
Dr. Janet Andrews ’83
President-Elect
Chair, Special Events  
Dr. Nava Fathi ’95  
Chair, Annual Fund  
Dr. John Young Jin Kim ’04  
Co-Chair, External Regions  
Mr. Gary Mitchell  
Chair, Membership  
Dr. W. Ronald Redmond ’66  
Campaign Co-Chair  
Dr. Craig Yarborough ’80  
Executive Director  
Assoc. Dean for Institutional Advancement  
Dr. M. Gabrielle “Gabby” Thodas ’77, ’95 Ortho  
Past President  
Dr. Gary Weiner ’66  
Campaign Co-chair  
Dr. Saam Zarrabi ’08  
Co-Chair, External Regions  

Board  
Dr. Edmond Bedrossian ’86  
Dr. Gerald “Jerry” Bittner, Jr. ’85  
Dr. Susan Bittner ’74A  
Dr. Joseph Bronzini ’66  
Dr. Michael Campbell ’79  
Dr. Elisa LoBue-Campbell ’84  
Dr. Arthur Dugoni ’48  
Dr. David Ehsan ’95  
Dr. Joseph Errante ’80  
Dr. Brian Grey ’91 Ortho  
Dr. Michael Lasky ’95  
Dr. Jill Lasky ’98  
Dr. Gary Low ’76  
Dr. Aneet Randhawa  
Dr. V. Dean Salo ’92  
Dr. Kenneth Shimizu ’85, ’87 Ortho  
Mr. Andrew J. Stout, WMS  
Dr. Colin Wong ’65  
Dr. Douglas Yarris ’83

**Development**
The Development team drives the Dugoni School’s fundraising efforts, accounting for almost 10% of revenue necessary for school operations. Thousands of alumni, students, faculty, staff, friends, foundations, and corporate donors have helped to build clinics and classrooms, fund scholarships and programs, provide dental care to patients, and support numerous projects that keep the Dugoni School strong.

**Marketing & Communication**
The Office of Marketing & Communication directs communications and marketing programs to increase the visibility of the dental school and to enhance its identity to various constituents. The marketing and communications team promotes not only the dental school, but also the school’s students, faculty, staff, alumni, and clinics, through effective media relations, Web communications, event planning, publication development, and marketing strategies.

**Continuing Dental Education**
The Division of Continuing Dental Education (CDE) provides dynamic and multidisciplinary continuing education programs for all members of the dental profession. CDE offers a variety of programs, including lecture courses, hands-on workshops, mini residency programs, certification programs, and online courses. Program lengths vary, and include half-day, full-day, and multiple session programs. CDE courses are presented by the profession’s outstanding leaders and educators and classes are held at the dental school in San Francisco as well as select locations throughout California and the United States. The division also sponsors travel CE programs abroad, the next being planned for 2020 is a trip to Peru.

Dugoni School of Dentistry students, faculty, and staff receive discounted rates, up to 50% off regular tuition, to attend continuing dental education courses offered by the division. Dues-paying members of the Alumni Association receive a 15% discount on most CDE programs offered by the division and recent graduates, from the last five years, receive a 20% discount off of regular tuition.

For more information, visit dental.pacific.edu/ce1 (https://www.dental.pacific.edu/continuing-education/) or contact Continuing Dental Education at (415) 929-6486 or cedental@pacific.edu. To register for courses, please click here (https://reg.abcsignup.com/view/cal1a.aspx?ek=&amp;ref=&amp;aa=&amp;sid1=&amp;sid2=&amp;as=36&amp;wp=197&amp;tz=).

**Dental Hygiene**
As is the case for all programs within the Pacific Dugoni School of Dentistry, the Dental Hygiene Program strives to be a global leader in our field, focusing on evidence-based practice while creating an environment of innovation, dynamism, and diversity. Similarly, the Program shares the School of Dentistry’s commitment to values that reflect distinguishing features of our program, most notably:

**Mission**

**THE MISSION OF THE DENTAL HYGIENE PROGRAM** is to:

- Educate individuals who will be professionally competent to provide quality preventive oral health care in an evolving profession;
- Provide culturally aware, patient-centered, quality care within the context of an efficient clinical model that demonstrates the highest standards of service achievable;
- Provide opportunities for inter-professional and community-based oral health education and health promotion in a variety of settings.
• Apply principles of critical thinking and evidence-based decision making to all aspects of dental hygiene practice.

• Articulate the value of continued competence, lifelong learning and pursuit of advanced degrees.

PURPOSE

Our purpose is to help people lead healthy lives.

We grow and inspire a diverse community of learners through our humanistic culture. Building on a distinguished tradition, we provide exceptional education; offer personalized quality patient care; support collaborative research; and foster commitment to service.

The Study of Dental Hygiene

The dental hygiene course of study is a professional program where students learn to provide preventive clinical care for patients with emphasis on recognition, treatment, and prevention of oral diseases. In addition to performing a variety of preventive and therapeutic functions, the dental hygienist also has a major role in counseling and educating patients, community groups, and other health professionals. The curriculum helps students build the educational, communication, and clinical skills necessary to work in co-therapy with the dental team.

Admission Requirements

Admission to the Dental Hygiene Program is competitive and based on merit. Students may apply either as a freshman student, doing prerequisite coursework at Pacific, or as a transfer student, completing prerequisites at another institution. After review of the completed application, the Office of Admissions will invite qualified candidates to participate in interviews on campus. In addition to a personal interview, applicants are invited to take part in orientation and financial aid seminars, meet informally with current students, and tour the campus. Admission will be based on the combination of application information and interview.

Please click here (http://www.pacific.edu/Admission/Undergraduate/Applying/Dental-Hygiene.html) to see detailed admissions information.

GPA: Special emphasis is placed on coursework selected, the grades achieved in those courses, and the cumulative grade point average.

SAT or ACT Exams: The Admissions Committee reviews the results of the student’s SAT or ACT scores only for freshman admission.

Essay: An essay may be required of University applicants.

Recommendation: Two letters of recommendation are required. They may be from a faculty member, counselor or advisor or from health care or job related professionals.

Dental Experience: Job shadowing (20 hours) or dental office employment are expected so that the applicant is familiar with the role of the practicing dental hygienist.

Extracurricular Activities: Other factors considered (but not required) in selecting the class include community service and involvement and volunteer activities.

Transfer Student Application:

Transfer application deadline for entry into the program is August 1 for the following spring semester. Applicants are notified by December 1. SAT or ACT exam scores are NOT required.

Sixty-four units of lower division college courses that are Pacific transferable and include the following prerequisites or equivalents are required:

• General Biology and lab (one semester or 2 quarters) must articulate to Pacific BIOL 061

• General Chemistry and lab (2 semesters or 3 quarters) must articulate to Pacific CHEM 025 and CHEM 027 and include content in biochemistry.

• Microbiology (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific BIOL 145 but other microbiology courses are accepted. All Microbiology courses must include a lab.

• General (Introductory) Psychology (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific PSYC 031

• Introductory Sociology (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific SOCI 051

• Mathematics (Statistics) (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific MATH 035 or MATH 037

• English Composition (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific ENGL 025 or WRIT 021

• Communication (Speech) (minimum of one 3 unit semester course or one 4 unit quarter class) must articulate to Pacific COMM 027

• Anatomy and Physiology (2 semesters or 4 quarters) must articulate to Pacific BIOL 170 and BIOL 180. Separate Anatomy and Physiology courses are required and all courses must include a lab.

• Elective courses should be added so that the total units equal 64 semester units or more.

• One course that must articulate with Pacific General Education Category I–C Societies and Cultures Outside the United States

• One course that must articulate with Pacific General Education Category II–B Fundamental Concerns

• One course that must articulate with Pacific General Education Category II–C Practice and Perspectives in the Visual and Performing Arts or another course in the II-B category

For applicants with a baccalaureate degree, the GE course requirement is waived.

Health Requirements:

Prior to entry into the professional portion of the program (final 4 semesters), health requirements must be met and documentation submitted to the University’s Cowell Wellness Center as follows:

• Medical Examination: Following acceptance for admission, students submit the University’s “Entrance History and Physical,” form signed by a physician which confirms that a medical examination was completed within 3 months of the date of matriculation into the professional portion of the Dental Hygiene program. Current Pacific students who submitted a physical exam form upon matriculation, do not require another physical.

• Measles, Rubella (German Measles), and Mumps: Students provide documentation of presence of positive titres. Documented vaccination with two dose series MMR given one month apart with live attenuated measles and rubella virus is adequate. A history of measles and rubella as childhood diseases is not sufficient.

• Tuberculosis: ALL Students must submit the report of a two-step PPD tuberculosis skin test done within 3 months of entering professional program. With a history of tuberculosis OR a positive skin test, students submit the physician’s report of a chest X-ray taken within
the year prior to matriculation. Chest X-rays may be required at intervals, and suppressive medication may be recommended.

- **Hepatitis B**: Every student is required to submit documented proof of presence of antibodies to the Hepatitis B virus or to complete the Hepatitis B three-dose vaccination series and Hepatitis B antigen test at least one month after completion of series. It is recommended that this be done prior to matriculation; in all cases, however, it must be done before a student is allowed to treat patients which occurs in the first month of the program. If a student does not have documented proof of having antibodies to this virus, the vaccination series is available at the school for a fee.

- **Tetanus Diphtheria (Td)**: Vaccination is required within past 10 years.

- **Varivax**: Vaccination is required after 12 months of life. Students are required to provide documentation of 2 dose vaccination series or presence of titer if history of having chicken pox.

- **Influenza vaccine**: Is required each year of enrollment.

Inquiries about health requirements and supporting documentation are handled through the University’s Cowell Wellness Center (209) 946-2315.

**Program Description**

The bachelor of science degree in dental hygiene is a professional program presented in an accelerated year-round format of eight semesters including summer sessions. Students accepted into the program as freshmen complete all sessions with the University. Transfer level program entrants, with prerequisites fulfilled, complete the final four semesters of professional coursework only.

Program applicants must complete prerequisite general education courses either at Pacific or another institution to provide a strong science background, and a broad base in the humanities. The prerequisites are designed to strengthen dental hygiene science and clinical practice. Students undertake this portion of their course work, in the College of the Pacific, with the general undergraduate student population on the main campus. The student must maintain a 2.7 GPA or better in lower division coursework and a grade of C or higher in all science courses to be considered for the professional portion of the program.

The professional portion of the program is a highly structured four consecutive semesters of upper division coursework that includes both didactic and clinical experience. This portion of the program is presented by the Arthur A. Dugoni School of Dentistry, Dental Hygiene Program on the San Francisco campus.

The program and its graduates will be distinguished by the following attributes:

- Continuous enhancement through professional development
- Humanistic values that respect the dignity of each individual and foster the potential for growth in all of us
- Application of theory and data for continuous improvement
- Leadership in addressing the challenges facing the profession of dental hygiene, education and our communities

**Core Competencies (C)**

C.1 Apply a professional code of ethics in all endeavors.
C.2 Adhere to state and federal laws, recommendations, and regulations in the provision of oral health care.
C.3 Use critical thinking skills and comprehensive problem-solving to identify oral health care strategies that promote patient health and wellness.

C.4 Use evidence-based decision making to evaluate emerging technology and treatment modalities to integrate into patient dental hygiene care plans to achieve high-quality, cost-effective care.
C.5 Assume responsibility for professional actions and care based on accepted scientific theories, research, and the accepted standard of care.
C.6 Continuously perform self-assessment for lifelong learning and professional growth.
C.7 Integrate accepted scientific theories and research into educational, preventive, and therapeutic oral health services.
C.8 Promote the values of the dental hygiene profession through service-based activities, positive community affiliations, and active involvement in local organizations.
C.9 Apply quality assurance mechanisms to ensure continuous commitment to accepted standards of care.
C.10 Communicate effectively with diverse individuals and groups, serving all persons without discrimination by acknowledging and appreciating diversity.
C.11 Record accurate, consistent, and complete documentation of oral health services provided.
C.12 Initiate a collaborative approach with all patients when developing individualized care plans that are specialized, comprehensive, culturally sensitive, and acceptable to all parties involved in care planning.
C.13 Initiate consultations and collaborations with all relevant health care providers to facilitate optimal treatments.
C.14 Manage medical emergencies by using professional judgment, providing life support, and utilizing required CPR and any specialized training or knowledge.

**Health Promotion and Disease Prevention (HP)**

HP.1 Promote positive values of overall health and wellness to the public and organizations within and outside the profession.
HP.2 Respect the goals, values, beliefs, and preferences of all patients.
HP.3 Refer patients who may have physiological, psychological, or social problems for comprehensive evaluation.
HP.4 Identify individual and population risk factors, and develop strategies that promote health-related quality of life.
HP.5 Evaluate factors that can be used to promote patient adherence to disease prevention or health maintenance strategies.
HP.6 Utilize methods that ensure the health and safety of the patient and the oral health professional in the delivery of care.

**Community Involvement (CM)**

CM.1 Assess the oral health needs and services of the community to determine action plans and availability of resources to meet the health care needs.
CM.2 Provide screening, referral, and educational services that allow patients to access the re-sources of the health care system.
CM.3 Provide community oral health services in a variety of settings.
CM.4 Facilitate patient access to oral health services by influencing individuals or organizations for the provision of oral health care.
CM.5 Evaluate reimbursement mechanisms and their impact on the patient’s access to oral health care.
CM.6 Evaluate the outcomes of community-based programs, and plan for future activities.
CM.7 Advocate for effective oral health care for underserved populations.

**Patient Care (PC)**

**Assessment**

PC.1 Systematically collect, analyze, and record diagnostic data on the general, oral, and psychosocial health status of a variety of patients using methods consistent with medicolegal principles.
PC.2 Recognize predisposing and etiologic risk factors that require intervention to prevent disease.
PC.3 Recognize the relationships among systemic disease, medications, and oral health that impact overall patient care and treatment outcomes.
PC.4 Identify patients at risk for a medical emergency, and manage the patient care in a manner that prevents an emergency.

Dental Hygiene

Diagnosis
PC.5 Use patient assessment data, diagnostic technologies, and critical decision making skills to determine a dental hygiene diagnosis, a component of the dental diagnosis, to reach conclusions about the patient’s dental hygiene care needs.

Planning
PC.6 Utilize reflective judgment in developing a comprehensive patient dental hygiene care plan.
PC.7 Collaborate with the patient and other health professionals as indicated to formulate a comprehensive dental hygiene care plan that is patient-centered and based on the best scientific evidence and professional judgment.
PC.8 Make referrals to professional colleagues and other health care professionals as indicated in the patient care plan.
PC.9 Obtain the patient’s informed consent based on a thorough case presentation.

Implementation
PC.10 Provide specialized treatment that includes educational, preventive, and therapeutic services designed to achieve and maintain oral health. Partner with the patient in achieving oral health goals.

Evaluation
PC.11 Evaluate the effectiveness of the provided services, and modify care plans as needed.
PC.12 Determine the outcomes of dental hygiene interventions using indices, instruments, examination techniques, and patient self-reports as specified in patient goals.
PC.13 Compare actual outcomes to expected outcomes, reevaluating goals, diagnoses, and services when expected outcomes are not achieved.

Professional Growth and Development (PGD)
PGD.1 Pursue career opportunities within health care, industry, education, research, and other roles as they evolve for the dental hygienist.
PGD.2 Develop practice management and marketing strategies to be used in the delivery of oral health care.
PGD.3 Access professional and social opportunities to foster career growth and development.

Dental Hygiene Licensure
Completion of the program enables graduates to take national and regional or state licensure examinations. For California examination information contact:

Dental Hygiene Board of California
2005 Evergreen Street, Suite 2050
Sacramento, CA 95815
https://www.dhbc.ca.gov/
(916) 263-1978

Course Descriptions
Predoctoral Courses
DHYG 110. Oral Health Education. 1 Unit.
Students are introduced to principles and practices of prevention and control of dental disease. The course emphasizes oral health promotion, to include plaque control, patient education and behavior modification.

DHYG 111. Head and Neck Anatomy. 2 Units.
This course is designed to expand student knowledge of the anatomical structures of the head and neck. Students examine clinical correlations relevant for dental professionals.
DHYG 112. Dental Anatomy. 2 Units.
Students study dental terminology, tooth morphology and the relationship of teeth in form and function to each other and to supporting structures. Root morphology, hard tissue charting, occlusion and dental anomalies correlated to basic clinical applications.

DHYG 113. Oral Radiology Lecture. 1 Unit.
This course is designed to examine the fundamentals of dental radiography. Topics include history, principles, legal considerations, and radiation safety. Clinical applications include exposure technique, film processing, preparing and interpreting dental radiographs. Students learn how to correct technical errors.

DHYG 114. Oral Histology and Embryology. 2 Units.
This course offers lectures, clinical examples, classroom discussions and slide materials designed to help students develop a knowledge of oral histology and embryology that is applied to the clinical practice of dental hygiene.

DHYG 115. Dental Hygiene Practice. 3 Units.
Students are introduced to the contemporary role of the dental hygienist, the evolving profession of dental hygiene, and procedures and techniques that are utilized in the dental hygiene process of care. Emphasis is placed on development of a comprehensive medical and dental database and history, diagnostic tools, oral cancer examination, clinical systems and protocol, infection control, basic instrumentation and polishing, and patient communication.

DHYG 116. Pre-Clinical Dental Hygiene. 3 Units.
This course provides the opportunity for application of the information presented concurrently in DHYG 115. Students practice infection control, vital signs, oral cancer examination, instrumentation and other clinical skills using manikins and student partners.

DHYG 118. Oral Radiology Lab. 1 Unit.
Clinical applications of the concepts delivered in DHYG 113 take place during the laboratory experience. Content includes radiographic exposure technique, film processing, preparing and interpreting film and digital radiographs, and correcting of technical errors.

DHYG 120. Periodontics I. 2 Units.
Students are introduced to periodontology. Emphasis is placed on etiology, histology and epidemiology, diagnosis and classification of periodontal disease. Principles of periodontal disease preventive therapy, treatment planning, reassessment and supportive periodontal therapy are also introduced. Students learn under which circumstances referral to periodontal specialty practices is appropriate. Prerequisite: Admission into the Baccalaureate Dental Hygiene program.

DHYG 121. Pharmacology. 3 Units.
This course is designed to classify and study therapeutic agents commonly encountered and/or utilized in the practice of dentistry. Students learn chemical and physical properties, therapeutic effects, methods of administration, dosage, contraindications and side effects of these agents.

DHYG 122. Pathology. 3 Units.
Students study the etiology, pathogenesis, and clinical features of diseases. Students learn to recognize basic tissue, reactions and lesions and describe them using professional medical terminology, and through data collection, learn to assist in the preliminary diagnosis of oral conditions. Emphasis is placed on lesions that occur in the oral and maxillofacial regions. However, general pathology introductions necessary to understand the pathologic processes of oral lesions and conditions will be discussed. Common systemic diseases that may manifest in the mouth or impact oral healthcare delivery will also be presented. Prerequisite: Admission to the Dental Hygiene Program.

DHYG 123. Medical and Dental Emergencies I. 1 Unit.
Students learn basic methods of medical and dental emergency prevention and management in the dental office. Emphasis is on recognizing signs, symptoms, and treatment of the more common emergencies which may occur in the dental setting. Drugs and equipment that are utilized in the management of medical emergencies are outlined. Students are trained in Basic Life Support Systems (BLS).

DHYG 124. Local Anesthesia/Pain Management. 2 Units.
Students examine comprehensive information and skills that provide comfortable dental treatment. Local anesthesia and nitrous oxide-oxygen administration are explained and practiced.

DHYG 125. Dental Hygiene Clinic I. 2 Units.
This lecture/lab course is designed to provide students lecture and lab experience in the dental hygiene process of care for child, adolescent, adult and geriatric patients. Promotion of oral health and wellness is stressed through lecture and case studies. The principles, rationale and application of sealants and glass ionomers, area specific cures, advanced fulcrums, piezo and magnetostriuctive ultrasonic scaling, air-powder polishes and desensitizing agents are discussed as well as cariology and fluoride delivery options. Students integrate knowledge and skills developed in DHYG 110, DHYG 115, DHYG 116 and concurrent course DHYG 120.

DHYG 126. Dental Hygiene Clinic II. 5 Units.
This clinic course is designed to provide students beginning clinical experience in the treatment of child, adolescent, adult, and geriatric patients. Promotion of oral health and wellness is stressed through clinical experiences in: patient assessment, dental hygiene care treatment planning, case presentation and implementation and evaluation of treatment outcomes. The principles, rationale and application of sealants and glass ionomers, the use of ultrasonic scaling, area specific curettes, advanced fulcrum, desensitizing products and other treatment modalities are implemented. Cariology considerations and additional fluoride delivery options are also discussed and implemented for patient care. Students integrate knowledge and skills developed in previous courses. Pertains to DHYG 126A, DHYG 126B, and DHYG 126C which implements the information learned in the concurrent courses: DHYG 125A, DHYG 125B and DHYG 125C.

DHYG 130. Periodontics II. 2 Units.
This course is designed to enable students to enhance and develop knowledge and skills applicable in the treatment of patients with advanced periodontal disease. Concepts and treatment techniques of surgical and non-surgical periodontal therapy are stressed.

DHYG 131. Community Oral Health and Research. 4 Units.
This course is designed to enable students to examine the principles and practices of oral health in diverse public health settings. Emphasis is placed on the role of the dental hygienist as an innovator and educator in community dental health programs with consideration to needs assessment, research study utilization, biostatistic application, program planning, and results evaluation. The social and professional responsibility of the dental professional with regard to public promotion of oral health and access to care is examined. Students design and implement a community-based research project that culminates in a class presentation and may be submitted in to the professional association's table clinic competition.

DHYG 132. Patient Management/Special Needs. 2 Units.
This course is designed to enlighten the viewer to the world of people with special needs, the issues they face, the programs in place to help them, and dental treatment modalities.

University of the Pacific
DHYG 133. Medical and Dental Emergencies II. 1 Unit.
This course provides a continuation of DHYG 123, Medical and Dental Emergencies I. Students review methods of medical and dental emergency prevention and management in the dental office. Emphasis is on recognizing signs, symptoms, and treatment of the more common emergencies which may occur in the dental setting. Drugs and equipment are utilized in the management of medical emergencies are outlined.

DHYG 134. Senior Project I. 3 Units.
This course is designed to provide students the opportunity for supervised practical application of previously studied theory in a variety of settings. Through outside agency affiliation, faculty assistance and mentorship, students choose a specific area of hygiene practice to explore in depth. Prerequisite: Admission into the Baccalaureate Dental Hygiene program.

DHYG 135. Dental Hygiene Clinic II. 2 Units.
This lecture/lab/clinic course is designed to enable students to expand their experience in treatment of the periodontally involved patient. Students refine techniques for patient assessment, treatment planning, patient communication, full mouth scaling, and non-surgical periodontal treatment. Desensitization techniques, and pit and fissure sealants, are introduced. Utilization of radiographs, local anesthesia and nitrous oxide sedation in patient care is further developed. Students integrate knowledge and skills developed in DHYG 130, DHYG 132, and all previous course work to-date.

DHYG 136. Dental Hygiene Clinic II. 7 Units.
This lecture/lab/clinic course is designed to enable students to expand their experience in treatment of the periodontally involved patient. Students refine techniques for treatment planning, root planing, and non-surgical periodontal treatment. Desensitization techniques, and pit and tissue sealants, are introduced. Utilization of radiographs, local anesthesia and nitrous oxide sedation in patient care is further developed. Students integrate knowledge and skills developed in DHYG 130, DHYG 132, and all previous course work to-date.

DHYG 137. Dental Materials I. 2 Units.
This course is designed to examine structure and physical properties of dental materials utilized in the practice of dental hygiene. Emphasis on concepts and principles of clinical application.

DHYG 138. Ethics and Jurisprudence. 2 Units.
Students study ethical theories and issues related to the practice of dental hygiene and professionalism. A personal philosophy of professional conduct, continuous quality assurance and self-assessment is explored. Fundamental factors necessary to practice within existing regulatory frameworks are stressed.

DHYG 139. Biochemistry and Nutrition. 2 Units.
Students study basic principles of biochemistry and nutrition related to dentistry. Students complete patient dietary surveys and develop correctional nutritional plans.

DHYG 140. Senior Project II. 3 Units.
This course offers students the opportunity for supervised practical application of previously studied theory in a variety of settings. Through outside program affiliation, faculty assistance, and mentorship, students choose a specific area of dental hygiene practice to explore in depth.

DHYG 141. Dental Materials II. 2 Units.
This course is designed to provide advanced clinical experience in performing treatment for a variety of clinical patient cases. Students use local anesthesia, nitrous oxide, oral antimicrobials, and diet analysis. State Board Examination requirements and protocol, are reviewed and simulated through practical exercises. Identification of an appropriate patient for licensure examination is made. Students integrate knowledge and skills developed in all previous course work to-date.

DHYG 146. Dental Hygiene Clinical Practice III. 7 Units.
This course is designed to provide advanced clinical experience in performing treatment for a variety of clinical patient cases. Students use local anesthesia, nitrous oxide, oral antimicrobials, and diet analysis. State Board Examination requirements and protocol, are reviewed and simulated through practical exercises. Identification of an appropriate patient for licensure examination is made. Prerequisite: Admission into the Baccalaureate Dental Hygiene program.

Advanced Education in General Dentistry

The University of the Pacific, Arthur A. Dugoni School of Dentistry houses its Advanced Education in General Dentistry (AEGD) residency program in Union City, approximately 35 miles southeast of San Francisco.

The AEGD program is a one-year accredited postgraduate residency in general dentistry with an optional second year. The core of the program involves advanced clinical treatment of patients requiring comprehensive general dental care to healthy as well as medically compromised patients. Rotations are strategically set for additional training in geriatrics, pediatrics, hospital dentistry, implant restorations and dental emergencies. The AEGD program has an emphasis in minimally invasive and prevention based dentistry such as CAMBRA (Caries Management By Risk Assessment). We feature CAD/CAM restorations, complex implant restoration, Invisalign, and Cone Beam technology. There is an all-encompassing seminar series which covers all dental specialties and participation in rotations at community clinics and in a hospital setting.

The start date for the program is July 1. Residents have time off during the school's winter break, holidays in addition to 10 days leave that can be scheduled with the approval of the program director.

Applicants must show record they have graduated from North American dental school. There is no tuition to participate in the program; residents receive an educational stipend. The program uses the American Dental Education Association's PASS application to receive application materials. For further information on the Pacific AEGD program application process, please click here (http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/advanced-education-in-general-dentistry/application-process/). To learn more about the Union City Dental Care Center, please click here (http://www.unioncitydentalcare.com/).

International General Dentist Educator Program

In this five-year program, the first two years consist of participation in the AEGD program, and the remaining three years consist of attaining a Master's or doctoral degree in professional education and leadership from the University's Benerd School of Education.

The clinical residency and graduate program for international general dentists is a dual-track program consisting of clinical and didactic education. The clinical track is mainly intended to prepare the candidate for a career in patient care and clinical education. The didactic track and teaching practicum are mainly intended to prepare the candidate for a full-time career in dental academia. However, each track may have overlapping features in terms of purpose.

Clinical education is provided under a two-year residency program leading to a clinical certificate upon completion of both years one and two. Didactic education is provided under the two-year graduate program leading to a Master’s in Education. The final year of the program will consist of completing the thesis project if not completed in the previous year, and teaching practicum in didactic,
pre-clinical, and clinical education of doctoral students. Please click here (http://www.dental.pacific.edu/Academic_Programs/International_General_Dentist_Educator_Program.html) for more information about this program.

Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

Doctor of Dental Surgery

Program Overview

Doctor of Dental Surgery (http://catalog.pacific.edu/sanfrancisco/arthuradugonischoolofdentistry/doctorofdentalssurgery/ProgramOverview_DDS_2020-2021-030620.pdf)

Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

Personalized Instructional Program

Beginning with the DDS class of 2019 and IDS class of 2019, successful completion of a Personalized Instructional Program (PIP) is required for graduation. This is reflected on the transcript as a stand-alone course (BMS 394, COH 394, DS 394 etc.). Unit values will vary based upon contact hours.

Curriculum

Biomedical, preclinical, and clinical science subjects are integrated and combined with applied behavioral sciences in a program to prepare graduates to provide excellent quality dental care to the public and to enter a changing world that will require them to be critical thinkers and lifelong learners. The 36-month curriculum leading to the degree of Doctor of Dental Surgery begins in July and is divided into twelve quarters, each consisting of ten weeks of instruction, one week of examinations, and a vacation period of between one and four weeks.

Integrated biomedical science instruction in anatomy, histology, biochemistry, physiology, pharmacology, and microbiology and immunology is offered over the 10 quarters in increasing detail, followed by multidisciplinary presentations of basic science foundations for clinical topics such as the importance of saliva, tissue aging, nutrition, and infection control. Throughout the curriculum, students learn to apply basic science knowledge to clinical problems. Integrated preclinical instruction in direct and indirect restorative dentistry and dental anatomy is concentrated in the first four quarters with students learning to work from a seated position in a modern preclinical simulation laboratory. Preclinical instruction in removable prosthetics, occlusion, and implants is offered in quarters 5-7. Clinical work with patients is initiated in the fifth quarter.

The school is a pioneer in competency-based education, an approach that replaces the traditional system of clinical requirements with experiences that ensure graduates possess the knowledge, skills, and values needed to begin the independent practice of general dentistry. Pacific is also known for its humanistic approach to dental education, stressing the dignity of each individual and his or her value as a person.

The Clinical Practice Strand supports comprehensive patient care which is based on the concept of private dental practice where the student assumes responsibility for assigned patients’ overall treatment, consultation, and referral for specialty care. Second-year students practice clinical dentistry approximately 15 hours per week and third year students practice approximately 33 hours per week. Students learn to provide comprehensive dental care under the direction of a team of clinical faculty led by the Group Practice Leader (GPL). The GPL is responsible for mentoring students and ensuring they are receiving adequate clinical experiences to ensure competency upon graduation. In the second year, students treat patients in a discipline-based model where they are supervised by trained and calibrated faculty in specific clinical disciplines, including oral diagnosis and treatment planning, periodontics, endodontics, restorative dentistry, and removable prosthetics. In the third year, students treat patients in a generalist model, where they provide all care for their patients under faculty supervision.

The second- and third-year class is divided alphabetically into six group practices. There are approximately 22 second-year and 22 third-year students in each group practice, which is managed by the GPL, who has overall responsibility for the care of patients by all students and faculty in the group practice. Specialists in endodontics manage complex cases in a specified area of the clinic, including test cases. Periodontists manage most periodontal procedures.

There are four exceptions to the comprehensive care model: oral and maxillofacial surgery, pediatric dentistry, oral medicine/facial pain, and radiology. Students are assigned to rotations for two to three weeks in each of these disciplines, except for the oral medicine/facial pain rotations which are one day each. In orthodontics, students participate with faculty and orthodontic residents in adjunctive orthodontic care and in oral development clinics. Third-year students also rotate through the Special Care Clinic where they treat perinatal patients, dental-phobic patients, and patients with developmental disabilities. In addition, each student provides care in the hospital operating room on patients with specific health issues.

Advanced clinical dentistry and evaluation of new developments and topics that involve several disciplines are learned in the third year in conjunction with patient care. Third-year students participate in patient care at extramural sites located in treatment facilities around the Bay Area, including acute care hospitals and community clinics. At extramural clinic sites, students are taught by Pacific faculty in conditions that more closely resemble private practice, and typically treat 4-6 patients per day. Rotations occur at a number of different times,
including weekdays during the academic year and vacation periods. Students find these experiences to be valuable, teaching them how to provide excellent patient care in a condensed time frame. Students may elect to participate in externships to specialty programs during academic break periods.

Behavioral science aspects of ethics, communication, human resource and practice management, and dental jurisprudence are integrated across the curriculum. Epidemiology and demography of the older population, basic processes of aging, and dental management of hospitalized patients, geriatric patients, and those with the most common disabling conditions are studied during the third year.

Students are counseled individually with regard to establishing a practice and applying for postgraduate education. A weekend conference in the senior year acquaints students with opportunities for postgraduate education and with alumni views of the realities of dental practice.

In the 1990s under the leadership of Dr. David W. Chambers, the school led the nation in the adoption of a competency-based education model for pre-doctoral dental programs. In contrast to the prevailing system of ‘clinical requirements,’ an approach that merely counted a pre-set number of procedures completed in each clinical discipline, competency (p. 93) implies an ongoing and broad-based measure of the developing knowledge, skills, abilities, and values essential to the beginning practice of general dentistry (p. 93). In a competency-based model, multiple faculty observers repeatedly evaluate independent student performance in a natural setting over time.

These competency statements were developed in 2016-17 by a representative group of faculty, students, and alumni to reflect the ‘head-heart-hands’ philosophy the school embraces: the integration of current and emerging biomedical and clinical knowledge (head); professionalism, ethical behavior, empathy, and communication skills (heart); and clinical skills (hands). For clarity and consistency in application and measurement, an appended glossary defines key terms highlighted in the statements.

1. Integrate biomedical (p. 93) and clinical knowledge to improve oral and systemic health.
2. Think critically (p. 93); use the scientific method (p. 94) to evaluate established and emerging biomedical and clinical science evidence (p. 93) to guide practice decisions.
3. Recognize manifestations of systemic disease and evaluate the impact on oral health (p. 93), oral health care, and well-being.
4. Recognize and evaluate the impact of comprehensive oral health care on systemic health and well-being.
5. Apply the principles of health promotion and disease prevention (p. 93) to individuals and communities.
6. Apply the principles of bioethics (p. 93) to practice.
7. Apply the principles of behavioral science (p. 92) to practice.
8. Establish and maintain trust and rapport with all stakeholders (p. 94) in patient care. Demonstrate empathy (p. 93).
9. Manage the oral health care needs of pediatric, adolescent, and adult patients, including geriatric patients and patients with complex needs (p. 93).
10. Perform comprehensive diagnostic evaluations and risk assessment on patients at all stages of life (p. 94).
11. Obtain, select, and interpret images and tests necessary for accurate differential diagnoses and correlate them with clinical findings.
12. Formulate and present comprehensive, sequenced treatment plans and prognoses in accordance with patient needs, values, and expectations.
13. Obtain and document informed consent or refusal.
14. Follow standard infection control guidelines.
15. Preserve and restore hard and soft tissue to support health, function, and esthetics:
   - Screening and risk assessment for head and neck cancer;
   - Local anesthesia and pain and anxiety control;
   - Appropriate utilization of therapeutic and pharmacological agents used in patient care;
   - Management of orofacial pain;
   - Communicate with dental laboratory technicians and manage laboratory procedures to support patient care;
   - Risk assessment, prevention, and management of caries, including minimally invasive dentistry;
   - Restore and replace teeth, including operative, fixed, removable, and dental implant therapy;
   - Periodontal therapy and recall strategies;
   - Dental emergencies;
   - Pulpal therapy and endodontics;
   - Oral mucosal and osseous disorders;
   - Bony and soft tissue surgery;
   - Malocclusion and space management; and
   - Evaluate treatment outcomes, prognosis, and continuing care strategies.
16. Recognize and manage medical emergencies in the dental setting.
17. Interact effectively with stakeholders from diverse cultures, backgrounds, and identities (p. 93).
18. Practice, delegate, or refer within the scope of practice (p. 94) and in alignment with patient needs, values, and expectations.
19. Apply current principles of business, financial, and human resource management to lead the oral health care team (p. 93).
20. Evaluate contemporary and emerging models of oral healthcare delivery, understand dentistry’s role in the larger health care system, and strive to reduce barriers to care.
21. Collaborate with the interprofessional (p. 93) health care team to improve oral-systemic health, enhance the patient experience (p. 93), and reduce risk.
22. Evaluate and implement current and emerging technology to diagnose, prevent, and treat disease.
23. Engage in ongoing quality assurance (p. 93) to improve patient outcomes.
24. Behave professionally (p. 93): manage personal behavior and performance in accordance with standards of the school and the profession.
25. Practice in accordance with current local, state, and federal laws and regulations.
26. Demonstrate ongoing reflection (p. 94), self-assessment (p. 94), continuous learning, and professional development.
27. Demonstrate healthy coping and self-care (p. 94) strategies.
28. Participate in professional activities to promote the profession and serve individuals and communities.

**Competency Statements: Glossary of Terms**

The purpose of this glossary is: (a) to define critical terms in the competency statements so that faculty can design, deliver, and assess targeted, sequenced learning experiences; and (b) to make transparent to students and faculty the goals of the educational program. The glossary is a critical component of the Competency Statement document.

**Behavioral science:** a branch of science that studies human action and investigates decision-making processes and communication strategies.
that occur within and between organisms in a social system. Familiarity with major concepts of the discipline may provide solutions to an array of individual, family, and community challenges.

**Bioethics:** the shared discipline of reflective examination of ethical issues and implications in health care, health science, and health policy.

**Biomedical science:** the scientific knowledge base of human biology required for the treatment and prevention of oral and systemic disease. This includes knowledge of anatomy, biochemistry, molecular and cell biology, epidemiology, embryology, genetics, histology, immunology, microbiology, nutrition, pathology, pharmacology, physiology, and related knowledge domains.

**Competence (competency):** knowledge, skills, abilities, and values essential to the beginning practice of oral health care that are performed consistently and independently in natural settings. Competence is observable over time and therefore can be measured and assessed to ensure acquisition.

**Goal of the Educational Program**

- Novice
- Advanced Beginner
- Competent
- Proficient
- Expert

(from: Patricia Benner, Novice to Expert Continuum)

**Complex needs:** patients with moderate to severe medical, developmental, and/or psychosocial conditions that require of the practitioner additional information or knowledge to manage the patient's health.

**Critical thinking:** the ability to interpret, evaluate, and draw sound conclusions in sometimes complex situations where all information may not be present or apparent. In professional practice, critical thinking is the application of rational analysis to patient assessment, diagnosis, and treatment planning. The practitioner must be able to identify pertinent information, make decisions based on deliberate review of options, evaluate outcomes of diagnostic and therapeutic tests or decisions, and assess his or her own competence and ability.

**Empathy:** to understand the thinking, perspectives, and feelings of others. To be done correctly, empathy requires interest in others and a set of skills.

**Evidence-based dentistry (EBD):** an approach to oral health care that requires the judicious integration of clinically relevant scientific evidence relating to the patient's oral and medical condition and history, the dentist's clinical expertise, and the patient's treatment needs and preferences. (American Dental Association).

**General dentistry:** (a) the evaluation, diagnosis, prevention, and surgical and non-surgical treatment of diseases, disorders and conditions of the oral cavity, maxillofacial area, and the adjacent and associated structures, and their impact on the human body; (b) a service provided by a dentist within the scope of his/her education, training, and experience; and that is (c) in accordance with the ethics of the profession and applicable law. A general dentist is an integral part of the healthcare system and is the primary oral health care provider for patients of all ages. (adapted from ADA House of Delegates, 1997).

**Identity:** the belief that a subject, person, or thing is the same as it is represented or claimed to be. Identity can encompass race, gender, sexual orientation, gender identity, age, ability, and other personal characteristics.

**Interprofessional education:** When students from two or more health professions learn about, from, and with each other to enable effective patient care collaboration and improve health outcomes. Interprofessional collaborative practice exists when providers from different health backgrounds work together with patients, families, caregivers, and communities to deliver quality care (adapted from the World Health Organization, 2010).

**Oral health:** a functional, structural, aesthetic, physiologic, and psychosocial state of well-being that is essential to an individual's general health and quality of life (ADA House of Delegates, 2014).

**Oral health care team:** generally composed of the dentist, specialist dentist, dental therapist or dental health aide therapist, dental hygienist (with or without expanded function), dental assistant (with or without expanded function), office support staff, and the dental laboratory technician. Physicians, nurses, nurse practitioners, physician assistants, and other medical professionals are increasingly a critical component of the team.

**Patient experience:** all elements of the care experience that contribute to patient satisfaction: scheduling, reception, treatment and care, sensitive and empathetic interactions with staff and providers, billing, and follow up.

**Prevention:** procedures, processes, or strategies that reduce risk, promote disease prevention, and result in improved patient health.

**Professionalism (see also 2017 ADEA Statement on Professionalism in Dental Education [http://www.jdental.org/content/81/7/885.full.pdf+Html/]):** the habitual and judicious use of communication skills, knowledge, technical skills, clinical reasoning, empathy, values, and reflection in daily practice for the benefit of the individual or community being served. (Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA 2002: 287: 226–235). Professionalism is the foundation of the doctor-patient relationship. It requires integrity and a high level of skill. The professional assumes an obligation to sharpen and develop skills and judgment throughout a career.

**Quality assurance:** systematic and ongoing assessment and evaluation of quality and appropriateness of a service, product, process, structure, or outcome. The process involves identifying strengths and weaknesses, designing and implementing solutions or strategies to improve performance, and careful monitoring to determine the effectiveness of a change or intervention.
Reflection: the active process of reviewing, analyzing, and evaluating experiences, drawing upon theoretical concepts or previous learning, to inform future action (Reid, 1993).

Scientific method: the foundation of the natural sciences that comprises some or all of the following: (a) systematic observation, measurement, and experimentation; (b) induction and the formulation of hypotheses; (c) the making of deductions from the hypotheses; (d) the experimental testing of the deductions; and (e) the modification of the hypotheses, if necessary.

Scope of practice: procedures, treatments, and actions that a practitioner is allowed to undertake as prescribed by professional licensure and that are within the practitioner's competence.

Self-Assessment: the evaluation of one's performance against current, defined, evidence-based standards and, ultimately, without external input.

Self-Care: activities and practices that are engaged in regularly that aim to reduce stress and to maintain and enhance health and wellbeing. Prioritizing emotional, physical, intellectual, occupational and environmental wellness is necessary to honor professional and personal commitments. Healthy self-care includes a realization of when to reach out for help or support.

Stages of life: pediatric (< 14 years), adult (15-65 years), and geriatric (>66 years), including the frail elderly and patients with complex needs.

Stakeholder: any person or party in the healthcare setting with an interest in the financing, implementation, or outcome of a service, practice, process, or decision made by another. Stakeholders include patients, care givers, family members, faculty and other practitioners, specialists, the dental school, and others consulting on or providing care.

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter 'I' indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter's unit value and culminate in a final and permanent unit value. The final unit value is transcripted with the permanent course while interim courses and corresponding unit values can be found on report cards.

### Year 1

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### Block Rotations

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Year 2

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Year 3

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University of the Pacific 95
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**International Dental Studies**

**Program Overview**


**Units of Credit**

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

**Personalized Instructional Program**

Beginning with the DDS class of 2019 and IDS class of 2019, successful completion of a Personalized Instructional Program (PIP) is required for graduation. This is reflected on the transcript as a stand-alone course (BMS 394, COH 394, DS 394 etc.). Unit values will vary based upon contact hours.

Designed specifically for foreign-trained dentists who possess a dental degree from abroad, the IDS program integrates preclinical and clinical science subjects with applied behavioral sciences to prepare graduates to provide high quality dental care and to enter a changing world that will require them to be critical thinkers and lifelong learners. The 24-month curriculum leading to the degree of Doctor of Dental Surgery begins in July and is divided into eight quarters, each consisting of ten weeks of instruction, one week of examinations, and a vacation period of between one and four weeks. Students in the IDS program are held to the same competency standards as their peers in the DDS program.

Integrated preclinical instruction is concentrated in the first three quarters with students learning to work from a seated position in a modern preclinical simulation laboratory and with a chair-side assistant in conjunction with pediatric dental practice. Clinical work with patients is initiated in the second quarter.

The school is a pioneer in competency-based education, an approach that replaces the traditional system of clinical requirements with experiences that ensure graduates possess the skills, understanding, and professional values needed for the independent practice of general dentistry. Pacific is also known for its humanistic approach to dental education, stressing the dignity of each individual and his or her value as a person.

The Clinical Practice Strand of the Helix curriculum supports comprehensive patient care based on the concept of private dental practice where the student assumes responsibility for assigned patients' overall treatment, consultation, and referral for specialty care. IDS students begin seeing patients in the second quarter, and practice clinical dentistry approximately 8 hours per week starting
in October. The number of clinical practice hours increased in January and April to 15 and 18 per week, respectively. Second-year IDS students practice approximately 33 hours per week. Students learn to provide comprehensive dental care under the direction of a team of clinical faculty led by the Group Practice Leader (GPL). The GPL is responsible for mentoring students and ensuring they are receiving adequate clinical experiences to ensure competency upon graduation. In the first year, students treat patients in a discipline-based model where they are supervised by trained and calibrated faculty in specific clinical disciplines, including oral diagnosis and treatment planning, periodontics, endodontics, restorative dentistry, and removable prosthetics. In the second year, students treat patients in a generalist model, where they provide all care for their patients under faculty supervision.

There are four discipline exceptions to the comprehensive care model: oral and maxillofacial surgery, pediatric dentistry, oral medicine/facial pain, and radiology. Students are assigned to rotations for two to three weeks in each of these disciplines, except for the oral medicine/facial pain rotations which is one day. In orthodontics, students participate with faculty and orthodontic residents in adjunctive orthodontic care and in oral development clinics. Second-year students also rotate through the Special Care Clinic where they treat perinatal patients, dental-phobic patients, and patients with developmental disabilities. In addition, each student provides care in the hospital operating room on patients with specific health issues.

Advanced clinical dentistry and evaluation of new developments and topics that involve several disciplines are learned in the second year in conjunction with patient care. Second-year IDS students participate in patient care at extramural sites in numerous treatment facilities around the Bay Area, including acute care hospitals, community clinics, and skilled nursing facilities. At extramural clinic sites, students are taught by Pacific faculty in conditions that more closely resemble private practice and typically treat 4-6 patients per day. Rotations at these sites occur at a number of different times, including weekdays during the academic year and vacation periods. Students find these experiences to be highly educational, teaching them how to provide excellent patient care in a more condensed time frame. IDS students may elect to participate in externships to specialty programs during academic break periods.

Behavioral science aspects of ethics, communication, human resource and practice management, and dental jurisprudence are integrated throughout the curriculum. Epidemiology and demography of the older population, basic processes of aging, and dental management of hospitalized patients, geriatric patients, and those with the most common disabling conditions are studied during the final year.

Students are counseled individually with regard to establishing a practice and applying for postgraduate education. A weekend conference acquaints IDS students with opportunities for postgraduate education and with alumni views of the realities of dental practice.

In the 1990s under the leadership of Dr. David W. Chambers, the school led the nation in the adoption of a competency-based education model for pre-doctoral dental programs. In contrast to the prevailing system of ‘clinical requirements,’ an approach that merely counted a pre-set number of procedures completed in each clinical discipline, competency (p. 98) implies an ongoing and broad-based measure of the developing knowledge, skills, abilities, and values essential to the beginning practice of general dentistry (p. 98). In a competency-based model, multiple faculty observers repeatedly evaluate independent student performance in a natural setting over time.

These competency statements were developed in 2016-17 by a representative group of faculty, students, and alumni to reflect the ‘head-heart-hands’ philosophy the school embraces: the integration of current and emerging biomedical and clinical knowledge (head); professionalism, ethical behavior, empathy, and communication skills (heart); and clinical skills (hands). For clarity and consistency in application and measurement, an appended glossary defines key terms highlighted in the statements.

1. Integrate biomedical (p. 98) and clinical knowledge to improve oral and systemic health.
2. Think critically (p. 98); use the scientific method (p. 99) to evaluate established and emerging biomedical and clinical science evidence (p. 98) to guide practice decisions.
3. Recognize manifestations of systemic disease and evaluate the impact on oral health (p. 99), oral health care, and well-being.
4. Recognize and evaluate the impact of comprehensive oral health care on systemic health and well-being.
5. Apply the principles of health promotion and disease prevention (p. 99) to individuals and communities.
6. Apply the principles of bioethics (p. 98) to practice.
7. Apply the principles of behavioral science (p. 98) to practice.
8. Establish and maintain trust and rapport with all stakeholders (p. 99) in patient care. Demonstrate empathy (p. 98).
9. Manage the oral health care needs of pediatric, adolescent, and adult patients, including geriatric patients and patients with complex needs (p. 98).
11. Obtain, select, and interpret images and tests necessary for accurate differential diagnoses and correlate them with clinical findings.
12. Formulate and present comprehensive, sequenced treatment plans and prognosis in accordance with patient needs, values, and expectations.
13. Obtain and document informed consent or refusal.
14. Follow standard infection control guidelines.
15. Preserve and restore hard and soft tissue to support health, function, and esthetics:
   - Screening and risk assessment for head and neck cancer;
   - Local anesthesia and pain and anxiety control;
   - Appropriate utilization of therapeutic and pharmacological agents used in patient care;
   - Management of orofacial pain;
   - Communicate with dental laboratory technicians and manage laboratory procedures to support patient care;
   - Risk assessment, prevention, and management of caries, including minimally invasive dentistry;
   - Restore and replace teeth, including operative, fixed, removable, and dental implant therapy;
   - Periodontal therapy and recall strategies;
   - Dental emergencies;
   - Pulpal therapy and endodontics;
   - Oral mucosal and osseous disorders;
   - Bony and soft tissue surgery;
   - Malocclusion and space management; and
   - Evaluate treatment outcomes, prognosis, and continuing care strategies.
16. Recognize and manage medical emergencies in the dental setting.
17. Interact effectively with stakeholders from diverse cultures, backgrounds, and identities (p. 98).
18. Practice, delegate, or refer within the scope of practice (p. 99) and in alignment with patient needs, values, and expectations.
19. Apply current principles of business, financial, and human resource management to lead the oral health care team (p. 99).
20. Evaluate contemporary and emerging models of oral healthcare delivery, understand dentistry’s role in the larger health care system, and strive to reduce barriers to care.
21. Collaborate with the interprofessional (p. 98) health care team to improve oral-systemic health, enhance the patient experience (p. 99), and reduce risk.
22. Evaluate and implement current and emerging technology to diagnose, prevent, and treat disease.
23. Engage in ongoing quality assurance (p. 99) to improve patient outcomes.
24. Behave professionally (p. 99): manage personal behavior and performance in accordance with standards of the school and the profession.
25. Practice in accordance with current local, state, and federal laws and regulations.
27. Demonstrate healthy coping and self-care (p. 99) strategies.
28. Participate in professional activities to promote the profession and serve individuals and communities.

**Competency Statements: Glossary of Terms**

The purpose of this glossary is: (a) to define critical terms in the competency statements so that faculty can design, deliver, and assess targeted, sequenced learning experiences; and (b) to make transparent to students and faculty the goals of the educational program. The glossary is a critical component of the Competency Statement document.

**Behavioral science**: a branch of science that studies human action and investigates decision-making processes and communication strategies that occur within and between organisms in a social system. Familiarity with major concepts of the discipline may provide solutions to an array of individual, family, and community challenges.

**Bioethics**: the shared discipline of reflective examination of ethical issues and implications in health care, health science, and health policy.

**Biomedical science**: the scientific knowledge base of human biology required for the treatment and prevention of oral and systemic disease. This includes knowledge of anatomy, biochemistry, molecular and cell biology, epidemiology, embryology, genetics, histology, immunology, microbiology, nutrition, pathology, pharmacology, physiology, and related knowledge domains.

**Competence (competency)**: knowledge, skills, abilities, and values essential to the beginning practice of oral health care that are performed consistently and independently in natural settings. Competence is observable over time and therefore can be measured and assessed to ensure acquisition.

**Evidence-based dentistry (EBD)**: an approach to oral health care that requires the judicious integration of clinically relevant scientific evidence relating to the patient’s oral and medical condition and history, the dentist’s clinical expertise, and the patient’s treatment needs and preferences. (American Dental Association)

**General dentistry**: (a) the evaluation, diagnosis, prevention, and surgical and non-surgical treatment of diseases, disorders and conditions of the oral cavity, maxillofacial area, and the adjacent and associated structures, and their impact on the human body; (b) a service provided by a dentist within the scope of his/her education, training, and experience; and that is (c) in accordance with the ethics of the profession and applicable law. A general dentist is an integral part of the healthcare system and is the primary oral health care provider for patients of all ages. (adapted from ADA House of Delegates, 1997)

**Identity**: the belief that a subject, person, or thing is the same as it is represented or claimed to be. Identity can encompass race, gender, sexual orientation, gender identity, age, ability, and other personal characteristics.

**Interprofessional education**: When students from two or more health professions learn about, from, and with each other to enable effective patient care collaboration and improve health outcomes. Interprofessional collaborative practice exists when providers from different health backgrounds work together with patients, families, caregivers, and communities to deliver quality care (adapted from the World Health Organization, 2010).
Oral health: a functional, structural, aesthetic, physiologic, and psychosocial state of well-being that is essential to an individual's general health and quality of life (ADA House of Delegates, 2014).

Oral health care team: generally composed of the dentist, specialist dentist, dental therapist or dental health aide therapist, dental hygienist (with or without expanded function), dental assistant (with or without expanded function), office support staff, and the dental laboratory technician. Physicians, nurses, nurse practitioners, physician assistants, and other medical professionals are increasingly a critical component of the team.

Patient experience: all elements of the care experience that contribute to patient satisfaction: scheduling, reception, treatment and care, sensitive and empathetic interactions with staff and providers, billing, and follow up.

Prevention: procedures, processes, or strategies that reduce risk, promote disease prevention, and result in improved patient health.

Professionalism (see also 2017 ADEA Statement on Professionalism in Dental Education (http://www.jdentaled.org/content/81/7/885.full.pdf+html/)): the habitual and judicious use of communication skills, knowledge, technical skills, clinical reasoning, empathy, values, and reflection in daily practice for the benefit of the individual or community being served. (Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA 2002: 287: 226–235). Professionalism is the foundation of the doctor-patient relationship. It requires integrity and a high level of skill. The professional assumes an obligation to sharpen and develop skills and judgment throughout a career.

Quality assurance: systematic and ongoing assessment and evaluation of the quality and appropriateness of a service, product, process, structure, or outcome. The process involves identifying strengths and weaknesses, designing and implementing solutions or strategies to improve performance, and careful monitoring to determine the effectiveness of a change or intervention.

Reflection: the active process of reviewing, analyzing, and evaluating experiences, drawing upon theoretical concepts or previous learning, to inform future action (Reid, 1993).

Scientific method: the foundation of the natural sciences that comprises some or all of the following: (a) systematic observation, measurement, and experimentation; (b) induction and the formulation of hypotheses; (c) the making of deductions from the hypotheses; (d) the experimental testing of the deductions; and (e) the modification of the hypotheses, if necessary.

Scope of practice: procedures, treatments, and actions that a practitioner is allowed to undertake as prescribed by professional licensure and that are within the practitioner's competence.

Self-Assessment: the evaluation of one's performance against current, defined, evidence-based standards and, ultimately, without external input.

Self-Care: activities and practices that are engaged in regularly that aim to reduce stress and to maintain and enhance health and well-being. Prioritizing emotional, physical, intellectual, occupational and environmental wellness is necessary to honor professional and personal commitments. Healthy self-care includes a realization of when to reach out for help or support.

Stages of life: pediatric (<14 years), adult (15-65 years), and geriatric (>66 years), including the frail elderly and patients with complex needs.

Stakeholder: any person or party in the healthcare setting with an interest in the financing, implementation, or outcome of a service, practice, process, or decision made by another. Stakeholders include patients, care givers, family members, faculty and other practitioners, specialists, the dental school, and others consulting on or providing care.

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter ‘I’ indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter's unit value and culminate in a final and permanent unit value. The final unit value is transcripted with the permanent course while interim courses and corresponding unit values can be found on report cards.

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**Year 2**

**Summer Quarter (5)**

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**International Dental Studies**
Endodontics

Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinical disciplines in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

Endodontic residents participate in a comprehensive 27-month program designed to provide in-depth clinical training in endodontics, supported by a solid foundation of course work in the biologic principles that uphold the specialty. In addition to a curriculum that nurtures the clinician-scientist, the program offers clinical experiences with an extensive patient demographic supported by the School of Dentistry and a community dental clinic that is part of an expansive health care network in the East San Francisco Bay Area. Each resident will also engage in an investigative project and complete an acceptable thesis to qualify for the Master of Science in Dentistry degree. The thesis is typically submitted for publication in scientific journals. Classes begin each July. Residents are scheduled for classroom and clinical instruction five full days (and some evenings) per week and full participation is required.

The graduate program in endodontology is fully accredited by the Commission on Dental Accreditation.

More information on the program, including admissions requirements, curriculum and schedule, graduation and certification requirements are available here (http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/advanced-education-program-in-endodontology/).

Graduates of Advanced Education Program in Endodontology will:

• Achieve a full range of endodontic care experiences, including but not limited to diagnosis and treatment planning for patients of all ages.
• Be equipped with the necessary manual and cognitive skills for the changing marketplace in private practice now and in the foreseeable future.
• Incorporate during their practice an in-depth knowledge of the biologic and technical aspects of maintaining, replacing, and enhancing the natural dentition, including mechanisms for enhanced tissue healing and tissue regeneration on areas relevant to endodontics.
• Emphasize the interrelationship among the biomedical and clinical sciences and their application to clinical practice.
• Be prepared to practice evidence-based endodontics in both simple and complex cases.
• Exercise the five principles of ethics in their practice.
• Have detailed knowledge in:
  • Anatomy (gross and micro) of soft and hard tissues of the head and neck relevant for endodontic diagnostics, successful anesthesia and surgical procedures.
  • Pathophysiology of the pulpal/periradicular disease
  • Infectious and immunologic processes in oral health and disease
  • Embryology
  • Wound healing
  • Oral medicine and oral pathology
  • Pharmacotherapeutics
  • Research methodology and statistics
  • Neurosciences
  • Biomaterials
• Have in-depth proficiency in:
  • Diagnosis, treatment planning and prognosis
  • Non-surgical and surgical endodontic treatment and retreatment
  • A variety of endodontic techniques
  • Outcome evaluation
  • Radiography and other diagnostic imaging technologies
  • Management of endodontic treatment of medically compromised patients
  • Emergency treatment for endodontic conditions for consultations and treatment if needed.
  • Management of patients with orofacial pain and anxiety
  • Preparation of space for intraradicular restorations in endodontically treated teeth
  • Communication with patients and health care professionals to effectively and formally verbalize knowledge of endodontics, clinical therapies, treatment plans and related diseases to others
  • Use of magnification technologies such as operating microscopes and cameras for documentation.
• Have in-depth proficiency in:
  • Vital pulp management
  • Endodontic management of developing permanent teeth
  • Revascularization/regenerative endodontics
  • Intracoronal bleaching procedures
  • Endodontic management of traumatic dental injuries
• Have in-depth competency in:
  • Diagnosis and treatment of periodontal disease and defects in conjunction with the treatment of the specified tooth undergoing endodontic therapy; treatment provided in consultation with the individuals who will assume the responsibility for the completion or supervision of any additional periodontal maintenance or treatment
  • Placement of intraradicular restorations and cores in endodontically treated teeth; and when the patient is referred, this treatment is accomplished in consultation with the restorative dentist
• Implant dentistry
• Extrusion procedures
• Have in-depth knowledge of the:
  • History of endodontics
  • Teaching methodology
  • Jurisprudence and risk management
  • Practice management
  • Medical emergencies
• Acquire in-depth knowledge of classic and contemporary literature to help graduates critically evaluate the dental literature and provide theoretical bases for diagnostics, techniques and procedures, management, successes, and failures/complications in the clinical practice of non-surgical and surgical endodontic therapy.
• Make or respond to all appropriate consultation requests and demonstrate professionalism, rapport and cooperation with professional colleagues.
• Maintain a patient list in the approved electronic health record for follow-up of patients to enable graduates to assess the outcome of their treatment.
• Demonstrate competency in using clinical management software like axiUm to maintain a comprehensive records of history, diagnosis and treatment of each patient.
• Teach endodontics to predoctoral and/or postdoctoral students in a clinical setting.
• Possess sufficient knowledge and clinical experiences to become proficient in diagnostic data collection, pulpal and periradicular diagnosis treatment planning and treatment sequencing for complicated patients.
• Accomplish a research project and present a thesis monograph in written form, submitted for publication in a peer-reviewed endodontic journal and present a summary of the findings in oral form and defense of the thesis in a colloquium
• Develop and update treatment approach documents for each of the board case categories that must be evidence based.
• Submit 10 board level cases that follows current ABE criteria; both an electronic and a print-out version
• Be eligible to sit for the certifying Boards of the American Board of Endodontists

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter 'I' indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter's unit value and culminate in a final and permanent unit value. The final unit value is transcripted with the permanent course.

Year 1

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### Orthodontics

#### Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term. In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinics in proportion to the amount of time an average student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term. All residents in the Advanced Education in General Dentistry are considered full time.

Pacific's orthodontics residency program, instituted in 1971, is fully accredited by the Commission on Dental Accreditation, and is recognized for educational eligibility by the American Board of Orthodontics. The program's courses prepare the resident to provide excellent treatment based on contemporary biologic orthodontic principles.

Faculty members foster the humanistic atmosphere with informal professional relationships and mutual respect with the residents. Clinical instruction and practice are conducted in the orthodontic clinic.

Didactic courses include principles of orthodontics, cephalometrics and 3D imaging and airway consideration, facial growth, biomechanics, craniofacial biology, cleft lip and palate, research methodology, appliance laboratory, pediatrics, statistics, anatomy, bone biology and clinical use of temporary anchorage device, TMD, orthognathic surgery, restorative-orthodontic relationships, practice management, and periodontic/orthodontic care. The faculty fosters a collegial atmosphere and mutual respect between residents and faculty.

Clinical instruction and practice are conducted in the school's orthodontic clinic in six half-day clinics per week which include treatment for children, adolescents, adults, and multidisciplinary (integrated with periodontal and restorative procedures) patients. Adult patients constitute about one fourth of a student's caseload. Each resident starts approximately

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### Units of Credit

#### Year 2

**Summer Quarter (5)**

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**Units of Credit**

- One unit of credit is awarded for ten hours of lecture or seminar, twenty hours of laboratory or clinic, or thirty hours of independent study per term.
- In the predoctoral programs (DDS and IDS), students are assigned to comprehensive care clinics for approximately 650 hours during the second year and 1,000 hours during the third, in addition to specialty clinic rotations. Units of credit are assigned in the comprehensive care clinics.
- Full-time enrollment in the predoctoral programs at the School of Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-time enrollment in the graduate residency programs in orthodontics and endodontics is defined as 20 or more units per term.
- All residents in the Advanced Education in General Dentistry are considered full time.

Pacific's orthodontics residency program, instituted in 1971, is fully accredited by the Commission on Dental Accreditation, and is recognized for educational eligibility by the American Board of Orthodontics. The program's courses prepare the resident to provide excellent treatment based on contemporary biologic orthodontic principles.

Faculty members foster the humanistic atmosphere with informal professional relationships and mutual respect with the residents. Clinical instruction and practice are conducted in the orthodontic clinic.

Didactic courses include principles of orthodontics, cephalometrics and 3D imaging and airway consideration, facial growth, biomechanics, craniofacial biology, cleft lip and palate, research methodology, appliance laboratory, pediatrics, statistics, anatomy, bone biology and clinical use of temporary anchorage device, TMD, orthognathic surgery, restorative-orthodontic relationships, practice management, and periodontic/orthodontic care. The faculty fosters a collegial atmosphere and mutual respect between residents and faculty.

Clinical instruction and practice are conducted in the school's orthodontic clinic in six half-day clinics per week which include treatment for children, adolescents, adults, and multidisciplinary (integrated with periodontal and restorative procedures) patients. Adult patients constitute about one fourth of a student's caseload. Each resident starts approximately
50-55 new patients and 50-60 transfer patients during the residency program. Residents are also rotated through the Children’s Hospital Oakland Craniofacial Panel as well as the Stanford Sleep Surgery clinic. Fixed appliance treatment employs the edgewise technique, although instruction permits a wide latitude of clinical variation based on patient needs and special faculty expertise. Experience in treating the entire range of orthodontic problems is provided. Each resident also starts multiple cases utilizing micro-implant anchorage, including MARPE (microimplant-assisted rapid palatal expander) appliances. From 1998 to 2002 the orthodontic department was the initial testing site for the new Invisalign technology, and today provides a state-of-the-art approach to treating a wide variety of patients with Invisalign. Each resident generally starts more than 10 patients with this clear appliance. Complete 3D digital records are obtained from Cone Beam Computed Tomography (CBCT) scan, iTero intra-oral scan, and 3D facial scan. Digital orthodontics and 3D printing technology also allows residents to perform 3D digital set-up, 3D printed indirect bonding, and in-house clear aligner treatment.

Each resident engages in a research project and completes a thesis to qualify for the Master of Science in Dentistry degree. These are submitted for publication in scientific journals.

Residents are scheduled for didactic and clinical instruction five full days per week and full participation is required. While there is no prohibition of weekend private dental practice, residents’ commitments during the program seriously limit this opportunity.

More information on the program, including admissions requirements, curriculum and schedule, graduation and certification requirements is available here (http://dental.pacific.edu/academic-programs/residency-and-graduate-programs/graduate-orthodontics-program/).

**MSD (Master of Science in Dentistry) / Certificate in Orthodontics**

- Initiate and complete a research project to include critical review of the literature, development of a hypothesis and the design, statistical analysis and interpretation of data
- Research expertise under the guidance of a faculty member and thesis committee, culminating in a thesis and its defense

A graduate of an advanced specialty education program in orthodontics is competent to:

1. Integrate biomedical and clinical knowledge to improve oral health.
2. Think critically; use the scientific method to evaluate established and emerging biomedical and clinical science evidence to guide practice decisions.
3. Practice Evidence based Orthodontics - critically evaluate the literature and other information pertaining to this field.
4. Treat all types of malocclusion, whether in the permanent or transitional dentitions
5. Treat and manage developing dentofacial problems which can be minimized by appropriate timely intervention
6. Use dentofacial orthopedics in the treatment of patients when appropriate
7. Treat and manage major dentofacial abnormalities and coordinate care with oral and maxillofacial surgeons and other healthcare providers
8. Provide all phases of orthodontic treatment including initiation, completion and retention
9. Manage patients with functional occlusal and temporomandibular disorders
10. Treat or manage the orthodontic aspects of patients with moderate and advanced periodontal problems
11. Coordinate and document detailed interdisciplinary treatment plans which may include care from other providers, such as restorative dentists and oral and maxillofacial surgeons or other dental specialists
12. Develop and document treatment plans using sound principles of appliance design and biomechanics
13. Use dental materials knowledgeably in the fabrication and placement of fixed and removable appliances
14. Develop and maintain a system of long-term treatment records as a foundation for understanding and planning treatment and retention procedures
15. Practice orthodontics in full compliance with accepted Standards of ethical behavior
16. Understand current three dimensional (3D) imaging techniques to evaluate the developmental and functional inter-relationships between TMJ, occlusions, airway, and facial growth
17. Understand the following supporting knowledge:
   - Biostatistics
   - History of Orthodontics and Dentofacial Orthopedics
   - Jurisprudence
   - Oral Physiology
   - Pain and Anxiety Control
   - Pediatrics
   - Periodontics
   - Pharmacology
   - Preventive Dentistry
   - Psychological Aspects of Orthodontic and Dentofacial Orthopedic Treatment
   - Public Health Aspects of Orthodontics and Dentofacial Orthopedics
   - Speech Pathology and Therapy
   - Sleep physiology and Sleep Disordered Breathing
18. Engage in ongoing quality assurance to improve patient outcomes.
20. Practice in accordance with current local, state, and federal laws and regulations.
22. Participate in professional activities to promote the profession and serve individuals and communities.

Please note: Courses are taught on a permanent or interim (continuing) basis. Course numbers followed by the letter ‘I’ indicate interim courses which are taught over two or more quarters. Units assigned to interim courses build upon each preceding quarter’s unit value and culminate in a final and permanent unit value. The final unit value is transcripted with the permanent course.

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**Summer Quarter (5)**

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**University of the Pacific**
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**Autumn Quarter (6)**

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**Winter Quarter (7)**

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**Course Descriptions and Faculty**

Course descriptions are grouped by department. Courses are numbered by year: first-year predoctoral courses in the 100s, second-year predoctoral courses in the 200s, and third-year predoctoral courses in the 300s. Graduate courses are similarly numbered by year: first-year graduate courses in the 400s, second-year graduate courses in the 500s, and third-year graduate courses in the 600s. Quarters during which a course is offered in the DDS and graduate orthodontics and endodontics programs are indicated in parentheses following the course descriptions. (For the sequence of courses in the IDS program, please see Distribution of Instruction). Units of credit are listed separately for clinical courses offered during second and third years, e.g. EN 259 Clinical Endodontics I (4 units). Otherwise the unit value is listed after the course title. More than a single unit value is reported when there is a difference in contact hours between DDS and IDS courses.
Beginning in the fourth quarter, DDS and IDS students must enroll in
selective instruction each year which serves to extend basic knowledge
and skills in a discipline. A listing of selective course offerings is
distributed during the winter and spring quarters. Advanced topics and
experiences in selected basic, clinical, and behavioral science disciplines
are offered (10 to 40 hours per year, 0.1-1.0 units per course). If additional
work is needed to reach competency in previously completed courses,
supplemental instruction offering additional customized and intensive
instruction in targeted didactic, laboratory, and clinical competencies will
be offered by the faculty.

Units of Credit

One unit of credit is awarded for ten hours of lecture or seminar, twenty
hours of laboratory or clinic, or thirty hours of independent study per
term. In the predoctoral programs (DDS and IDS), students are assigned
to comprehensive care clinics for approximately 650 hours during the
second year and 1,000 hours during the third, in addition to specialty
clinic rotations. Units of credit are assigned in the comprehensive care
clinical disciplines in proportion to the amount of time an average
student spends providing specific types of care for assigned patterns.

Full-time enrollment in the predoctoral programs at the School of
Dentistry (DDS and IDS) is defined as 16 or more units per term. Full-
time enrollment in the graduate residency programs in orthodontics and
endodontics is defined as 20 or more units per term. All residents in
the Advanced Education in General Dentistry are considered full time.

Biomedical Sciences (BMS)

Department Chairperson
David M. Ojcius
Professor of Biomedical Sciences

Faculty

A

Homayon (Homer) Asadi
Associate Professor of Biomedical Sciences
B.A., San Jose State University, Biology, 1984
D.D.S., University of the Pacific, 1988
Other, San Jose City College, 1982

Alan Budenz
Professor of Biomedical Sciences
Oregon State University, 1972
University of California, Los Angeles, 1977
University of California, San Francisco, 1982
University of Redlands, 1970
University of the Pacific, 2000

Dorothy T. Burk
Professor of Biomedical Sciences
BA, University of New Hampshire, Zoology, 1972
MA, University of the Pacific, Educational Counseling Psychology, 1994
PhD, University of Michigan, Anatomy, 1976
University of Virginia, Craniofacial Development, Postdoctoral Fellowship,
1979

Takahiro Chino
Associate Professor of Biomedical Sciences

B

D. Nejat A. Duzgunes
Professor of Biomedical Sciences
BS, Middle East Technical University, Ankara, Turkey, Physics, 1972
Diploma, Noble and Grenough School, Deham, Mass., 1968
Other, University of California, San Francisco, Membrane Biophysics, 1981
PhD, State University of New York at Buffalo, Biophysical Sciences, 1978

Xiaoyuan Han
Assistant Professor of Biomedical Sciences
BS, China Pharmaceutical University, Nanjing, China, Basic Pharmacy, 2006
MS, China Pharmaceutical University, Nanjing, China, Pharmacology, 2009
Other, Stanford University, Stanford, CA, Postdoctoral Scholar, Anesthesia, 2019
Other, Stanford University, Stanford, CA, Postdoctoral Scholar, Urology, 2017
PhD, University of the Pacific, Stockton, CA, Pharmaceutical and Chemical
Sciences (Molecular-Cellular Pharmacology and Toxicology), 2014

Stefan Highsmith
Professor of Biomedical Sciences
BA, University of California, Berkeley, Chemistry, 1966
Brandeis University, Physical Chemistry, 1974
PhD, Massachusetts Institute of Technology, Organic Chemistry, 1972
University of California, San Francisco, Biophysical Chemistry, 1978

K

Roman Karp
Assistant Professor of Biomedical Sciences
Certificate, ASCP, Pathologists’s Assistance, 2009
MD, Ivano-Frankivsk State Medical Institute, Ukraine, General Medicine, 1988

M

Ana Carolina Morandini
Assistant Professor of Biomedical Sciences
DDS, University of São Paulo, Bauru School of Dentistry, 2006
Federal University of Rio de Janeiro, Postdoctoral Fellow - Immunobiology, 2014
Medical University of South Carolina, Research Visiting Scholar - Oral
Health Sciences, 2016
MS, University of São Paulo, Bauru School of Dentistry, Periodontology, 2009
PhD, University of São Paulo, Bauru School of Dentistry, Oral Biology, 2012
University of São Paulo, Bauru School of Dentistry, Postdoctoral Fellow - Oral Biology, 2015

Alexander J. Murphy

University of the Pacific 107
Professor of Biomedical Sciences
BS, Brooklyn College, Chemistry, 1962
PhD, Yale University, Biochemistry, 1967
University of California, San Francisco, Biophysical Chemistry, 1970

David M. Ojcius
Professor of Biomedical Sciences
BS, Brooklyn College, Chemistry, 1962
PhD, Yale University, Biochemistry, 1967

David M. Ojcius
Professor of Biomedical Sciences
BA, University of California, Berkeley, Biophysics, 1979
PhD, University of California, Berkeley, Biophysics, 1986

Erivan Schnaider Ramos Junior
Assistant Professor of Biomedical Sciences
DDS, UEPG (State University of Ponta Grossa), Dentistry, 2000
MS, USP, Stomatology/Oral Biology, 2009
PhD, UFRJ (Federal University of Rio de Janeiro, Institute of Biophysics Carlos Chagas Filho), Biological Science (Biophysics), 2014

Gary D. Richards
Professor of Biomedical Sciences
B.A., University of California at Berkeley, Anthropology, 1980
M.A., University of California at Berkeley, Anthropology, 1984
PhD, University of California at Berkeley, Anthropology, 2007

Norina Tang
Assistant Professor of Biomedical Sciences
BA, University of Chicago, Chicago, IL, 1998
BS, University of the Pacific, Stockton, CA, 2007
City College of San Francisco, San Francisco, CA.
PhD, University of WA, Seattle, 1986

Der Thor
Assistant Professor of Biomedical Sciences
BS, University of the Pacific, Biological Sciences, 2000
MS, University of the Pacific, Biological Sciences, 2003
PhD, University of the Pacific, Physiology and Pharmacology, 2009

Scott P. Turner
Assistant Professor of Biomedical Sciences
A.B., Columbia University, Anthropology, 1994
M.A., University of California, Berkeley, Anthropology, 1997
University of California, Berkeley

Nan Xiao
Assistant Professor of Biomedical Sciences
BS, Peking University, Stomatology, 2003
MS, Peking University - School of Stomatology, Orthodontics, 2005
PhD, Hong Kong University of Science and Technology, Biochemistry, 2009

Benjamin D. Zeitlin
Associate Professor of Biomedical Sciences
BSc, University of Strathclyde, Immunology and Pharmacology, 1992
PhD, Sheffield Hallam University, Immunopharmacology, 2000

Adjunct Faculty

Luis A. Cordova
Adjunct Assistant Professor of Biomedical Sciences
BS, University of Chile, School of Dentistry, Dental Science, 1996
DDS, University of Chile, School of Dentistry, Dentistry, 1996
DDS, University of Chile, School of Dentistry, Oral and Maxillofacial Surgery Internship, 2002
PhD, University of Nantes, School of Medicine/INSERM, Orthopaedic Bone Research, 2014

Dorothy Dechant
Adjunct Associate Professor of Biomedical Sciences
BA, University of California, Berkeley, Anthropology, 1973
MA, University of California, Berkeley, Anthropology, 1978
PhD, University of California, Berkeley, Anthropology, 1982

Robert Francis Halliwell
Adjunct Professor of Biomedical Sciences
BSc, University of Stirling, Biology and Psychology, 1983
Fellowship, University of California, Irvine, Post-Doctoral Research Fellow, Neuroscience, 1999
MSc, University of London, Neurological Science, 1986
PhD, University of Dundee, Neuropharmacology, 1992

Jill Helms
Adjunct Professor of Biomedical Sciences
Baylor College of Medicine, Postdoctoral fellowship, Molecular Control of Patterning and Morphogenesis in Vertebrate Limb Tissue, 1995
BS, University of Minnesota, Minneapolis, MN, Biological Sciences major, 1978
DDS, University of Minnesota, Minneapolis, MN, Doctor of Dental Surgery, 1986
Other, Roosevelt High School, Minneapolis, MN, 1975
PhD, Connecticut, Health Sciences Center, Biomedical, Sciences/Neuroscience, 1993
Salk Institute, Laboratory of David Cheresh, PhD, Sabbatical, 2003

Krystyna Konopka
Adjunct Professor of Biomedical Sciences
Bieganski Hospital, Lodz Poland, Clinical Pathology, 1965
High School, Lodz, Poland, 1954
Jonscher Hospital, Lodz Poland, Rotating Internship, 1962
MD, School of Medicine, Lodz, Poland, Medicine, 1961
MS, University of Lodz, Biochemistry, 1966
PhD, University of Lodz, Biochemistry, 1969

Matthew Milnes
Adjunct Instructor of Biomedical Sciences
BS, California Lutheran University, Biology, 1997
DDS, University of the Pacific School of Dentistry, General Dentistry, 2003
MS, University of the Pacific, Biology, 2000

108 Biomedical Sciences (BMS)
**Course Descriptions**

**Predoctoral Courses**

**BMS 100. Introduction to BMS. 2 Units.**
This course presents introductory information, foundational knowledge, and faculty expectations of the BMS strand: purpose, policies, and grading in BMS courses; relationship to ICS and IPS strands; assessment of knowledge of prerequisites and remediation; basic statistics; and research methodology.

**BMS 120. Genetics. 0.7 Units.**
Introduction to genetics, hereditary medicine, genetics assessment, and genetics and diseases.

**BMS 121. Clinical Pharmacology and Pathology. 3 Units.**
This course focuses on the action of therapeutic drugs on dental patients. In addition, the most commonly found pathologic lesions (red and white, ulcerative, etc.) will be discussed. This three-quarter course covers the general principles of drug action, including drug absorption, distribution, metabolism, elimination, and pharmacodynamics of important therapeutic drug categories in combination with the most commonly found oral lesions. The dental implications of therapeutic drugs and commonly found oral lesions will be emphasized and discussed using a seminar, case-based format. (IDS Quarters 1, 2 and 3).

**BMS 122. A Multidisciplinary Approach to Clinical Diagnosis and Treatment Planning. 1 Unit.**
This course is meant to integrate and apply various disciplines to the diagnosis and treatment planning process. In this interactive class, students will be presented cases with medical-dental, anatomic, pain problems, and psychological issues to discuss. Students in small groups will workup cases and present their diagnostic conclusions and treatment plans to the larger group. The faculty will facilitate and provide feedback on the student conclusions and plans. Students will learn: Commonly encountered medical problems, system disorders, and potential drug interactions in practice and the modifications to be considered in treatment decisions. The anatomy of the oromaxillofacial complex and its relationship to diagnosis and treatment. Diagnosis of orofacial lesions and TMD dysfunction and their effect on treatment. The role of the specialist in the diagnostic process and when to consult or refer patients to specialists in patient care. (IDS Quarter 4).

**BMS 123. Anatomy and Histology. 4 Units.**
The student will gain an understanding of functional histology and gross anatomy of the human body as appropriate for professional health care providers. Emphasis will be on the integration of anatomical knowledge at all levels and its correlation with basic clinical medicine relevant to dentistry.

**BMS 124. Cells & Biochemistry. 2.5 Units.**
The study of major molecular structures and processes of the human organism. Muscles, neurons, action potentials, extracellular matrix. Additional topics covered are enzymes, pharmacology, pharmacodynamics, pharmacokinetics, anesthesia, and pain.

**BMS 130. Applied Physiology. 3 Units.**
Clinical Application of Physiology based on integrated biomedical science, including Physiology, Biochemistry, Anatomy and Histology; with specific focus on urinary system, blood vessels and lymphoid organs, heart, GI tract, liver, pancreas, gall bladder, airways and endocrinology.

**BMS 131. Biochemistry & Nutrition. 1 Unit.**
An integrated systems-based biomedical review of metabolism of digestion, carbohydrate metabolism, lipid metabolism, hemoglobin and myoglobin, oxidative metabolism, nucleotide metabolism, vitamins. Introduction to clinically applied nutrition related to support of oral systemic health.

**BMS 133. Applied Orofacial Anatomy. 6 Units.**
The student will gain a fundamental understanding of head and neck embryology, gross anatomy, and oral histology as is appropriate for dental healthcare providers. Emphasis will be placed on the integration of anatomical and histological knowledge of the orofacial complex at all levels with basic clinical dentistry and medicine. The establishment of clinical correlations with radiographic interpretation, local anesthesia administration and the overall health will be a strength of this course.

**BMS 140. Sensory & Salivary Biology. 1 Unit.**
This course focuses on vision, sleep, central nervous system, hearing, taste and smell, salivary glands, biochemistry of saliva, structure of hydroxypatite, mineralization, effect of fluoride, and salivary diagnostics.

**BMS 220. Pharmacology. 5 Units.**
Introduction to pharmacology. Pharmacodynamics; pharmacokinetics; local anesthesia; analgesics; prescription writing; anxiolytics; cardiovascular pharmacology; drug interactions; antibiotics; autonemics; immunopharmacology; drugs and hematology; pregnancy; aging; asthma and COPD; antihistamines; corticosteroids; calcium regulation; antifungals, antivirals; alternative therapy; gastrointestinal pharmacology; nitrous; anticancer drugs; general anesthetics; thyroid drugs; neuromuscular; anti-Parkinsons, anti-Alzheimers; psychosis; anti-seizures; anti-sposmatic; substance abuse; opioid crisis; diabetes.

**BMS 232. Immunology & Microbiology. 3 Units.**
Introduction to immunology and microbiology, immunity to infection, oral microbiology and immunology, and dental plaque.

**PG 220. Pharmacology and Therapeutics. 6 Units.**
Rationale of drug use in dental practice, and mechanisms of action of drugs used for the medical management of dental patients; pharmacodynamics and drug kinetics; quantitative pharmacology; drug laws and regulations; prescription writing; emergency drugs, autonomic, respiratory, cardiovascular, psychotropic, hormonal, gastrointestinal, antianxiety, antiparkinson, anti diabetic, antineoplastic drugs; neuromuscular blockers, histamine antagonists, inflammatory mediators, sedative- hypnotics, anticonvulsants, general and local anesthetics, analgesics, antibiotics, antifungal and antiviral agents, substance abuse, toxicology, drug interactions, and therapeutic decision making. (60 hours lecture. Quarters 6-8.).

**Graduate Courses**

**AN 410. Advanced Head and Neck Anatomy I. 1 Unit.**
This course presents head and neck anatomy in depth to provide residents essential foundation for dental procedures. The development of normal and pathological craniofacial shapes, as well as anatomical structures relevant for implant placement, are discussed in detail. (Quarter 1).

**BC 414. Biochemistry and Bioengineering I. 1 Unit.**
Residents learn how to assess biocompatibility and longevity of various materials in contact with body fluid and tissues. This course also covers biofilm formation and removal from oral biomaterials. (Quarter 2).

**BMS 401. Research Philosophy and Design I. 1 Unit.**
In this two-quarter foundational course, students learn about hypothesis-driven research, including hypothesis development and significance testing. (Quarter 1).

**BMS 411. Stem Cell Biology I. 1 Unit.**
In this two-quarter course, residents discuss in detail current research on cell populations, their properties, and possible application routes—the foundation of modern biology-driven endodontic therapy. Treatment possibilities for immature teeth and other applications in regenerative endodontics are presented. (Quarter 2).
BMS 412. Topics in Oral Biology I. 1 Unit.
This course covers the interaction of pulpal and periapical tissues with medicaments such as bisphosphonates or TNF-alpha blocking antibodies, the effects of systemic diseases such as HIV, diabetes or sclerodermia on oral tissues, and other common issues in endodontics. (Quarter 4.).

BMS 414. Oral Biology Journal Club I. 3 Units.
This course features discussion of papers on a variety of topics in oral biology. (Quarters 2-4.)

BMS 440. Thesis Protocol. 1 Unit.
In this independent-study research course, residents work with mentor(s) to develop research questions, formulate hypotheses, and write a formal research proposal that includes a full literature review, statement of material and methods, execution of the research, and appropriate analysis and interpretation of data. (Quarter 2.).

BMS 450. Research Project I. 3 Units.
In this independent-study research course, residents work with research mentors to perform the research project, including data gathering, compilation, and interpretation of the results. The course will culminate in a publishable manuscript. (Quarters 1-4.)

BMS 512. Topics in Oral Biology II. 1 Unit.
This course covers the interaction of pulpal and periapical tissues with medicaments such as bisphosphonates or TNF-alpha blocking antibodies, the effects of systemic diseases such as HIV, diabetes or sclerodermia on oral tissues, and other common issues in endodontics. (Quarter 8.).

BMS 514. Oral Biology Journal Club II. 3 Units.
Residents read and discuss current literature on a range of oral biology topics. (Quarters 6-8.).

BMS 550. Research Project II. 3 Units.
In this independent-study research course, residents work with research mentors to perform the research project, including data gathering, compilation, and interpretation of the results. The course will culminate in a publishable manuscript. (Quarters 5-8.).

BMS 651. Manuscript Preparation. 3 Units.
Residents prepare the final version of a publishable manuscript. (Quarter 9.).

MC 404. Host Response I. 1 Unit.
This course extends basic immunology to the etiology of pulpal and periapical disease focusing on the host response. The role of inflammatory mediators and the cells that elaborate them is discussed. (Quarter 1.).

MC 424. Oral Microbiology I. 1 Unit.
Residents learn about microbial structure, metabolism, genetics, and virulence factors; molecular diagnostics and recombinant DNA technology; pathogenesis, epidemiology, clinical syndromes, laboratory diagnosis, treatment, and prevention of infectious diseases. (Quarter 2.).

MC 504. Host Response II. 1 Unit.
This course extends from basic immunology to the etiology of pulpal and periapical disease focusing on the host response. The role of inflammatory mediators and the cells that elaborate them will be discussed. (Quarter 5.).

PG 420. Advanced Pharmacology I. 1 Unit.
Local anesthesia and pain management of acute and chronic pain are main components of this lecture series, with specific emphasis on endodontics. Infection control, including biochemistry and side effects, is also presented. (Quarter 1.).

PG 520. Advanced Pharmacology II. 1 Unit.
Local anesthesia and pain management of acute and chronic pain are two main components of this lecture series, with specific emphasis on endodontics. Infection control, including biochemistry and side effects, is also presented. (Quarter 5.).
Russell G. Choy  
Assistant Professor of Clinical Oral Health  
BA, University of California at Berkeley, Biology, 1984  
DDS, University of the Pacific, 1987

Carlos A Correa  
Instructor of Clinical Oral Health  
City College of San Francisco, 2015  
College of Marin, 1983

Lori Doran-Garcia  
Assistant Professor of Clinical Oral Health  
BS, University of California, Los Angeles, Psychology, 1987  
DDS, University of the Pacific School of Dentistry, General Dentistry, 1991

Lynn Edwards  
Assistant Professor of Clinical Oral Health  
BA, University of the Pacific, Biology, 1978  
DDS, UOP School of Dentistry, Dentistry, 1981

Richard Farrell  
Instructor of Clinical Oral Health  
BS, University of San Francisco, 1967  
DDS, University of Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1974  
San Diego State University, Secondary Education courses, 1970  
University of California, Berkeley, Graduate courses, Department of Zoology, 1968

Des Gallagher  
Assistant Professor of Clinical Oral Health  
DDS, University of Wales, College of Medicine, Dental Surgery, 1994  
MA, UoP Bernerd School of Education/AAL, Dental Education, 2016  
Other, Army, Advance Education in General Dentistry, 1995  
Trinity College Dublin Dental School, Postgraduate diploma Clinical Dentistry, 2004

Michael V. Gamboa  
Assistant Professor of Clinical Oral Health  
BA, University of the Pacific, Biology, 1985  
DDS, University of the Pacific, Dentistry, 1988

Shika Gupta  
Associate Professor of Clinical Oral Health  
BDS, Goa Dental College and Hospital, Dentistry, 1997  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2007  
MDSc, University of Malaya, Faculty of Dentistry, Restorative Dentistry, 2009

Farida Hakimi  
Assistant Professor of Clinical Oral Health  
BS, Golden Gate University, Health Services Management, 1990  
BS, San Francisco State University, Biology and Health Services, 1993  
DMD, Tufts University, 1997

Glen F Hebert  
Assistant Professor of Clinical Oral Health  
BA, California State University, Northridge, Biology, 1985  
California State University, Fresno, 1983  
DDS, University of California, San Francisco, Dentistry, 1990

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DDS, University of the Pacific, 1981

Vivian Huang  
Assistant Professor of Clinical Oral Health  
BA, Creighton University, Communication Arts, 2000  
DMD, Tufts University, Dentistry, 2005  
University of California Los Angeles, AEGD Residency, 2006

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BS, Cal Poly State University, Computer Science, 1987  
CERT, University of the Pacific, AEGD, 2000  
DDS, University of the Pacific, 1998

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BA, Golden Gate University, 1981  
DDS, Northwestern University, 1982  
MS, University of New Haven, Human Nutrition, 2002

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BS, University of California Davis, Physiology, 1984  
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BA, Brown University, Human Biology, 1979  
DMD, Tufts University, Dentistry, 1982

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William W. Lee  
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BS, University of Pittsburgh, Neuroscience, 1993  
Cert, San Francisco VA Hospital, GPR Dentistry, 1999  
DDS, State University of New York, Buffalo, Dentistry, 1998  
Fellowship, San Francisco VA Hospital, Prosthodontics, 2000

Stephen C. Lindblom  
Assistant Professor of Clinical Oral Health  
BS, University of California, San Diego, Molecular Biology, 1996  
DDS, University of the Pacific, 2001

Xiaosong (Steven) Liu
Assistant Professor of Clinical Oral Health
BS, University of Minnesota College of Biological Sciences, Biology, 2006
DDS, University of Minnesota School of Dentistry, Dentistry, 2008
MD, Tianjin Medical University, Medicine, 1996

Elliot Low
Instructor of Clinical Oral Health
DDS, University of the Pacific School of Dentistry, Dentistry, 1977
UCSF Postgraduate Temporomandibular Joint Disorder Program, 1989
UCSF Implantology Study Group - (One Year Program), 1984
University of California, Berkeley, 1974

Richard Marill
Instructor of Clinical Oral Health
BS, California State College, Los Angeles, Zoology, Entomology, 1963
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, General Dentistry, 1968

Roberto S. Masangkay
Assistant Professor of Clinical Oral Health
BA, Letran College, Manilla Philippines, 1961
DDS, University of the Pacific, 1989
Dental Intern, Veterans Memorial Hospital, Manilla Philippines, Oral Surgery, 1968
DMD, University of the East, School of Dentistry, 1965

Anita Biju Mathews
Instructor of Clinical Oral Health
BDS, Manipal Academy of Higher Education, College of Dental Surgery, Dental Surgery, 1997
DMD, Harvard School of Dental Medicine, Dental Medicine, 2012
MSD, A.B. Shetty Memorial Institute of Dental Sciences, Department of Prosthodontics, Prosthodontics, 1999

Jason Matsushino
Instructor of Clinical Oral Health
BA, UC Santa Barbara, Japanese, 2003
DDS, UOP Dugoni Dental School, General Dentistry, 2008
Other, Weil Cornell, PGY-1 6PR, 2009

Olga Matveyeva
Instructor of Clinical Oral Health
Cert., Health Department of Odessa Regional State Boars of Certification, Dental Technician, 2013
Cert., Odessa Training School for Health Workers, Certificate of Completion, 1986
Other, Odessa Medical College #1, Dental Technician, 1977

Sandra McLaren
Assistant Professor of Clinical Oral Health
BA, U.C. Berkeley, Biology, 1978
DDS, University of Pacific School of Dentistry, Dentistry, 1981
MA, Pepperdine University, Clinical Psychology, 2013

Xiomara Aldina Mejia
Instructor of Clinical Oral Health
DDS, Universidad Evangélica de El Salvador, Dentistry, 1996

Farbod Bob Nadjibi
Instructor of Clinical Oral Health
AEGD, University of the Pacific, School of Dentistry, 2000
BS, University of California, Davis, Genetics, 1996

Daniel Nam
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BA, University of California, Los Angeles, Music-Piano, 1996
DDS, University of the Pacific School of Dentistry, General Dentistry, 2002

Namrata Nayyar
Assistant Professor of Clinical Oral Health
BDS, Manipal College of Dental Sciences, Manipal Academy of Higher Education (MAHE), Dentistry, 2005
Certificate, State University of New York, Advanced Prosthodontics, 2011
MS, State University of New York at Buffalo, School of Dental Medicine, Oral Biology, 2008

Josephine Ng
Instructor of Clinical Oral Health
BS, University of the Pacific, Biological Sciences, 2006
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Edward Orson
Instructor of Clinical Oral Health
DDS, University of the Pacific, 1994
Progressive Ortho, Orthodontics, 2008

Susan Park
Instructor of Clinical Oral Health
DDS, University of the Pacific, 1982
VA Palo Alto, General Practice Residency, 1983

Tim J. Patel
Instructor of Clinical Oral Health
BA, UC Berkeley, Psychology, 1991
DMD, Boston University Dental School, Dentistry, 1996

Erika Peterson
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BS, San Jose State University, Molecular Biology, 1976
DDS, University of the Pacific School of Dentistry, Dentistry, 1979
Other, USC School of Dental Hygiene, 1967

Shirin Salehinia
Instructor of Clinical Oral Health
B.A., California State University, Northridge, 1990
D.D.S., University of California at San Francisco, 1995
Tufts University, Dental Sleep Medicine, 2013

Edward L. Shaw
Assistant Professor of Clinical Oral Health
BS, University of British Columbia, 1977
Cert, University of California, San Francisco, GPR, 1983
Cert, University of California, San Francisco, Prosthodontics, 1986
DDS, University of the Pacific, 1982

Raymond Joseph Sheridan
Assistant Professor of Clinical Oral Health
BS, LeMoyne College, Biology, 1966
DDS, New York University College of Dentistry, Doctor of Dental Surgery, 1970
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Education/Training</th>
</tr>
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<tbody>
<tr>
<td>Jennifer Silvers</td>
<td>Instructor of Clinical Oral Health</td>
<td>BS, Univ. of Mary Mardin - Baylor, Cellular Biology, 2008</td>
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<td></td>
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<td>DDS, University of the Pacific, Dentistry, 2012</td>
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<tr>
<td>James Stephens</td>
<td>Instructor of Clinical Oral Health</td>
<td>BA, Stanford University, Human Biology, 1979</td>
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<td>Butte Community College, 1976</td>
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<td>DDS, University of Pacific School of Dentistry, 1982</td>
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<tr>
<td>David T. Thornton</td>
<td>Assistant Professor of Clinical Oral Health</td>
<td>BS, University of the California, Berkeley, Nutrition/Dietetics, 1980</td>
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<td>DDS, University of the Pacific School of Dentistry, 1986</td>
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<td>Other, V. A. Hospital Martinez, CA GPR, 1988</td>
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<td>Cynthia Tong</td>
<td>Instructor of Clinical Oral Health</td>
<td>BS, University of California, Berkeley, Physiology, 1989</td>
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<td>DDS, University of California, San Francisco, School of Dentistry, Dentistry, 1994</td>
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<td>Mary Michael Turoff</td>
<td>Assistant Professor of Clinical Oral Health</td>
<td>BS, UC Davis, Biological Sciences, 1974</td>
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<td>DDS, UOP School of Dentistry, General Dentistry, 1977</td>
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<td>Michael Viale</td>
<td>Assistant Professor of Clinical Oral Health</td>
<td>BS, UC Berkeley, Genetics, 1975</td>
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<td>DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1979</td>
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<td>Walter Weber</td>
<td>Assistant Professor of Clinical Oral Health</td>
<td>DDS, UOP, Dentistry, 1976</td>
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<td>De Paul Hospital, General Practice, 1977</td>
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<td>MA, Golden Gate University, Masters in business admin, Finance, 1988</td>
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<td>University of Santa Clara, Economics, 1973</td>
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<td>George J. Wolff</td>
<td>Assistant Professor of Clinical Oral Health</td>
<td>DDS, University of Washington, 1966</td>
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<td>University of California(Berkeley), 1961</td>
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<td>Debra A. Woo</td>
<td>Assistant Professor of Clinical Oral Health</td>
<td>BS, University of California, Davis, Human Biology, 1979</td>
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<td>DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 1986</td>
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<td>MA, San Jose State University, Health Sciences, 1983</td>
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<td>Adjunct Faculty</td>
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<td>William C. Barthold</td>
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<td>BA, Indiana University, 1971</td>
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<tr>
<td>Lawrence E. Fong</td>
<td>Adjunct Instructor of Clinical Oral Health</td>
<td>BA, University of California, Berkeley, Zoology, 1967</td>
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<td>DDS, Northwestern University Dental School, Dentist, 1971</td>
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<tr>
<td>Jamshid James Ghafourpour</td>
<td>Adjunct Assistant Professor of Clinical Oral Health</td>
<td>BS, University of California, Los Angeles, CA, Chemistry and Geophysics, 1981</td>
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<td>D.D.S., University of the Pacific, Arthur A. Dugoni School of Dentistry, 1986</td>
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<td>MBA, University of the Pacific, Arthur A. Dugoni School of Dentistry, Business Administration, 2000</td>
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<td>MS, University of California, Los Angeles, CA, Geophysics, 1983</td>
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<td>Keith Grote</td>
<td>Adjunct Instructor of Clinical Oral Health</td>
<td>DMD, Boston University, General Dentistry, 1996</td>
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<td>Other, Boston University, CAGS in AEGD, 1997</td>
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<td>University of California Davis, History, 1989</td>
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<tr>
<td>Michael B. Lambert</td>
<td>Adjunct Assistant Professor of Clinical Oral Health</td>
<td>BA, University of California, 1971</td>
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<td>DMD, Washington University School of Dentistry, Dentistry, 1984</td>
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<td>VA Hospital, Palo Alto, Certificate, 1985</td>
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<tr>
<td>Timothy Daren Lee</td>
<td>Adjunct Instructor of Clinical Oral Health</td>
<td>DDS, University of the Pacific, School of Dentistry, Dentistry. Invisalign Certified, Oral Sedation Certified, 2007</td>
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<tr>
<td></td>
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<td>University of California, Irvine, 2004</td>
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<tr>
<td>Susan Oh</td>
<td>Adjunct Instructor of Clinical Oral Health</td>
<td>BS, University of Washington, Biochemistry, 2003</td>
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<td>DDS, Columbia University College of Dental Medicine, Dentistry, 2008</td>
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<tr>
<td>Sanjay Patel</td>
<td>Adjunct of Clinical Oral Health</td>
<td>BDS, Gujarat University, 1982</td>
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<td></td>
<td>Dept. of Prosthodontics, Government Dental College and Hospital, Gujarat, India, Clinical Residency, 1983</td>
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<td>MSD, Gujarat University, Operative Dentistry Endodontics, 1985</td>
</tr>
<tr>
<td>Kiran Rapal</td>
<td>Adjunct Instructor of Clinical Oral Health</td>
<td>BSc, San Jose State University, Biology and Chemistry, 1996</td>
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<td></td>
<td>DDS, University of the Pacific, 2001</td>
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<tr>
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<td></td>
<td>MA, University of Santa Monica, Spiritual Psychology, 2016</td>
</tr>
<tr>
<td>Shiva Salehi</td>
<td>Adjunct Instructor of Clinical Oral Health</td>
<td></td>
</tr>
</tbody>
</table>
BS, King’s College London, Computer Science, 2004
DDS, UoP, Dentistry, 2014

W

Yvonne Wong
Adjunct Instructor of Clinical Oral Health
BSc, San Francisco State University, Microbiology, 1997
DDS, University of Southern California, 2001

Course Descriptions

Predoctoral Courses
COH 116. Preparation for Clinical Care. 1 Unit.
This course prepares first-year students to understand and apply clinic policy, protocols, and the standard of care necessary for success in a competency-based clinical education. Practitioner wellness, mental and physical, is also to be addressed. Together with additional courses in the second and third years, this series prepares the student to independently provide patient care.

COH 216. Patient Management and Productivity I. 3-4 Units.
Development of competency in patient management skills to maximize patient satisfaction. Students learn to use proper verbal and non-verbal communication and listening skills; to respond appropriately to patient and non-patient concerns; to be organized and prepared for tasks and contingencies related to patient care; to complete tasks and treatment in a timely manner; to provide patients with relevant information about prevention of dental disease and treatment options; and to obtain proper informed consent for procedures. (Quarters 5-8.)

COH 218. Clinical Management and Judgment I. 3-4 Units.
Students will learn comprehensive diagnostic care for assigned patients in the disciplines of endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, periodontics, removable prosthotodontics and orthodontics. For each assigned patient, the student will examine and evaluate the patient, identify and list dental problems, complete an appropriate treatment plan and schedule, provide all dentistry required in the disciplines, and recognize need for and refer the patient to specialty areas when such treatment is required. (Quarters 9-10.)

COH 316. Patient Management and Productivity II. 4 Units.
Development of competency in patient management skills to maximize patient satisfaction. Students learn to use proper verbal and non-verbal communication and listening skills; to respond appropriately to patient and non-patient concerns; to be organized and prepared for tasks and contingencies related to patient care; to complete tasks and treatment in a timely manner; to provide patients with relevant information about prevention of dental disease and treatment options; and to obtain proper informed consent for procedures. (Quarters 9-10.)

COH 317. Patient Management and Productivity III. 4 Units.
Development of competency in patient management skills to maximize patient satisfaction. Students learn to use proper verbal and non-verbal communication and listening skills; to respond appropriately to patient and non-patient concerns; to be organized and prepared for tasks and contingencies related to patient care; to complete tasks and treatment in a timely manner; to provide patients with relevant information about prevention of dental disease and treatment options; and to obtain proper informed consent for procedures. (Quarters 11-12.)

COH 318. Clinical Management and Judgment II. 4 Units.
Students will learn comprehensive diagnostic care for assigned patients in the disciplines of endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, periodontics, removable prosthotodontics and orthodontics. For each assigned patient, the student will examine and evaluate the patient, identify and list dental problems, complete an appropriate treatment plan and schedule, provide all dentistry required in the disciplines, and recognize need for and refer the patient to specialty areas when such treatment is required. (Quarters 9-10.)

COH 319. Clinical Management and Judgment III. 4 Units.
Students will learn comprehensive diagnostic care for assigned patients in the disciplines of endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, periodontics, removable prosthotodontics and orthodontics. For each assigned patient, the student will examine and evaluate the patient, identify and list dental problems, complete an appropriate treatment plan and schedule, provide all dentistry required in the disciplines, and recognize need for and refer the patient to specialty areas when such treatment is required. (Approximately 700 hours in clinical disciplines listed. Quarters 11-12.)

COH 368. Emergency Clinic. 3 Units.
The diagnosis and treatment of patients who require immediate attention. (70 hours clinical rotation. Quarters 9-12.)

Diagnostic Sciences (DS)

Department Chairperson
Paul Subar
Associate Professor of Diagnostic Sciences

Faculty
B

Brenda Barrientos
Instructor of Diagnostic Sciences
BS Dental Hygiene, University of the Pacific, 2015

Carsen Bentley
Assistant Professor of Diagnostic Sciences
BA Chemistry/Pol Sci, University of New Mexico, 2008
Certificate, Lutheran Medical Center Brooklyn New York, Advanced Education in General Dentistry, 2012
DDS, University of the Pacific, 2011
MPH, Medical College of Wisconsin, 2016

Kim Lucas Benton
Instructor of Diagnostic Sciences
DDS, Meharry Medical College School of Dentistry, 1988

John Berk
Assistant Professor of Diagnostic Sciences
DDS, University of California, San Francisco School of Dentistry, Dentistry, 1970

Michelle Brady
Assistant Professor of Diagnostic Sciences
BDS, Cardiff Dental School, Dentistry, 1994
Other, Dublin Dental School, Clinic Dentistry, 2004
Other, Dublin Dental School, Conscious Sedation, 2011

Alan Budenz
Professor of Diagnostic Sciences
BS Dental Science, University of California Los Angeles, 1977
DDS, University of California San Francisco, 1982
MBA, University of the Pacific, 2000

Elisa M. Chavez
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BS, Saint Mary’s College of California, Biology, Cum Laude, 1990
Certificate, University of Michigan, Geriatric Dentistry Fellowship, 2000
DDS, BS, University of California, San Francisco, School of Dentistry, Dentistry, 1994

Irene Chen
Instructor of Diagnostic Sciences
BA, Barnard College/Columbia University, Chemistry, 1995
DMD, Boston University, 2004
University of the Pacific, School of Dentistry, Advanced Education in General Dentistry, 2006

Janice Chou
Instructor of Diagnostic Sciences
BS, University of San Diego, Biochemistry/Cell Biology, 2006
DDS, University of the Pacific, School of Dentistry, 2010
University of the Pacific, School of Dentistry, Advanced Education in General Dentistry, 2011

Darren P Cox
Professor of Diagnostic Sciences
BS Zoology, Louisiana State University, Zoology, 1985
DDS, LSU School of Dentistry, 1990
Emory University Hospital, Atlanta, GA, Oral, Head and Neck Pathology Residency, 2000
Loyola University Hospital, Chicago, IL, General Practice Residency, 1991
MBA, University of Pittsburgh, 2004

Eve Cuny
Associate Professor of Diagnostic Sciences
BA, St. Mary’s College, Management, 1998
MS, St. Mary’s College, Health Service Administration, 2001

Leticia Ferreira
Associate Professor of Diagnostic Sciences
Certificate, Baylor College of Dentistry, Texas AM University, Oral and Maxillofacial Pathology, 2011
DDS, Universidade Federal da Bahia College of Dentistry, 2006
MS, Baylor College of Dentistry, Texas AM University, Biomedical Sciences, 2011

Maria Flores
Instructor of Diagnostic Sciences
BS, Mount St. Mary’s College, 1982
DDS, University of California, San Francisco, 1987

Barbara J. Fong-Hori
Assistant Professor of Diagnostic Sciences
BA, University of California, Berkeley, Physiology, 1974
DDS, UCSF School of Dentistry, 1978

Nick Farzin Forooghi
Instructor of Diagnostic Sciences
BA, San Jose State University, Industrial Arts, 1987
Other, Lincoln Law School of San Jose, Law, 2006

Paul Glassman
Professor of Diagnostic Sciences
BA, University of California, Los Angeles, Zoology, 1968
CERT, University of California, San Francisco, General Practice Residency, 1975
DDS, University of California, San Francisco, Dentistry, 1972
MA, University of the Pacific, Educational and Counseling Psychology, 1994
MBA, University of the Pacific, 1999

Kenneth Han
Instructor of Diagnostic Sciences
BS, University of San Francisco, School of Arts and Sciences, Biology, Chemistry Minor, 2008
DDS, New York University, College of Dentistry, Dentistry, 2016
PGY-1, University of the Pacific Arthur A. Dugoni School of Dentistry, Advanced Education in General Dentistry, 2017
PGY-2, University of the Pacific Arthur A. Dugoni School of Dentistry, Advanced Education in General Dentistry, 2018

Thi Hoang
Assistant Professor of Diagnostic Sciences
BS, University of the Pacific, Stockton, Biological Sciences, 2004
DDS, University of the Pacific, School of Dentistry, 2007
University of the Pacific, Union City, Advanced Education in General Dentistry, 2008

Terry Edwin Hoover
Associate Professor of Diagnostic Sciences
BA, Stanford University, Biology, 1968
Certificate, Rotating Hospital Dental Internship, VA Hospital, Portland, OR, 1973
DDS, University of California, San Francisco, 1972

Parvati H. Iyer
Assistant Professor of Diagnostic Sciences
BDS, Madras Dental College (India), Dentistry, 1989
DDS, University of Michigan, Dentistry, 1998
Other, AEGD, UCSF School of Dentistry, Hospital Dentistry, 1999

Justin H Jellin
Instructor of Diagnostic Sciences
BA, University of the Pacific, College of the Pacific, Sports Sciences, 2010
DPT, University of the Pacific, Thomas J. Long School Pharmacy Health Sciences, 2012

Jessica Jorquera
Instructor of Diagnostic Sciences
BS, Loyola Marymount University, Natural Science, 2011
BS, University of Southern California, Herman Ostrow School of Dentistry, Dental Hygiene, 2014

Dani Joudi
Instructor of Diagnostic Sciences
BS, University of California, Davis, Biological Sciences, 2013
BS, University of the Pacific, Dental Hygiene, 2018
**L**

**Natasha Lee**  
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BA, University of California, Santa Cruz, Anthropology, 1994  
DDS, University of the Pacific Dugoni School of Dentistry, 2000

**Lucinda J. Lyon**  
*Professor of Diagnostic Sciences*  
BS, University of Southern California, Dental Hygiene, 1978  
DDS, University of the Pacific, 1986  
EdD, University of the Pacific, 2009

**M**

**Leslie McGarvey**  
*Instructor of Diagnostic Sciences*  
BS, University of Scranton, Biology, 1998  
DDS, University of Michigan, School of Dentistry, Dentistry, 2014

**Stephen A. Mikulic**  
*Assistant Professor of Diagnostic Sciences*  
BA, University of Arizona, Psychology, 1971  
DDS, University of Southern California, 1975

**Christine E Miller**  
*Associate Professor of Diagnostic Sciences*  
BS, University of Orgeon Health Sciences Center, Dental Hygiene, 1975  
MA, University of the Pacific, Education, 1994  
MHS, University of San Francisco, 1987

**Irina Mirkina**  
*Instructor of Diagnostic Sciences*  
DDS, Medical University USSR, 1986  
DDS, University of the Pacific, 1995

**Helen Patricia Mockler**  
*Instructor of Diagnostic Sciences*  
BS, University of California, Santa Barbara, Mathematical Sciences, 2006  
DDS, University of the Pacific School of Dentistry, 2010

**N**

**Nader A. Nadershahi**  
*Professor of Diagnostic Sciences*  
CERT, Palo Alto Veterans Administration Hospital, Hospital Dentistry, 1995  
DDS, University of the Pacific, 1994  
EdD, University of the Pacific, Education and Leadership, 2011  
MBA, University of the Pacific, 1999

**P**

**Bruce Peltier**  
*Professor of Diagnostic Sciences*  
BS, US Military Adademy, West Point, Engineering, 1970  
M.Ed., Wayne State University, West Berlin, Psychology, 1974  
MBA, Eberhardt School of Business, University of the Pacific, 1999  
PhD, Wayne State University, Detroit, Counseling, 1979

**S**

**Eric S. Salmon**  
*Assistant Professor of Diagnostic Sciences*  
BS, Harvey Mudd College, Biology, 1993  
DDS, University of the Pacific, 1999

**William C. Sands**  
*Assistant Professor of Diagnostic Sciences*  
BA, University of the Pacific, Stockton, CA, Chemistry, 1967  
DDS, University of the Pacific, School of Dentistry, San Francisco, CA, 1971

**Monica Sasaki**  
*Instructor of Diagnostic Sciences*  
BS, California State University, Fresno, Physical Therapy, 1994  
MA, California State University, Fresno, Physical Therapy, 1996

**Timothy Sheu**  
*Instructor of Diagnostic Sciences*  
BS, University of British Columbia, Biochemistry, 1986  
DDS, University of the Pacific, School of Dentistry, 1990

**George Shiao**  
*Instructor of Diagnostic Sciences*  
BA, Washington University St. Louis, Biology/History, 1995  
DMD, Temple University School of Dentistry, 1999

**Dennis Song**  
*Associate Professor of Diagnostic Sciences*  
Board Certified, American Board of Oral and Maxillofacial Surgery, Oral and Maxillofacial Surgery, 2014  
Board Certified, National Dental Board of Anesthesiology, 2013  
Certificate, University of California San Francisco, General Surgery, 2005  
Certificate, University of California San Francisco, Oral and Maxillofacial Surgery, 2007  
DDS, BS, University of California San Francisco, Dental Surgery and Dental Sciences, 2000  
Fellowship, International Congress of Oral Implantologists, 2010  
Fellowship, University of California San Francisco, Resident Teaching Fellowship, 2007  
MD, University of California Davis, School of Medicine, 2004  
University of San Francisco, Biology, 1996

**Paul Subar**  
*Associate Professor of Diagnostic Sciences*  
BA, University of California, Santa Cruz, Biochemistry/ Molecular Biology, 1989  
DDS, University of California, Los Angeles School of Dentistry, 1993  
EdD, University of the Pacific Benerd School of Education, Educational Leadership and Administration, 2009  
Residency, UCLA Center for Health Sciences, Department of Hospital Dentistry (General Practice), 1994  
Residency, Veterans Administration Medical Center, Hospital Dental Service, 1995

**W**

**Allen Wong**  
*Professor of Diagnostic Sciences*  
BA, University of the Pacific, Biology, 1983  
Certificate, Branemark Nobel Biocare, Restorative Implant, 2000  
Certificate, University of the Pacific, School of Dentistry, Advanced Education General Dentistry, 2001  
Certificate, University of the Pacific, School of Dentistry, Advanced Clinical Dentistry, 1987  
DDS, University of the Pacific, School of Dentistry, 1986  
EdD, University of the Pacific, Gladys Bernerd School of Education, Professional Education and Leadership, 2010

**Lynne M. Wong**  
MS, University of the Pacific, Data Analytics, 2017
Assistant Professor of Diagnostic Sciences
BS, San Francisco State University, Biochemistry/Asian American Studies, 1998
DDS, University of the Pacific, School of Dentistry, 2002
Residency, University of the Pacific, Advanced Education in General Dentistry, 2004

Russell G. Woodson
Assistant Professor of Diagnostic Sciences
BS, Arizona State University, Chemistry, 1976
DDS, University of the Pacific, 1979
MA, University of the Pacific, Educational Psychology-Counseling, 1994

Andrew Young
Assistant Professor of Diagnostic Sciences
BA, University of California, Berkeley, Molecular Biology/Cell Biology, 2001
Certificate, Department of Veterans Affairs (Northern California Health Care System), General Practice Dentistry, 2006
Certificate, University of California, San Francisco (Pain Management Center), Post Graduate Pain Management, 2008
Certificate, University of Medicine and Dentistry, New Jersey, Orofacial Pain Fellowship, 2008
DDS, University of California, San Francisco, 2005
MSD, University of Medicine and Dentistry, New Jersey, Orofacial Pain Masters, 2009

Meixun Sinky Zheng
Associate Professor of Diagnostic Sciences
BA, East China Normal University, English Education, 2004
MA, East China Normal University, Educational Administration, 2007
PhD, North Carolina State University, Curriculum and Instruction, 2012

Keivan Zoufan
Assistant Professor of Diagnostic Sciences
Certificate, University of Connecticut, Endodontics, 2010
Certificate, University of Southern California, Advanced Education in General Dentistry, 2005
DDS, Tehran Azad University, 1999
DDS, University of Southern California, 2004
MDS, University of Connecticut, Endodontics, 2010

Adjunct Faculty

Brian Adams
Adjunct Instructor of Diagnostic Sciences
DDS, University of the Pacific, 2002
MBA Management Systems, California Polytechnic State University San Luis Obispo, 1998

Kimberly Adams
Adjunct Instructor of Diagnostic Sciences
BA Speech/Physiology, University of San Diego, 2007
BS Dental Hygiene, Foothill College, 2012

Edward Ayekum
Adjunct Instructor of Diagnostic Sciences
BA Zoology/Physiology, Rutgers University, 1981
DMD, Boston University Henry M. Goldman School of Dental Medicine, 1990

Franklin G. Ballard
Adjunct Assistant Professor of Diagnostic Sciences
BA, Northwest Nazarene College, 1965
DDS, Loma Linda University, 1969

Sepideh Banava
Adjunct Instructor of Diagnostic Sciences
Certificate, University of San Francisco, Dental Public Health, 2019
DDS, Tehran University of Medical Sciences, Dentistry, 1993
MPH, University of San Francisco, Public Health, 2017
MSc, Tehran University of Medical Sciences, Restorative Dentistry and Dental Materials, 1997

Andrea S. Braun
Adjunct Assistant Professor of Diagnostic Sciences
BS Biology, Emory University, 1978
Certificate, ADDX, Periodontal Medicine, 2007
DDS, New York University College of Dentistry, 1982
Fellowship, World Clinical Laser Institute, 2007
Residency, University of California San Francisco, Dental Sleep Medicine, 2016

Christian Brennan
Adjunct Instructor of Diagnostic Sciences
BA, San Francisco State University, Communications, 2007
MS, CAL East Bay, Educational Leadership, 2018
Other, Foothill College, Dental Hygiene, 2014

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BA Molecular Biology, UC Santa Cruz, 1985
DDS, University of the Pacific, 1988

C

Annaliese Carlsmith
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BS Dental Hygiene, University of California San Francisco, 2000
DDS, University of the Pacific, 2009

Steven Cavagnolo
Adjunct Instructor of Diagnostic Sciences
BA Environmental Health, San Jose State College, 1967
DDS, University of California San Francisco, 1973
Residency, St. Luke’s Hospital - Malawi, Central Africa, 1974

Crystal Chang
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BA, Harvard University, Molecular and Cellular Biology, 2010
DDS, UCSF School of Dentistry, Dentistry, 2015
Veterans Affairs Palo Alto, 2016

Kara Chang
Adjunct Instructor of Diagnostic Sciences
BA, University of Texas at Austin, Human Ecology, 2006
BSc, University of Texas at Austin, Human Development Family Science, 2006
DDS, Baylor College of Dentistry, Dentistry, 2010
Michael E. DeBakey VA Medical Center, General Practice Residency, 2011
Our Children’s House at Baylor, Pediatric Dentistry - Externship, 2009
University of Texas Dental Branch at Houston, Pediatric Dentistry - Externship, 2010

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BA, University of California, Berkeley, Molecular Cell Biology, 1995
DDS, University of California, San Francisco School of Dentistry, Dentistry, 2001

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BS, UCLA, Biology, 2007
DDS, University of The Pacific, Dentistry, 2011

William Choi
Adjunct Instructor of Diagnostic Sciences
BS, University of California, Irvine, Biology, 2003
DMD, Temple University School of Dentistry, Magna Cum Laude in Dentistry, 2009
University of California, San Francisco, Hospital Dentistry, 2010

Jean Creasey
Adjunct Instructor of Diagnostic Sciences
DDS, University of California, San Francisco, Doctorate of Dental Surgery, 2001

Arthur W. Curley
Adjunct Instructor of Diagnostic Sciences
BS, Marquette University, Physical Therapy, 1978

D

Wayne Del Carlo
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BSD, University of San Francisco, Pre Dental, 1964
DDS, University of the Pacific San Francisco, Dental, 1968

Osleydis Diaz
Adjunct Instructor of Diagnostic Sciences
BA, IPVCE/Cuba, Sciences/Literature, 1995
DDS, UCSF School of Dentistry, Dentistry, 2008
DS, Advanced Institute of Medical Sciences of Santiago de Cuba, Doctor of Stomatology, 2000
Faculty of Medicine, Granma, Cuba, Management and Health Care, 2001
Kaplan Institute and Truman College, English as a Second Language (ESL), 2003

Eunice Dizon
Adjunct Instructor of Diagnostic Sciences
DDS, New York University College of Dentistry, General Dentistry, 2006
University of the Pacific Arthur A. Dugoni School of Dentistry, General Dentistry - AEGD, 2007

Jennifer Domagalski
Adjunct Instructor of Diagnostic Sciences
BA, Dartmouth College, Anthropology, 2006
DDS, Arizona School of Dentistry, Dentistry, 2010

Arthur A. Dugoni
Adjunct Professor of Diagnostic Sciences
BS, Gonzaga University, 1944
Bureau of Medicine and Surgery Internship, Dental, 1949
DDS, College of Physicians Surgeons (UOP), Dental, 1948
MSD, University of Washington, Orthodontics Certificate, 1963
University Missouri, School of Dentistry, Dental, 1946
University of San Francisco, 1943

E

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Certificate, University of the Pacific School of Dentistry, AEGD, 1991
DDS, Faculte Dentaire Paris V Montrouge, Dental Surgery, 1985

Joe Errante
Adjunct Instructor of Diagnostic Sciences
BS, University of Arizona, Nutritional Biochemistry, 1977
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 1980

F

Simiade Fabiyi
Adjunct Instructor of Diagnostic Sciences
BS, University of Florida Gainesville, Food Science, Human Nutrition and Dietetics, 2003
DDS, University of California San Francisco, General Dentistry, 2015

Harold F. Fisk
Adjunct Instructor of Diagnostic Sciences
BS, UC Berkeley, Business Admin, 1970
JD, UC Hastings College of Law, Law, 1974
Roger Fung
Adjunct Instructor of Diagnostic Sciences
BS, University of Memphis, Microbiology, 1977
DDS, University of The Pacific School of Dentistry, Dentistry, 1987

Vanisha Gandhi
Adjunct Instructor of Diagnostic Sciences
BA, Stanford University, Human Biology, 2010
DDS, University of the Pacific Dugoni School of Dentistry, Dentistry, 2014

Dyani Gaudilliere
Adjunct Assistant Professor of Diagnostic Sciences
BA, Stanford University, Human Biology, 2005
DMD, Harvard School of Dental Medicine, 2009
Other, University of California Berkeley, Public Health, 2012

Koroush Langroudi Ghafourpour
Adjunct Instructor of Diagnostic Sciences
BS, University of California, Davis, Physiology, 1994
College of San Mateo, 1991
DDS, University of the Pacific School of Dentistry, Dentistry, 1997
Highland Trauma Center, Intern in Oral and Maxillofacial Surgery, 2003
The Ohio State Medical Center Teaching Fellow in Oral and Maxillofacial Surgery, Maxillofacial trauma, Dental pathology, Anesthesia, Grafting, Implantology, 2005

Vishavjeet Shah Girn
Adjunct Instructor of Diagnostic Sciences
BA, University of California, Berkeley, Integrative Biology, 2011
Certificate, University of California, San Francisco, Pediatric Dentistry, 2018
DMD, Tufts University School of Dental Medicine, Dentistry, 2015
MS, University of California, San Francisco, Oral and Craniofacial Sciences, 2018

Lindsey Green
Adjunct Instructor of Diagnostic Sciences
BA, Oakland University, Psychology, 2003
JD, DePaul College of Law, Law, 2007

Sandra Guereca
Adjunct Instructor of Diagnostic Sciences
DDS, Juarez University of Durango State Dental School, 1999

Maureen Harrington
Adjunct Instructor of Diagnostic Sciences
BA, St. Mary’s College of California, Integral Studies, 1992
MPH, California State University, Long Beach, Community Health Education, 1996

Mariam Hashoush
Adjunct Instructor of Diagnostic Sciences
BBS, Cal State East Bay, Biology, 2000
DDS, UCSF, Dentistry, 2006

Eddie K Hayashida
Adjunct Associate Professor of Diagnostic Sciences
AB, University of California, Berkeley, Physiology, 1971
DDS, University of California, Los Angeles, 1976

MBA, University of the Pacific, 1999

Amruta Hendre
Adjunct Instructor of Diagnostic Sciences
BDS, University of Pune India, Dentistry, 1997
DDS, California State, Dentistry, 2008

Kelly Hicklin
Adjunct Instructor of Diagnostic Sciences
BS, UCLA, Microbiology, Immunology and Molecular Genetics, 2006
DDS, University of the Pacific School of Dentistry, Dentistry, 2009
VA Greater Los Angeles Healthcare System, General Practice Residency, 2011

Andy Hoover
Adjunct Assistant Professor of Diagnostic Sciences
Archbishop Mitty High School, High School, 2000
BA, University of Colorado at Boulder, Environmental, Population, and Organic Biology, 2005
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Sciences, 2013

Kimberley Hubenette
Adjunct Instructor of Diagnostic Sciences
BS, University of Southern California, Los Angeles, CA, Biology, 1989
DDS, University of Southern California, Los Angeles, CA, Doctor of Dental Surgery, 1993

David Masao Ichimura
Adjunct Instructor of Diagnostic Sciences
BA, Florida State University, Biology w. Minor in Chemistry, 1967
DDS, University of California, San Francisco, Dentistry, 1977
Fellowship, University of California, Berkeley, Postdoctoral Fellowship in Toxicology, 1973
PhD, University of California, San Francisco, Comparative Pharmacology and Toxicology, 1972
University of California, San Francisco Dental School, Oral Medicine Clerkship (6 months), 1976

Peter Linsey Jacobsen
Adjunct Professor of Diagnostic Sciences
BA, Florida State University, Biology w. Minor in Chemistry, 1967
DDS, University of California, San Francisco, Dentistry, 1977
Fellowship, University of California, Berkeley, Postdoctoral Fellowship in Toxicology, 1973
PhD, University of California, San Francisco, Comparative Pharmacology and Toxicology, 1972
University of California, San Francisco Dental School, Oral Medicine Clerkship (6 months), 1976

Maximillian Jensen
Adjunct Instructor of Diagnostic Sciences
BS, University of New Mexico, Nutrition/ Dietetics, 2016
DDS, University California, San Francisco, Dentistry, 2015

Tripti Joshi
Adjunct Instructor of Diagnostic Sciences
BA, Haverford College, Biology, 2007
Temple University, 2011

Bonnie Lynn Jue
Adjunct Assistant Professor of Diagnostic Sciences
DDS, University of the Pacific, dentistry, 1993
University of the Pacific, pre-dental, 1990

Dennis M Kalebjian
Adjunct Assistant Professor of Diagnostic Sciences
California State University, Fresno, 1974
DDS, University of the Pacific, 1978
University of California, Los Angeles, 1975
Valley Medical Center, GPR, 1979

**John Kim**
Adjunct Instructor of Diagnostic Sciences
BS, University of Puget Sound, Natural Biology, 2000
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, General Dentistry, 2008

**Hoang N. Le**
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BS, Baylor University, Chemistry, 1980
Certificate, Jerry L. Pettis VA Hospital, Hospital Dentistry, 1986
DDS, University of Texas, Dental Branch in Houston, Dentistry, 1984
MA, University of Pacific, Dental Education, 2013

**Bonnie Lederman**
Adjunct Instructor of Diagnostic Sciences
BSc, Baltimore College of Dental Surgery Dental School, Dental Hygiene, 1981
DDS, Baltimore College of Dentistry Dental School, Dentistry, 1992
University of California, San Francisco, Geriatric Dental Fellow, 2013

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BS, UC Riverside, Business Admin, 2008
DDS, Loma Linda University, Dentistry, 2013

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DDS, University of the Pacific School of Dentistry, General Dentistry, 1999

**Lawrence W. Life**
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BA, University of Denver, Biology, Magna Cum Laude, 1978
DMD, Tufts University School of Dental Medicine, Dentistry Cum Laude, 1981

**Anthony Likes**
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Certificate, Medical University of South Carolina, Advanced Education in General Dentistry, 1996
DMD, Medical University of South Carolina, Dental Medicine, 1995

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BS, University of Portland, Life Science, 1976
DDS, University of Pacific, Dentistry, 1994

**Mai Ly**
Adjunct Instructor of Diagnostic Sciences
BS, University of California, Davis, Biology, 2002
DDS, UCSF School of Dentistry, Dentistry, 2007

**Monica MacVane-Pearson**
Adjunct Instructor of Diagnostic Sciences
BS, Mount Allison University, Biology, 2001
DMD, McGill University, 2005
David Bruce Nielsen
Adjunct Associate Professor of Diagnostic Sciences
American Dental Association, 1980
BA, Los Angeles State College, 1962
DDS, University of the Pacific, 1967
MA, University of the Pacific, 1994

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DDS, Ain Shams University, Dental Medicine and Surgery, 2005
MS, New Mexico State University, Public Health, 2010

Jacob Pai
Adjunct Instructor of Diagnostic Sciences
BS, Pacific Union College, Physical Science, 1986
DDS, UCSF, Dentistry, 1994
Loma Linda University, Health Education: Community Health, 1990
UCSF, Dental Public Health, 2003

Aditya Pandya
Adjunct Instructor of Diagnostic Sciences
BSc, Arizona State University, Biology, 2009
DMD, A.T. Still University, Dental Public Health, 2014

Kam Pareek
Adjunct Assistant Professor of Diagnostic Sciences
BDS, SMS Medical College and Hospital, General Dentistry, 1995
MPH, AT Still University, Public Health Dentistry, 2019
MS, University of Southern California, Orofacial Pain and Oral Medicine, 2020

Sridevi Ponnala
Adjunct Instructor of Diagnostic Sciences
DDS, M.R. Ambedkar Dental College, Dental Surgery, 1997
DDS, University of California San Francisco, Dentistry, 2004

Emily Renk
Adjunct Instructor of Diagnostic Sciences
BA, University of California, Los Angeles, Classical Civilizations, 2005
DDS, Ostrow School of Dentistry, USC, Dentistry, 2011
University of California, Los Angeles, General Practice Residency, Hospital Dentistry, 2012

Gary K Roberts
Adjunct Assistant Professor of Diagnostic Sciences
BA, University of the Pacific, Liberal Studies Biochemistry, 1984
Certificate, United States Navy, Oral Surgery, 1992
DDS, University of the Pacific San Francisco, Dentistry, 1988
Other, United States Navy, Hospital Dentistry, 1989

Boyd Edwin Robinson
Adjunct Associate Professor of Diagnostic Sciences
BA, California State University, Chico, BA in Biology 1971
Graduate Studies 1971-1973, 1973
DDS, University of the Pacific, School of Dentistry, Doctor of Dental Surgery, 1976
MD, Naval Dental School, Bethesda, MD, 1984

O

Rami Saah
Adjunct Instructor of Diagnostic Sciences
BS, University of California, Irvine, Biological Sciences, 1996
DDS, University of the Pacific School of Dentistry, Dentistry, 2000

Faeez Sadeghi
Adjunct Instructor of Diagnostic Sciences
BA, University of California San Francisco, Biology, 1999
BS, Isfahan University, Iran, Zoology, 1992
College of San Mateo, Biology, 1997
DDS, University of California San Francisco, Dentistry, 2005

Mahdi Salek
Adjunct Instructor of Diagnostic Sciences
BS, UCLA, Biological Sciences, 2005
DDS, University of Illinois at Chicago, General Dentistry, 2011

Ronald J Sani
Adjunct Associate Professor of Diagnostic Sciences
BS, Santa Clara University, Biology, 1972
DDS, University of the Pacific, 1975
Valley Medical Center, 1976

Jack Saroyan
Adjunct Assistant Professor of Diagnostic Sciences
BA, University of California Berkeley, General Curriculum, 1958
DDS, University of the Pacific, Dental School, Dentist, 1962

Brian Sheppard
Adjunct Instructor of Diagnostic Sciences
BS, San Jose State University, Mechanical Engineering, 2004
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 2010
University of the Pacific, Arthur A. Dugoni School of Dentistry, Advanced Education in General Dentistry, 2011

Cristiane Silva
Adjunct Instructor of Diagnostic Sciences
DDS, Universidad de la Salle Bajio, Leon, Guanajuato, Mexico, Doctor of Dental Science, 2014
Universidade de Ribeirao Preto, Ribeirao Preto, Sao Paulo, Brazil, Cirurgia Dentista- Liscensed Dentist in Brazil, 1998

Other, George Washington University, Masters Degree, Higher Ed and Human Development, 1991
Other, Naval Dental School, National Naval Dental Center, Comprehensive Dentistry Residency, 1984
Ann Marie Silvestri
Adjunct Assistant Professor of Diagnostic Sciences
BS, University of San Francisco, General Biology, 1972
Certificate, University Hospital School, The University of Iowa, Dental Course for patients with disabilities, 1979
DDS, University of the Pacific, Arthur A. Dugoni, School of Dentistry, General Dentistry, 1975
MPA, Notre Dame de Namur University, Belmont, CA, Health Services Administration, 1999
Other, Notre Dame des Victories High School, College Preparatory, 1968

Mark J. Singer
Adjunct Instructor of Diagnostic Sciences
BA, University of Michigan, 1966
MD, College of Physicians and Surgeons of Columbia University, Medicine, 1970
Northwestern University McGraw Medical Center, Fellowship: Head and Neck Surgery, 1976
Northwestern University McGraw Medical Center, Residency: Otolaryngology, 1976
Northwestern University McGraw Medical Center, Residency: Pathology, 1972
Northwestern University McGraw Medical Center, Residency: Surgery, 1973
Rush-Presbyterian St. Luke’s Medical Center, Internship-Surgery, 1971

Norma Solarz
Adjunct Instructor of Diagnostic Sciences
BA, University of California Berkeley, Botany, 1976
DDS, University of California San Francisco, Dentistry, 1980
University of California Berkeley, MPH Epidemiology, 1990

Sara Soleimani
Adjunct Instructor of Diagnostic Sciences
BA, University of Washington, Washington DC, Near Eastern Languages Civilizations, 2003
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery, 2006

Catherine Suh
Adjunct Instructor of Diagnostic Sciences
BA, Wellesley College, Psychology, 2004
DMD, Tufts University School of Dental Medicine, Dentistry, 2010

Stanley R. Surabian
Adjunct Associate Professor of Diagnostic Sciences
California State University, Fresno, 1965
DDS, University of Southern California, 1969
JD, San Joaquin College of Law, 1992

Alice Tai
Adjunct Instructor of Diagnostic Sciences
BS, University of California Los Angeles, Sciences, 1986
Certificate, University of Washington School of Dentistry, Periodontics, 1992
DDS, University of California San Francisco, General Dentistry, 1990

Ariane Terlet
Adjunct Instructor of Diagnostic Sciences
BA, UC Berkeley, 1980
DDS, University of the Pacific, 1986

Garrett Tien
Adjunct Instructor of Diagnostic Sciences
BA, UC Berkeley, Biology, 2002
DDS, University of Pacific, School of Dentistry, Dentistry, 2010

Lauren Umetani
Adjunct Instructor of Diagnostic Sciences
BA, Cogswell College, Computer Video Imaging / Web Design, 2003

W
Colin Wong
Adjunct Professor of Diagnostic Sciences
BA, University of California, Berkeley, Microbiology, 1961
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, General Dentistry, 1965

Y
Gilbert Yee
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BA, UC Berkeley, Psychology, 1983
DDS, University of the Pacific-Dugoni School of Dentistry, Dentistry, 1988
San Francisco State University, Post Baccalaureate Study, 1985

Chung-Kwan Yen
Adjunct Assistant Professor of Diagnostic Sciences
BS, Stanford University, Chemical Engineering, 1978
Certificate, University of California, San Francisco, Oral and Maxillo-Facial Surgery, 1987
DDS, Emory University, Dentistry, 1983
MS, University of Michigan, Chemical Engineering, 1979

Z
Alaleh Zadmehr
Adjunct Instructor of Diagnostic Sciences
BS, University of California Irvine, Biology, 2004
DDS, University of California, SF, Dentistry, 2008

Course Descriptions
Predoctoral Courses
DS 101. Integrated Clinical Sciences I: Orientation to the Clinical Practice of General Dentistry. 10 Units.
This course is the didactic component of a multi-disciplinary, year-long course designed to prepare students to treat patients and engage in community oral health events and programs. Together DS 101 and DS 106 focus on diagnostic sciences, behavioral sciences, periodontology, and prevention and community health care services and systems. Case-based simulations are supported by clinical exercises and practical exams. In addition whole patient health, medical implications of dental disease, professionalism, and odontogenesis are discussed.
DS 102. Integrated Clinical Sciences I Concepts: Orientation to the Clinical Practice of General Dentistry. 9 Units.
This is a didactic course designed to prepare students to treat patients in Pacific's Main Dental Clinic and engage in community oral health events and programs. The course focuses on Diagnostic Sciences, Behavior Sciences, Periodontology, Prevention and Community Health Care Services and Systems. Case-based simulations are supported by clinical exercises and practical exams. (IDS Quarters 1-2).

DS 103. Integrated Case Based Discussions. 4 Units.
Multi-disciplinary faculty lead small group case-based discussions incorporating biomedical science content, clinical knowledge, and behavioral concepts.

DS 106. Integrated Clinical Sciences I: Orientation to Clinical Practice Lab. 4.5 Units.
This course is a clinically-focused, multi-disciplinary course designed to prepare students to treat patients in Pacific's Main Dental Clinic and in community-based settings. This lab course is comprised of supervised case-based simulations, workshops, clinical exercises and visits to community sites. The focus is on the development of a comprehensive understanding of the more common diseases and their potential impact on patient management.

DS 107. Integrated Clinical Sciences I Lab: Orientation to Clinical Practice in General Dentistry. 4 Units.
The Orientation to the Clinical Practice of General Dentistry Practicum is a clinically-focused, multi-disciplinary, one-quarter course designed to prepare students to treat patients in Pacific’s Main Dental Clinic and in community-based settings. This lab/clinic course is comprised of supervised case-based simulations, workshops, clinical exercises and community sites. The focus is on the development of a comprehensive understanding of the more common diseases and their potential impact on patient management. Activities include a module on community health/social determinants of health and small group, case based discussions.

DS 160. Dental Radiology. 1 or 2 Unit.
The application of radiation physics and biology, the assessment of image quality, the practice of radiation safety and prescribing protocols, and the study of radiographic techniques, anatomic landmarks, and the principles of radiographic interpretations for both two- and three-dimensional imaging. (Quarters 2-3).

DS 166. Dental Radiographic Technique. 1-2 Units.
Instruction and practice using the extension cone paralleling radiographic technique including patient management, radiation safety, use of equipment, film placement, exposure, identification and mounting, and correction of technical error. (20 hours lab/clinic. Quarter 4.).

DS 200. Practice Management I. 1 Unit.
Introduces students to the study of fundamental concepts and terminology of the art and science of practice management as a basis for leadership and decisions in dental practice. Students will learn to track and evaluate key practice indicators, read financial reports, understand the importance of leading a team for efficient delivery of patient care, track and control overhead expenses, and set goals. (10 hours. Quarter 5.).

DS 201. Integrated Clinical Sciences II: Application of Foundational Knowledge. 5 Units.
This second year Integrated Clinical Sciences course, "Applications of Foundational Knowledge", provides students with enriched multidisciplinary diagnostic and technical content that builds on the fundamentals and active learning approach of first year studies. This course is directed from the Department of Diagnostic Sciences however, development and teaching are done in collaboration with many departments and disciplines. Topics include biomedical sciences, information literacy, evidence based dentistry, dental materials, professionalism, community oral health, clinical techniques and issues, and information specific to endodontics, oral surgery, sleep medicine and orofacial pain. Emphasis is placed on critical thinking and application of evidence to the clinical diagnosis, treatment and management of patients with diverse needs, in order to improve the novice practitioner's ability to adjust ideal principles and protocols to the successful management of non-ideal, real world cases. (Quarters 5-6.).

DS 202. Integrated Clinical Sciences II: Application of Foundational Knowledge. 4 Units.
This course builds on foundational clinical and biomedical material presented in first-year studies and in DS 201 through a multidisciplinary approach to basic science principles and clinical application. Topics will be presented in a lecture format as well as smaller seminar sessions, many of which are focused on case scenarios. There is also independent study time to prepare for these activities. Emphasis is placed on the integration of dental concepts, evidence, and critical thinking to deliver accurate diagnoses, prepare customized treatment plans and consider the need for inter-professional collaboration in the delivery of oral health care. Topics include advanced endodontic content, orofacial pain, ethics, patient management, community oral health and various clinical topics. (Quarter 7).

DS 203. Integrated Clinical Sciences II: Application of Foundational Knowledge. 4-5 Units.
This course continues the multidisciplinary and active learning approach used in DS 201 and DS 202. Topics include advanced content in oral surgery and sedation, endodontics, regenerative dentistry, orofacial pain, ethics, and the management of complex cases. Students are also introduced to resume and professional electronic portfolio development as they ready themselves for professional careers. (Quarter 8).

DS 217. Clinical Oral Diagnosis and Treatment Planning. 3-4 Units.
The diagnosis and communication to the patient of the need for dental treatment; recognizing medical, oral, physical, emotional, and economic factors that modify or complicate dental treatment; and development of comprehensive dental treatment plans suitable for patients’ needs in accordance with identified modifying and complicating factors. (Quarters 5-8).

DS 230. General Pathology. 5 Units.
This course aims to present the basic mechanisms of pathology and the diseases affecting the different organ systems of the body. It is also intended to provide an understanding of the more common diseases and where appropriate how they might impact patient management.

DS 266. Clinical Dental Radiology. 2 Units.
Study of preparation, evaluation, and interpretation of diagnostically acceptable intraoral radiographic and panoramic surveys for comprehensive care and emergency clinic patients. (Quarters 5-8.).
DS 300. Practice Management II. 3 Units.
Challenges students to apply knowledge of practice management concepts through utilization of a computerized business simulation. Includes preparation for career decisions in dentistry with a focus on practice transitions, associateships, dental benefit plan participation, marketing, debt management, retirement planning, patient billing and collections, scheduling for efficiency, basic accounting, tax planning, and development of business plans. (30 hours lecture. Quarter 11.).

DS 301. Jurisprudence. 1 Unit.
Prepares students for an understanding of the foundations of the law, its primary groupings and modes, and its application to the dentist and dental practice environment. Particular attention will be given to California dental law and risk management. (10 hours lecture. Quarter 12.).

DS 302. Clinical Care of Complex Needs. 4 Units.
Study of basic disease processes, epidemiology, demographics, treatment planning, principles of providing dental treatment for individuals with a wide variety of conditions including medical and developmental disabilities, problems associated with aging, psychological problems including dental phobia, hospital organization, joining a hospital staff, providing dental treatment and consultation in a hospital, and principles of general anesthesia. (20 hours lecture, 20 hours self-study and seminar. Quarters 9-11.).

DS 303. Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars. 6 Units.
Multidisciplinary case based presentations of integrated material related to the practice of clinical dentistry. This three-quarter course builds on the foundational and clinical knowledge base of each student to evaluate and plan more complex treatment needs. (60 hours lecture/seminar. (Quarters 9-11).

DS 307. Extramural Patient Care. 4 Units.
Through a combination of didactic and clinical experiences, this course seeks to prepare the student for practice in community clinical settings where diverse patient populations may be encountered. Upon completion of the course, students will have developed the skills to: perform dental procedures in community-based practice settings, work with diverse patient populations, describe the social context of disease processes, develop social awareness and skills for treating underserved groups, describe dental delivery in a community clinic environment, and develop treatment alternative in clinics with limited resources (90 hours clinical rotations and 4 hours lecture/seminar. Quarters 9-12).

DS 320. Prep for State Licensure. 0 Units.
This course, available to students on an as-needed basis, includes a review of requirements and protocol as well as practical exercises in preparation for the Western Regional Examining Board and other licensing examinations.

DS 399. Enriched Clinical Experience. 16 Units.
This course provides students with an additional opportunity to enhance or enrich their skills in some or all clinical disciplines subsequent to the scheduled graduation date. These experiences are directed by the student’s Group Practice Leader, who also recommends certification for graduation.

PA 231. Oral Pathology. 3 Units.
Study of the etiology, pathogenesis, clinical and histopathogenic features, and the treatment and prognosis of oral diseases. Recognition of basic tissue reaction and lesions that occur in the mouth, jaws, and neck; formulation of tentative diagnoses; methods used to secure definitive diagnoses and provide appropriate therapy and management or obtaining consultation for the same. (24 hours lecture, programmed instruction equivalent to 30 hours lecture, and six hours clinical rotation. Quarter 7.).

PA 232. Differential Diagnosis of Oral and Maxillofacial Lesions. 3 Units.
Clinical evaluation, development of a differential diagnosis, and management protocols for oral and paraoral soft tissue and jaw lesions, based on knowledge of the appearance, behavior, and treatment of oral diseases. (Quarter 8.).

Graduate Courses
DS 402. Statistical Methods I. 1 Unit.
Residents learn the importance of data organization and evaluation, and statistical methods used in research. They apply this knowledge to their own research and enhance skills in the interpretation of quality research data. (Quarter 3.).

DS 430. Advanced Oral Pathology I. 1 Unit.
Organized into lectures and clinical-pathologic conferences, this course provides residents a firm foundation in endodontic pathology and clinical entities that may occur in patients but are unrelated to root canal treatment. (Quarter 1.).

DS 460. Advanced Radiology I. 1 Unit.
This course covers key elements of endodontics such as proper radiographic technique and three-dimensional data acquisition and interpretation. Residents obtain and read images from small FOV cone beam scans. (Quarter 1.).

DS 530. Advanced Oral Pathology II. 1 Unit.
Organized into lectures and clinical-pathologic conferences, this course provides residents a firm foundation in endodontic pathology and clinical entities that may occur in patients but are unrelated to root canal treatment. (Quarter 5.).

Endodontics (EN)

Department Chairperson
Ove Andreas Peters
Professor of Endodontics

Vice Chair
Alan H. Gluskin
Professor of Endodontics

Faculty

A

Andy Ashtiani
Assistant Professor of Endodontics
18th Annual Loma Linda Anesthesia Symposium, 2016
Certificate, Loma Linda University Medical Center, Certificate in Dental Anesthesiology, 1998
Certificate, New York University, Certificate in Endodontics, 2001
DDDS, Northwestern University Dental School, Chicago, IL, 1989
ITI Dental Implant Systems, 2016
Loma Linda University, Dental Anesthesiology, 1998
New York University, Endodontics, 2001
Oral surgery Internship Department of Oral/Maxillofacial surgery, 2016
Scripps Implant Dentistry course featuring biological, surgical, and prosthetic treatments involving various implant modalities, 1991
Steri-oss Advances Surgical and Prosthetic Techniques, 2016

B

Orest Balytsky
Assistant Professor of Endodontics
BS, Lviv Medical Institute, Dr of Stomatology Prenatal/Dentistry, 1981
Certificate, University of Pittsburgh School of Dentistry, Certificate in Endo, 1998
DMD, University of Pittsburgh School of Dentistry, Dentistry, 1995
Farinaz Bokhour
Assistant Professor of Endodontics
BS, University of California, Los Angeles, Psychobiology, 2004
Certificate, New York University College of Dentistry, Endodontics, 2018
DDS, University of California, Los Angeles, School of Dentistry, Dentistry, 2009

David Clifford Brown
Associate Professor of Endodontics
BSD, Newcastle University Dental School, 1988
MSD, Indiana University, Endodontics, 1994
MSD, Newcastle University Dental School, Operative, 1993

Craig Dunlap
Assistant Professor of Endodontics
BS, UC Davis, Genetics, 1990
Certificate, University of Illinois, Chicago, Endodontics, 1996
DDS, UC San Francisco, Dentistry, 1994
Other, Oregon Health Sciences University, Moderate Parenteral Sedation, 2010

Samer Magdi Ebeid
Assistant Professor of Endodontics
Boston University School of Dental Medicine, Endodontics, 1996
BS, University of San Francisco, Biological Sciences, 1989
DDS, University of the Pacific, Dentistry, 1992

Jennifer Melissa Fong
Assistant Professor of Endodontics
BS, UC Davis, Genetics, 2004
DDS, University of the Pacific, School of Dentistry, Dentistry, 2007
Other, Tufts Denal School, Endodontics, 2013
VA Palo Alto, General Practice Residency, 2008

Johnah C Galicia
Assistant Professor of Endodontics
DMD, Manila Central University, Philippines, Dentistry, 1996
MS, University of North Carolina, Endodontics, 2014
Other, University of Rennes 1, France, Clinical Dentistry, 2000
PhD, Niigata University, Japan, Oral Biology, 2006

Alan H. Gluskin
Professor of Endodontics
BA, University of California, Los Angeles, Anthropology, 1968
CERT, Temple University, Endodontics, 1976
DDS, University of the Pacific School of Dentistry, Dentistry, 1972

Ravi S. Koka
Assistant Professor of Endodontics
BDS, London Hospital Medical College, England, 1990
DDS, Loma Linda University, 1993
MS, University of Nebraska, 1998

Yoon Lee
Assistant Professor of Endodontics
BS, University of the Pacific (UOP), Bachelor of Science (B.S.) in Biological Sciences, 2011
DDS, UOP Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery (D.D.S.), 2014
Nova Southeastern University College of Dental Medicine, Specialty certificate in Endodontics, 2016

Lawrence M. LeVine
Assistant Professor of Endodontics
BS, University of Illinois, Urbana, Philosophy, 1958
DDS, University of Illinois, Chicago, Dentistry, 1962

Nick A Morton
Assistant Professor of Endodontics
BS, University of California San Diego, Biochemistry and Cell Biology, 2004
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery, 2008
MS, University of Florida, Masters of Science in Dental Science, 2010

Christine Inge Peters
Associate Professor of Endodontics
American School in Lahore, Pakistan, 1976
DMD, Ruprecht-Carls - University, Heidleberg, Baden-Württemberg, Germany, Approbation as Dentist, 1992
DMD, Ruprecht-Carls - University, Heidleberg, Baden-Württemberg, Germany, Dissertation: Dr. med. Dent, 1992
Gymnasium Mockmuhl, Mockmuhl, Germany, 1986
Heilbronn, Germany, Primary School, 1977
University of Zurich, Switzerland, Postgraduate in Education Endodontology, 2001

Ove Andreas Peters
Professor of Endodontics
Certificate, UCSF, Endodontics, 2006
Certificate, University of Zurich Dental School Switzerland, Endodontics, 2001
DDS, University of Kiel Dental School, Germany, Dentistry, 1990
MS, UCSF, Oral Biology, 2003
PhD, University of Kiel, Department of Physiology, Dr med dent., 1992
PhD, University of Zurich Dental School Switzerland, Oper. Dentistry/Endodontics, 2001

Phuong N. Quang
Assistant Professor of Endodontics
BA, University of California, Berkeley, Biochemistry and Molecular Biology Minor: Spanish, 2000
DDS, University of California, San Francisco School of Dentistry, Doctor of Dental Surgery, 2005
PhD, University of California, San Francisco, School of Dentistry, Oral Craniofacial Sciences, 2010
University of Texas Health Sciences Center at San Antonio, Endodontics Certificate, 2012
R

Yasaman Ravandoust
Assistant Professor of Endodontics
DDS, Azad University, School of Dentistry, Dentistry, 1999
DDS, UCSF, Dentistry, 2010
MS, Isfahan University, Endodontics, 2001
MS, UCSF, Endodontics, 2013

Ali Allen Rezai
Assistant Professor of Endodontics
BA, University of California, Davis, Economics, 1987
DDS, Columbia University School of Dental Oral Surgery, Dentistry, 1999
Manhattan VA Medical Center, 2000
Manhattan VA Medical Center/New York University, Endodontics, 2002

S

Raymond S. Scott
Associate Professor of Endodontics
BA, U.C. Santa Barbara, Biology, 1977
DDS, University of the Pacific, Dentistry, 1980
MS, University of Pittsburgh, Endodontics, 1992

Mark Stevenson
Instructor of Endodontics
BA, University of California, Berkeley, BA, 1983
Certificate, American Board of Endodontics, Specialty Board Certification, 2002
DDS, Georgetown University School of Dentistry, Doctor of Dental Surgery, 1988
University of Southern CA Medical Center, General Practice Residency, 1989
University of Southern CA School of Dentistry, Endo Residency, 1997

T

Kenneth W. Tittle
Assistant Professor of Endodontics
BS, University of California, Santa Barbara, Biopsychology, 1985
DDS, University of the Pacific, Dentistry, 1989
MS, Loma Linda University, Endodontics, 1995
VA Medical Center at Long Beach, CA, 1990

W

Ralan Dai Ming Wong
Associate Professor of Endodontics
College of San Mateo, 1988
DDS, University of the Pacific, Dentistry, 1992
MS, University of Pennsylvania, 1997
Skyline College, 1988
University of Pennsylvania, Endodontics, 1997
University of the Pacific, 1989
University of the Pacific, AEGD, 1994
University of Vienna, Histology, 1996

Adjunct Faculty

B

Sean F Bardsley
Adjunct Assistant Professor of Endodontics
BA, University of California, Santa Barbara, Biological Sciences, 1995
Certificate, University of Southern California, Endodontics, 2015
Certificate, University of the Pacific School of Dentistry, AEGD, General Dentistry, 2000

S

Mohammad Ali Saghiri
Adjunct Assistant Professor of Endodontics
BS, Karaj University, Materials Sciences Engineering, 2002
MS, Azad University, Science and Research Branch, Biomedical Engineering, 2006
PhD, Azad University, Science and Research Branch, Biomedical Engineering (Nano-Dental Material and Devices), 2010
PhD, Tehran University, Medical Laboratories (Maxillofacial Biology), 2011
Clinical care. (Quarter 1.)

Teeth with a variety of instruments and devices to prepare residents for comprehensive clinical dental practice setting. (Quarters 9-12.)

This preclinical course uses simulated root canal treatment on extracted teeth with a variety of instruments and devices to prepare residents for clinical care. (Quarter 1.)

EN 405. Advanced Endodontic Technique. 8 Units.

This preclinical course uses simulated root canal treatment on extracted teeth with a variety of instruments and devices to prepare residents for clinical care. (Quarter 1.)

EN 402. Endodontic Therapy Seminar I. 2 Units.

Residents discuss contemporary endodontic strategies and the management of endodontic emergencies and surgical endodontics in a comprehensive clinical dental practice setting. (Quarters 9-12.)

EN 422. Clinical Transition: Evidence-based Endodontics. 4 Units.

This course introduces residents to the evidence-based modalities and local rules for treating patients endodontically in the school’s clinic. (Quarter 2.)

En 423. Anesthesia and Pain Management I. 1 Unit.

This course is an introduction to theoretical and practical anesthetic techniques and pain management. (Quarter 2.)

EN 424. Pain/Neuro Seminar I. 1 Unit.

Residents study the physiology and pathophysiology of pain. (Quarter 1.)

EN 430. Clinic Connections I. 1 Unit.

The collaboration between endodontists and other members of the dental team is essential for good clinical outcomes. A series of presentations by clinicians with different training and expertise reinforces an inclusive view of typical and atypical treatment modalities. (Quarter 4.)

EN 440. Special Topics in Endodontics I. 2 Units.

Residents attend seminars by invited speakers and faculty with expertise and training in contemporary endodontic therapies. (Quarters 1-2.)

EN 457. Clinical Endodontics I. 25 Units.

Residents practice non-surgical endodontics appropriate in scope and disease. (Quarters 5-8.)

EN 459. Clinical Endodontics: Surgery I. 3 Units.

Residents practice surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 2-4.)

EN 459. Clinical Endodontics: Surgery I. 3 Units.

Residents practice surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 2-4.)

EN 456. Special Care Clinic Rotation. 1 Unit.

In this rotation, residents practice non-surgical endodontics under sedation and general anesthesia for patients with special needs. (Quarter 3.)

EN 503. Endodontic Biology and Pathology II. 8 Units.

This course presents the biology and etiology of pulpal and periapical disease. (Quarters 5-8.)

EN 511. Case Seminar II. 12 Units.

Residents review their own cases prepared according to ABE board documentation rules. (Quarters 1-4.)

EN 512. Classic Literature II. 12 Units.

Residents review the body of classic literature pertinent to endodontics, including material relevant for board preparation. (Quarters 1-4.)

EN 513. Current Literature II. 4 Units.

In this course, residents review current endodontic literature using the EndoLit iPad app. (Quarters 1-4.)

EN 520. Clinic Connections II. 1 Unit.

The collaboration between endodontists and other members of the dental team is essential for good clinical outcomes. A series of presentations by clinicians with different training and expertise reinforces an inclusive view of typical and atypical treatment modalities. (Quarter 8.)

Course Descriptions

Predoctoral Courses

EN 154. Basic Endodontics. 1 Unit.

Development of the dental pulp, classification and nature of endodontic disease, clinical diagnosis, and fundamentals of root canal therapy and radiographic interpretation. (10 hours lecture. Quarter 3.)

EN 159. Preclinical Endodontics. 2-3 Units.

Study of pulp morphology, anatomy, cleaning and shaping of root canals; access openings; use of irrigating solutions; obturating the canal and judging the complete treatment with radiographs. (40 hours laboratory. Quarter 4.)

EN 254. Endodontics. 1 Unit.

Review of endodontic retreatment and surgical therapies; dental trauma and sequelae; complex problem solving; endodontic emergencies; endodontic mishaps; and alternate treatments. (10 hours lecture. Quarter 7.)

EN 259. Clinical Endodontics I. 4 Units.

Study of endodontic diagnosis, treatment planning, and therapy, including management of endodontic emergencies and surgical endodontics in a comprehensive clinical dental practice setting. (Quarters 5-8.)

EN 359. Clinical Endodontics II. 8 Units.

Study of endodontic diagnosis, treatment planning, and therapy, including management of endodontic emergencies and surgical endodontics in a comprehensive clinical dental practice setting. (Quarters 9-12.)

Graduate Courses

EN 401. Endodontic Technology I. 1 Unit.

This course introduces residents to endodontic technology. (Quarter 1.)

EN 402. Endodontic Therapy Seminar I. 2 Units.

Residents discuss contemporary endodontic strategies and the application of current scientific evidence to endodontic treatment. (Quarters 1-2.)

EN 403. Endodontic Biology and Pathology I. 8 Units.

This course presents the biology and etiology of pulpal and periapical disease. (Quarters 1-4.)

EN 405. Advanced Endodontic Technique. 8 Units.

This preclinical course uses simulated root canal treatment on extracted teeth with a variety of instruments and devices to prepare residents for clinical care. (Quarter 1.)

EN 411. Case Seminar I. 12 Units.

Residents review their own cases prepared according to ABE board documentation rules. (Quarters 1-4.)

EN 412. Classic Literature I. 12 Units.

Residents review the body of classic literature pertinent to endodontics, including material relevant for board preparation. (Quarters 1-4.)

EN 413. Current Literature I. 4 Units.

In this course, residents review current endodontic literature using the EndoLit iPad app. (Quarters 1-4.)

EN 422. Clinical Transition: Evidence-based Endodontics. 4 Units.

This course introduces residents to the evidence-based modalities and local rules for treating patients endodontically in the school’s clinic. (Quarter 2.)

EN 423. Anesthesia and Pain Management I. 1 Unit.

This course is an introduction to theoretical and practical anesthetic techniques and pain management. (Quarter 2.)

EN 424. Pain/Neuro Seminar I. 1 Unit.

Residents study the physiology and pathophysiology of pain. (Quarter 1.)

EN 430. Clinic Connections I. 1 Unit.

The collaboration between endodontists and other members of the dental team is essential for good clinical outcomes. A series of presentations by clinicians with different training and expertise reinforces an inclusive view of typical and atypical treatment modalities. (Quarter 4.)

EN 440. Special Topics in Endodontics I. 2 Units.

Residents attend seminars by invited speakers and faculty with expertise and training in contemporary endodontic therapies. (Quarters 1-2.)

EN 457. Endodontic Clinic: Assisting. 1 Unit.

In this clinical course, residents assist during endodontic treatment by endodontic faculty in the graduate endodontic clinic. (Quarter 1.)

EN 458. Clinical Endodontics I. 25 Units.

Residents practice non-surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 2-4.)

EN 459. Clinical Endodontics: Surgery I. 3 Units.

Residents practice surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 2-4.)

EN 466. Special Care Clinic Rotation. 1 Unit.

In this rotation, residents practice non-surgical endodontics under sedation and general anesthesia for patients with special needs. (Quarter 3.)

EN 503. Endodontic Biology and Pathology II. 8 Units.

This course presents the biology and etiology of pulpal and periapical disease. (Quarters 5-8.)

EN 511. Case Seminar II. 12 Units.

Residents review their own cases prepared according to ABE board documentation rules. (Quarters 5-8.)

EN 512. Classic Literature II. 12 Units.

Residents review the body of classic literature pertinent to endodontics, including material relevant for board preparation. (Quarters 5-8.)

EN 513. Current Literature II. 4 Units.

In this course, residents review current endodontic literature using the EndoLit iPad app. (Quarters 5-8.)

EN 530. Clinic Connections II. 1 Unit.

The collaboration between endodontists and other members of the dental team is essential for good clinical outcomes. A series of presentations by clinicians with different training and expertise reinforces an inclusive view of typical and atypical treatment modalities. (Quarter 8.)

T

Mahmoud Torabinejad
Adjunct Professor of Endodontics
BS, University of Tehran Medical School, 1967
Certificate, University of Illinois, Oral Pathology, 1974
DM, University of Tehran Dental School, Dentistry, 1971
MSD, University of Washington, Endodontics, 1976
PhD, University of London, 1995

W

Scott Wilkinson
Adjunct Assistant Professor of Endodontics
BA, West Virginia University, Biology, 1988
BA, West Virginia University, English, 1989
Certificate, Temple University, Endodontics Dept., Endodontics, 1999
DM, Medical University of South Carolina School of Dentistry, Dental Medicine, 1993

University of the Pacific
EN 558. Clinical Endodontics II. 42 Units.
Residents practice non-surgical endodontics appropriate in scope and case difficulty for the first year. (Quarters 5-8.).

EN 559. Clinical Endodontics: Surgery II. 4 Units.
Residents practice surgical endodontics appropriate in scope and case difficulty for the second year. (Quarters 5-8.).

EN 567. Endodontics at La Clinica II. 28 Units.
Residents practice non-surgical endodontics appropriate in scope and case difficulty for the second year at an affiliated extramural site. (Quarters 5-8.).

EN 571. Predoctoral Instruction. 4 Units.
Residents instruct predoctoral dental students in non-surgical endodontics. (Quarters 6-8.).

EN 611. Case Seminar III. 3 Units.
Residents review their own cases prepared according to ABE board documentation rules. (Quarter 9.).

EN 613. Current Literature III. 1 Unit.
In this course, residents review current endodontic literature using the EndoLit iPad app. (Quarter 9.).

EN 658. Clinical Endodontics III. 9 Units.
Residents practice non-surgical endodontics appropriate in scope and case difficulty for the third year. (Quarters 5-8.).

EN 659. Clinical Endodontics: Surgery III. 1 Unit.
Residents practice surgical endodontics appropriate in scope and case difficulty for the third year. (Quarter 9.).

EN 671. Residency Instruction. 2 Units.
Senior residents instruct first-year residents in endodontic technique. (Quarter 9.).

EN 684. ABE Seminar. 3 Units.
Residents participate in mock board exams and assemble their portfolios. (Quarter 9.).

Oral and Maxillofacial Surgery (OS)

Department Chairpersons
Anders Nattestad
Professor of Oral and Maxillofacial Surgery

Faculty

A
Michael Ajayi
Associate Professor of Oral and Maxillofacial Surgery
BDS, University of Lagos College of Medicine and Dentistry, 1975
BSc, University of Toronto, Toronto, Canada, 1981
Henry Ford Hospital, Oral Maxillofacial Surgery, Detroit, Michigan, Chief Resident, 1983
University of Toronto, Oral and Maxillofacial Surgery, Resident, 1981

Edmond Bedrossian
Professor of Oral and Maxillofacial Surgery
BS, University of San Francisco, Biology, 1981
DDS, Highland General Hospital, Certificate of Completion, 1990
DDS, University of the Pacific, 1986

John A. Boghossian
Associate Professor of Oral and Maxillofacial Surgery
BA, San Francisco State University, Biology, 1984

B

Fatima Mashkoor
Assistant Professor of Oral and Maxillofacial Surgery
BS, Fatima Jinnah Dental School, University of Karachi, Pakistan, Bachelors of Dental Surgery, 2004
Certificate, Medical College of Virginia, Post Baccalaureate Graduate Certificate in Anatomy and Neurobiology, 2008
DDS, Virginia Commonwealth University, School of Dentistry, Richmond, VA, Doctorate of Dental Surgery, 2012
The Brooklyn Hospital Center, Brooklyn, NY, Internship in Oral Maxillofacial Surgery, 2013

Joseph Clarence McMurray

L

Luis Ramon G. Limchayseng
Assistant Professor of Oral and Maxillofacial Surgery
BS, University of the East (Philippines), 1979
DMD, University of the Philippines College of Dentistry, 1983

M

Brandon Kang
Instructor of Oral and Maxillofacial Surgery
BA, Rutgers University, New Brunswick NJ, 2000
New York University, College of Dentistry, Doctor of Dental Surgery, 2004
Woodhull Medical Center Brooklyn NY, Oral Maxillofacial surgery, 2009

Sam F Khoury
Instructor of Oral and Maxillofacial Surgery
BS, Santa Clara University, Biology, 1999
DMD, University of Pittsburgh, Dental Medicine, 2005

F

Vincent Wayne Farhood
Associate Professor of Oral and Maxillofacial Surgery
Certificate, Wilford Hall USAF Medical Center, Oral Maxillofacial Surgery, 1978
DDS, University of Southern California, Dentistry, 1970

J

Bahram Javid
Associate Professor of Oral and Maxillofacial Surgery
BDS (LDS), King’s College Dental School, 1957
BDS, King College (Durham University) Sutherland Dental School, Newcastle-upon-Tyne, U.K., 1956
Diplomate, American Board of Oral and Maxillofacial Surgery, 1972
DMD, School of Dental Medicine, Tufts University, 1960
Eastman Dental Center, University of Rochester, Rochester, New York, USA, Clinical Fellow, 1958
Hilsea College (Basingstoke) U.K., School Certificate, Oxford University, U.K., 1951
Hospital of the University of Pennsylvania, Graduate School of Medicine, Pennsylvania, PA USA, Oral Surgery Residency Program, 1966
King’s College Dental School (Durham University). Newcastle-upon-Tyne, U.K., Junior House Officer, 1957

K

Brandon Kang
Instructor of Oral and Maxillofacial Surgery
BA, Rutgers University, New Brunswick NJ, 2000
New York University, College of Dentistry, Doctor of Dental Surgery, 2004
Woodhull Medical Center Brooklyn NY, Oral Maxillofacial surgery, 2009

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Instructor of Oral and Maxillofacial Surgery
BS, Santa Clara University, Biology, 1999
DMD, University of Pittsburgh, Dental Medicine, 2005

F

Vincent Wayne Farhood
Associate Professor of Oral and Maxillofacial Surgery
Certificate, Wilford Hall USAF Medical Center, Oral Maxillofacial Surgery, 1978
DDS, University of Southern California, Dentistry, 1970

J

Bahram Javid
Associate Professor of Oral and Maxillofacial Surgery
BDS (LDS), King’s College Dental School, 1957
BDS, King College (Durham University) Sutherland Dental School, Newcastle-upon-Tyne, U.K., 1956
Diplomate, American Board of Oral and Maxillofacial Surgery, 1972
DMD, School of Dental Medicine, Tufts University, 1960
Eastman Dental Center, University of Rochester, Rochester, New York, USA, Clinical Fellow, 1958
Hilsea College (Basingstoke) U.K., School Certificate, Oxford University, U.K., 1951
Hospital of the University of Pennsylvania, Graduate School of Medicine, Pennsylvania, PA USA, Oral Surgery Residency Program, 1966
King’s College Dental School (Durham University). Newcastle-upon-Tyne, U.K., Junior House Officer, 1957

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BA, Rutgers University, New Brunswick NJ, 2000
New York University, College of Dentistry, Doctor of Dental Surgery, 2004
Woodhull Medical Center Brooklyn NY, Oral Maxillofacial surgery, 2009

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BS, Santa Clara University, Biology, 1999
DMD, University of Pittsburgh, Dental Medicine, 2005

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Assistant Professor of Oral and Maxillofacial Surgery
BS, University of the East (Philippines), 1979
DMD, University of the Philippines College of Dentistry, 1983

M

Fatima Mashkoor
Assistant Professor of Oral and Maxillofacial Surgery
BS, Fatima Jinnah Dental School, University of Karachi, Pakistan, Bachelors of Dental Surgery, 2004
Certificate, Medical College of Virginia, Post Baccalaureate Graduate Certificate in Anatomy and Neurobiology, 2008
DDS, Virginia Commonwealth University, School of Dentistry, Richmond, VA, Doctorate of Dental Surgery, 2012
The Brooklyn Hospital Center, Brooklyn, NY, Internship in Oral Maxillofacial Surgery, 2013

Joseph Clarence McMurray
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Education/Training Details</th>
</tr>
</thead>
</table>
| Anders Nattestad                         | Assistant Professor of Oral and Maxillofacial Surgery | BS, Pt. Loma College, Biology, 1985  
MBA, Pepperdine University, Business Economics and Management, 2007  
University of Southern California, Oral Maxillofacial Surgery, 1994 |
| Joshua Parfitt                            | Instructor of Oral and Maxillofacial Surgery | BS, Linfield College, Physiology, 2009  
DDS, A.T Still University, Dentistry, 2015  
University of the Pacific, Oral and Maxillofacial Surgery, 2019 |
| Olya P Smutko                             | Instructor of Oral and Maxillofacial Surgery | BS, Arizona State University, Microbiology, 2006  
DDS, University of the Pacific School of Dentistry, Dentistry, 2009  
University of the Pacific, School of Dentistry, SF, Invisalign Certificate, 2008 |
| Len Tolstunov                             | Associate Professor of Oral and Maxillofacial Surgery | DDS, University of the Pacific, Graduated with honors (TAU KAPPA OMEGA), 1992  
DMD, Moscow Dental University, Doctor of Stomatology (DMD), graduated Summa Cum Laude, 1985  
Moscow Trauma Hospital, Resident in the department of oral and maxillofacial surgery, 1989  
University of California, San Francisco, Chief Resident in Oral and Maxillofacial Surgery, 1997  
University of California, San Francisco, Oral and Maxillofacial Surgery Internship, 1993  
University of California, San Francisco, Oral and Maxillofacial Surgery Residency, 1997 |
| Michael Lawrence Beckley                  | Adjunct Assistant Professor of Oral and Maxillofacial Surgery | BS, Texas Christian University, Biology, 1992  
DDS, Baylor College of Dentistry Texas A and M University, 1997  
University of the Pacific School of Dentistry, Oral and Maxillofacial Surgery, 2002 |
| Michael E. Cadra                          | Adjunct Assistant Professor of Oral and Maxillofacial Surgery | BS, University of California, Irvine, Biological Sciences, 1975  
Cottage Hospital, Santa Barbara, General Surgery, 1994  
DMD, Washington University School of Dental Medicine, Dentistry, 1982  
Los Angeles County/USC Medical Center, Oral and Maxillofacial Surgery, 1986  
MD, University of Alabama School of Medicine, Medicine, 1993  
Other, California State University, Fullerton, Graduate Research in Biochemistry, 1978 |
| Jesse M. Fa                               | Adjunct Instructor of Oral and Maxillofacial Surgery | BS, University of the Notre Dame, IN, Science, 2003  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2006  
PGY1 General Practice Residency VA/UCI Medical Center, Long Beach, Certificate, 2007  
PGY2 General Practice Residency VA/UCLA Medical Center, LA, Certificate, 2008  
University of Illinois at Chicago, Oral Surgery Internship, Certificate, 2010 |
| Ehssan Ghassemi                           | Adjunct Instructor of Oral and Maxillofacial Surgery | Western University of Health Sciences |
| Brian Goo                                 | Adjunct Instructor of Oral and Maxillofacial Surgery | University of Southern California |
| Joseph S Kim                              | Adjunct Assistant Professor of Oral and Maxillofacial Surgery | BA, Oxford College at Emery University, Chemistry, 1985  
DMD, Tufts University School of Dental Medicine, 1991  
Montefiore Medical Center, Specialty Certificate, 1997 |
| Gregory Scott Lee                         | Adjunct Assistant Professor of Oral and Maxillofacial Surgery | BA, University of the Pacific Stockton, Stockton California, 1984  
Certificate, University of the Pacific School of Dentistry, Highland General Hospital, 1997  
DDS, University of the Pacific School of Dentistry, 1987 |
| Kristin Lee                               | Adjunct Instructor of Oral and Maxillofacial Surgery | BS, Santa Clara University, Public Health Science, 2014  
DDS, Creighton University School of Dentistry, Dentistry, 2018 |
| Sean Lee                                  | Adjunct Instructor of Oral and Maxillofacial Surgery | BA, Dartmouth College, Neuroscience, 2011 |
DDS, Stony Brook School of Dental Medicine, General Dentistry, 2018

Wendy Peiwen Liao
Adjunct Instructor of Oral and Maxillofacial Surgery
BA, University of California, Berkeley, Molecular Cell Biology Emphasis in Neurobiology, 1999
BA, University of California, Berkeley, Music, 1999
DDS, University of California, Los Angeles, Degree Expected, 2004

Sheng (Charlie) Chuan Lin
Adjunct of Oral and Maxillofacial Surgery
BSc, University of British Columbia, Integrated Sciences (Biomechanics and Physiology), 2011
DMD, Harvard School of Dental Medicine, Dental Medicine, 2015

Sirish Makan
Adjunct Assistant Professor of Oral and Maxillofacial Surgery
BS, University of California Riverside, 2007
Certificate, Howard University Hospital, Oral and Maxillofacial Surgery, 2016
DDS, University of the Pacific, Dental Surgery, 2011
Georgetown University Hospital, Residency Rotation, 2016
Posnick Center for Facial Plastic Surgery, Residency Rotation, 2016

Nima Masoomi
Adjunct Assistant Professor of Oral and Maxillofacial Surgery
BS, St. Lawrence University, Cum Laude, Canton, New York, Bio/Chemistry, 1994
DMD, University of Pennsylvania School of Dental Medicine, Dental Medicine, 2001
Fellowship, T. Williams Evans Fellowship Columbus, Ohio, Facial Cosmetics Surgery, 2008
Internship, Vanderbilt University Medical Center, Nashville, TN, General Surgery, 2005
MD, Vanderbilt University School of Medicine, Nashville, TN, Medicine, 2007
Residency, Vanderbilt University, Nashville, TN, Oral Maxillofacial Surgery, 2007

Yuko Christine Nakamura
Adjunct Assistant Professor of Oral and Maxillofacial Surgery
BS, Duke University, Trinity College, Major: Cell Molecular Biology, Minor: Chemistry, 1999
DMD, Case Western Reserve University, School of Dental Medicine, Doctor of Medical Dentistry, 2004
MD, Columbia University - College of Physicians Surgeons, Doctor of Medicine, 2007
New York Presbyterian Hospital - Columbia Campus, General Surgery Internship, 2008
New York Presbyterian Hospital - Columbia Campus, Oral Maxillofacial Surgery Residency, 2010

Andrew Rich
Adjunct Instructor of Oral and Maxillofacial Surgery
BS, UC Santa Barbara, Biology, 2010
DMD, Western University of Health Sciences, Dentistry, 2018

Terry Rust

Adjunct Assistant Professor of Oral and Maxillofacial Surgery
BS, University of Oregon, 1962
County Hospital NY Intern, 1968
DDS, St. Louis University Dental School, Dentistry, 1967
North Welling Hospital, 1969
NYU Post Grad Oral Surgery, Oral Surgery, 1970

Roger W. Sachs
Adjunct Assistant Professor of Oral and Maxillofacial Surgery
Beth Israel Hospital, OMFS, 1971
BS, Parsons College, Biology, 1964
DMD, Temple University, Dentistry, 1970
Lincoln Hospital, Albert Einstein College of Medicine, Oral Maxillofacial Surgery, 1974
MS, Northeastern University, Physiology, 1966

Alireza Michael Sodeifi
Adjunct Assistant Professor of Oral and Maxillofacial Surgery
DMD, Harvard School of Dental Medicine, Dentistry, 1997
MD, Vanderbilt University School of Medicine, Dentistry, 2007
Vanderbilt University Medical Center, Chief Resident, Oral Surgery, 2003
Vanderbilt University Medical Center, Intern, Oral Surgery, 1998
Vanderbilt University Medical Center, Resident, General Surgery, 2001
Vanderbilt University Medical Center, Resident, Oral Surgery, 2002

Brett Sterling
Adjunct Instructor of Oral and Maxillofacial Surgery
New York University College of Dentistry

Ho Hyun Sun
Adjunct Instructor of Oral and Maxillofacial Surgery
BS, UCLA, Psychbiology, 2009
DMD, Western University, Dentistry, 2017

Justin Michael Young
Adjunct Instructor of Oral and Maxillofacial Surgery
BA, Miami University, Microbiology/Immunology, 1996
Certificate, Thomas Jefferson University Hospital, Department of Oral and Maxillofacial Surgery, Oral and Maxillofacial Surgery, 2007
Certificate, Thomas Jefferson University Hospital, General Surgery, 2005
DDS, Ohio State University College of Dentistry, Dentistry, 2000
MD, Jefferson Medical College, OMFS/Medicine Summa cum laude, 2004

Wenli Yu
Adjunct Instructor of Oral and Maxillofacial Surgery
DDS, Peking University, Dentistry, 2001
DDS, University of Minnesota, Dentistry, 2017
Other, Peking University, OMFS, 2004
PhD, Baylor College of Dentistry, Biomedical Sciences, 2017

Course Descriptions
Predoctoral Courses
OS 139. Preclinical Multidisciplinary Surgery. 1 Unit.
Study of the principles of mucoperiosteal flap design, biopsy techniques, suturing, use of flaps, bone removal, and tooth sectioning for exodontia; apicectomy in endodontic surgery and osseous surgery. Soft tissue grafting in periodontics will also be demonstrated. (7.5 hours lecture, 4 hours laboratory. Quarter 4.)
OS 239. Clinical Oral and Maxillofacial Surgery I. 1 Unit.
Oral and maxillofacial surgical treatment planning and treatment including routine exodontia, incision and drainage, biopsy, mucoperiosteal flap design, sectioning of teeth, and bone removal; utilizing accepted procedures for asepsis; and patient preparation, positioning, and management including obtaining patients’ informed consent and proper consideration for medically compromised patients. The student learns to assume responsibility for recognizing limitations of their competence and to refer patients who need more complex surgical treatment to a specialist. (Quarters 9-12.).

OS 339. Clinical Oral and Maxillofacial Surgery II. 2 Units.
Oral and maxillofacial surgical treatment planning and treatment including routine exodontia, incision and drainage, biopsy, mucoperiosteal flap design, sectioning of teeth, and bone removal; utilizing accepted procedures for asepsis; and patient preparation, positioning, and management including obtaining patients’ informed consent and proper consideration for medically compromised patients. The student learns to assume responsibility for recognizing limitations of their competence and to refer patients who need more complex surgical treatment to a specialist. (Quarters 9-12.).

Graduate Courses
OS 434. Implant Seminar I. 4 Units.
In this implant treatment-planning seminar, endodontics residents discuss case presentations and treatment planning options. The focus will be on evidence-based treatment options. (Quarters 1-4.).

OS 439. Advanced Oral Surgery and Implantology I. 6 Units.
This hands-on course provides endodontics residents the foundational and practical knowledge of treatment planning and placement. (Quarters 3-4.).

OS 534. Implant Seminar II. 4 Units.
In this implant treatment-planning seminar, endodontics residents discuss case presentations and treatment planning options. The focus will be on evidence-based treatment options. (Quarters 5-8.).

OS 634. Implant Seminar III. 1 Unit.
In this implant treatment-planning seminar, endodontics residents discuss case presentations and treatment planning options. The focus will be on evidence-based treatment options. (Quarter 9.).

Orthodontics (OR)
Department Chairperson
HeeSoo Oh
Professor of Orthodontics

Program Director
HeeSoo Oh
Professor of Orthodontics

Associate Director of the Craniofacial Research Instrumentation Laboratory (CRIL)
HeeSoo Oh
Professor of Orthodontics

Director of the Cleft Lip and Palate Prevention Program
Marie Milena Tolarova
Professor of Orthodontics

Faculty
B
Marta Parisek Baird

Assistant Professor of Orthodontics
American Board of Orthodontics, Diplomate, 2012
BS, University of the Pacific, Biological Sciences Summa Cum Laude, 2005
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2008
McLaughlin, 2 year course, 2017
MSD, CERT, University of the Pacific Arthur A. Dugoni School of Dentistry, MS in Dentistry, Certification in Orthodontics, 2011
Western Regional Board Exam, successfully completed, 2008

Roger P. Boero
Associate Professor of Orthodontics
DDS, College of Physicians Surgeons (UOP), Dentistry, 1964
MSD, University of the Pacific, Orthodontics, 1995
Pomona College, 1960
University of the Pacific, Orthodontics, 1975

C
David William Chambers
Professor of Orthodontics
AB, Harvard University, Experimental psychology, 1965
Cambridge University, Department of Philosophy, Visiting Scholar, 2008
Center for Philosophy of Natural and Social Sciences, London School of Economics, Visiting Scholar, 2012
EdM, Harvard University, School of Education, Educational evaluation, 1966
MBA, San Francisco State University, Management and operations research, 1979
PhD, Stanford University, School of Education, Educational psychology, 1969
University of California, Berkeley, Department of Philosophy, Visiting Scholar, 2010

James Chen
Assistant Professor of Orthodontics
Certificate, University of California - San Francisco, Orthodontics, 2011
DDS, University of California - San Francisco, Dentistry, 2005
Other, University of California - Berkeley, MPH - Health Policy Concentration, 2011
PhD, University of California - San Francisco, Oral and Craniofacial Sciences, 2011

K
Katherine Kieu
Instructor of Orthodontics
BS, University of California, Los Angeles, Biology, 2005
DDS, University of California, San Francisco, Dentistry, 2009
MSD, University of the Pacific, Orthodontics, 2012

M
Kimberly A Mahood
Assistant Professor of Orthodontics
BS, University of Louisville, Biology, 2000
DMD, University of Kentucky College of Dentistry, Dentistry, 2004
MSD, University of the Pacific Arthur A. Dugoni School of Dentistry, Orthodontics, 2010
University of Kentucky College of Dentistry, Oral and Maxillofacial Surgery, 2005
Heesoo Oh  
**Professor of Orthodontics**  
Chonnam National University Hospital, Korea, Pediatric Dentistry, 1992  
DDS, Chonnam National University School of Dentistry, Korea, Dentistry, 1989  
MS, Chonnam National University, School of Dentistry, Korea, Pediatric Dentistry, 1992  
MSD, University of the Pacific, Arthur A. Dugoni School of Dentistry, Orthodontics, 2005  
PhD, Chonnam National University, School of Dentistry, Korea, Oral Biology, 1999  
University of the Pacific, School of Dentistry, Graduate Residency Program - AEGD, 2001

Joorok Park  
**Assistant Professor of Orthodontics**  
BA, University of California, Berkeley, Molecular and Cell Biology, 2001  
DMD, University of Pennsylvania, School of Dental Medicine, Dental Medicine, 2006  
MSD, University of the Pacific, Arthur A. Dugoni School of Dentistry, Certificate, Orthodontics, 2008

Heeyeon Suh  
**Assistant Professor of Orthodontics**  
BS, Seoul National University, Chemical Engineering, 2004  
DDS, Seoul National University, General Dentistry, 2009  
PhD, Seoul National University, Dentistry, 2015

Miroslav Tolar  
**Associate Professor of Orthodontics**  
MD, Charles University School of Medicine, 1965  
PhD, Czechoslovak Academy of Sciences Charles University School of Medicine, Postgraduate Program in Physiology, 1970  
University of California in San Francisco, Postgraduate course in biostatistics biomodeling, 1993

Marie Milena Tolarova  
**Professor of Orthodontics**  
Board Cert, Postgraduate Medical Institute, Prague, Czechoslovakia, Medical Genetics, Board Certificate, 1985  
Board Cert, Postgraduate Medical Institute, Prague, Czechoslovakia, Pediatrics, Board Certificate, 1985  
DSc, Czechoslovak Academy of Sciences, Prague, Czechoslovakia, Medical Genetics, 1986  
Gymnasium, Tabor, Czechoslovakia, College education, 1959  
MD, Charles University School of Medicine, Prague, 1965  
PhD, Czechoslovak Academy of Sciences Charles University School of Medicine, Prague, Czechoslovakia, Human Genetics, 1979

Jennifer Yau  
**Instructor of Orthodontics**  
BS, University of the Pacific, Biology, 2009  
DDS, University of California, Los Angeles, Doctor of Dental Surgery, 2013  

Olivia Yue  
**Assistant Professor of Orthodontics**  
DDS, University of California, Los Angeles: School of Dentistry, 2015  
New York University School of Dentistry, Orthodontic Residency, 2018  
NYU Langone, Orthodontic Craniofacial Fellowship, 2019

**Adjunct Faculty**

Hesham Amer  
**Adjunct Assistant Professor of Orthodontics**  
BDS, Cairo University (Cairo, Egypt), General Dentistry, 1995  
MS, University of the Pacific School of Dentistry, Orthodontics, 2001

Christopher Anderson  
**Adjunct Assistant Professor of Orthodontics**  
BS, Santa Clara University, Biology, 2001  
DDS, University of the Pacific, Dentistry, 2004  
MSD, University of the Pacific, Orthodontics, 2006

Maryse M. Aubert  
**Adjunct Associate Professor of Orthodontics**  
DDS, University Paris V, Dentistry, 1976  
MA, University of the Pacific, Education, 1994  
MA, University of the Pacific, Psychology and Counseling, 1994  
University of California, San Francisco, Certificate of Participation - Temporomandibular, 1996  
University of the Pacific, Orthodontics, 1980  
University Paris VII, Embryology, 1976

Thomas Reed Bales  
**Adjunct Assistant Professor of Orthodontics**  
Certificate, UCLA, Orthodontics, 1976  
DDS, University of the Pacific, School of Dentistry, Dental, 1974  
University of California Davis, 1971

Robert L. Boyd  
**Adjunct Professor of Orthodontics**  
CERT, University of Pennsylvania, Orthodontics, 1974  
CERT, University of Pennsylvania, Periodontics, 1972  
DDS, Temple University, Dentistry, 1970  
Indiana University, Biology, 1966  
Med, University of Florida, Dental Education, 1981

Ana Calles  
**Adjunct Instructor of Orthodontics**  
BA, Wake Forest University, Spanish Literature, 2011  
DMD, Harvard University, Dentistry, 2017  
MSD, University of the Pacific, Orthodontics, 2019

Sean K. Carlson  
**Adjunct Assistant Professor of Orthodontics**  
BA, University of California, Santa Barbara, Biology, 1989  
DMD, Harvard School of Dental Medicine, Dentistry, 1994  
MS, University of California, San Francisco, Oral Biology, 1998  
University of California, San Francisco, Orthodontics Certificate, 1998  

William A Cole  
**Adjunct Associate Professor of Orthodontics**
Bill Dischinger
Adjunct Assistant Professor of Orthodontics
BS, Oregon State University, Pre-Dental, 1994
Certificate, Tufts University, Orthodontics, 1999
DMD, Oregon Health Sciences University, Dentistry, 1997
Lake Oswego High School, 1990

Steven A. Dugoni
Adjunct Professor of Orthodontics
DMD, Tufts University, 1979
MSD, University of the Pacific, 1981

Stuart Lund Frost
Adjunct Assistant Professor of Orthodontics
Arizona State University, 1989
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1992
Eastman School of Dentistry, Certificate in TMJD, 1988
Mesa Community College, 1989
University of Rochester, Eastman Dental Center, Certificate in Orthodontics, 2000

John P. Gibbs
Adjunct Associate Professor of Orthodontics
BS, University of Nebraska, Nebraska, 1954
DDS, University of Nebraska Medical Center, Nebraska, Doctor of Dental Surgery, 1956
Other, University of Nebraska, Nebraska, Orthodontics, 1960

David C. Hatcher
Adjunct Associate Professor of Orthodontics
BA, Central Washington State College (1969), Biology
DDS, University of Washington, Seattle (1973), Dentistry
M.R.C.D., University of Toronto, Ontario Canada (1983), Oral Radiology
M.Sc., University of Toronto, Ontario Canada (1983), Oral Radiology
University of Vermont Medical Center (1976), General Practice Residency
University of Washington, Seattle (1965), Biology
University of Washington, Seattle (1968), Biology
Western Washington State College (1969), Biology

Hyeon-Shik Hwang
Adjunct Associate Professor of Orthodontics
DDS, Yonsei University, Dentistry, 1983
MSD, Yonsei University, Orthodontics, 1989
Other, Yonsei University, Pre-Dentistry, 1979
PhD, Yonsei University, Orthodontics, 1992

Adrienne Joy
Adjunct Instructor of Orthodontics
AB, Princeton University, Chemistry, 2011
Certificate, Princeton University, Materials Science and Engineering, 2011
Certificate, University of the Pacific, Orthodontics, 2018

Bill Dischinger
Adjunct Assistant Professor of Orthodontics
BS, Oregon State University, Pre-Dental, 1994
Certificate, Tufts University, Orthodontics, 1999
DMD, Oregon Health Sciences University, Dentistry, 1997
Lake Oswego High School, 1990

Steven A. Dugoni
Adjunct Professor of Orthodontics
DMD, Tufts University, 1979
MSD, University of the Pacific, 1981

Stuart Lund Frost
Adjunct Assistant Professor of Orthodontics
Arizona State University, 1989
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1992
Eastman School of Dentistry, Certificate in TMJD, 1988
Mesa Community College, 1989
University of Rochester, Eastman Dental Center, Certificate in Orthodontics, 2000

John P. Gibbs
Adjunct Associate Professor of Orthodontics
BS, University of Nebraska, Nebraska, 1954
DDS, University of Nebraska Medical Center, Nebraska, Doctor of Dental Surgery, 1956
Other, University of Nebraska, Nebraska, Orthodontics, 1960

David C. Hatcher
Adjunct Associate Professor of Orthodontics
BA, Central Washington State College (1969), Biology
DDS, University of Washington, Seattle (1973), Dentistry
M.R.C.D., University of Toronto, Ontario Canada (1983), Oral Radiology
M.Sc., University of Toronto, Ontario Canada (1983), Oral Radiology
University of Vermont Medical Center (1976), General Practice Residency
University of Washington, Seattle (1965), Biology
University of Washington, Seattle (1968), Biology
Western Washington State College (1969), Biology

Hyeon-Shik Hwang
Adjunct Associate Professor of Orthodontics
DDS, Yonsei University, Dentistry, 1983
MSD, Yonsei University, Orthodontics, 1989
Other, Yonsei University, Pre-Dentistry, 1979
PhD, Yonsei University, Orthodontics, 1992

Adrienne Joy
Adjunct Instructor of Orthodontics
AB, Princeton University, Chemistry, 2011
Certificate, Princeton University, Materials Science and Engineering, 2011
Certificate, University of the Pacific, Orthodontics, 2018
Shikha Rathi
Adjunct Assistant Professor of Orthodontics
BDS, D.Y. Patil College of Dentistry, general dentistry, 2004
Certificate, University of Texas Health Science Center San Antonio, Oral and maxillofacial Radiology, 2010
D.Y. Patil Dental College and Hospital, General Dentistry Internship, 2005
MS, University of Texas Health Science Center San Antonio, Oral and Maxillofacial Radiology, 2011
Preceptors, University of Texas HSC San Antonio, Oral and Maxillofacial Radiology, 2007

W. Ron Redmond
Adjunct Associate Professor of Orthodontics
BA, U C Riverside, Zoology, 1962
DDS, University of the Pacific, Dentistry, 1966
MS, University of Southern California, Orthodontics, 1970

Michael R. Ricupito
Adjunct Associate Professor of Orthodontics
BA, San Jose State University, Biological Science, Psychology minor, 1980
DDS, University of the Pacific School of Dentistry, Dentistry, 1983
MS, University of California at Los Angeles School of Dentistry, Oral Biology, 1987
University of California at Los Angeles School of Dentistry, Certificate in Orthodontics, 1987

Bert D. Rouleau
Adjunct Assistant Professor of Orthodontics
BS, University of Vermont, Zoology, Botany, 1975
DMD, Tufts University, Dentistry, 1978
MS, Northwestern University, Pediatric Dentistry, 1980
MSD, University of the Pacific, Orthodontics, 1982

L. William Schmohl
Adjunct Assistant Professor of Orthodontics
BS, University of California Berkeley, Business Administration, 1966
DDS, University of California, San Francisco, Dentistry, 1970
MS, Case Western Reserve University, Orthodontics, 1974
U.S. Naval Hospital, Oakland, CA, Externship, 1969

Kenneth Shimizu
Adjunct Assistant Professor of Orthodontics
BS, University of California, Berkeley, Biology, 1980
DDS, University of the Pacific, Dentistry, 1985
MSD, University of the Pacific, Orthodontics, 1987

Kevin Shimizu
Adjunct Instructor of Orthodontics
BS, UC Davis, Biological Sciences Environmental Toxicology, 2013
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, dentistry, 2017
MSD, University of the Pacific Arthur A. Dugoni School of Dentistry, orthodontics, 2019

Sandra Khong Tai
Adjunct Assistant Professor of Orthodontics
BDS, University Malaya, Dentistry, 1986
MS, University of Minnesota, Orthodontics, 1990

Gregory V Wadden
Adjunct Assistant Professor of Orthodontics
BS, University of Maryland, Zoology, 1968
Certificate, DeWitt Army Hospital, Rotating Dental Internship, 1973
Certificate, University of the Pacific, orthodontics, 1977
DDS, Georgetown University, Dentistry, 1972

Audrey Yoon
Adjunct Assistant Professor of Orthodontics
DDS, Seoul National University, College of Dentistry, South Korea, dentistry, 2000
DDS, University of California, Los Angeles, dentistry, 2004
MS, University of California, Los Angeles, Oral Biology, 2008
Seoul National University, College of Natural Science, South Korea, preliminary course in dentistry, 1996
University of California, Los Angeles, orthodontics, 2008
University of California, Los Angeles, pediatrics, 2008

Course Descriptions

Predoctoral Courses

OR 244. Orthodontics. 2 Units.
An introduction to orthodontic diagnostic procedures, comprehensive treatment planning, and various treatment modalities as applied to a full range of malocclusions in a general dental practice. A strong emphasis is placed on the use of the Invisalign appliance and its application in general practice. Other orthodontic appliances covered will be the functional appliance as it relates to early orthodontic treatment and the edgewise appliance in full comprehensive cases. Orthognathic surgical cases and use of microimplants for anchorage will also be reviewed. (20 hours lecture. Quarters 4-5.)

OR 249. Preclinical Orthodontics. 1 Unit.
This preclinical course introduces students to various removable and fixed appliances with primary focus on their application for minor orthodontic movement. Laboratory instruction addresses such areas as fabrication of removable and fixed appliances, cementation of bands, bonding of brackets and placement of arch wires. Lateral head films are traced, measured, analyzed, and discussed with regard to norms and growth patterns. The course also introduces students to 3-D computer technology for the manufacturing of the Invisalign system appliance and the use of this appliance in general practice. Emphasis is placed on critical self-evaluation skills. (12 hours seminar. Quarter 8.)

OR 348. Applied Orthodontics. 1 Unit.
A study of standard orthodontic records and their application to diagnosis, treatment planning, and treatment evaluation in the mixed and permanent dentitions. Students will present cases incorporating digital records, cephalometric analysis, photographs, to explain diagnostic, treatment planning, and treatment procedures. (12 hours seminar, 6 hours graduate orthodontic clinic. Quarters 9-10.)
Graduate Courses

OR 400. Craniofacial Biology & Genetics. 1 Unit.
In about sixty percent of dental conditions and diseases, genetics plays an important – and sometimes the major – role in etiology. As orthodontics is focusing on treatment of malocclusions and dentofacial deformities, in etiology of which genetics is almost always in the background, it is important for an orthodontist to understand why or how a malocclusion occurs, how it reacts to a treatment plan, to what extent it may be expressed in the next generation, and -last but not least- if it can be prevented. The concepts of heredity and genetics in orthodontics are covered in this course starting with historical Orthodontia Era (1900-1930), through Hereditary vs Environment Era (1930-1970) and Heritability Era (1970-2000) to the present time Orthodontic Genomic Era. Nowadays, genetics is a backbone of personalized medicine and also of personalized orthodontics. Patient’s treatment outcome may be affected by combinations of specific gene mutations not only in orofacial clefts, craniofacial anomalies and malocclusions, but also in external apical root resorption, mandibular morphology, tooth size, hypodontia, and other conditions. Understanding of basic genetic and translational research concepts is needed for precision orthodontics and for utilization of modern genomic information for improved treatment of malocclusions and dentofacial deformities.

OR 401. Cephalometrics. 4 Units.
The purpose of the course is to introduce students to the use of cephalometric radiographs in clinical orthodontics. In addition to understanding basic principles and the historical significance of cephalometry, students will learn how to interpret various cephalometric analyses that are most commonly used in diagnosis and treatment planning. At the end of this course, students should also be able to perform various methods of superimposition in order to identify and understand changes that occurred during growth and treatment between different lateral cephalometric radiographs. (Quarters 1-2.).

OR 402. Facial Growth. 4 Units.
The purpose of the course is to provide students with scientific literature that supports current knowledge and understanding of basic biological principles on craniofacial growth and development. This course focuses on the basic mechanisms of postnatal growth of the cranium, nasomaxillary complex and mandible, and the clinical application of facial growth principles. (Quarters 3-4.).

OR 403. Critical Thinking - Research Design. 3 Units.
The purpose of the course is to provide students with foundational knowledge on scientific methods, while also honing an ability to critically evaluate the literature and to design a sound research project. (Quarters 2-4.).

OR 404. Research Practicum and Thesis I. 2 Units.
This is an independent research course. Under the guidance of research mentors, students develop research questions, formulate hypotheses and write a formal research proposal that includes a full literature review, statement of method and methods, execution of the research, and appropriate analysis and interpretation of data. This course is designed to enable successful completion of the MS thesis. (Quarters 1-4.).

OR 410. Biomechanics. 7 Units.
The purpose of the course is to introduce fundamental concepts for understanding the laws of mechanics and biological responses to force systems used in orthodontic appliances. This is a seminar-based course designed to teach first year residents the basic principles of biomechanics and theories related to planning and designing orthodontic force systems. Students will be expected to read and understand background material in assigned articles & textbooks for seminar discussions. (Quarters 1-4.).

OR 411. Craniofacial Biology & Genetics - Genetics in Orthodontics. 2 Units.
In about sixty percent of dental conditions and diseases, genetics plays an important – and sometimes the major – role in etiology. As orthodontics is focusing on treatment of malocclusions and dentofacial deformities, in etiology of which genetics is almost always in the background, it is important for an orthodontist to understand why or how a malocclusion occurs, how it reacts to a treatment plan, to what extent it may be expressed in the next generation, and -last but not least- if it can be prevented. The concepts of heredity and genetics in orthodontics are covered in this course starting with historical Orthodontia Era (1900-1930), through Hereditary vs Environment Era (1930-1970) and Heritability Era (1970-2000) to the present time Orthodontic Genomic Era. Nowadays, genetics is a backbone of personalized medicine and also of personalized orthodontics. Patient’s treatment outcome may be affected by combinations of specific gene mutations not only in orofacial clefts, craniofacial anomalies and malocclusions, but also in external apical root resorption, mandibular morphology, tooth size, hypodontia, and other conditions. Understanding of basic genetic and translational research concepts is needed for precision orthodontics and for utilization of modern genomic information for improved treatment of malocclusions and dentofacial deformities. (Quarters 2-3.).

OR 412. Cleft Lip & Palate/Craniofacial Anomalies - Orofacial Clefts and Abnormal Craniofacial Development. 2 Units.
This course provides information needed for understanding of concepts related to disturbed and compromised craniofacial growth. It forms a necessary background that makes possible to distinguish and diagnose craniofacial abnormalities. Principles of developmental craniofacial biology and craniofacial embryology are reviewed and continuously updated with new findings and discoveries. Particular emphasis is given to molecular regulation of craniofacial morphogenesis, abnormal neural crest formation (leading to Treacher Collins syndrome, Pierre Robin sequence, DiGeorge sequence, and Hemifacial Microsomia), and molecular regulation of skeletal morphogenesis and disorders comprising the FGFR-related craniosynostosis spectrum (Apert, Crouzon, Pfeiffer, Muenke, Jackson-Weiss, and Beare-Stevenson syndromes). In order to build a solid foundation for the clinical dental treatment and, specifically, for orthodontic treatment of orofacial clefts (cleft lip, cleft palate and cleft palate only) – complex etiology of these anomalies, that is influenced by a genetic background and environmental factors, is explained. Points of origin and importance of precise diagnosis of nonsyndromic and syndromic cases are emphasized. (Quarter 4.).

OR 414. Introduction to Contemporary Orthodontics. 4 Units.
The purpose of the course is to introduce basic artistic skills in contemporary orthodontics. This is a seminar-based course designed for first year residents to review the basic concepts of photography, direct bonding of fixed appliances, 3D imaging, 3D cephalometric analysis, and digital imaging software (2D and 3D). Students will be expected to read and understand background material in assigned articles for seminar discussions. They are also expected to complete assignments. This course will consist of 17 seminar sessions throughout the first year of residency. (Quarters 1-3.).

OR 420. Bone Biology. 3 Units.
The purpose of this course is for students to gain an understanding of the general biological activities of bone. This is a seminar-based course designed for first year residents to review basic concepts and theories of bone biology, orthodontic tooth movement, and osseointegration of orthodontic microimplants. Students will be expected to read and understand background material in assigned articles & textbooks for seminar discussions. (Quarter 4.).
OR 421. Current Literature Seminar I. 4 Units.
A review of articles appearing in orthodontic and related journals is presented using a seminar format. (Quarters 1-4.)

OR 422. Anatomy. 1 Unit.
This course provides a detailed review of anatomic structures of the craniofacial region. Lecture topics include osteology of the skull, innervation and blood supply of the face, muscles of facial expression and mastication, and anatomy of the oral cavity. (Quarter 1.)

OR 423. Comprehensive Case Analysis Seminar I. 4 Units.
The seminar highlights the clinical application of various diagnostic procedures and treatment philosophies and the presentation of practical procedures in the management of unusual problems that can arise during the course of treatment. Basic and applied principles of photography and advances in computer technology are integral to this course. During each session, a Comprehensive Case Analysis is presented by the second year residents. All students then participate in discussion about the case. (Quarters 1-4.)

OR 424. Treatment Planning Seminar I. 2 Units.
A case presentation is prepared by the first-year residents to share initial diagnostic records in order to diagnose and treatment plan orthodontic cases. All students then participate in free-format discussion. (Quarters 1-4.)

OR 426. Principles of Orthodontic Technique. 5 Units.
This course is designed to provide basic principles on orthodontic tooth movement and fixed appliances by working on typodonts. (Quarters 1-2.)

OR 430. Surgical-Orthodontic Treatment. 4 Units.
The purpose of this course is to provide the student with fundamental knowledge in orthognathic surgery and its role in the orthodontic treatment of skeletal malocclusions. This seminar-based course covers basic concepts involved in surgical orthodontics, which include: diagnosis and treatment planning, pre-surgical orthodontics, surgical procedures utilized by oral surgeons, and post-surgical orthodontics. In addition, topics such as TMJ disorders, Distraction Osteogenesis, and Obstructive Sleep Apnea are discussed. The goal is for the student to understand these surgical concepts and implement them in the clinical treatment of orthognathic surgery patients. (Quarters 1-3.)

OR 431. Orthognathic Surgery Seminar I. 4 Units.
This course is a joint seminar for the orthodontic and oral surgery residents that is held once a month during the first and second years of the residency program. The Orthognathic Surgery Seminar consists of case presentations by the Orthodontic and Oral and Maxillofacial Surgery faculty and residents. Emphasis is placed on diagnosis, treatment planning, management of pre- and post surgical orthodontic treatment, and understanding of treatment outcome and stability. (Quarters 1-4.)

OR 432. Multidisciplinary Seminar I. 4 Units.
The treatment of patients with complex dental and skeletal orthodontic, periodontal, and restorative problems that requires input from a variety of dental specialties is considered. The teaching format includes case presentations by the residents and open discussions of interdisciplinary topics. (Quarters 1-4.)

OR 433. Retention Seminar I. 1 Unit.
Long-term post-active treatment records provide invaluable material for studying stability of orthodontic treatment outcome. Each of the second year residents is required to present the long-term post retention patient whose active orthodontic treatment was completed at least ten years prior to the resident’s year of graduation from the program. Faculty and the first year residents are participated in the discussion after the presentation. (Quarter 4.)

OR 434. Introduction to Invisalign. 1 Unit.
The purpose of this course is to introduce basic knowledge on clinical applications of Invisalign treatment, while also incorporating the latest treatment protocols. (Quarter 1.)

OR 440. Imaging in Orthodontics, TMJ & Airway Consideration. 4 Units.
Orthodontists have a fundamental interest in facial form, facial growth patterns, occlusion and any pathologic conditions that may alter them. Current three-dimensional (3D) imaging techniques available for routine imaging provide the opportunity to utilize a “systems approach” in order to visualize and evaluate the functional and developmental relationships between proximal craniofacial regions. This course will discuss the use of 3D imaging to evaluate the developmental and functional inter-relationships between TMJ, occlusions, airway, and facial growth. (Quarters 2-3.)

OR 441. Orthodontic Treatment of Craniofacial Anomalies. 2 Units.
Understand and relate embryology, abnormal growth and development and sequelae of surgical repair of craniofacial anomalies to the orthodontic treatment of craniofacial anomalies. (Quarters 2-4.)

OR 445. Clinical Orthodontics I. 30 Units.
Clinical orthodontics includes various appliance systems: edgewise appliance (.018 & .022” slot), TAD, self-ligating brackets, fixed-functional appliance (Herbst, Forsus), and Invisalign for adolescent and adult patients. Clinical experience in treating orthodontic patients with a variety of problems is provided. In addition, various orthopedic appliances, including the headgear, face mask, rapid maxillary expander and other fixed auxiliary appliances (LLA, TPA, Wilson distalizer) may be incorporated into specific treatment protocols. Patients are treated in the Graduate Orthodontic Clinic every afternoon Monday-Friday, as well as Thursday nights. (Quarters 1-4.)

OR 457. Mixed Dentition Orthodontics I. 8 Units.
In addition to a didactic portion that focuses on the review of mixed dentition articles and comprehensive case analyses, this course also includes clinical sessions that provide residents with basic knowledge and experience in treating various malocclusions in the mixed dentition stage. This course provides an understanding of facial growth and occlusal development in the mixed dentition, an ability to diagnosis and treatment plan mixed dentition cases, and an ability to evaluate growth changes and treatment outcomes. (Quarters 1-4.)

OR 458. Surgical Orthodontics I. 2 Units.
This course provides clinical experience in analyzing diagnostic records and formulating surgical orthodontic treatment plans for patients with major skeletal and dental disharmonies that require integration of surgical and orthodontic treatment, communication with surgeons, pre- and post-surgical orthodontic treatment, and evaluation of treatment outcomes. (Quarters 1-4.)

OR 459. Clinical Orthodontics in Craniofacial Anomalies I. 2 Units.
This course combines the orthodontic treatment of patients with craniofacial anomalies in the graduate clinic and attending panels provided by comprehensive Oakland Children’s Hospital Craniofacial Anomalies Teams. (Quarters 1-4.)

OR 501. Principles of Orthodontics. 8 Units.
Principles of Orthodontics is a literature-based seminar. Each resident will participate in discussion with emphasis on the critical analysis and evaluation of the scientific methodology in the literature reviewed. Topics include Principles of Orthodontics Introduction, Biomechanics, Facial growth, Retention & Relapse, Functional appliances, Intraoral forces, Mandibular motion & Tooth contact, Maxillo-Mandibular references, and Occlusal treatment objectives. Each seminar will focus on the clinical application of the material. (Quarters 5-8.)
OR 502. Microimplant I. 2 Units.
The objective of the course is to comprehensively review the factors related to safety and stability of orthodontic microimplants and their clinical application in orthodontic treatment. Students will be expected to read and understand background material in assigned articles for seminar discussions. They will also present their own clinical cases that utilized microimplants. (Quarters 5-6.).

OR 503. Research Design I. 4 Units.
An advanced course for orthodontic graduate students in which the nature of hypothesis testing, the process of clinical decision making, and the statistical methodology to be employed in each student's thesis project is discussed. (Quarters 5-8.).

OR 504. Research Practicum and Thesis II. 5 Units.
This is an independent research course. Under the guidance of research mentors, students develop research questions, formulate hypotheses and write a formal research proposal that includes a full literature review, statement of material and methods, execution of the research, and appropriate analysis and interpretation of data. This course is designed to enable successful completion of the M.S thesis. (Quarters 5-8.).

OR 510. Periodontic-Orthodontic Relations. 6 Units.
This course includes the Orthodontic-Restorative-Periodontal Interface: Esthetic & Functional Considerations, Periodontal and Other Benefits of Two Phase vs. Single Phase Orthodontic Treatment, Clinical Considerations of Orthodontic Root Resorption, Periodontal Considerations in the Orthodontic Treatment of Impacted Teeth, Invisalign treatment. Part II Invisalign Treatment: What are the Latest Innovations from Invisalign and Do They make Possible Now the Successful Treatment of Complex Class I, II, and III Malocclusions? (Quarters 5-6.).

OR 511. Practice Management I. 4 Units.
The goal of the Practice Management Course is to introduce and familiarize the orthodontic residents with a multitude of basic concepts that include human resource management, management systems, marketing, legal aspects of orthodontics, associateships/practice ownership, and customer service. The course includes: 1) guest lectures by orthodontists, orthodontic consultants, and other professionals connected to the specialty of orthodontics, and 2) private practice office visits both in the San Francisco Bay area and out-of-state. (Quarters 7-8.).

OR 512. Preparation for Specialty Examination. 2 Units.
This course will prepare the 2nd year residents for the American Board of Orthodontics Written Exam. This provides a comprehensive review of basic sciences and clinical concepts in orthodontics. This course will consist of 10 seminar sessions during the Winter and Spring quarters of the 2nd year of residency. (Quarter 7.)

OR 514. Temporomandibular Joint Disorders. 1 Unit.
This course provides an overview of clinical anatomy and mechanics of the TMJ, pathogenesis of degenerative TMD disorders, and various approaches on the management of TMD. (Quarter 7.)

OR 521. Current Literature Seminar II. 4 Units.
A review of articles appearing in orthodontic and related journals is presented using a seminar format. (Quarters 5-8.).

OR 523. Comprehensive Case Analysis Seminar II. 4 Units.
The seminar highlights the clinical application of various diagnostic procedures and treatment philosophies and the presentation of practical procedures in the management of unusual problems that can arise during the course of treatment. Basic and applied principles of photography and advances in computer technology are integral to this course. During each session, a Comprehensive Case Analysis is presented by the second year residents. All students then participate in discussion about the case. (Quarters 5-8.).

OR 524. Treatment Planning Seminar II. 2 Units.
A case presentation is prepared by the first-year residents to share initial diagnostic records in order to diagnose and treatment plan orthodontic cases. All students then participate in free-format discussion. (Quarters 5-8.).

OR 531. Orthognathic Surgery Seminar II. 4 Units.
This course is a joint seminar for the orthodontic and oral surgery residents that is held once a month during the first and second years of the residency program. The Orthognathic Surgery Seminar consists of case presentations by the Orthodontic and Oral and Maxillofacial Surgery faculty and residents. Emphasis is placed on diagnosis, treatment planning, management of pre- & post surgical orthodontic treatment, and understanding of treatment outcome and stability. (Quarters 5-8.).

OR 532. Multidisciplinary Seminar II. 4 Units.
The treatment of patients with complex dental and skeletal orthodontic, periodontal, and restorative problems that requires input from a variety of dental specialties is considered. The teaching format includes case presentations by the residents and open discussions of interdisciplinary topics. (Quarters 5-8.).

OR 533. Retention Seminar II. 1 Unit.
Long-term post-active treatment records provide invaluable material for studying stability of orthodontic treatment outcome. Each of the second year residents is required to present the long-term post retention patient whose active orthodontic treatment was completed at least ten years prior to the resident's year of graduation from the program. Faculty and the first year residents are participated in the discussion after the presentation. (Quarter 8.).

OR 556. Clinical Orthodontics II. 38 Units.
Clinical orthodontics includes various appliance systems: edgewise appliance (.018 & .022" slot), TAD, self-ligating brackets, fixed-functional appliance (Herbst, Forsus), and Invisalign for adolescent and adult patients. Clinical experience in treating orthodontic patients with a variety of problems is provided. In addition, various orthopedic appliances, including the headgear, face mask, rapid maxillary expander and other fixed auxiliary appliances (LLA, TPA, Wilson distalizer) may be incorporated into specific treatment protocols. Patients are treated in the Graduate Orthodontic Clinic every afternoon Monday-Friday, as well as Thursday nights. (Quarters 5-8.).

OR 557. Mixed Dentition Orthodontics II. 8 Units.
In addition to a didactic portion that focuses on the review of mixed dentition articles and comprehensive case analyses, this course also includes clinical sessions that provide residents with basic knowledge and experience in treating various malocclusions in the mixed dentition stage. This course provides an understanding of facial growth and occlusal development in the mixed dentition, an ability to diagnosis and treatment plan mixed dentition cases, and an ability to evaluate growth changes and treatment outcomes. (Quarters 5-8.).

OR 558. Surgical Orthodontics II. 3 Units.
This course provides clinical experience in analyzing diagnostic records and formulating surgical orthodontic treatment plans for patients with major skeletal and dental disharmonies that require integration of surgical and orthodontic treatment, communication with surgeons, pre- and post- surgical orthodontic treatment, and evaluation of treatment outcomes. (Quarters 5-8.).

OR 559. Clinical Orthodontics in Craniofacial Anomalies II. 3 Units.
This course combines the orthodontic treatment of patients with craniofacial anomalies in the graduate clinic and attending panels provided by comprehensive KAISER and Oakland Children's Hospital Craniofacial Anomalies Teams. (Quarters 5-8.).
OR 602. Microimplant II. 1 Unit.
The objective of the course is to comprehensively review the factors related to safety and stability of orthodontic microimplants and their clinical application in orthodontic treatment. Students will be expected to read and understand background material in assigned articles for seminar discussions. They will also present their own clinical cases that utilized microimplants. This course will consist of 16 seminar sessions throughout the second and third year of residency. (Quarter 9.).

OR 603. Research Design II. 1 Unit.
An advanced course for orthodontic graduate students in which the nature of hypothesis testing, the process of clinical decision making, and the statistical methodology to be employed in each student's thesis project is discussed. (Quarter 9.).

OR 604. Research Practicum and Thesis III. 6 Units.
This is an independent research course. Under the guidance of research mentors, students develop research questions, formulate hypotheses and write a formal research proposal that includes a full literature review, statement of material and methods, execution of the research, and appropriate analysis and interpretation of data. This course is designed to enable successful completion of the M.S. thesis. (Quarter 9.).

OR 611. Practice Management II. 2 Units.
The goal of the Practice Management Course is to introduce and familiarize the orthodontic residents with a multitude of basic concepts that include human resource management, management systems, marketing, legal aspects of orthodontics, associateships/practice ownership, and customer service. The course includes: 1) guest lectures by orthodontists, orthodontic consultants, and other professionals connected to the specialty of orthodontics, and 2) private practice office visits both in the San Francisco Bay area and out-of-state. (Quarter 9.).

OR 612. Ethics. 1 Unit.
This is an intermediate-advanced course that builds on undergraduate ethics instruction and focuses on issues unique to orthodontic practice. Typical or expectable ethical problems in orthodontics are studied. Reflection and student participation is emphasized in discussions of real-life cases. (Quarter 9.).

OR 613. Orthodontics Speaker Series. 2 Units.
This course includes various topics in orthodontics. (Quarter 9.).

OR 621. Current Literature Seminar III. 1 Unit.
A review of articles appearing in orthodontic and related journals is presented using a seminar format. (Quarter 9.).

OR 623. Comprehensive Case Analysis Seminar III. 1 Unit.
The seminar highlights the clinical application of various diagnostic procedures and treatment philosophies and the presentation of practical procedures in the management of unusual problems that can arise during the course of treatment. Basic and applied principles of photography and advances in computer technology are integral to this course. During each session, a Comprehensive Case Analysis is presented by the second year residents. All students then participate in discussion about the case. (Quarter 9.).

OR 624. Treatment Planning Seminar III. 1 Unit.
A case presentation is prepared by the first-year residents to share initial diagnostic records in order to diagnose and treatment plan orthodontic cases. All students then participate in free-format discussion. (Quarter 9.).

OR 631. Orthognathic Surgery Seminar III. 1 Unit.
This course is a joint seminar for the orthodontic and oral surgery residents that is held once a month during the first and second years of the residency program. The Orthognathic Surgery Seminar consists of case presentations by the Orthodontic and Oral and Maxillofacial Surgery faculty and residents. Emphasis is placed on diagnosis, treatment planning, management of pre- & post surgical orthodontic treatment, and understanding of treatment outcome and stability. (Quarter 9.).

OR 632. Multidisciplinary Seminar III. 1 Unit.
The treatment of patients with complex dental and skeletal orthodontic, periodontal, and restorative problems that requires input from a variety of dental specialties is considered. The teaching format includes case presentations by the residents and open discussions of interdisciplinary topics. (Quarter 9.).

OR 655. Clinical Orthodontics III. 9 Units.
Clinical orthodontics includes various appliance systems: edgewise appliance (.018 & .022" slot), TAD, self-ligating brackets, fixed-functional appliance (Herbst, Forsus), and Invisalign for adolescent and adult patients. Clinical experience in treating orthodontic patients with a variety of problems is provided. In addition, various orthopedic appliances, including the headgear, face mask, rapid maxillary expander and other fixed auxiliary appliances (LLA, TPA, Wilson distalizer) may be incorporated into specific treatment protocols. Patients are treated in the Graduate Orthodontic Clinic every afternoon Monday-Friday, as well as Thursday nights. (Quarter 9.).

OR 656. Clinical Orthodontics III. 9 Units.
Clinical orthodontics includes various appliance systems: edgewise appliance (.018 & .022" slot), TAD, self-ligating brackets, fixed-functional appliance (Herbst, Forsus), and Invisalign for adolescent and adult patients. Clinical experience in treating orthodontic patients with a variety of problems is provided. In addition, various orthopedic appliances, including the headgear, face mask, rapid maxillary expander and other fixed auxiliary appliances (LLA, TPA, Wilson distalizer) may be incorporated into specific treatment protocols. Patients are treated in the Graduate Orthodontic Clinic every afternoon Monday-Friday, as well as Thursday nights. (Quarter 9.).

OR 657. Mixed Dentition Orthodontics III. 1 Unit.
A review of articles appearing in orthodontic and related journals is presented using a seminar format. (Quarter 9.).

OR 658. Surgical Orthodontics III. 1 Unit.
This course provides clinical experience in analyzing diagnostic records and formulating surgical orthodontic treatment plans for patients with major skeletal and dental disharmonies that require integration of surgical and orthodontic treatment, communication with surgeons, pre-and post-surgical orthodontic treatment, and evaluation of treatment outcomes. (Quarter 9.).

OR 659. Clinical Orthodontics in Craniofacial Anomalies III. 1 Unit.
This course combines the orthodontic treatment of patients with craniofacial anomalies in the graduate clinic and attending panels provided by comprehensive KAISER and Oakland Children's Hospital Craniofacial Anomalies Teams. (Quarter 9.).
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BS, University of California Los Angeles, Engineering, 2006
DDS, New York University College of Dentistry, DDS, 2010
New York University College of Dentistry, Pediatric Dentistry, 2012

Christian Yee
Adjunct Assistant Professor of Pediatric Dentistry
BS, University of the Pacific, Biology, 2006
Certi., University of Southern California, Pediatric Dentistry, 2012
DDS, UCSF Dental School, Dentistry, 2010
St. Barnabas Hospital, Bronx, General Dental Practice, 2008
St. Barnabas Hospital, Bronx, Pediatric Dental Residency, 2010
Yr1-Sem1, University of Sydney, Medical Science, 1999

Vincent Van
Adjunct Assistant Professor of Pediatric Dentistry
BS, University of Hawaii at Manoa, Biological Sciences, 2006
DDS, University of California, Los Angeles, School of Dentistry, 2011
Other, New York University College of Dentistry, Advanced Education in Pediatric Dentistry, 2013

T

Course Descriptions
Predoctoral Courses
PD 146. Preclinical Pediatric Dentistry. 1 Unit.
This simulation lab-based course introduces first-year IDS students to the technical aspects of preparing and restoring primary teeth and preparation of a space maintenance appliance. (2 hours lecture, approximately 6 hours lab/clinic. IDS Quarter 3.).

PD 240. Pediatric Dentistry. 2 Units.
The study of the physical and psychological development of the child; understanding and prevention of dental disease in children; differential diagnosis and treatment of dental and periodontal diseases and abnormalities in children; and modern concepts of behavioral guidance in children. (20 hours lecture. Quarters 5-6.).
PD 346. Dental Auxiliary Utilization. 1-2 Units.
Rationale and system of procedures for sit-down, four-handed dental practice, including ergonomically correct practice and work-related injury prevention. (84 hours clinic in conjunction with Clinical Pediatric Dentistry. Quarters 7-10.)

PD 347. Clinical Pediatric Dentistry. 1 or 4 Unit.
Study of the diagnosis, treatment planning, and comprehensive preventive and restorative dental treatment for children. (84 hours clinic in conjunction with Dental Auxiliary Utilization. Quarters 7-10.)

Periodontics (PR)

Department Chairperson
William P. Lundergan
Professor of Periodontics

Faculty

A

Tamer Alpagot
Professor of Periodontics
DDS, Ege University, Izmir, Turkey, Dentistry, 1983
Hacettepe University, Ankara, Turkey, Dentistry, 1981
PhD, Hacettepe University, Ankara, Turkey, Periodontics, 1986
PhD, University of Minnesota, Oral Biology, 1995

B

Gretchen J. Bruce
Associate Professor of Periodontics
BA, Northwestern University, Biology, 1976
BS, University of Illinois, Bachelor of Science Dentistry 12/81, 1983
Cert, Boston University, Certificate, Periodontics 6/87, 1987
DDS, University of Illinois, Doctor of Dental Surgery 6/83, 1983
MBA, University of the Pacific, Master of Business Administration, 1999
University of Minnesota, 1973

C

Huei-Ling Chang
Assistant Professor of Periodontics
DDS, University of California, San Francisco, Dentistry, 2005
MS, The Ohio State University, Periodontology, 2008

Lauren K Chin
Instructor of Periodontics
BA, San Francisco State University, Industrial Arts, 2007
BA, San Francisco State University, Journalism, 2007
BS, University of Pacific, Dental Hygiene, 2014

E

Roan Flores Espino
Instructor of Periodontics/Dental Hygiene
BS, University of the Pacific, Dental Hygiene, 2010

G

Gary Grill
Assistant Professor of Periodontics
Boston University, Certificate in Periodontics, 1980
BS, University of Maryland, BS Zoology, 1974
DDS, University of Southern California, Dentistry, 1978

H

Lisa A. Harpenau
Professor of Periodontics
Baylor College of Dentistry, Periodontics, 1992
BS, Loyola Marymount University, Biology, 1986
BS, University of California San Francisco, Dental Sciences, 1990
DDS, University of California San Francisco, 1990
MA, University of the Pacific, Educational Administration, 2009
MBA, University of the Pacific, 1999
MS, Baylor University Graduate School, Oral Biology, 1992

Josef A Huang
Assistant Professor of Periodontics
BS, University of San Diego, Biology, 1993
DDS, Columbia University Dental, Dental, 1998
New York University, Periodontics, 2001

K

Candice Kieffer
Instructor of Periodontics/Dental Hygiene
BS, University of the Pacific, RDH, 2009
MS, University of California San Francisco, 2017
San Joaquin Delta College, Stockton CA, 2007

L

Michael S. LaFlamme
Instructor of Periodontics/Dental Hygiene
AS, Carrington College, Dental Hygiene, 2009
BA, San Francisco State University, Broadcasting Electronic Communications, 1996

Dan R. Lauber
Assistant Professor of Periodontics
BA, San Fernando Valley State College, Biology, 1970
Boston University, Periodontics Certificate, 1979
DDS, University of Southern California, 1975

Lory Laughter
Assistant Professor of Periodontics/Dental Hygiene
BS, Idaho State University, Dental Hygiene, 1994
MS, University of the California, San Francisco, Dental Hygiene, 2015

William P. Lundergan
Professor of Periodontics
BS, University of California, Irvine, Irvine, Biology, 1973
Certificate, University of Connecticut, Certificate of Proficiency in Periodontics, 1983
DDS, University of the Pacific, Dentistry, 1981
MA, University of the Pacific, Education, 1994
University of California, San Francisco, Pharmacy, 1978

N

Richard Alan Nathan
Associate Professor of Periodontics
BS, Tufts College, Biology / Psychology, 1971
Certificate, UCSF Dental School, Periodontontology, 1978
Denver Hospital, Denver, CO, General Practice, 1976
DMD, Tufts Dental School, Dentistry, 1975
MS, UCSF Dental School, Oral Biology, 1979

Chistopher Edmond Nucho
Assistant Professor of Periodontics/Dental Hygiene
AS, West Los Angeles College, 2009
BS, University Of California, 2004
MS, University of California, 2016

P

Sohyun Park
Assistant Professor of Periodontics
BS, Virginia Commonwealth University, Biology, 2006
Certificate, Lutheran Medical Center, Upstate New York, AEGD Residency, 2011
Certificate, School of Dental Medicine, University of Pittsburgh, Periodontology, 2017
DDS, School of Dental Medicine, SUNY at Buffalo, Dentistry, 2010
MDS, School of Dental Medicine, University of Pittsburgh, Department of Periodontics and Preventive Dentistry, Periodontology, 2017

Kavitha Parthasarathy
Associate Professor of Periodontics
BDS, Bangalore University, Dental Science, 1999
MS, SUNY at Buffalo, Periodontics, 2007

R

Mustafa Radif
Assistant Professor of Periodontics/Dental Hygiene
BDS, Baghdad University, Dental Surgery, 2001
BSD, University of the Pacific, Dental Hygiene, 2012
Cert., Diablo Valley College, Dental Laboratory Technology, 2010

Norina Tang
Instructor of Periodontics/Dental Hygiene
Hong Kong Polytechnic University, Occupational Therapy, 1988
MA, University of the Pacific, Business Administration, 2002
Rocky Mountain University of Health Professions, Occupational Therapy, 2011

Adjunct Faculty

A

Yasin Assadi
Adjunct Instructor of Periodontics
BA, University of California, Berkeley, Integratie Biology, 2009
BS, University of the Pacific, CA, Dental Hygiene, 2017
MS, University of California, San Francisco, Dental Hygiene Education, 2018
San Francisco State University, Certificate, 2012

B

Eric M Blasingame
Adjunct Assistant Professor of Periodontics
BS, University of the Pacific, Biochemistry, 2007
DDS, University of the Pacific Dugoni School of Dentistry, Dentistry, 2012
MS, University of the Pacific, Biology, 2009
University of Alabama at Baltimore, Periodontics, 2015

F

Ardavan Fateh
Adjunct Assistant Professor of Periodontics
DDS, Tehran University of Medical Sciences, Tehran, Iran, Doctor of Dental Surgery, 2001
DDS, University of California, San Francisco, School of Dentistry, San Francisco, CA, Doctor of Dental Surgery (International Dentist Program), 2010
DDS, Yeditepe University, School of Dentistry, Istanbul, Turkey, Periodontology, 2005
MMSc, Harvard University, Boston, MA, Master of Medical Science in Periodontology, 2013
Other, Harvard University, Boston, MA, Postdoctoral Residency in Periodontology, 2013
University of California, Los Angeles, School of Dentistry, Los Angeles, CA, Preceptorship in Periodontology, 2008

J

Bao K Jabbar
Adjunct Assistant Professor of Periodontics
BS, Santa Clara University, Cell and Molecular Biology, 2006
DMD, MPH, Arizona School of Dentistry, Dentistry, 2019
MSD, University of Texas School of Dentistry at Houston, Periodontology, 2016

K

Richard Tsu-hsun Kao
Adjunct Professor of Periodontics
AB, University of California, Berkeley, Bacteriology, 1976
Certificate, University of California, San Francisco, Periodontics, 1991
DDS, University of California, San Francisco, Dentistry, 1982
Fellowship, University of California, San Francisco, Post-doctoral fellow in Bone Biochemistry, 1986
Fellowship, University of California, San Francisco, Post-doctoral fellow in Pathology, 1986
MA, San Francisco State University, Cell Biology, 1980
PhD, University of California, San Francisco, Experimental, 1984

M

Arielle Miller
Adjunct Instructor of Periodontics
BS, Santa Clara University, Biology, 2012
BS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dental Hygiene, 2015
Gavilan College, 2009

R

Mauricio Ronderos
Adjunct Assistant Professor of Periodontics
DDS, Pontificia Universidad Javeriana, Dentistry, 1992
MPH, University of Minnesota, Epidemiology, 1999
MS, University of Minnesota, Periodontics-Dentistry, 1999
University of Minnesota, Periodontics, 1999

T

William J. Tognotti
Adjunct Assistant Professor of Periodontics
DDS, College of Physicians Surgeons (UOP), 1959
University of San Francisco, 1955

Urmi Tripathi
Adjunct Instructor of Periodontics
BDS, Bharti Vidyapeeth Dental College And Hospital, 2008
MSD, Sumandeep University, Periodontics, 2013
Course Descriptions

Predoctoral Courses

PR 150. Periodontal Diseases. 1 Unit.
Introduction to periodontology, clinical and histopathological features, epidemiology, classification of periodontal diseases, pathogenesis, etiologies of periodontal disease, genetics, and risk assessment. (10 hours lecture. Quarter 4.).

PR 156. Preclinical Periodontics. 1 Unit.
Study of techniques for instrument sharpening, root planing, and use of ultrasonic devices. Introduction to temporary splinting, microbiologic sampling, and dental implants. (5 hours lecture, 5 hours lab. Quarter 4.).

PR 250. Periodontics. 3 Units.
Introduction to the methodology of collecting data, utilizing data to make a diagnosis, preparing a treatment plan, and providing initial therapy including microbial sampling and chemotherapeutics; rationale for initial therapy including elimination of local factors, occlusal correction, provisional splinting, and initial therapy evaluation; basic rationale for periodontal surgery; techniques employed in surgical periodontics including the scientific basis for surgical technique, specific indications/contraindications, and sequence in healing following gingival surgery, osseous resection, gingival augmentation, regenerative therapy, and dental implants. (30 hours lecture. Quarters 5-7.).

PR 251. Periodontics. 2 Units.
Introduction to basic rationale for periodontal surgery; techniques employed in surgical periodontics including scientific basis for surgical technique, specific indications/contraindications, and sequence in healing following gingival surgery, osseous resection, gingival augmentation, regenerative therapy, and dental implants. (20 hours lecture. IDS Quarters 2-3.).

PR 256. Clinical Periodontics I. 5 or 6 Units.
Study of periodontal examination, diagnosis, treatment planning, nonsurgical therapy, use of evidence based dentistry and self-assessment principles, periodontal re-evaluation, periodontal surgery, and supportive periodontal therapy in comprehensive clinical dental practice. (Quarters 5-8.).

PR 356. Clinical Periodontics II. 4 Units.
Study of periodontal examination, diagnosis, treatment planning, nonsurgical therapy, periodontal re-evaluation, periodontal surgery, and supportive periodontal therapy in comprehensive clinical dental practice. (Quarters 9-12.).

Faculty

A

Bernadette A Alvear Fa
Associate Professor of Preventive and Restorative Dentistry
BS, University of the Pacific, Biology, 2003
DDS, University of the Pacific, Dentistry, 2006
National Academy of Sports Medicine, Exercise Physiology, Certified Personal Trainer, 2012
Women’s Fitness Specialist (WFS), National Academy of Sports Medicine, Exercise Physiology for Women, 2014

Shuba Anantha
Instructor of Preventive and Restorative Dentistry
Certificate, University of Illinois at Chicago, College of Dentistry, International Dentist Program, 2004
DDS, University Of Illinois at Chicago, Dentistry, 2009

Kalid Aziz
Assistant Professor of Preventive and Restorative Dentistry
Certificate, University of Iowa, College of Dentistry, Operative Dentistry, 2002
DDS, University of Los Andes, Venezuela, Dentistry, 1993
MS, University of Iowa, Operative Dentistry, 2002

B

Curtis Barmby
Assistant Professor of Preventive and Restorative Dentistry
American Board of Prosthodontics, Diplomate, 1987
American River College, AA Pre-Dental, 1967
DDS, UCSF School of Dentistry, Dentistry, 1971
Wadsworth VA Medical Center, Certificate in Fixed Prosthodontics, 1981

George E. Bunnell
Associate Professor of Preventive and Restorative Dentistry
BS, University of San Francisco, Biology, 1962
DDS, College of Physician and Surgeons, University of the Pacific, Dentistry, 1967

C

Susan Caliri
Instructor of Preventive and Restorative Dentistry
BS, University of San Francisco, Science, 1977
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dentistry, 1985
V.A. Medical Center, San Francisco, General Practice Residency, 1986

Daniel M. Castagna
Associate Professor of Preventive and Restorative Dentistry
BA, University of the Pacific Stockton, CA, Biology, 1978
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1981

Warren Hoochang Chee
Instructor of Preventive and Restorative Dentistry
BS, University of California at Berkeley, Business Administration, 1978
DDS, University of Southern California School of Dentistry, Dentistry, 1982

Eric H. Chen
Instructor of Preventive and Restorative Dentistry
BS, University of the Pacific, Biochemistry, 2002
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, Dental Surgery, 2009
MS, University of the Pacific, Pharmacy and Chemistry, 2007

Preventive and Restorative Dentistry (PRD)

Department Chairperson
Homayon (Homer) Asadi
Associate Professor of Biomedical Sciences
Other, University of the Pacific, Arthur A. Dugoni School of Dentistry, Certificate: Adv Education in General Dentistry, 2011

Kevin Chen
Instructor of Preventive and Restorative Dentistry  
BS, University California of San Diego, General Biology, 2011  
DDS, University of the Pacific, Dentistry, 2016

Robert H. Christoffersen
Professor of Preventive and Restorative Dentistry  
BA, San Francisco State University, 1963  
DDS, University of the Pacific, Dentistry, 1967  
MA, University of the Pacific, Educational Assessment, 1980

Ryan Courtin
Instructor of Preventive and Restorative Dentistry  
BS, UCLA, BS Biology, 2010  
DDS, UOP Dental, DDS, 2016

Steven Reed Curtis
Associate Professor of Preventive and Restorative Dentistry  
Certificate, Bethesda National Naval Dental Center, Prosthodontic Specialty Certificate, 1992  
Chanute Air Force Base, Air Force General Practice Residency, 1983  
DDS, University of California, Los Angeles, Doctor of Dental Science, 1982  
Peterson Area Dental Laboratory, Prosthodontic Fellow Dental Laboratory, 1996  
Santa Rosa Junior College, 1977  
University of California, Davis, 1978

Scott Riley Dexter
Instructor of Preventive and Restorative Dentistry  
Certificate, Cedars-Sinai Medical Center, General Practice Residency, 2007  
DDS, Loma Linda University School of Dentistry, Dentistry, 2006

Stafford Justin Duhn
Assistant Professor of Preventive and Restorative Dentistry  
BA, University of California, Berkeley, 1981  
DDS, University of the Pacific, 1984

Charles M. Eliason
Associate Professor of Preventive and Restorative Dentistry  
BS, University of California, Berkeley, Nutrition, 1967  
DDS, University of California, San Francisco, 1971  
MA, University of the Pacific, Education, 1979

Thomas C Ellerhorst
Assistant Professor of Preventive and Restorative Dentistry  
BS, University of San Francisco, Biology, 1972  
DDS, University of the Pacific, Dentistry, 1977

Steven Bruce Elman
Instructor of Preventive and Restorative Dentistry  
BS, City University of New York, Pre-Dentistry, 1968  
DMD, Tufts University School of Dental Medicine, Dental Medicine, cum laude, 1972

Gail E. Frick
Assistant Professor of Preventive and Restorative Dentistry  
BS, Scripps College, Biology, 1973  
DMD, TUFFTS University - School of Dental Medicine, Dentistry, 1977  
Georgetown, Graduate Biology, 1974  
UCLA, Prosthodontics Certificate, 1981

Richard John Garcia
Associate Professor of Preventive and Restorative Dentistry  
BS, University of San Francisco, 1971  
DDS, University of California, Los Angeles, 1975  
Veterans Administration Hospital, San Francisco, 1976

Ernest G. Giachetti
Assistant Professor of Preventive and Restorative Dentistry  
BS, University of Santa Clara, 1963  
DDS, University of the Pacific, 1967

Tiffany Giang
Instructor of Preventive and Restorative Dentistry  
BS, University of the Pacific, Biology, 2012  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2015

Carlos Eduardo Gonzalez Espinoza
Assistant Professor of Preventive and Restorative Dentistry  
DDS, Universidad Evangelica, Dental Surgery, 1995  
New York University, Prosthodontics Certificate of Completion, 1998  
Pikos Implant Institute, Advanced Bone Grafting Procedures I II, 2009  
Private Zahn Klinik Schloss Schellestein with Prof. Fouad Khoury, Olsberg, Germany, Bone augmentation Procedures soft tissue management, 2008

Foroud F. Hakim
Associate Professor of Preventive and Restorative Dentistry  
ADEA Leadership Institute, 2008  
BS, San Jose State University, 1987  
DDS, University of the Pacific, 1991  
Louisiana State University, 1985  
MBA, University of the Pacific, 1999

Heidi K. Hausauer
Assistant Professor of Preventive and Restorative Dentistry  
BA, University of the Pacific, 1982  
DDS, University of the Pacific, 1985  
VA Palo Alto, 1986

Rex W Hoover
Assistant Professor of Preventive and Restorative Dentistry  
BA, UOP, Biology, 1970  
DDS, UCLA, 1974

Judy A. Hwang
Instructor of Preventive and Restorative Dentistry  
BS, University of California at Los Angeles, Anthropology, 1998  
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2001

Chelsea C. Hyun
Instructor of Preventive and Restorative Dentistry  
BS, Emory University, Biology, 2010  
DMD, Tufts School of Dental Medicine, Dental Medicine, 2014

Narhide Kanayama
Assistant Professor of Preventive and Restorative Dentistry
BS, Tufts University, Biology, 1988
Certificate, University of Pittsburgh, School of Dental Medicine, Prosthodontics, 1996
DMD, University of Pennsylvania, School of Dental Medicine, Dental Medicine, 1992

Aouse Khalil
Instructor of Preventive and Restorative Dentistry
BDS, University of Mosul, College of Dentistry, Dental Surgery, 2003
DDS, University of the Pacific, Arthur A. Dugoni School of Dentistry, 2011

Courtney Killough
Instructor of Preventive and Restorative Dentistry
BA, University of Virginia, Biology Spanish, 2013
DDS, Virginia Commonwealth University School of Dentistry, 2017

Nicholas K. Kitajima
Instructor of Preventive and Restorative Dentistry
BS, University of California, Davis, Physiology, 2001
DMD, University of the Pacific, School of Dentistry, General Dentistry, 2004
University of the Pacific, School of Dentistry, AEGD Dentistry, 2005

Linda Kuo
Instructor of Preventive and Restorative Dentistry
BS, UC Berkeley, Molecular Cell Biology, 2007
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2013

Eugene Edward LaBarre
Associate Professor of Preventive and Restorative Dentistry
BA, Harvard University, 1973
DMD, Tufts University, 1977
MS, University of North Carolina, 1981

Marcia A Loo
Assistant Professor of Preventive and Restorative Dentistry
DDS, University of the Pacific, Dentistry, 1996

Kenneth Gregory Louie
Associate Professor of Preventive and Restorative Dentistry
BA, University of California, Berkeley, Microbiology, 1985
DMD, University of the Pacific, Dentistry, 1988
MA, University of the Pacific, Education, 1994

Jennifer Marie Low
Instructor of Preventive and Restorative Dentistry
BS, Santa Clara University, Biology, 2008
DDS, University of the Pacific Arthur A Dugoni School of Dentistry, 2012

Joy Magtanong-Madrid
Instructor of Preventive and Restorative Dentistry
BS, University of California, Irvine, CA, Classical Civilization, 2004
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery, 2011
University of California, San Francisco, Post-Baccalaureate Certificate, 2007

James Edward Milani
Associate Professor of Preventive and Restorative Dentistry
BA, University of the Pacific, Biology, 1979
DDS, University of the Pacific, 1982

Jeffrey P. Miles

Associate Professor of Preventive and Restorative Dentistry
BA, University of California, Santa Barbara, CA, Biochemistry, 1976
BDS, University of California, San Francisco, Dental Services, 1980
DDS, University of California, San Francisco, CA, 1980
University of North Carolina, Institute for Teaching and Learning, 2007
University of Washington, Summer Institute in Clinical Dental Research Metho, 2006

Anubhuti Misra
Instructor of Preventive and Restorative Dentistry
BDS, HNBG University, Dental Surgery, 2011
DDS, University Of Southern California School of Dentistry, Dentistry, 2016
MA, University Of California, Davis, Public Health, 2013

Donald Missirlian
Assistant Professor of Preventive and Restorative Dentistry
DDS, Northwestern University Dental School, Dentistry, 1965
SF State, 1978
UCLA, 1961
University of Iowa, School of Dentistry (Iowa City), Certificate of Specialty in Fixed Prosthodontics, 1981

Matthew Mizono
Instructor of Preventive and Restorative Dentistry
BS, University of California, Los Angeles, Psychology, 2011
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, 2018

Kathy Mueller
Assistant Professor of Preventive and Restorative Dentistry
BS, University of KY, 1974
DMD, University of KY, 1980
MS, Pursue University, 1976
VA UCSF, Prosthodontic Certificate, 1983

Arthur Muncheryan
Instructor of Preventive and Restorative Dentistry
BSc, U.C. Irvine, Electrical Engineering, 1972
DDS, UCSF School of Dentistry, Dentistry, 1977

Nilou Nadershahi
Assistant Professor of Preventive and Restorative Dentistry
BS, University of California Berkeley, Architecture, 1988
DDS, University of the Pacific Author A. Dugoni School of Dentistry, Dentistry, 1991

Warden H. Noble
Professor of Preventive and Restorative Dentistry
DDS, University of California, San Francisco, Dentistry, 1965
MS, University of Michigan, Ann Arbor, Restorative Dentistry, 1970
MS, University of Southern California, Education, 1968
University of California, Berkeley, Biology, 1961

Frances Pham
Instructor of Preventive and Restorative Dentistry
BS, University of the Pacific, Biological Sciences, 2012
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 2017
Post-bac, University of the Pacific, Biological Sciences, 2013

Allan Pineda
Instructor of Preventive and Restorative Dentistry
DDS, University of Pacific, School of Dentistry, 2002
Gitta Radjaeipour
Associate Professor of Preventive and Restorative Dentistry
DDS, University of the Pacific, School of Dentistry, Doctoral of Dental Surgery, 1992
EdD, University of the Pacific, Gladys L Benerd School of Education, Education administration and leadership EDD, 2009
San Jose State University, Pre-Dental, 1989

Aneet Randhawa
Assistant Professor of Preventive and Restorative Dentistry
BDS, Punjab Government Dental College and Hospital, 1988
MDS, Punjab Government Dental College and Hospital, 1992

Laura K. Reid
Assistant Professor of Preventive and Restorative Dentistry
BS, University of California, Davis, Psychology, 1991
DDS, University of the Pacific, Doctorate of Dental Surgery, 2000
Vanderbilt University, Doctor of Medicine, 1996

Patrick L. Roetzer
Associate Professor of Preventive and Restorative Dentistry
BS, University of Wisconsin, Experimental Psychology and Biology, 1970
DDS, Marquette University, Dentistry, 1974
Veterans Administration Medical Center, General Practice Resident, 1975

Steven Judd Sadowsky
Professor of Preventive and Restorative Dentistry
BA, University of California, Los Angeles, Psychology, 1967
DDS, University of California, Los Angeles, DDS, 1971
University of Southern California School of Dentistry, Los Angeles, Certificate, Advanced Prosthodontic Education, 1983

Ladan Sahabi
Assistant Professor of Preventive and Restorative Dentistry
BS, University of California Los Angeles, Biochemistry, 2009
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Doctor of Dental Surgery, 2012

S

Sima Salimi
Assistant Professor of Preventive and Restorative Dentistry
BS, Fairleigh Dickinson University, Bachelors of Science in Biology, 1991
DDS, University of the Pacific, 1994, Doctor of Dental Surgery, 1994

Eugene T. Santucci
Associate Professor of Preventive and Restorative Dentistry
BS, Kings College, 1964
DDS, Temple University School of Dentistry, 1968
Foundation for Advanced Continuing Education, Certificate of Completion, 1977
MA, University of the Pacific, 1994
U.S. Navy Dental Internship, Certificate of Completion, 1969

Noelle M Santucci
Associate Professor of Preventive and Restorative Dentistry
BS/RDH, Marquette University, Dental Hygiene/Biology, 1985
Certificate, University of the Pacific, School of Dentistry, Advanced Education in General Dentistry Cert., 1992
DDS, University of the Pacific, School of Dentistry, Dentistry, 1991
MA, University of the Pacific, Benerd School of Education, Educational Psychology and Counseling, 1994

Robert Savage
Assistant Professor of Preventive and Restorative Dentistry
BS, University of California Irvine, Biological Sciences, 1993
DDS, Northwestern University, Dentistry, 1997
Other, University of California San Francisco, Prosthodontics, 2006

Karen A. Schulze
Associate Professor of Preventive and Restorative Dentistry
DDS, University of Leipzig, Germany, Dentistry, 1992
PhD, University of Leipzig, Germany, Oral Surgery, 1998
Post-doc, UC San Francisco, Post-Doc in Dental Materials, 2002

Roxanna R. Shafiee
Assistant Professor of Preventive and Restorative Dentistry
BS, University of San Francisco, Biology, 1993
DDS, University of the Pacific, Dentistry, 1997
MSD, University of the Pacific, Dentistry, Orthodontics, 2009

Dennis Daizo Shinbori
Associate Professor of Preventive and Restorative Dentistry
BA, University of the Pacific, 1972
DDS, University of the Pacific, Dentistry, 1975
Other, Lowell High School, 1968

Bina Surti
Associate Professor of Preventive and Restorative Dentistry
BS, Wayne State University, Biology, 1991
AEGD, Case Western Reserve University, AEGD, 1996
Case Western Reserve University, Fellowship, 1997
DDS, University of Detroit Mercy, Dentistry, 1995

Walter Tickner
Assistant Professor of Preventive and Restorative Dentistry
BA, University of California, Berkeley, Paleontology, 1968
DDS, University of California, Los Angeles, Dentistry, 1973
Diablo Valley College, General Education for transfer to UC, 1966

Michael T. Tiller
Instructor of Preventive and Restorative Dentistry
BA, University of Oregon, 1995
DDS, University of the Pacific, Dentistry, 1999

Konni Kawata Tittle
Instructor of Preventive and Restorative Dentistry
CSUF, Biology, 1984
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1989
Indiana University, Biology - Undergraduate, 1985
Indiana University, School of Dentistry, 1987

Chi Dinh Tran
Associate Professor of Preventive and Restorative Dentistry
CSUF, Biology, 1984
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1989
University of California San Francisco, Certificate in Prosthodontics, 1984
University of Richmond, 1973

Steven Truman
Instructor of Preventive and Restorative Dentistry
Cañada College, Associate of Science in Interdisciplinary Studies with Emphasis in Natural Science Mathematics, 2013
DDS, University of the Pacific Arthur A. Dugoni, 2016

Erich Werner
Assistant Professor of Preventive and Restorative Dentistry
BS, San Jose State University, Biology, 1984
DDS, UOP School of Dentistry, 1988

Adjunct Faculty

B

Eric Barrientos
Adjunct Instructor of Preventive and Restorative Dentistry
BS, San Jose State University, Accounting, 1988
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1996
Foothill College, Sciences, 1993

Druhthl Belur
Adjunct Instructor of Preventive and Restorative Dentistry
BDS, R. V. Dental College, Dentistry, 2003
DMD, Boston University Goldman School of Dental Medicine, Dentistry, 2007
MS, Texas AM College of Dentistry, Prosthodontics, 2018

Charles Bocks
Adjunct Instructor of Preventive and Restorative Dentistry
BS, Linfield College, Biology, 1967
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, Dentistry, 1972

Philip M. Buchanan
Adjunct Associate Professor of Preventive and Restorative Dentistry
DDS, University of Southern California, School of Dentistry, Dentistry, 1968
EdD, University of the Pacific, Benerd School of Education, Dental Education, 2016

G

Marc J. Geissberger
Adjunct Professor of Preventive and Restorative Dentistry
BS, St. Mary’s College of California, Bachelors of Science in Biology, 1988
CPT, National Academy of Sports Medicine, Exercise Physiology, 2009
DDS, Doctor of Dental Surgery, University of the Pacific, Dentistry, 1991
MA, University of the Pacific, Master of Arts in Educational Psychology, 1994

Juan Gomez
Adjunct Instructor of Preventive and Restorative Dentistry
DDS, University Of The Pacific, Dugoni School Of Dentistry, 1985
University Of Southern California, Los Angeles, Chemistry, 1982

H

W. Peter Hansen
Adjunct Associate Professor of Preventive and Restorative Dentistry
BS, UOP Bachelor of Science Biology, 1966
Certificate, University of Southern California School of Dentistry Advanced Prosthodontics, 1979
DDS, University of the Pacific School of Dentistry, 1971
Mercy Hospital School of Medicine Technology, 1967

I

Todd Iverson
Adjunct Instructor of Preventive and Restorative Dentistry
BS, University of Utah, Biology, 1992
DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, 2002

K

Parag R. Kachalia
Adjunct Associate Professor of Preventive and Restorative Dentistry
BS, University of California, Davis, Physiology, 1998
DDS, University of the Pacific, Dentistry, 2001
Minor, University of California at Davis, Managerial Economics, 1998

N

Molly P. Newlon
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BA, UCLA, Fine Arts/Dance, 1975
DDS, University of the Pacific, Dentistry, 1982
GPR Cert., Veterans Administration Hospital, general practice residency, 1983
MA, UCLA, Dance Therapy, 1977
UCSB, General Education, 1973

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BA, California State University, Northridge, Biological Sciences, 1985
DDS, UOP School of Dentistry, Dentistry, 1988

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BS, University of California, San Diego, Biochemistry cell Biology, 1996
DDS, University of the Pacific, Dental School, Dentistry, 2001

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DDS, Georgetown University, Dentistry, 1985
UC Davis, Biology, 1981

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BA, Ateneo de Manila University, Psychology, 2007
DDS, University of the Pacific, Dentistry, 2016

W

Richard H. White
Adjunct Associate Professor of Preventive and Restorative Dentistry
BA, Albion College, Biology, 1971
CalTeach I and CalTeach II, 2013
DDS, University of Michigan School of Dentistry, Dentistry, 1975
University of Washington, Summer Institute in Clinical Dental Research Metho, 2010
US Public Health Service, General Practice Dental Residency, 1976
Course Descriptions

Predoctoral Courses

PRD 131. IPS I: Fundamentals in Restorative Dentistry. 15 Units.
Students will learn basic concepts of dental anatomy, tooth morphology, dental materials, bonding, occlusion, and cariology; caries risk assessment and the ADA classification of dental caries; diagnosis and treatment planning for restorative dentistry; treatment planning of restorations; rationale and criteria for restorations; introduction to implant and removable dentistry; fabrication of articulated diagnostic casts from preliminary alginates; CAD/CAM and digital dentistry; conveyor and the osio-dento-facial analyzer mounting techniques; color and shade selections, restoration of damaged teeth with fillers and/or post placement in endodontically treated teeth; preparation design and execution of full veneer, monolithic, zirconia, lithium disilicate, porcelain-fused-to-metal and porcelain-fused-to-zirconia crowns; anterior and posterior fixed prostheses (bridges); fabrication of provisional restorations utilizing direct and indirect techniques for single crowns and provisional fixed prostheses (bridges) based on knowledge of principles of treatment planning, path of insertion, resistance and retention forms, and fabrication of provisional restorations.

PRD 134. Professionalism & Dentistry. 1.5 Unit.
This course provides the student with an understanding of dentistry as a profession, including multi-disciplinary skills and all relevant ethical concepts and decision-making models to deal effectively with typical situations in patient care. It presents information from historical and contemporary perspectives with an emphasis on the responsibility of the student dentist as a member of the profession. Humanism, ethics, communication skills, ergonomics, self-care, and stress management are also discussed.

PRD 137. Local Anesthesia. 1 Unit.
Students review basic anesthesia delivery techniques and apply them to a clinical situation. Students will learn new injection technique and how to overcome difficulties in mandibular anesthesia. In the self-study component, students will conduct independent research and summarize their findings in writing. (Quarter 4).

PRD 138. Advanced Restorative Technique. 0.5-2 Units.
This hands-on course, referred to as "A.R.T" block, utilizes extracted human teeth to simulate a multitude of clinical procedures. Students will perform advanced techniques focused on adhesive dentistry and digital dentistry. (Quarter 4).

PRD 139. Clinical Transitions. 0.5-1 Units.
A hands-on course focused on caries detection evaluation and removal techniques in extracted human teeth. Students will also participate in seminars that highlight Dugoni's clinical process and procedures relating to reconstructive dentistry. (Quarter 4).

PRD 144. Professionalism & Dentistry II. 2 Units.
This course provides the student with a deeper understanding of dentistry as a profession, including multi-disciplinary skills and all relevant ethical concepts and decision-making models to deal effectively with typical situations in patient care. It is based on foundational concepts presented in PRD 134, and introduces normative principles and case-based discussions to simulate application to patient care.

PRD 146. Integrated Preclinical Technique I: Direct Restorative. 9 Units.
This course teaches students to prepare teeth for Class I, II, III, IV and V cavity preparations for filling with amalgam and composite restorative materials. Students are taught a range of techniques depending on the extent of caries, from minimally invasive to traditional amalgam preparations. Other subjects covered include the use of liners, matricing systems, and buildup materials. Students work in the simulation clinic on plastic typodont teeth in a mannequin and are evaluated with technique practical examinations.

PRD 147. Integrated Preclinical Technique I: Indirect Restorative. 10 Units.
Students learn laboratory skills to simulate reconstructive dentistry procedures as they relate to a "family" of patient cases. Starting with dental anatomy wax ups and all-ceramic preparations and progressing through PFM and gold partial coverage restorations, an emphasis is on conservation of tooth structure and maintaining or enhancing esthetics. Students learn single and multiple tooth rehabilitation as projects increase in complexity throughout the year and culminate in treatment planning in preparation for digital dentistry (CAD/CAM). Ample time is spent on the adhesive protocols for cementation. Related topics addressed are post and core replacement, laboratory skills, and general dental procedures such as impression taking and model work.

PRD 151. Integrated Preclinical Concepts I: Capstone. 2 Units.
As a component of the Integrated Preclinical Preventive and Restorative Dentistry curriculum, students learn how to treat an integrated Posterior Restorative case and an Anterior Restorative case. Students are introduced to the concepts of a Smile Design, Esthetic wax-up, Core build-up, Lithium Disilicate crown prep, provisional and a final impression of each case. All-ceramic restorations are emphasized in later weeks with an emphasis on conservation of tooth structure and maintaining or enhancing esthetics is woven through all projects. Cases increase in complexity throughout the quarter and treatment planning accompanies all projects. Ample time is spent on the adhesive protocols for Restoration Cementation. Related topics included in this component are Post and Core placement, laboratory skills, general dental procedures such as Impression-taking and model work and shade selection in Restorative Dentistry. Lithium-Disilicate veneer preps and provisional restorations are also taught during this course. Finally, an integrated OSCE-type multiple-choice exam is given to help evaluate student competency in the concepts of Preventive and Restorative Dentistry. (Quarter 4).

PRD 155. Integrated Preclinical Technique I: Capstone. 2-3 Units.
As a component of the Integrated Preclinical Preventive and Restorative Dentistry curriculum, students will be evaluated on their mastery of laboratory skills and simulation of Restorative Procedures presented in this course. Cases increase in complexity throughout the quarter and treatment planning accompanies all projects. Students simulate the treatment of an integrated Posterior and Anterior case utilizing the principles and techniques taught in the Dental Anatomy, Direct and Indirect Restorative Dentistry courses in Quarter One through Three. Students perform a Smile Design on their simulated patient, prepare teeth #6-11 for Lithium Disilicate Porcelain Veneers and create Provisional (temporary) Restorations. An all-ceramic Onlay preparation and Provisional are also fabricated. A Restoration shade exercise is completed. During the last week of this course, the students remove the dental material Gutta-Percha, from an endodontically-treated tooth, create a post space and cement a Fiber Post utilizing the Prelude Bonding System and Rock-core build-up material. (Quarter 4).
PRD 172. Fundamentals and Application of Local Anesthesia. 2 Units.
In this course students will learn and apply basic techniques and fundamentals of local anesthesia, and discuss mandibular and maxillary difficulties in anesthesia and pain management. Knowledge gained in this course will help students appropriately apply current anesthesia concepts to general dentistry.

PRD 173. Integrated Preclinical Concepts I: Direct and Indirect Restorative. 7 Units.
This course introduces students to operative dentistry, dental anatomy, occlusion, and fixed prosthodontics in a comprehensive, integrated format with an emphasis on clinical applications. Foundational knowledge of direct and indirect restorative materials is presented. Indications and principles of preparations for restoring teeth with amalgam and composite resins, including techniques for placement of these direct restorations are introduced. Additionally, correct ergonomics for a dental practitioner, hand piece techniques, rubber dam application and tooth morphology are covered. Sequencing treatment is incorporated through the use of simulated clinical patient cases. Clinical photography with a hands-on training session is taught. The rationale and criteria for full cast gold and ceramic crowns, including the preparation designs for individual teeth and fixed partial dentures is introduced. Traditional and digital impression techniques and provisional fabrications are also taught. Emphasis is placed on the development of hand skills and self-evaluation of the student’s own work. Development of critical thinking skills is achieved through a literature review project. (IDS Quarters 1 & 2.).

PRD 174. Integrated Preclinical Concepts I: Advanced Direct and Indirect Restorative. 2 Units.
The second course of the series continues with the integration of the disciplines of operative dentistry, fixed prosthodontics, and removable prosthetics. Advanced restorative procedures, direct and indirect esthetic posterior restorations, and anterior esthetic reconstruction by creating a smile design and fabricating indirect porcelain veneers are covered. Advanced concepts in occlusion are introduced using wax up projects. Complex multi-disciplinary simulated cases are introduced where treatment planning and sequencing is reinforced. Digital dentistry advanced concepts such as CAD/CAM and Lasers are introduced to the students, which includes hands-on training sessions. Placement of fiber posts on an endodontically treated tooth is covered. Emphasis is placed on the student’s ability to apply principles taught in the first two quarters to simulated clinical situations. (IDS Quarter 3.).

PRD 175. Integrated Preclinical Technique I: Direct and Indirect Restorative. 8 Units.
This course introduces students to operative dentistry, dental anatomy, occlusion, and fixed prosthodontics in a comprehensive, integrated format with an emphasis on clinical applications. Foundational knowledge of direct and indirect restorative materials is presented. Indications and principles of preparations for restoring teeth with amalgam and composite resins, including techniques for placement of these direct restorations are introduced. Additionally, correct ergonomics for a dental practitioner, hand piece techniques, rubber dam application and tooth morphology are covered. Sequencing treatment is incorporated through the use of simulated clinical patient cases. Clinical photography with a hands-on training session is taught. The rationale and criteria for full cast gold and ceramic crowns, including the preparation designs for individual teeth and fixed partial dentures is introduced. Traditional and digital impression techniques and provisional fabrications are also taught. Emphasis is placed on the development of hand skills and self-evaluation of the student’s own work. (IDS Quarters 1 & 2.).

PRD 176. Integrated Preclinical Technique I: Advanced Direct and Indirect Restorative. 6 Units.
The second course of the series continues with the integration of the disciplines of operative dentistry, fixed prosthodontics, and removable prosthetics. Advanced restorative procedures, direct and indirect esthetic posterior restorations, and anterior esthetic reconstruction by creating a smile design and fabricating indirect porcelain veneers are covered. Advanced concepts in occlusion are introduced using wax up projects. Complex multi-disciplinary simulated cases are introduced where treatment planning and sequencing is reinforced. Digital dentistry advanced concepts such as CAD/CAM and Lasers are introduced to the students, which includes hands-on training sessions. Placement of fiber posts on an endodontically treated tooth is covered. Emphasis is placed on the student’s ability to apply principles taught in the first two quarters to simulated clinical situations. (IDS Quarter 3.).

PRD 230. Integrated Preclinical Concepts II: Removable Prosthodontics. 3 Units.
This didactic course provides students with the foundational knowledge in removable prosthodontics needed to build a strong foundation for critical assessment, evidence-based practice, and lifelong learning in the dental profession. Formative and summative assessment will be used frequently to appraise students’ grasp of principles related to the partially edentulous and fully edentulous patient. Course material includes the full scope of removable prosthodontic treatment for partially and completely edentulous patients, including patho-physiology of tooth loss; diagnosis and treatment planning for transitional and definitive removable dentures; fabrication of partial and complete dentures; follow-up, recall, and problem-solving for patients with removable dentures. (Quarters 5 & 6, IDS Quarters 1 & 2).

PRD 231. Integrated Preclinical Concepts II:: Occlusion. 1-2 Units.
This course is part of the Integrated Preclinical Transition for second year DDS students and provides a broad overview of occlusion combined with an occlusion philosophy for the students to utilize as “safe beginners” in the student clinic and upon graduation. The curriculum is designed to develop the students’ occlusal awareness and for students to know when to refer more complex occlusal problems. The concept of “optimal occlusion” is taught as a model to utilize when designing new restorations and larger restorative cases. Topics include temporomandibular joint and muscle anatomy, anterior guidance, occlusal exam and TMJ analysis, inter-occlusal records, centric relation and taking a centric relation record, VPS final impression, marking media, mandibular movements, red flags, parafunction and levers, splint types, esthetic and functional wax-up, posterior wax-up, the smile design process, custom incisal guide table and occlusal equilibration. (Quarter 5).

PRD 232. Integrated Preclinical Concepts II: Implant Dentistry. 1 Unit.
The concepts part of the pre-clinical Implant Dentistry course will focus on introducing implant dentistry in a streamlined fashion to the pre-doctoral students. Lecture topics will include Introduction to Implants, Diagnostic Regimen, Biomechanics of Loading, Virtual Imaging, Soft Tissue and Hard tissue grafting for esthetics, Restorative Armamentaria, Implant Delivery and Maintenance, Implant Complications and Implants for Edentulous patients. The OSCE will facilitate critical thinking and integrate content from Occlusion. (Quarter 6, IDS Quarter 2).
PRD 233. Integrated Preclinical Concepts II: Comprehensive Principles in Dentistry. 3 Units.
The Concepts part of this pre-clinical course is a blend of established routine dental procedures concerned with Adhesive Dentistry, Veneer Preparation and Cementation, Ceramic Design for Inlay/Onlay Preparation, Erosion Etiology and Treatment. This is combined with an understanding of Basic Sleep principles, etiology and treatment. Block rotations are presented covering Dental Lasers, Laboratory Questions/Answers and Restorability of Teeth. Finally, the students are introduced to CAD CAM Dental Technology, CAD CAM case selection, materials, workflow of CAD CAM Restorations, including design, mill, stain/glaze and cementation of a full ceramic restoration. The students will participate in Evidence Based Research in a seminar format and present to their peers. (Quarter 7).

PRD 235. Integrated Preclinical Technique II: Removable Prosthodontics. 5 Units.
In this course, students develop laboratory and clinical skills as related to removable prosthodontics. In the partially edentulous patient, students will gain technical experience with tooth replacement with a removable prosthesis. Students will apply biomechanical principles and fundamentals of survey and prosthesis design, including base, clasp, rest, minor connector, and major connector designs. For edentulous patients and those patients with hopeless dentition, students will learn the basic clinical and laboratory phases of complete denture fabrication including diagnosis, pre-prosthetic surgery, tissue conditioning, impression, cast fabrication, record base/rim, occlusal records, chair-sideesthetic arrangement, articulator mounting, anterior artificial tooth arrangement, trial denture try-in, denture processing and finishing, denture insertion, prosthetic home care patient education, and prosthetic follow-up and recall, including reline/repair and laboratory communication. Students will prescribe optimal clinical materials to be used in prosthesis fabrication and diagnose biomechanical problems from simulated case scenarios. (Quarters 5 & 6, IDS Quarters 1 & 2).

PRD 236. Integrated Preclinical Technique II: Occlusion. 1 Unit.
This course is part of the Integrated Preclinical Transition for second year DDS students and provides the laboratory and clinic technique knowledge, supporting the concepts learned in PRD 231. This course focuses on treatment of the dentate patient. Students gain clinical experience working on a partner in occlusal exam and TMJ analysis, centric relation record, PVS final impression and the Kois Dento-Facial Analyzer record. The students will gain knowledge in centric relation vs maximum intercuspation theories. Other learned techniques include the rehearsal of a smile design, a custom incisive guide table, and an occlusal adjustment from CR to MI. (Quarter 5).

PRD 237. Integrated Preclinical Technique II: Implant Dentistry. 1 Unit.
The technique part of the course will focus on lab exercises that will train the students to be competent in treating implant patients on the clinic floor. They will learn to surgically place an anterior and a posterior implant on a plastic model, learn the significance of a surgical stent and fabricate a surgical stent, learn to take closed and open tray impressions for implants, learn to fabricate a screw retained implant temporary crown and learn to convert a lower complete denture into an Overdenture. The students will learn the format for the Implant Seminar for single and multiple teeth. The quizzes are embedded in clinical videos to improve students' understanding of application of implant concepts in patient care. (Quarter 6, IDS Quarter 2).

PRD 238. Integrated Preclinical Technique II: Comprehensive Principles in Dentistry. 3 Units.
The Technique part of this course will focus on the following laboratory experiences: Understanding the basic laser concepts and safety protocol in using the instrument to cut various materials. Hands-on experience of a CAD CAM system to scan, design and mill a full ceramic restoration. Experience firing and customizing with principles of esthetics of custom staining and glazing a full ceramic restoration. Cementation/Bonding of a final full ceramic restoration Design and prepare a partial ceramic restoration. Hands on Veneer Preparations and methods of Cementation. Experience the sectioning of Crown Removal and Porcelain Repairs. Students will diagnose and restore patient’s models following an approved treatment plan exhibiting an ideal mode of form and function. (Quarter 7).

PRD 239. Integrated Preclinical Technique II: Clinical Occlusion. 2 Units.
This course is about the occlusion of the natural teeth. The course will also include comparisons between the Occlusion of the natural teeth with the occlusion of implant-supported teeth and the occlusion of removable dental prosthodontics. Lectures in concepts will cover principles of occlusion and describe clinical and laboratory technique. In the technique component, students will be evaluated on their mastery of clinical and laboratory skills. Technique will include two parts. The first is the occlusal aspects of treating a typodont patient needing anterior esthetic restorations. The second involves the records, fabrication and delivery of an occlusal stabilization splint to a class-mate “patient”. The course provides a broad overview of occlusion combined with an occlusion philosophy for students to utilize as “safe beginners”. The curriculum is designed to develop the students’ occlusal awareness and for students to know when to refer more complex occlusal problems. The concept of “optimal occlusion” is taught as a model to utilize when designing new restorations and larger restorative cases. (IDS Quarter 3).

PRD 245. Integrated Preclinical Technique II: Applied Occlusion. 1 Unit.
This course is about the Occlusion of the natural teeth and is the continuation of PRD236. The course will also include comparisons between the Occlusion of the natural teeth with the Occlusion of implant-supported teeth and the Occlusion of Removable Dental Prosthodontics. In this technique course, students will be evaluated on their mastery of clinical and laboratory skills. The course focuses on treatment of the dentate patient. In the previous quarter, the students gained clinical experience in occlusal principals working and record collection on student partners. During this course, each student will participate in the clinical delivery of an occlusal stabilization splint. The splint project began in the previous quarter PRD236 and will now be completed due to the time needed by the lab to process the splints. (Quarter 6).

PRD 277. Local Anesthesia. 1 Unit.
Students review basic anesthesia delivery techniques and apply them to a clinical situation. Students will learn new injection technique and how to overcome difficulties in mandibular anesthesia. In the self-study component, students will conduct independent research and summarize their findings in writing. (2 hours lecture, 6 hours clinical rotation, 10 hours self-study. Quarters 5-7.)
PRD 279. Clinical Restorative Dentistry I. 4-6 Units.
Study of diagnosis, treatment planning, and intracoronal dental therapy, including preparation for and restoration of teeth with cast gold and porcelain inlays and onlays, composite resins, laminates, and amalgam in comprehensive clinical dental practice. Requirements include practice of operative dentistry procedures under simulated state board examination conditions. These courses also cover the diagnosis, treatment planning, and delivery of fixed prosthodontic treatment that addresses the patient’s esthetic dental needs; stabilizes, improves, and protects the patients’ gnathostomatic system in a comprehensive clinical dental practice. Students participate in quality assessment at clinical impression stage and at prosthesis delivery. Lab Services coordinates student dental laboratory prescriptions with private outsource laboratories. Test cases determine student competency by evaluating their ability to independently prepare a single tooth crown preparation in a specified time period. (Quarters 5-8.).

PRD 281. Dental Implants. 1 Unit.
The study of modern implant dentistry with emphasis on history, the physiology of osseous integration, treatment planning, implant surgery, fabrication of single and multiple tooth fixed implant restorations and implant-supported removable overdentures, laboratory steps, maintenance and implant problems. Hard and soft tissue augmentation procedures will be studied along with esthetic concerns. (10 hours lecture and laboratory. Quarter 8.).

PRD 378. Clinical Restorative Dentistry II. 11 Units.
Study of diagnosis, treatment planning, and intracoronal dental therapy, including preparation for and restoration of teeth with cast gold and porcelain inlays and onlays, composite resins, laminates, and amalgam in comprehensive clinical dental practice. Requirements include practice of operative dentistry procedures under simulated state board examination conditions. These courses also cover the diagnosis, treatment planning, and delivery of fixed prosthodontic treatment that addresses the patient’s esthetic dental needs; stabilizes, improves, and protects the patients’ gnathostomatic system in a comprehensive clinical dental practice. Students participate in quality assessment at clinical impression stage and at prosthesis delivery. Lab Services coordinates student dental laboratory prescriptions with private outsource laboratories. Test cases determine student competency by evaluating their ability to independently prepare a single tooth crown preparation in a specified time period. (Quarters 9-10.).

PRD 379. Clinical Restorative Dentistry III. 12 Units.
Study of diagnosis, treatment planning, and intracoronal dental therapy, including preparation for and restoration of teeth with cast gold and porcelain inlays and onlays, composite resins, laminates, and amalgam in comprehensive clinical dental practice. Requirements include practice of operative dentistry procedures under simulated state board examination conditions. These courses also cover the diagnosis, treatment planning, and delivery of fixed prosthodontic treatment that addresses the patient’s esthetic dental needs; stabilizes, improves, and protects the patients’ gnathostomatic system in a comprehensive clinical dental practice. Students participate in quality assessment at clinical impression stage and at prosthesis delivery. Lab Services coordinates student dental laboratory prescriptions with private outsource laboratories. Test cases determine student competency by evaluating their ability to independently prepare a single tooth crown preparation in a specified time period. (Quarters 11-12.).

PRD 396. Clinical Removable Prosthodontics. 12 Units.
The study of diagnosis, treatment planning, and removable prosthodontic treatment that restores masticatory function and phonetics, preserves underlying structures, results in patient comfort, and is esthetically pleasing. Course includes practice for state board removable prosthodontic procedures and simulated examination conditions. (Quarters 9-12.).

Graduate Courses
PRD 484. Biomaterials I. 1 Unit.
This class focuses on restorative materials such as bonding systems, buildup composites and materials for crown and bridge fabrication. It also introduces new developments in biomaterial sciences. Basic material testing principles are discussed and the material properties for NiTi alloy used in endodontics are included. (Quarter 2.).

Conservatory of Music
http://www.pacific.edu/conservatory/
Phone: (209) 946-2415
Location: Stockton Campus Faye Spanos Concert Hall
Peter Witte, Dean

Programs Offered
Master of Arts in Music Therapy
The Conservatory of Music offers graduate degrees in music education and music therapy: Master of Music and Master of Arts in Music Therapy. Additionally, the Master of Education (with an emphasis in music education) is available through the Benerd College. The Conservatory of Music graduate programs give students individual faculty attention and opportunities to work with experts in their field.

Graduate students in the Conservatory of Music take a range of coursework designed to enhance their musicianship and research skills. They develop advanced skills in music therapy, conducting, pedagogy, or other areas of music specialization depending on individual career goals.

Music education degrees are designed for those with a previous degree/credential in music; in general, the Master of Music includes more coursework in music, while the Master of Education includes more education courses. Applicants who have not attained a music education degree/teaching credential previously are expected to complete the credential program as part of earning their graduate degree. Building on previous music and teaching experiences, the education programs are individualized and lead to a creative, productive career in teaching music, pre-K through college.

The Master of Arts in Music Therapy offers a choice of two tracks of study (research and clinical) that support (1) preparation for eventual entry into teaching and research careers or (2) development of advanced clinical, administrative, and program development skills.

Comprehensive Examination
At the conclusion of the Master’s programs, all students are expected to pass a comprehensive written and/or oral examination/thesis defense on all work covered during their graduate study at University of the Pacific.

Admission Requirements
Admission to any graduate program in music at University of the Pacific is based upon both academic qualifications and musicianship, including overt musical behavior as demonstrated in performance and listening.
Academic considerations for the entering Master’s student, regardless of major, are discussed in earlier pages of this catalog under Admission.

**Music Therapy Majors**

1. **Music Audition (live or DVD recording):**
   - Candidates should prepare two contrasting pieces on their principal instrument/voice.
   - Sing two pieces from a traditional or contemporary musical repertoire with self-accompaniment on piano and guitar (proficiency on both piano and guitar is an important consideration for potential candidates). For these pieces, candidates may use sheet music or a lead sheet.
   - Sing one American folk song from memory a cappella.

2. A Bachelor’s degree in music or related fields.
3. Undergraduate GPA of 3.0 or better.
4. Online application form through the Graduate School.
5. 3 letters of recommendation.
6. General GRE scores (GRE is not required for applicants with GPA of 3.5 or higher)
7. Official Transcripts
8. Statement of intent
9. Resume

**Music Therapy**

The Master of Arts in Music Therapy program at University of the Pacific prepares students for a career using music-based interventions in a focused and concentrated manner to address health-related, psychological, educational, and other rehabilitative needs. The program offers students greater depth and breadth in knowledge and skills for advanced clinical competency. Through advanced learning and skill development, students will have a vital competitive advantage in the current healthcare market to provide quality patient care.

**Two paths to obtaining an MA in Music Therapy**

- **Two-Year Master of Arts in Music Therapy:** This 32-unit program is designed for students who hold an undergraduate degree in music therapy (or its equivalent) and are looking for advanced-level clinical skills or research practice to secure a competitive position in today’s rapidly growing health care system.
- **Three-Year Plus Internship Master of Arts in Music Therapy:** This 55-unit* program is designed for those with a bachelor’s degree in music or related fields (e.g. psychology, special education, etc.) who seek both entry-and advanced-level training in music therapy. This popular and flexible learning option starts with strong basic musicianship and adds specific knowledge and skills to meet the requirements of the Certification Board for Music Therapists (CBMT) and the American Music Therapy Association.

*Additional units may be required depending on prior degree, coursework and experience

**Plan of Study**

Students focus on their specific personal career goals by selecting a thesis or non-thesis track supporting: a) development of advanced clinical, administrative, and program development skills, or b) preparation for eventual entry into teaching and research careers.

Both tracks in the Master of Arts in music therapy program allow for flexibility in the design of individualized study plans. Master of Arts students should consult with their adviser during the first term in residency to determine their overall plan of study and to detail their schedule of classes for each semester.

**Program Policies**

1. Students must (a) maintain a minimum term and cumulative grade point average of 3.0, (b) earn a B- or better in all music therapy courses, and (c) demonstrate interpersonal and professional skills appropriate to the clinical profession as evaluated by the Music Therapy Program faculty, in order to remain in the program.
2. Students must pass the Board Certification Examination or provide evidence of current re-certification (MT-BC) status prior to completion of the Master of Arts degree in music therapy.
3. Students must demonstrate advanced clinical competencies as defined by the American Music Therapy Association (AMTA). Particular emphasis is placed upon the acquisition of advanced competencies relevant to the student’s area of specialization.

**Clinical Musicianship**

- Design a broad range of improvisational experiences and utilize a variety of clinical improvisation techniques for therapeutic purposes.
- Apply advanced musical skills in the clinical use of at least two of the following: keyboard, voice and/or percussion.
- Design and employ a broad range of re-creative music experiences for therapeutic purposes

**Music Therapy Theory**

- Apply comprehensive, in-depth knowledge of the foundations and principles of music therapy practice.
- Articulate and defend a personal philosophy, approach and/or theory to music therapy.

**Clinical Supervision**

- Design and implement methods of observing and evaluating supervisees that have positive effects on music therapy students and professionals at various levels of advancement and at different stages in the supervisory process.
- Evaluate the effects of one’s own personality, supervisory style, and limitations on the supervisee and the supervisory process and seek consultation as indicated.

**Advanced Clinical Skills**

- Apply comprehensive knowledge of current methods of music therapy assessment, treatment, and evaluation.
- Utilize advanced music therapy methods within one or more theoretical frameworks to assess and evaluate clients’ strengths, needs and progress.

**Research**

- Perform and evaluate the results of a comprehensive literature review to identify gaps in knowledge.
- Conduct research according to ethical principles for protection of human participants, including informed consent, assessment of risk and benefit, and participant selection.

**Master of Arts in Music Therapy**

Students must complete a minimum of 32 units with a Pacific cumulative and major/program grade point average of 3.0 or higher in order to earn the Master of Arts degree in music therapy.

**Music Therapy Foundational Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTHR 231</td>
<td>Individual Music Therapy: Advanced Theory and Techniques</td>
<td>3</td>
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University of the Pacific
Master of Arts in Music Therapy - 3 Year Internship Option

Students must complete a minimum of 32 units with a Pacific cumulative and major/program grade point average of 3.0 or higher in order to earn the Master of Arts degree in music therapy.

Pre-Board-Certification Courses:
- MTHR 011 Music as Therapy: A Survey of Clinical Applications 3
- MTHR 018 Basic Skills for Music Therapists and Allied Professionals 3
- MTHR 020 Observation and Assessment in Music Therapy 2
- MTHR 135 Music with Children in Inclusive Settings: Therapeutic and Educational Applications 3
- MTHR 141 Music Therapy in Mental Health and Social Services 3
- MTHR 142 Music Therapy in Medicine and Health Care 3
- MTHR 150 Fieldwork in Music Therapy * 1-2
- MTHR 187 Internship in Music Therapy ** 1

* Must take a total of 4 units.
** Must take a total of 2 units.

Music Therapy Foundational Courses:
- MTHR 231 Individual Music Therapy: Advanced Theory and Techniques 3
- MTHR 232 Group Music Therapy: Advanced Theory and Techniques 3
- MTHR 251 Music Therapy Supervision I: Introduction to Theory and Applications 1
- MTHR 252 Music Therapy Supervision II: Applied Experience 1
- MTHR 260 Advanced Clinical Practice in Music Therapy * 2
- MUSC 203 Contemporary Issues in Music Education and Music Therapy 3

* Two semesters, one unit each semester.

Choose one of the following Options:

Option A, Thesis Plan

EDUC 201 Techniques of Research 3
or MTHR 239 Research in Music
& MTHR 265 and Human Research in Music Therapy: Supervised Experience

MTHR 299 Thesis 4
Select three of the following Specialized Electives: 9
- EDUC 216 Nature and Conditions of Learning
- EDUC 330 Advanced Human Development I
- EDUC 331 Advanced Human Development II
- EDUC 335 Psychotherapeutic Interventions
- EDUC 337 Crisis Intervention
- EDUC 338 Consultation Methods
- EDUC 341 History and Systems in Psychology
- EDUC 343 Psychopathology and Wellness Promotion
- EDUC 348 Neuropsychology
- MTHR 240 Psychology of Music
& MTHR 291 and Graduate Independent Study

Option B, Non- Thesis Plan

EDUC 201 Techniques of Research 3
or MTHR 239 Research in Music
& MTHR 265 and Human Research in Music Therapy: Supervised Experience

MTHR 245 Clinical Clerkship in Music Therapy 1
MUSC 202 Introduction in Music Research 3
Select four of the following Specialized Electives: 12
- EDUC 216 Nature and Conditions of Learning
- EDUC 330 Advanced Human Development I
- EDUC 331 Advanced Human Development II
- EDUC 335 Psychotherapeutic Interventions
- EDUC 337 Crisis Intervention
- EDUC 338 Consultation Methods
- EDUC 341 History and Systems in Psychology
- EDUC 343 Psychopathology and Wellness Promotion
- EDUC 348 Neuropsychology
- MTHR 240 Psychology of Music
& MTHR 291 and Graduate Independent Study

Music Therapy Foundational Courses:
- MTHR 231 Individual Music Therapy: Advanced Theory and Techniques 3
- MTHR 232 Group Music Therapy: Advanced Theory and Techniques 3
- MTHR 251 Music Therapy Supervision I: Introduction to Theory and Applications 1
- MTHR 252 Music Therapy Supervision II: Applied Experience 1
- MTHR 260 Advanced Clinical Practice in Music Therapy * 2
- MUSC 203 Contemporary Issues in Music Education and Music Therapy 3

* Two semesters, one unit each semester.

Choose one of the following Options:

Option A, Thesis Plan

EDUC 201 Techniques of Research 3
or MTHR 239 Research in Music
& MTHR 265 and Human Research in Music Therapy: Supervised Experience

MTHR 299 Thesis 4
Select three of the following Specialized Electives: 6
- EDUC 216 Nature and Conditions of Learning
- EDUC 330 Advanced Human Development I
- EDUC 331 Advanced Human Development II
- EDUC 335 Psychotherapeutic Interventions
- EDUC 337 Crisis Intervention
- EDUC 338 Consultation Methods
- EDUC 341 History and Systems in Psychology
- EDUC 343 Psychopathology and Wellness Promotion
- EDUC 348 Neuropsychology

Music Therapy Foundational Courses:
- MTHR 231 Individual Music Therapy: Advanced Theory and Techniques 3
- MTHR 232 Group Music Therapy: Advanced Theory and Techniques 3
- MTHR 251 Music Therapy Supervision I: Introduction to Theory and Applications 1
- MTHR 252 Music Therapy Supervision II: Applied Experience 1
- MTHR 260 Advanced Clinical Practice in Music Therapy * 2
- MUSC 203 Contemporary Issues in Music Education and Music Therapy 3

* Two semesters, one unit each semester.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>MTHR 240</td>
<td>Psychology of Music</td>
</tr>
<tr>
<td>&amp; MTHR 291</td>
<td>and Graduate Independent Study</td>
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**Option B, Non-Thesis Plan**

<table>
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<tr>
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<td>EDUC 201</td>
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<td>or MTHR 239</td>
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<td>&amp; MTHR 265</td>
<td>and Human Research in Music Therapy: Supervised Experience</td>
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<tr>
<td>MTHR 245</td>
<td>Clinical Clerkship in Music Therapy</td>
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<tr>
<td>MUSC 202</td>
<td>Introduction in Music Research</td>
<td>3</td>
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<td>SELECT four of the following Specialized Electives:</td>
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<tr>
<td>EDUC 216</td>
<td>Nature and Conditions of Learning</td>
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<tr>
<td>EDUC 330</td>
<td>Advanced Human Development I</td>
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<td>EDUC 331</td>
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<td>EDUC 335</td>
<td>Psychotherapeutic Interventions</td>
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<td>EDUC 337</td>
<td>Crisis Intervention</td>
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<td>EDUC 338</td>
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<td>EDUC 341</td>
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<td>EDUC 343</td>
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</table>

**Course Descriptions**

**Predoctoral Courses**

**MTHR 018. Basic Skills for Music Therapists and Allied Professionals. 3 Units.**

MTHR 018 focuses on the development of applied/basic music skills necessary for implementing therapeutic music interventions with children and adults. Students increase performance competencies in the areas of singing and accompanying, and explore improvising/composing/arranging with instruments such as autoharp, Orff and other rhythmic/ethnic instruments. The course includes development of song repertoire commonly used across various therapeutic settings. This course is open to non-Majors. Prerequisite: MCOM 002.

**MTHR 011. Music as Therapy: A Survey of Clinical Applications. 3 Units.**

This course introduces the uses of music as a creative arts therapy, and it includes an overview of the history, theory, and clinical practice of music therapy across a broad range of settings. Classroom experiences, reading, films, and field observations introduce the student to various uses of music in the treatment of children and adults that are a foundation for the sequence of music therapy courses which together support development of required AMTA competencies for the professional music therapist. This course also offers an introduction to music therapy for interested persons in other health and pre-professional programs. This course is open to non-majors. Prerequisite: MCOM 002.

**MTHR 020. Observation and Assessment in Music Therapy. 2 Units.**

This course focuses on developing observation skills and assessment competencies. Students will practice implementation of standardized and therapist-constructed assessments (through simulation) to appropriately measure and monitor progress and evaluate effectiveness of music therapy interventions for children and adults. For graduate students only who need to fulfill coursework for board-eligibility through the Certification Board for Music Therapists.

**MTHR 135. Music with Children in Inclusive Settings: Therapeutic and Educational Applications. 3 Units.**

This course presents specific music therapy techniques and skills for development of programs for children's successful integration within home/school/community environments. Students will identify and create therapeutic music strategies to effect changes in children's academic, social, motor, and leisure skills development. This course also acquaints students with relevant music therapy/education research and current legislation regarding children within inclusive settings. Open to non-majors. Prerequisites: SPED 123 and either MTHR 018 or MCOM 002, or with instructor permission.

**MTHR 139. Research in Music. 2 Units.**

The application of scientific methods to investigate music therapy and related disciplines (e.g., music education and music psychology) are reviewed, including: qualitative and quantitative methods and related designs, review and evaluation of research literature, and writing a research proposal. Statistical analyses and evidence-based practice are introduced. Prerequisite: MCOM 002 or Instructor Permission.

**MTHR 140. Psychology of Music. 2 Units.**

This course introduces the psychological foundations of music, including the study of acoustics, perception of sound, music and neuroscience, and physical and psychosocial responses to music. Prerequisite: MTHR 139 or MTHR 239 or permission of the instructor.

**MTHR 141. Music Therapy in Mental Health and Social Services. 3 Units.**

This course examines theory, research, and clinical skills related to music therapy for adults, children, and adolescents in various mental health and social service treatment settings. It also includes an introduction to current DSM criteria for mental disorders commonly encountered by music therapists, and an overview of major theories of psychotherapy as they relate to music therapy. The course introduces music therapy techniques for group treatment which includes music improvisation, songwriting, and basic relaxation methods. This course is for music therapy majors only and it must be taken concurrently with Fieldwork in Music Therapy. Prerequisites: MTHR 011, MTHR 018, MTHR 135, and MTHR 140, PSYC 017 and completion of Voice, Guitar, and Piano competencies.

**MTHR 142. Music Therapy in Medicine and Health Care. 3 Units.**

This course provides an overview of music therapy with children, adults, and older adults in medical settings. Students survey theories, methods, and empirically supported treatments in settings such as acute care, physical rehabilitation, gerontology, palliative care, preventative medicine, and health maintenance. It also includes the study of physical and psychosocial processes natural to aging and end of life, and assists students in developing skills in improvising music for relaxation and palliative care. The course is for music therapy majors only. Prerequisites: MTHR 141, BIOL 011 and completion of Voice, Guitar, and Piano competencies.

**MTHR 143. Supervisory Techniques. 1 or 2 Unit.**

This course offers techniques in the supervision of music therapy fieldwork. The course is only open to music therapy majors by permission of the instructor. Prerequisites: MTHR 020, MTHR 140 and MTHR 150.

**MTHR 150. Fieldwork in Music Therapy. 1-2 Units.**

Fieldwork provides students with structured clinical experiences in music therapy under the supervision of a music therapist in varying community settings. This course repeated for credit and taken concurrently each semester students are enrolled in MTHR 135, MTHR 140, MTHR 141 and MTHR 142. Prerequisites: MTHR 011 and MTHR 018. This course is open only to music therapy majors, and a minimum of 4 units of Fieldwork (MTHR 150) is required for completion of the music therapy degree program.
MTHR 187. Internship in Music Therapy. 1 Unit.
This course consists of clinical training experience at an internship site approved by the AMTA. Successful completion of required hours and competencies allows students to sit for the Music Therapy Board Certification Examination. Prerequisites: Successful completion of all coursework and functional music skills, competency evaluation and individualized internship training plan. Students are required to enroll in MTHR 150 within the period of one year prior to the start of internship.

MTHR 191. Independent Study. 1-2 Units.

MTHR 230. Bonny Method of Guided Imagery and Music Level I Training. 3 Units.
Intensive 5-day residential seminar introduces theory and clinical applications of the Bonny Method of Guided Imagery and Music (BMGIM) and other music and imagery techniques. Participants gain intensive personal experience with BMGIM. Hands-on experiential exercises, demonstrations, and clinical examples introduce simple imagery techniques to add to participants’ existing repertoire of therapeutic interventions. This residential phase of the course meets the Association of Music and Imagery (AMI) requirements for introductory training in the Bonny Method. The on-line learning component extends and deepens the student’s understanding through exposure to literature in the Bonny Method, sharing of discoveries from readings and music listening, as well as personal reflection and integration of experiential learning. Due to the experiential nature of this course, participants must be willing to participate in all learning activities and in the group sharing process, and attend all seminar sessions as listed in the residential seminar course schedule. All students and instructors are expected to maintain confidentiality of personal material shared by group members. Prerequisites: Evidence of clinical experience and permission of instructor.

MTHR 231. Individual Music Therapy: Advanced Theory and Techniques. 3 Units.
This course explores current theories and techniques of music-centered psychotherapy for supportive, re-educative/rehabilitative, and re-constructive levels of clinical practice with a variety of populations. The course includes development of therapeutic relationship through music improvisation, and focused music-evoked imagery to address supportive and re-educative goals for individual clients. Experiential learning includes classroom simulations and supervised clinical practice. Prerequisites: MTHR 187 (or an AMTA-approved clinical internship) and MTHR 230 (or Level I training in the Bonny Method of Guided Imagery and Music) or permission of instructor.

MTHR 232. Group Music Therapy: Advanced Theory and Techniques. 3 Units.
This course examines theories and models for group music therapy with applications for a variety of clinical populations. The course includes approaches for quick group assessment and brief treatment environments. The focus is on therapist and member roles and tasks within group development processes. Students refine group facilitation skills that use music-centered techniques of improvisation and music-evoked imagery through in-class simulations and supervised clinical practice. Prerequisite: MTHR 231 with a "B" or better or permission of instructor.

MTHR 239. Research in Music. 2 Units.
The application of scientific methods to investigate music therapy and related disciplines (e.g., music education and music psychology) are reviewed, including: qualitative and quantitative methods and related designs, review and evaluation of research literature, and writing a research proposal. Statistical analyses and evidence-based practice are introduced. Prerequisite: MCOM 002 or Instructor Permission.

MTHR 240. Psychology of Music. 2 Units.
This course introduces the psychological foundations of music, including the study of acoustics, perception of sound, music and neuroscience, and physical and psychosocial responses to music. Prerequisite: MTHR 139 or MTHR 239 or permission of the instructor.

MTHR 245. Clinical Clerkship in Music Therapy. 1-4 Units.
As an alternate requirement for Thesis, Clinical Clerkship is designed for students who may want to focus on clinical skills and knowledge. Students complete a major project related to an applied therapeutic or educational setting.

MTHR 251. Music Therapy Supervision I: Introduction to Theory and Applications. 1 Unit.
This course provides a foundation for effective music therapy clinical supervision. It introduces multicultural, ethical, and legal considerations and explores factors unique to music therapy supervision. Readings, workbook assignments, field observations and in-class discussion of theories and techniques prepare students for MTHR 252, and practical experience supervising undergraduate students in clinical training settings. Prerequisite: MTHR 187 or an AMTA approved clinical internship.

MTHR 252. Music Therapy Supervision II: Applied Experience. 1 Unit.
This course provides mentored practice in clinical supervision and it supports individualized skill development of competencies for professional participation in clinical management and student, volunteer, or peer supervision situations. Learning experiences include direct on-site supervision of undergraduate music therapy students in fieldwork placements, maintaining the on-site learning environment, monitoring student progress, conducting formal evaluations, conducting group student supervision and regular participation in supervisors group consultation meetings with faculty. Prerequisite: MTHR 251 with a "B" or better.

MTHR 260. Advanced Clinical Practice in Music Therapy. 1 Unit.
This course provides individualized experiences for development of advanced clinical skills in music therapy. Students may focus on a new area of specialization, or may work within a familiar clinical environment that develops skills at a more advanced level. Experiences may include supervised practice in advanced music therapy techniques, interdisciplinary collaboration, new program development, or expansion of an existing clinical program. Prerequisites: two semesters of MTHR 187 or clinical internship.

MTHR 265. Human Research in Music Therapy: Supervised Experience. 1 Unit.
This course offers individualized experiences for development of advanced research skills in music therapy. It provides faculty oversight and supervision of human research in clinical or laboratory settings. Students may focus on their own independent research project or may work within a collaborative or faculty-directed research environment. It is required for students who conduct summer research activities with human subjects and includes projects that contribute to completion of the master's thesis or clinical clerkship. This course may be repeated. Prerequisites: Completion of University Human Subjects (IRB) training for student investigators, and permission of instructor.

MTHR 275. College Teaching in Music Therapy: Curriculum, Competencies and Classroom. 3 Units.
Students review the AMTA requirements for music therapy undergraduate program curriculum and for competency-based education and clinical training. The course provides mentored practice in teaching foundational level music therapy college courses, and it supports individualized skill development for professional participation in academic music therapy programs as an instructor. Permission of instructor.
School of Engineering and Computer Science

http://www.pacific.edu/eng
Phone: (209) 946-2151
Location: Stockton Campus John T. Chambers Technology Center

Steven Howell, Dean

Program Offered
- Master of Science in Data Science
- Master of Science in Engineering Science

Admission Criteria for Master of Science in Engineering Science

All applicants for the Master of Science in Engineering Science program must submit the following materials to the Research and Graduate Studies Office at the University of the Pacific. A completed application includes:

1. The Graduate School application form
2. Letters of recommendation
3. Transcripts from the institution where the BS in engineering, computer science, or relevant degree was granted
4. A personal statement on professional goals and objectives
5. A 3.0/4.0 GPA on the last 60 units of undergraduate study
6. For students whose first language is not English, Test of English as a Foreign Language (TOEFL) is required. The minimum score for admission is 550 (paper) or 213 (computer) and the minimum score for a teaching assistantship award is 575 (paper) or 231 (computer)

Academic Policies for Master of Science in Engineering Science

Engineering and Computer Science Prerequisite Requirement

All course prerequisites in the MS in Engineering Science program must be passed with a grade of C or higher.

Courses Taken Pass/No Credit

All courses that count toward the MS in Engineering Science must be taken for a letter grade (except for thesis units).

Graduate Independent Studies

Students who have an interest in a subject not offered as a regular course and who, by their overall performance at Pacific, have proven their ability to do independent work, may consider enrolling in a graduate independent study. The qualified student should initiate discussions with his/her advisor and with a professor who is knowledgeable in the subject. If both parties are in agreement, the student must complete the Individualized Study Form and submit it to the instructor and Office of the Registrar prior to the last day to add (see University Academic Calendar). Students on academic probation are not permitted to enroll in independent study courses in any department of the University. The following School of Engineering and Computer Science policies apply:

1. The course(s) may not be substituted for a regularly scheduled course unless approved by the department.
2. If the course is to be used as an elective, approval by the student's advisor and the department chairperson is required.
3. All courses must be taken for a letter grade; the pass/no credit option is not allowed for independent study courses.
4. Each course may be taken for one (1), two (2), three (3), or four (4) units. The unit value for the course is established between the student and the professor responsible for the course. The student's advisor should be informed of this decision.

Course Substitutions

A maximum of six units of approved advanced undergraduate courses (100 level) can count toward the MS in Engineering Science.

Admission Criteria for Master of Science in Data Science

All applicants for the Master of Science in Data Science program must submit the following materials via the GradCAS online application system. A completed application includes:

1. Online application via the GradCAS system (https://gradcas.liaisoncas.org/apply/)
2. Two letters of recommendation
3. Official transcripts. An official, course-by-course evaluation of any non-US transcripts with an overall U.S. GPA equivalent from one of the agencies accepted by the University (see full list here (https://www.pacific.edu/admission/graduate-programs/international-applicants.html))
4. A 2.65/4.0 GPA on the last 60 units of undergraduate study
5. For students whose first language is not English, Test of English as a Foreign Language (TOEFL) is required. The minimum score for admission is 550 (paper) or 213 (computer) and the minimum score for a teaching assistantship award is 575 (paper) or 231 (computer). Alternatively, we accept IELTS
6. A personal statement of interest. The statement of interest allows applicants to demonstrate their motivation, skills, and abilities that will contribute to their academic success in our program. While there is no specific format required for this statement, applicants are advised to give particular consideration to:
   - Academic credentials
   - Experience in the foundational concepts of:
• Statistics
• Linear Algebra
• Computer programming (any language, but Python and R are preferred)
• Commitment and personal stamina to undertake fast paced, intensive academic program
• Enthusiasm for this particular course of study

Academic Policies for Master of Science in Data Science

Engineering and Computer Science Prerequisite Requirement
All course prerequisites in the MS in Data Science program must be passed with a grade of C or higher.

Courses Taken Pass/No Credit
All courses that count toward the MS in Data Science must be taken for a letter grade, with the exception of ANLT 283, which may be taken on a Pass / No Credit basis.

Data Science
Phone: (209) 946-2992
Location: San Francisco
Website: Data Science (http://www.pacific.edu/analytics/)

Degrees Offered
Master of Science in Data Science

Data Science Program Overview
The MS in Data Science prepares graduates for careers in data analytics and related fields. This is done by developing students' math foundation in statistics and linear algebra, and learning skills in the areas of data preparation, data modeling, predictive modeling, and a variety of data science / analytic solution areas such as customer analytics, fraud detection and healthcare analytics.

This 32-unit, 4-semester degree culminates in a Capstone Project, in which students work on an analytics problem with a corporation in the Silicon Valley/Northern California region.

Prerequisite entry requirements include:
• A Bachelor's degree
• GPA of 2.65 or above
• Educational qualifications and/or work experience in:
  • Statistics
  • Linear Algebra
  • Computer programming (any language, although Python and R are preferred)
  • Basic calculus (derivatives)
• In addition, international students must also have:
  • The US equivalent of a GPA of 2.65 or above
  • TOEFL (or equivalent) English language proficiency. A minimum score of 90 or a score of at least 550 (213 on the computer-based test) is required.

• Official, course-by-course evaluation of their transcripts with an overall U.S. GPA equivalent from one of the agencies accepted by the University.

Data Science Program Educational Objectives
The MS in Data Science prepares graduates for careers in data analytics and related fields. This is done by developing students' math foundation in statistics and linear algebra, and learning skills in the areas of data preparation, data modeling, predictive modeling, and a variety of data science / analytic solution areas such as customer analytics, fraud detection and healthcare analytics.

The education that students receive will allow them after graduation to:
• Extract value from data to assist organizations in understanding past performance, predicting future events, and optimizing processes;
• Apply the methods of data wrangling, analytic programming, data mining, quantitative methods, modeling, to prepare very large data sets for analysis;
• Design and develop practical data oriented solutions using modern analytic techniques such as machine learning, time series analysis, and clustering;
• Apply the scientific method to develop and test hypotheses using mathematical and statistical principles;
• Conduct compelling communications through informative visualizations and effective presentation skills.

Data Analysis
• Analyze various forms of data (e.g. numerical, categorical, textual, objects, etc.) using appropriate mathematical and/or machine learning techniques.

Data Engineering
• Apply modern programming and data engineering skills, extract data from files, databases, or online resources, and transform it for appropriate analysis.

Professional Presentation
• Effectively communicate results in a format that is appropriate to the audience, via written, oral, and graphical media.

Master of Science in Data Science
Students must complete a minimum of 32 units with a Pacific cumulative grade point average of 3.0 to earn the master of science in data science degree.

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<th>Course name</th>
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<td>ANLT 202</td>
<td>Frequentist Statistics</td>
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<td>ANLT 203</td>
<td>Bayesian Statistics</td>
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<td>Research Methods for Data Science</td>
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<td>ANLT 210</td>
<td>Software Methods for Data Science</td>
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<td>ANLT 212</td>
<td>Analytics Computing for Data Science</td>
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<td>ANLT 222</td>
<td>Machine Learning for Data Science</td>
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<td>ANLT 224</td>
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<td>ANLT 232</td>
<td>Introduction to Data Visualization</td>
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ANLT 243 NoSQL Databases 1
ANLT 272 Healthcare Case Studies 1
ANLT 276 Emphasis Case Studies 1
ANLT 282 Capstone Project 6
ANLT 283 Weekly Hot Topics * 3

Select three of the following: 3

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<td>ANLT 206</td>
<td>Sentiment Analysis and Opinion Mining</td>
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<td>ANLT 207</td>
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<td>ANLT 275</td>
<td>Text Mining</td>
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* Students will take three semesters of ANLT 283.

**Course Descriptions**

**Predoctoral Courses**

**ANLT 201. Linear Algebra for Data Science. 2 Units.**  
Linear algebra is the generalized study of solutions to systems of linear equations. In this course, students will begin by focusing on developing a conceptual understanding of computational tools from linear algebra, which are frequently employed in the analysis of data. These tools include: formulating linear systems as matrix-vector equations, solving systems of simultaneous equations using technology, performing basic computations involving matrix algebra, solving eigenvalue-eigenvector problems using technology, diagonalization, and orthogonal projections. Students will then be exposed to more advanced topics, such as singular value decomposition, principle component analysis, Random Walk, Markov Chains, and applications of linear algebra in data mining. The use of software to perform computations will be emphasized. Prerequisite: Graduate status in the Data Science program.

**ANLT 202. Frequentist Statistics. 1 Unit.**  
A survey of regression, linear models, and experimental design. Topics include simple and multiple linear regression, single- and multi-factor studies, analysis of variance, analysis of covariance, mode selection, and diagnostics. This class will focus more on the application of regression methods than the underlying theory through the use of modern statistical programming languages. Prerequisite: Graduate status in the Data Science program.

**ANLT 203. Bayesian Statistics. 1 Unit.**  
This course introduces Bayesian statistical methods that enable data analysts and scientists to combine information from similar experiments, account for complex spatial, temporal, and other relationships, and also incorporate prior information or expert knowledge into a statistical analysis. This course explains the theory behind Bayesian methods and their practical applications, such as social network analysis, predicting crime risk, or predicting credit fraud. The course emphasizes data analysis through the use of modern analytic programming languages. Prerequisite: Graduate status in the Data Science program.

**ANLT 205. Consumer Analytics. 1 Unit.**  
This course introduces the techniques used to analyze consumer shopping and buying behavior using transactional data in industries like retail, grocery, e-commerce, and others. Students will learn how to conduct item affinity (market basket) analysis, trip classification analysis, RFM (recency, frequency, monetary) analysis, churn analysis, and others. This class will teach students how to prepare data for these types of analyses, as well as how to use machine learning and statistical methods to build the models. The class is an experiential learning opportunity that utilizes real-world data sets and scenarios. Prerequisite: Graduate status in the Data Science program.

**ANLT 206. Sentiment Analysis and Opinion Mining. 1 Unit.**  
This course introduces the algorithms and methods used to analyze the subjective opinions and sentiments of the author of a free text document such as a tweet, blog post, or article. The class will examine the applications of this type of analysis as well as its benefits and limitations. Sentiment analysis is closely tied to text mining and uses techniques such as natural language processing, text analysis, and computational linguistics for feature extraction and preprocessing of the data. Students will explore the current state of usage of sentiment analysis, as well as future implications and opportunities. Prerequisite: Graduate status in the Data Science program.

**ANLT 207. Time Series Analysis. 1 Unit.**  
This course introduces the theory and application of statistical methods for the analysis of data that have been observed over time. Students will learn techniques for working with time series data and how to account for the correlation that may exist between measurements that are separated by time. The class will concentrate on both univariate and multivariate time series analysis, with a balance between theory and applications. Students will complete a time series analysis project using real-world scenario and data set. Prerequisite: Graduate status in the Data Science program.

**ANLT 208. Research Methods for Data Science. 1 Unit.**  
Students learn about research design, qualitative and quantitative research, and sources of data. Topics will include a variety of research topics, including such things as data collection procedures, measurement strategies questionnaire design and content analysis, interviewing techniques, literature surveys; information databases, probability testing, and inferential statistics. Students will prepare and present a research proposal (with emphasis on technical writing/presentation principles) as part of the course. Prerequisite: Graduate status in the Data Science program.

**ANLT 210. Software Methods for Data Science. 1 Unit.**  
Students learn the tools, methodology, and etiquette in developing data science applications, tools, and analytical workflows in collaborative environments. Data scientists are at the nexus of software engineering, science, and business. In order to thrive in this world, they must work collaboratively across these fields and skill sets, while ensuring that work is accessible and digestible to everyone involved. Moreover, they must ensure their work is production-worthy and extensible. This course teaches all of the elements, both technical and conceptual, to create productive, helpful, and professional data scientists. Prerequisite: Graduate status in the Data Science program.
ANLT 212. Analytics Computing for Data Science. 2 Units.
This course introduces computational data analysis using multi-paradigm programming languages. By the end of the course, students will tackle complex data analysis problems. The course emphasizes the use of programming languages for statistical and machine learning analysis, and predictive modeling. Graphical analytics tools will also be used. The course will also cover the various packages for accessing data that come with the various languages, manipulating and preparing data for analysis, conducting statistical and machine learning analyses, and graphically plotting and visualizing data and analytical results. The course emphasizes hands-on data and analysis using a variety of real-world data sets and analytical objectives. Prerequisite: Graduate status in the Data Science program.

ANLT 214. Data Engineering for Data Science. 1 Unit.
This course introduces students to data warehousing architectures, big data processing pipelines, and in-memory analytic techniques. Students will learn how to design systems to manage large volumes of multidimensional data. Currently, this includes the map-reduce paradigm, distributed file systems (HDFS), the Spark distributes computing platform, and how to sign up cloud computing resources (AWS EC2). Prerequisite: Graduate status in the Data Science program.

ANLT 216. Legal Analytics for Data Science. 1 Unit.
This course introduces students to how the law applies to the practice of data science. This course will expose students to: the ways in which data science assists with the practice of law, legal compliance and regulations that affect how data science tasks can be conducted, and the diverse ways in which the law affects the data scientist in his/her capacity as a practicing professional. Pre-requisite: Graduate status in the Data Science program.

ANLT 222. Machine Learning for Data Science. 2 Units.
Machine learning is the artificial intelligence discipline for uncovering patterns and relationships contained in large data sets. Students will be exposed to the supervised learning methods such as neural networks and decision trees. Practical application of these techniques will be tools like R and Python. Students will also learn: proper techniques for developing, training, and cross-validating predictive models; bias versus variance; and will explore the practical usage of these techniques in business and scientific environments. Students will also be introduced to unsupervised learning – the class of machine learning for uncovering patterns and relationships in data without labeling the data or establishing a preconceived set of classes or results. Students will learn through hands-on programming projects. Prerequisite: Graduate status in the Data Science program.

ANLT 223. Advanced Machine Learning. 1 Unit.
This course builds on the fundamentals introduced in ANLT 222 Machine Learning, by examining more machine algorithms and neural network topologies, and studying their respective applications. The course includes an overview of the TensorFlow language, Decision Tree methods, and an introduction to Natural Language Processing (NLP). Prerequisite: ANLT 222 (or concurrent enrollment in ANLT 222).

ANLT 224. Data Wrangling. 1 Unit.
This course will teach you how to retrieve data from disparate sources, combine it into a unified format, and prepare it for effective analysis. This aspect of data science is often estimated to be upwards of 80% of the effort in a typical analytics process. Students will learn how to read data from a variety of common storage formats, evaluate its quality, and learn various techniques for data cleansing. Students will also learn how to select appropriate features for analysis, transform them into more usable formats, and engineer new features into more powerful predictors. This class will also teach students how to split the data set into training and validation data for more effective analytical modeling. Prerequisite: Graduate status in the Data Science program.

ANLT 232. Introduction to Data Visualization. 1 Unit.
This course introduces tools and methods for visualizing data and communicating information clearly through graphical means. The class covers various data visualizations and how to select the most effective one depending on the nature of the data. Students will practice using the data visualization methodology by walking through a case study with the instructor and then practicing the steps on their own. Students will work with modern analytic graphics packages, and will be introduced to open source libraries, and to commercial visualization products. Prerequisite: Graduate status in the Data Science program.

ANLT 233. Dynamic Visualization. 1 Unit.
This course introduces advanced visualization techniques for developing dynamic, interactive, and animated data visualization. Students will learn a variety of techniques for the visualization of complicated data sets. These techniques are valuable for visualizing genomic data, social or other complex networks, healthcare data, business dynamics changing over time, weather and scientific data, and others. Often the visual presentation of data is enhanced when it is made interactive and dynamic, allowing users to “move through” the data and manipulate the data graphically for exploratory analysis. This presentation often involves web application development, and students will be exposed to these rudiments as well as tools that enable faster development of data visualization. Prerequisite: Graduate status in the Data Science program.

ANLT 234. Analytics Storytelling for Data Science. 1 Unit.
This course builds upon ANLT 232. It will dive into how visualizations should be presented differently when presenting to lay people, business executives, and a technical group. It will also consider visualizations meant for exploratory analysis versus persuasive argument versus survey, or “30,000 foot” analysis. Working alone and in teams, students will create visualizations using their own findings and using provided case studies. Prerequisite: Graduate status in the Data Science program.

ANLT 242. Relational Databases. 1 Unit.
This course introduces relational database management systems (RDBMS) and the structured query language (SQL) for manipulating data stored therein. The class is focused on the applied use of SQL by data scientists to extract, manipulate and prepare data for analysis. Although this class is not a database design class, students will be exposed to entity-relationship (ER) models and the benefits of third normal form (3NF) data modeling. The class employs hands-on experiential learning utilizing the modern relational database querying languages and graphical development environments. Prerequisite: Graduate status in the Data Science program.
ANLT 243. NoSQL Databases. 1 Unit.
This course will examine different non-relational (NoSQL) database paradigms, such as Key-Value, Document, Column-family, and Graph databases. Students will learn about advantages and disadvantages of the different approaches. The class will include hands-on experience with a representative sample of NoSQL databases. Computing developments that spurred the existence of NoSQL databases, such as big data, distributed and cloud computing will also be discussed. Prerequisite: Graduate status in the Data Science program.

ANLT 272. Healthcare Case Studies. 1 Unit.
This course is a culmination of the first semester of the MS Analytics program. It provides an experiential learning opportunity that ties together the statistical, computational analytics and database concepts in a series of case studies in the Healthcare sector. Students will examine four separate case studies of the use of data analytics in healthcare. Students will work in teams to dissect these case studies and evaluate the business opportunity, the analysis methodology, the raw data, the feature engineering and data preparation, and the analytical outcomes. Students will present their evaluation and make recommendations for improvements in the analysis and related opportunities. Prerequisite: Graduate status in the Data Science program.

ANLT 273. Fraud Detection. 1 Unit.
This course introduces the use of analytics to detect fraud in a variety of contexts. This class shows how to use machine learning techniques to detect fraudulent patterns in historical data, and how to predict future occurrences of fraud. Students will learn how to use supervised learning, unsupervised learning, and social network learning for these types of analyses. Students will be introduced to these techniques in the domains of credit card fraud, healthcare fraud, insurance fraud, employee fraud, telecommunications fraud, web click fraud, and others. The course is experiential and will apply concepts taught in prior data wrangling and machine learning courses using real-world data sets and fraud scenarios. Prerequisite: Graduate status in the Data Science program.

ANLT 274. Customer Analytics. 1 Unit.
This course introduces the techniques used to analyze consumer shopping and buying behavior using transactional data in industries like retail, grocery, e-commerce, and others. Students will learn how to conduct item affinity (market basket) analysis, trip classification analysis, recommender systems, RFM (recency, frequency, monetary) analysis, churn analysis, and others. This class will teach students how to prepare data for these types of analyses, as well as how to use machine learning and statistical methods to build the models. The class is an experiential learning opportunity that utilizes real-world data sets and scenarios. Prerequisite: Graduate status in the Data Science program.

ANLT 275. Text Mining. 1 Unit.
This course introduces the essential elements of text mining, or the extension of standard predictive methods to unstructured text. The class will explore the use of text mining in domains such as digital security, bioinformatics, law, marketing, and social media. Students will be exposed to information retrieval, lexical analysis, pattern recognition, meta-data tagging, and natural language processing (NLP). A large portion of this class will be devoted to the data preparation and wrangling methods needed to transform unstructured text into a suitable structure for analysis. Prerequisite: Graduate status in the Data Science program.

ANLT 276. Emphasis Case Studies. 1 Unit.
This course provides a real-world learning opportunity that ties together the concepts and practice of data science through a series of case studies in the finance, manufacturing, telecommunications and retail sectors. Students evaluate the business opportunities and challenges, explore, wrangle, and prepare the raw data, compare, select, implement, and validate statistical and machine learning models. Students present their evaluations and make recommendations for improvements.

ANLT 282. Capstone Project. 6 Units.
This course is a culmination of all modules in the MS Data Science program. It provides an experiential learning opportunity that connects all of the materials covered in the MS Analytics program. Students will be formed into teams and assigned to an industry sponsored project. Capstone projects will be agreed in advance with sponsoring companies and will represent real-world business issues that are amenable to an analytic approach. These projects will be conducted in close oversight by the sponsoring company, as well as, a University faculty member and may be conducted on the sponsoring company's premises using their preferred systems and tools, at the sponsoring company's discretion. Prerequisite: Graduate status in the Data Science program.

ANLT 283. Weekly Hot Topics. 1 Unit.
This course consists of a set of weekly presentations and discussions around key analytic issues and current case studies. These hot topics will be presented by a combination of guest speakers – industry luminaries in the area of analytics – and University of the Pacific faculty members, including the MS Analytics program director. Many of these topics will be drawn from relevant real-world contemporary analytic stories that reinforce specific elements of the academic content being taught and cannot be predicted in advance. Prerequisite: Graduate status in the Data Science program.

ANLT 287. Internship. 1-4 Units.
ANLT 287A. Internship. 1-4 Units.
ANLT 287B. Internship. 1-4 Units.

ANLT 297. Graduate Research. 1-6 Units.

School of Health Sciences
Nicoleta Bugnariu, Dean

Programs Offered
Master of Science in Athletic Training (Stockton)
Master of Science in Clinical Nutrition (Sacramento)
Master of Science in Nursing (Sacramento)
Master of Physician Assistant Studies (Sacramento)
Master of Social Work (Sacramento)
Master of Science in Speech-Language Pathology (Stockton)
Doctor of Audiology (San Francisco)
Doctor of Occupational Therapy (Sacramento)
Doctor of Physical Therapy (Stockton)
Vision
The vision of the School of Health Sciences is to lead in advancing the lifelong wellness of our communities.

Purpose
Prepare all graduates for leadership roles that advance lifelong wellness of diverse communities through learning, discovery and innovation. Taking advantage of the unique mix of programs, the School of Health Sciences will develop innovative curricula that takes advantage of the university's opportunities in interprofessional education. Students from the School of Health Sciences, Thomas J. Long School of Pharmacy, and Arthur A. Dugoni School of Dentistry will share classrooms and learn with, from and about each other, preparing them for interprofessional practice in settings where integrated teams provide optimal patient care.

Audiology
Pacific's doctor of audiology (AuD) program is the only three-year accelerated program in California. Students with a bachelor's degree in any major and an interest in the profession of audiology are encouraged to apply. While in the program, students will gain rich and diverse clinical experiences through the onsite audiology clinic, nearby medical and audiology centers as well as the audiology clinic in Stockton. This program is offered at Pacific's new state-of-the-art campus in the SoMa district of San Francisco.

Mission
The mission of the Audiology department is to prepare reflective audiologists for lifelong success by providing an excellent student-centered, experiential learning environment. Our students are mentored in developing professionalism, leadership, critical thinking skills, and a strong commitment to their profession and society. These efforts are assisted by the department’s commitment to professional growth through clinical practice, scholarly activity, and service to the profession and the community. The programs are developed in accordance with state and national accreditation standards and guidelines to ensure that graduates provide exemplary professional practice throughout their careers.

Program Highlights
• Pacific's Doctor of Audiology program is the first in Northern California.
• It is one of four accelerated programs in the country, and the only one in California.
• A strong and cohesive group of full-time faculty with areas of expertise covering a wide variety of the topics within the scope of practice of audiology.

Rewarding Career Opportunities
According to the Bureau of Labor Statistics of the U.S. Department of Labor, "Employment of audiologists is expected to grow by 37% from 2010 to 2020, much faster than the average for all occupations. Hearing loss increases as people age, so an aging population is likely to increase demand for audiologists. The early identification and diagnosis of hearing disorders in infants also will spur employment growth. Advances in hearing aid design, such as the reduction of feedback and a smaller size, may make the devices more appealing as a means to minimize hearing loss, leading to more demand for the audiologists who provide hearing aids."

Accreditation
The doctor of audiology program at the University of the Pacific has been awarded candidacy status by the Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA) of the American Speech-Language-Hearing Association and a ten-year accreditation status by the Accreditation Commission for Audiology Education (ACAE). Learn more about the accreditation process.

How To Apply
Submit your applications through the Communication Sciences & Disorders Centralized Application Service (CSDCAS) at https://cscas.liquidnetcas.com/applicant-ux/#/login.

Priority Deadline: February 1st
Final Deadline: March 1st

Admission interviews are conducted via Skype. Qualified applicants who meet the February 1st priority deadline will be invited to participate in admission interviews prior to March 1st. Incomplete and unverified applications will not be reviewed.

Admission Requirements
• Self-reported grades for prerequisites
• Official transcripts from all institutions attended post-high school
• Minimum GPA of 3.0
• Official GRE General Test score report (ETS code: 0773)
• Three letters of recommendation (at least one from a college or university faculty member)
• Personal statement that answers the following questions:
  • Why are you pursuing a Doctor of Audiology degree? (max 500 words)
  • Why is the University of the Pacific a good fit for you? (max 500 words)
  • Describe a time when you experienced failure/setback. (max 500 words)
  • Discuss the strategies you used to overcome this challenge. What did you learn as a result? (max 1000 words)
• Format: Arial, Calibri, or Times New Roman; size 12; double-spaced.

Prerequisites
Applicants are required to have earned a bachelor’s degree from an accredited college or university. Admission is competitive and a minimum cumulative 3.0 GPA is required for all undergraduate coursework. All prerequisite courses must be completed before the March 1st final application deadline with a grade of "C" or above. Online coursework is accepted.

• Biological Sciences: General Biology OR Human Anatomy & Physiology
• Physical Sciences: Chemistry OR Physics
• Social/Behavioral Sciences: Introduction to Psychology OR Introduction to Sociology OR Anthropology
• Mathematics: Statistics OR Calculus OR Pre-Calculus

International Students
International student applicants must supply additional documents such as TOEFL score report and international transcript evaluation. Required documents must be submitted six weeks prior to the posted deadlines.
to be considered for admission. If this applies to you, please find your additional requirements here (https://www.pacific.edu/admission/graduate-programs/international-applicants.html).

Graduates of the Doctor of Audiology program will demonstrate:

Humanistic Leadership
- Conceptualizes how to advance the community's hearing health, and integrates diverse perspectives on how to build access to hearing healthcare.

Evidence-based Practice
- Critically evaluate the quality of evidence from research and practice-based sources and uses these to educate about prevention, provide screening, and appropriate clinical treatment, including advanced diagnostic procedures.

Integrative Clinical Practice
Think critically and problem solve in the process of analyzing complex and diverse concepts, that require application of professional judgment
- Independently makes appropriate differential diagnoses that require the application of complex and diverse audiology concepts
- Collaborates with other practitioners to critically evaluate diagnoses in the course of developing and implementing treatment plans that are appropriate to the diagnosis and the client's situation and concerns.

Professional Communication
- Communicates results of diagnostic assessments, and treatment options effectively, both orally and in writing, to patients and to other clinical providers.

Ethical Competence
- Articulates the bases for the ethical standards in the audiology profession, explains how ethical principles can be applied to resolving ethical challenges in practice, and consistently adheres to ethical standards in the practice of audiology.

Interpersonal Interaction
- Interacts effectively and respectfully with people from diverse backgrounds and cultures and works through differences with civility.

Doctor of Audiology
Students must complete a minimum of 124 units with a Pacific cumulative grade point average of 3.0 in order to earn the doctor of audiology degree.

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<td>AUDI 349</td>
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<td>AUDI 355</td>
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<td>AUDI 365</td>
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<td>AUDI 389C</td>
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<td>Total Hours</td>
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Course Descriptions

Predoctoral Courses
**AUDI 301. Anatomy and Physiology of Hearing.** 3 Units.
An in-depth course on the anatomy and physiology of the hearing mechanism primarily as it related to hearing.

**AUDI 303. Signals and Systems.** 3 Units.
Basics of signal processing for hearing aids and equipment that measure hearing. IEC/ANSI standards of performance for the instrumentation, calibration procedures, and compliance.

**AUDI 305. Diagnostic Audiology I.** 3 Units.
Foundation and orientation to audiological equipment and testing. Basic audiometric tests and underlying principles, case history and universal precautions.

**AUDI 307. Diagnostic Audiology II.** 3 Units.
Evaluation of middle ear function by using the principles of acoustic immittance. Principles underlying optoacoustic emissions. Implementation of tests and formulation of diagnosis based on test results.

**AUDI 309. Diagnostic Electrophysiology I.** 3 Units.
Diagnostic electrophysiological techniques, assessment of hearing using auditory evoked responses across all age ranges. Evidence-based best practices for determining threshold and neurophysiological integrity with the auditory brainstem response (ABR).

**AUDI 311. Pediatric Audiology.** 3 Units.
Diagnostic assessment of children from ages 0-18. Embryology and hearing development and genetics of hearing loss.
AUDI 313. Central Auditory Processing - Diagnosis & Management. 3 Units.
Assessment (screening and diagnostic) and treatment options for auditory processing disorders.

AUDI 315. Amplification I. 3 Units.
Theoretical and applied understanding of current technology in hearing aids. Electroacoustic analysis and programming of hearing instruments and verification of the performance of hearing instruments using objective and subjective measurements.

AUDI 317. Amplification II. 3 Units.
Theoretical and clinical aspects of advanced signal processing schemes and verification procedures are taught. Selection and fitting of amplification for special populations.

AUDI 319. Amplification III. 3 Units.
Advanced application of knowledge and skills obtained in AUDI 315 and AUDI 317. Personal and sound field FM systems, classroom listening, and assessment beyond the sound booth, classroom acoustics, assistive listening devices and counseling techniques.

AUDI 321. Auditory Implants. 3 Units.
This course covers a variety of auditory prosthetic devices with emphasis on cochlear implant technology. History, pediatric and adult candidacy, signal processing strategies and fitting protocols will be explored in detail.

AUDI 323. Pediatric Aural Rehabilitation. 3 Units.
This course is an overview of current management options for the (re)habilitation of children with hearing loss.

AUDI 325. Aural Rehabilitation. 3 Units.

AUDI 327. Auditory Verbal Therapy. 3 Units.
Key principles and components of a successful auditory-verbal program along with procedural outlines to formulate a strategy to implement goals, including audiological monitoring, parent training and therapy components.

AUDI 331. Vestibular Assessment I. 3 Units.
Anatomy and physiology of the vestibular mechanism, diagnostic tests, case history, bedside evaluations, and ENG/VNG test battery.

AUDI 333. Vestibular Treatment. 3 Units.
Didactic and hands on approach to management and treatment of vestibular disorders. Causes and pathophysiology of vestibular loss, treatment programs. Interdisciplinary approach to the patient management.

AUDI 335. Speech and Language Development. 3 Units.
Overview of the normal processes underlying speech and language development across the lifespan.

AUDI 337. Speech-Language Pathology for Audiologists. 3 Units.
Overview of the speech and language disorders, screening and identification of children at risk for speech and language disorders. Basic phonetics and transcription, basic speech and language screening protocols.

AUDI 338A. Externship I. 3 Units.
Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

AUDI 339. Deaf Culture and Communication Systems. 3 Units.
Introduction to Deaf Culture and American Sign Language (ASL), with emphasis on signs most useful to audiologists working clinically.

AUDI 341. Psychoacoustics. 3 Units.
Physical and psychological attributes related to sound in normal hearing and impaired ears. Classical psychophysical methods discussed, with an emphasis on their application to audiological testing.

AUDI 343. Research Methods. 3 Units.
Introduction to research methods used in audiology. Statistical analyses in descriptive and experimental research.

AUDI 345. Hearing Disorders. 3 Units.
Etiology, pathophysiology, diagnosis and treatment of diseases of the outer, middle, inner ear and the central auditory system. Syndromic and non-syndromic genetic disorders along with their impact on the development and function of the auditory system.

AUDI 347. Tinnitus Assessment and Treatment. 3 Units.
Causes and pathophysiology of tinnitus. The various therapies, pharmacological agents, and management of tinnitus.

AUDI 349. Industrial Audiology. 3 Units.
Introduction to the basic principles of sound and its measurement, including Damage Risk Criteria and its application to noise-induced hearing loss will be addressed, as well as components of hearing conservation programs in a variety of settings and evaluation of their effectiveness in the prevention of hearing.

AUDI 353. Professional Issues. 3 Units.
Current issues in the profession of audiology including audiology scope of practice, audiology employment opportunities, state licensure requirements to practice audiology, and professional certification options for audiologists.

AUDI 355. Practice Management. 3 Units.
Operational and business management of a clinical practice setting. Developing an appropriate business plan; startup and long term planning; essential legal considerations.

AUDI 357. Pharmacology. 3 Units.
Basic concepts and terminology of pharmacology will be explored, including pharmacokinetics, pharmacodynamics and ototoxic drugs. Medications that may contribute to or treat audiologic and vestibular diagnoses will be discussed. Legislation and regulatory issues related to drug clinical trials and the Food and Drug Administration (FDA) will be reviewed.

AUDI 359. Tinnitus Management. 3 Units.
Management of the tinnitus patient with various therapies including pharmaceuticals, cognitive behavior therapy, and hearing devices.

AUDI 361. Comprehensive Differential Diagnosis. 3 Units.
Comprehensive review of use of auditory and vestibular test batteries in different diagnosis and management of patients.

AUDI 363. Diagnostic Electrophysiology II. 3 Units.
Advance assessments of hearing using auditory evoked responses across all age ranges. Evidence based review of the measurement and interpretation of the neurophysiological and electrophysiological methods of auditory function assessment in adults and children. Prerequisite: AUDI 309.

AUDI 365. Advanced Topics in Research, Practice and Technology. 3 Units.
Advance topics of current trends in the field of audiology. Seminars in contemporary research topics, developments in evidence-based practice, and advancement in technology in the industry.

AUDI 367. Vestibular Assessment II. 3 Units.
Anatomy and physiology of the vestibular mechanism, case history, bedside evaluations, advanced diagnostic tests, introduction to vestibular rehabilitation, and advanced topics in vestibular research. Prerequisite: AUDI 331.
AUDI 369. Physical and Behavioral Health for Audiology. 3 Units.
Referral and management of common health conditions including physical and behavioral health. Implications for hearing loss and clinical management.

AUDI 385C. Audiology Practicum III. 1 Unit.
Guided clinical experience of a variety of audiological activities in diagnostic evaluations and hearing aid fittings under the guidance of clinical supervisors. Students will accrue a minimum of 40 patient contact hours.

AUDI 385B. Audiology Practicum II. 1 Unit.
Guided clinical experience of a variety of audiological activities in diagnostic evaluations and hearing aid fittings under the guidance of clinical supervisors. Students will accrue a minimum of 40 patient contact hours.

AUDI 385A. Audiology Practicum I. 1 Unit.
Guided observations of a variety of audiologic activities and preliminary structured participation as aide in diagnostic evaluations under the guidance of clinical supervisors. Students will accrue a minimum of 40 patient observations and/or contact hours.

AUDI 387B. Internship II. 2 Units.
Clinical Experience in an off-campus placement to develop intermediate audiology skills and provide patient care. Minimum of 200 hours of clinical experience required.

AUDI 387A. Internship I. 2 Units.
Clinical Experience in an off-campus placement to develop beginning audiology skills and provide patient care. Minimum of 200 hours of clinical experience required.

AUDI 388C. Externship III. 9 Units.
Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

AUDI 388B. Externship II. 9 Units.
Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

AUDI 388A. Externship I. 9 Units.
Clinical Experience in an off-campus placement to develop advanced audiology skills and provide patient care. Minimum of 500 hours of clinical experience required.

AUDI 389C. Externship Seminar III. 1 Unit.
Utilizing an evidence-based approach, case presentations are made by students in a grand rounds format (presenting a particular patient’s medical problems, diagnostic testing results and treatment effects) to other audiology students and faculty incorporating various clinical practices and evaluation and treatment protocols.

AUDI 389B. Externship Seminar II. 1 Unit.
Utilizing an evidence-based approach, case presentations are made by students in a grand rounds format (presenting a particular patient’s medical problems, diagnostic testing results and treatment effects) to other audiology students and faculty incorporating various clinical practices and evaluation and treatment protocols.

AUDI 389A. Externship Seminar I. 1 Unit.
Utilizing an evidence-based approach, case presentations are made by students in a grand rounds format (presenting a particular patient’s medical problems, diagnostic testing results and treatment effects) to other audiology students and faculty incorporating various clinical practices and evaluation and treatment protocols.
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