Catalog description: 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.

<table>
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<tr>
<th>Date</th>
<th>Week</th>
<th>Topic</th>
<th>Lecturer</th>
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<tr>
<td></td>
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<td><strong>Module VII (Oct 9-Nov 10, 2017)</strong></td>
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<tr>
<td></td>
<td>1</td>
<td>General Principles of Periodontal Surgery</td>
<td>Dr. Gretchen Bruce</td>
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<td>Gingivectomy vs. Flap Surgery</td>
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<td>Surgical Case Management</td>
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<td>2</td>
<td>Basics of Flap Surgery</td>
<td>Dr. Joseph Zingale</td>
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<td>3</td>
<td>Anatomical Considerations in Periodontal Surgery</td>
<td>Dr. William Lundergan</td>
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<td>4</td>
<td>Normal and Altered Osseous Form; Osseous Resective Surgery</td>
<td>Dr. Joseph Zingale</td>
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<td>5</td>
<td>Crown Lengthening Surgery I</td>
<td>Dr. Mauricio Ronderos</td>
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<td><strong>Exam 1</strong></td>
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<td><strong>Module VIII (Nov 13-Dec 15, 2017)</strong></td>
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<td>1</td>
<td>Crown Lengthening Surgery II</td>
<td>Dr. Mauricio Ronderos</td>
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<td>2</td>
<td>Bone Grafting – Natural and Synthetic Materials</td>
<td>Dr. Gretchen Bruce</td>
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<td>Guided Tissue Regeneration</td>
<td>Dr. William Lundergan</td>
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<td>4</td>
<td>Treatment of Class II and Class III Furcation Involvements</td>
<td>Dr. Preeti Chopra</td>
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<td></td>
<td>5</td>
<td>Soft-Tissue Augmentation</td>
<td>(TBC)</td>
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COURSE LEARNING OBJECTIVES

**Topics:** General Principles of Periodontal Surgery. Gingivectomy vs. Flap Surgery. Surgical Case Management

**Learning Objectives:**
At the completion of this lecture, the student should be able to:
1. List the objectives of periodontal surgery in a general sense.
2. Develop a logical surgical treatment plan. List the techniques which may be used in periodontal surgery and their indications.
3. State the factors which would lead a therapist to decide that periodontal surgery is indicated or contraindicated.
4. Describe the sequential steps in performing gingivectomy/gingivoplasty and the healing sequences following their surgery.
5. Know the difference between a gingivectomy and surgical flap procedure.
6. Understand the management of normal post operative healing and potential post operative complications.

**Topics:** Basics of Flap Surgery

**Learning Objectives:**
At the completion of this session, the student will understand the indications, design, and sequential steps of the basic flap techniques used in periodontal surgery.
The student will be able to do the following:
1. State the definition and the objectives of a periodontal flap.
2. Differentiate between the types of incisions used in flap surgery.
3. Describe the difference between a full thickness and partial thickness flap.
4. Cite the reasoning and indications for each flap technique.
5. List the sequential surgical steps for each flap type.
6. Describe the healing sequence following flap surgery.

**Topics:** Anatomical Considerations in Periodontal Surgery

**Learning Objectives:**
At the completion of this lecture, the student should be able to:
1. State seven anatomic spaces of importance to the periodontal surgeon and know the possible consequences of entering these spaces surgically.
2. List the major arteries and their branches and know where they may be encountered in periodontal surgery.
3. List the branches of the fifth cranial nerve and know where they may be encountered in periodontal surgery.
4. State precautions necessary to avoid operative hazards related to anatomic structures.
5. Describe the relationship of osseous and soft tissue structures to the prognosis and treatment of individual teeth.

**Topics:** Normal and Altered Osseous Form; Osseous Resective Surgery

**Learning Objectives:**
At the completion of this lecture, the student should be able to:
1. Describe and/or recognize the features of “normal” osseous architecture and differentiate them from abnormalities: defects and craters (1, 2, 3 walled), well-shaped defects, hemisepta, dehiscences, fenestrations, ledging, exostoses.
2. Describe the basic goals of osseous resection procedures and the indications/contraindications for this approach to solving bony problems.
3. State the indications and contraindications and describe the steps and instruments used in osseous resection surgery.
4. Describe clinical and histologic wound healing following osseous resection surgery.
5. Illustrate and describe “positive osseous architecture.”

**Topics:** Crown Lengthening Surgery I

**Learning Objectives:**
At the completion of this lecture, the students should be able to:
1. Describe the indications for crown lengthening procedures.
2. Describe the different techniques used for lengthening clinical crowns, their advantages and their limitations.
3. Understand the concept of “biologic width” and its implications in clinical practice.
4. Outline the phases of healing following crown lengthening surgery.

**Topics:** Crown Lengthening Surgery II
**Learning Objectives:**

At the completion of this lecture, the students should be able to:
1. Describe the indications for crown lengthening procedures.
2. Describe the different techniques used for lengthening clinical crowns, their advantages and their limitations.
3. Understand the concept of “biologic width” and its implications in clinical practice.
4. Outline the phases of healing following crown lengthening surgery.

**Topics: Bone Grafting - Natural and Synthetic Materials**

**Learning Objectives:**

At the completion of this lecture, the students should be able to:
1. List the types of bone grafting materials and be able to discuss their relative success and indications.
2. Be familiar with the risks and complications with the use of bone grafts.
3. Describe the steps required to perform bone grafting and the flap design. Be able to list the important instruments necessary for successful grafting.
4. Understand some of the new advances with the bone grafting technique.

**Topics: Guided Tissue Regeneration**

**Learning Objectives:**

At the completion of this lecture, the student should be able to:

1. List the objectives, indications, and contraindications for guided tissue regeneration.
2. Describe the surgical technique for guided tissue regeneration.
3. Describe the wound healing in areas treated by guided tissue regeneration.
4. Differentiate among “reattachment”, “new attachment”, and “repair”.
5. Discuss the nature of products available for guide tissue regeneration procedures.

**Topics: Treatment of Class II and Class III Furcation Involvements**

**Learning Objectives:**

At the completion of the lecture the student should be able to:

1. Evaluate and diagnose furcation involvement.
2. Understand Classification of furcation Involvement.
3. Understand Etiology of furcation Involvement.
4. Understand Treatment of furcation Involvements (Past and present treat options).

**Topics: Soft-Tissue Augmentation: Techniques**

**Learning Objectives:**

At the completion of the lecture, students should be able to understand the:

1. Predisposing and precipitating factors for gingival recession
2. Characteristics of the different types of tissue that make up the gingival component
3. The indications for gingival augmentation surgery
   0. Classification of recession defects
4. Types of gingival augmentation surgery
# Modules IX – X
**Jan 8, 2018 - March 16, 2018**

<table>
<thead>
<tr>
<th>January</th>
<th>Week</th>
<th>Time</th>
<th>Lecturer(s)</th>
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<td><strong>Module IX</strong></td>
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<td>(Jan 8-Feb 9, 2018)</td>
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</table>
| 1       | 9:00 | Dr. Marc Geissberger | Periodontal – Restorative Interrelationships | **Exam 3**
| 2       | 9:00 | Dr. Gretchen Bruce | Soft-Tissue Augmentation: Techniques            |
| 3       | 9:00 | Dr. Gretchen Bruce | Implant Dentistry I: Management of the Dental Implant |
| 4       | 9:00 | Dr. Joe Gabany   | Implant Dentistry II                               |
| 5       | 9:00 | Dr. Richard Kao  | Treatment Planning for the Advanced              |

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<thead>
<tr>
<th>February</th>
<th>Time</th>
<th>Lecturer(s)</th>
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<td><strong>Module X</strong></td>
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<td>(Feb 12-March 16, 2018)</td>
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<tr>
<td>1</td>
<td>9:00</td>
<td>Dr. Lisa Harpenau</td>
<td>Periodontal Plastic &amp; Esthetic Surgery</td>
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<td>2</td>
<td>9:00</td>
<td>Periodontal &amp; DP Faculty: Drs. Bruce and Budenz</td>
<td>Treatment Planning Seminar Rooms: TBD</td>
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<td>8:00</td>
<td>Drs. Gluskin &amp; Lundergan</td>
<td>Endo/ Perio Lecture</td>
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<td>9:00</td>
<td>Periodontal &amp; DP Faculty: Drs. Bruce and Giusti</td>
<td>Treatment Planning Seminar Rooms: TBD</td>
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<td>4</td>
<td>8:00 – 9:50 a.m.</td>
<td>Dr. Robert Boyd, <strong>Improving Periodontal Health through Orthodontic Treatment</strong></td>
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<td>4</td>
<td>9:00 – 9:50 a.m.</td>
<td>Periodontal &amp; DP Faculty: Drs. Bruce and Giusti, <strong>Treatment Planning Seminar</strong></td>
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<tr>
<td>5</td>
<td>9:00 – 9:50 a.m.</td>
<td>Periodontal &amp; DP Faculty: Drs. Bruce and Budenz, <strong>Treatment Planning Seminar</strong></td>
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<td><em>Rooms: TBD</em></td>
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Exam 4
Periodontal - Restorative Interrelationships

Learning Objectives:

At the completion of the lecture, the student should be able to do the following:
1. Describe biologic width and its relation to restorative dentistry.
2. Differentiate between intracrevicular and subcrevicular physiologic margins.
3. Evaluate radiographically the need for periodontal surgery for prosthodontic needs.
4. Describe an adequate abutment from a periodontal and restorative perspective.
5. Describe appropriate contours for provisional restorations

Soft-Tissue Augmentation: Techniques

Learning Objectives:

At the completion of the lecture, students should be able to understand the:
1. Predisposing and precipitating factors for gingival recession
2. Characteristics of the different types of tissue that make up the gingival component
3. The indications for gingival augmentation surgery
4. Classification of recession defects
5. Types of gingival augmentation surgery

Implant Dentistry I: Management of the Dental Implant

Learning Objectives:

At the completion of the lecture, the student should be able to:
1. Describe the current concepts on the diagnosis of implant mucositis and peri-implantitis
2. Describe the management of the Healthy, Ailing and Failed dental implant
3. State the potential risk factors related to peri-implantitis
4. Discuss various treatment protocols that may be most appropriate for peri-implantitis cases.

Implant Dentistry II

Learning Objectives:

At the completion of the lecture, the student should be able to:
1. Understand minimum bone requirements for placement of implants
2. Describe the indication of socket grafting to preserve tissue height and width
3. Indication for advanced surgical techniques for placement of implants using bone grafts
4. Understand immediate placement, immediate loading, delayed placement and delayed loading
5. Understand the two methods of sinus grafting for implant placement
6. Understand multidisciplinary case sequencing with implants
7. Describe the parts and steps required for an implant restoration
8. Understand the difference between cement and screw retained restorations
Treatment Planning for the Advanced Periodontal Care

**Learning Objectives:**

At the completion of the lecture, the student should be able to:

1. Describe a decision tree for triaging teeth for periodontal therapy and restorative options. One should consider how this decision tree will influence clinical dental care.
2. Understanding treatment planning is based on what our perception of what is going on. Factors which should influence that perception are based on:
   a. Is there any disease activity going on?
   b. Is the patient in maintenance mode versus active treatment (restorative, rehabilitative, or orthodontic) mode? With maintenance mode, one can afford a little “watch & wait” whereas active treatment dictates a more proactive treatment plan where we eliminate or control the disease.
   c. What is the prognosis of the tooth and the dentition?
3. Describe the gingival tissue biotypes (thick versus thin) tissue and how this will dictate how the gingival response to insults, the nature of the resulting periodontal defects, and the treatment modality needed for its management.
4. Understand surgical strategies for changing the tissue “landscape” which we need to Work with.

**Periodontal Plastic and Esthetic Surgery**

**Learning Objectives:**

At the completion of the lecture, the student should be able to:

1. Describe the anatomic structures associated with mucogingival surgery.
2. Cite the indications for soft tissue grafting: for gingival augmentation and for root coverage.
3. List and briefly describe the various soft tissue grafting surgical techniques.
4. Note the indications for surgical canine uncovering.
5. Note the indications for a frenectomy.
6. Note the indications for a circumferential supracrestal fiberotomy (CSF).
7. Cite the indications for and limitations of esthetic recontouring (crown lengthening).

**Endo / Perio Lecture**

**Learning Objectives:**

At the completion of the lecture, the student should be able to:

1. List and discuss the sites of communication between the pulp and the PDL.
2. Describe how to analyze clinical and diagnostic information.
3. Describe the effects of periodontal disease on the pulp.
4. Describe the effects of periodontal therapy on the pulp.
5. Describe the effects of pulpal pathosis on the attachment apparatus.
6. Discuss the effects of endodontic therapy on the periodontium.
7. Discuss the development of the "true" combined lesion.
8. Discuss the prognosis of primary endo lesions versus primary perio lesions.
9. Describe treatment and sequencing for endo-perio lesions and prognosis for combined lesions.
10. Discuss the criteria necessary to know when to refer the patient to a specialist.

Treatment Planning Seminar

Learning Objectives:
At the completion of this seminar, the student should be able to:
   Utilize evidence based dentistry to treatment plan a complex periodontal case.

Improving Periodontal Health through Orthodontic Treatment

Learning Objectives:
At the completion of this lecture, the student should be able to:
   1. Describe the association between plaque control and periodontal disease and orthodontic therapy with fixed appliances
   2. Describe the association between plaque control and periodontal disease and orthodontic therapy with the Invisalign appliances
   3. Describe what degree of severity of periodontal bone loss which might preclude orthodontic treatment with fixed appliances vs. Invisalign
   4. Understand what are the best products for plaque control in patients with fixed appliances
GRADING CRITERIA for DH 130

DH 130 is a 4 module course – Modules VII, VIII, IX and X, spanning the time from October 9, 2017-March 16, 2018.

All module grades will be combined to determine a cumulative final grade which will be recorded as a Spring semester grade.

Grades will be based on the following percentage:

A = 90 - 100
B = 80 - 89
C = 70 - 79
D = 60 - 69
F = below 60

Attendance is mandatory and will be strictly monitored. 2 unexcused absences will lower your grade by one letter. 3 unexcused absences is an automatic D grade.

Your SIGNATURE (not initials) is required on the roll sheet. Signing the roll sheet for another student will be considered cheating, and a formal ethics violation will be filed for any suspected incidence. Students who are aware of others forging signatures on the roll sheet are ethically obligated to report this.

EXAMINATION REVIEW POLICY

A review session will be held during class in a reasonable time period following the examination. The review will cover questions and concepts where the class as a whole is weak and scientific foundations require clarification for enhanced understanding.

The examination is available for individual review by appointment ONLY with , Administrative Assistant for Academic Affairs, via email at ( ). Please note the following information regarding examination review:

- After results have been posted, you have 5 working days to review the exam via an appointment, walk-ins will not be able to review their exam results.

- After the 5 days review period any additional review of exam requests must go through the Course Director, Dr. Gretchen Bruce.

No photo copies and note taking regarding exam content is permitted. Should you have any questions or concerns, please feel free to contact Dr. Gretchen Bruce, Course Director for Periodontics, DH 130 at (gbruce@pacific.edu).
Student work may be retained to assess how the learning objectives of the course are being met.

**Academic Conduct Policy: University 11.24 Honor Code - Approved by the Faculty in 1958**

Established in 1958, the Honor Code is intended to maintain and preserve the high standards of personal character and integrity vital in academic pursuits. The success of the Honor Code is made possible only with the acceptance and cooperation of every student. Each student is expected to maintain the principles of the Code. A violation of the Honor Code may occur in one of the following areas:

- Giving or receiving information from another student during an examination;
- Using unauthorized sources for answers during an examination;
- Illegally obtained test questions before the test;
- Any and all forms of plagiarism; and
- The destruction and/or confiscation of school and/or personal property.

A violation is reported either to the professor involved, who will report it to the Dean of Students, or to the Dean of Students. Circumstances warranting, alleged violations are referred by the Dean of Students to the Joint University Judiciary for appropriate action. Example: Every student must read, understand and observe the UNIVERSITY HONOR CODE (Tiger Lore, Section 1.1 – 1.3); it is a violation of the Honor Code to submit all or part of someone else’s work or ideas as your own. Violations of the Honor Code are serious. They harm other students, your professor, and the integrity of the University. Alleged violations will be referred to the Office of Judicial Affairs. If found guilty of plagiarism, a student might receive a range of penalties, including failure of an assignment, failure of an assignment and withholding of the final course grade until a paper is turned in on the topic of plagiarism, failure of the course, or suspension from the University. If you have questions about plagiarism and other departures from the right way of conducting yourself in academic situations, speak with your professor. For more information about Pacific’s academic dishonesty policy, consult the Tiger Lore.

**Violations of Academic Integrity - Violations of the principle include, but are not limited to:**

- Cheating: Intentionally using or attempting to use unauthorized materials, information, notes, study aids, or other devices in any academic exercise. This definition includes unauthorized communication of information during an academic exercise.
- Fabrication and Falsification: Intentional and unauthorized alteration or invention of any information or citation in an academic exercise. Falsification is a matter of inventing or counterfeiting information for use in any academic exercise.
- Multiple Submissions: The submission of substantial portions of the same academic work for credit (including oral reports) more than once without authorization.
- Plagiarism: Intentionally or knowingly presenting the work of another as one's own (i.e., without proper acknowledgment of the source). The sole exception to the requirement of acknowledging sources is when the ideas, information, etc., is common knowledge.
- Abuse of Academic Materials: Intentionally or knowingly destroying, stealing, or making inaccessible library or other academic resource materials.
- Complicity in Academic Dishonesty: Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

Plagiarism includes, but is not limited, to the following:

- Copying or borrowing liberally from someone else’s work without his/her knowledge or
permission; or with his/her knowledge or permission and turning it in as your own work.

· Copying off of someone else’s exam or paper with or without his/her knowledge (aka Cheating)
· Allowing someone to turn in your work as his/her own
· Not providing adequate references for cited work
· Turning in someone else’s work and calling it your own
· Copying and pasting large quotes or passages without properly citing them

Disability Access and Non-Discrimination Statement - The University of the Pacific is committed to the goal of providing qualified students an equal opportunity to attain college education regardless of disability. To reach that goal, Pacific will make efforts towards meeting reasonable requests for services and accommodations to students with disabilities. To that end, please notify me about any special needs you may require during the first weeks of the semester. Students requesting accommodations due to a disability should provide me with an accommodations request letter from the Office of Services for Students with Disabilities, Bannister Hall, Room 101, (209) 946-2879, E-mail: ssd@uop.edu, website: http://www.uop.edu/education/ssp.

Accommodations for students with disabilities
In compliance with the University policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for student with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for unusual circumstances, so arrangements can be made. Students are encouraged to register with Student Disability Services to verify their eligibility for appropriate accommodations.

Students with Learning Disabilities: If you are registered with the Educational Resource Center as having a learning disability, you may decide to take advantage of accommodations the University can provide. To preserve student confidentiality, please discuss such accommodations with the instructor.


“The University of the Pacific is committed to providing access for qualified students, faculty, staff, and visitors to University programs. This non-discrimination policy applies to all qualified applicants or students who seek to or do participate in employment, in access to facilities, student programs, activities and services.” The Educational Resource Center offers a variety of services for Pacific students with disabilities. These services may include, but are not limited to, extended time for completing exams, alternative testing procedures, note takers, and transportation to and from classes.

I. Attendance Policy: See Dental Hygiene Program Policies
   Tardiness: To extend courtesy to your fellow classmates and the faculty, it is expected that you
   will arrive promptly and prepared to all class meetings. On scheduled lab days, it is expected that
   you will arrive early enough to allow time to review your patient’s chart, obtain all necessary
   supplies, perform personal hygiene and set up your operatory prior to the start of lab.

   Attendance: Course directors must be notified of absences due to illness, or personal or
family emergencies beyond the control of the student. The student is required to contact the Academic Affairs and the Program Director promptly in case of absence or tardiness so that proper and timely adjustments can be made to the day’s activities. An excused absence is recognized when students contact the persons listed above regarding illness or family emergency or when other proper written notification has been received and approved. Absences must be phoned in daily. If a student is absent for three or more consecutive days, certification from a health care provider is necessary. Religious observances cited in the handbook will be followed.