Dalhousie University Faculty of Dentistry Course Outline 2016-2017

Revision Date: June 1, 2016

**Curriculum Committee Review Date:** 

## **Course Number and Name:**

D2611 - Removable Prosthodontics II

## **Calendar Description:**

A series of lectures, seminars, demonstrations, laboratory and clinical experiences dealing with the fundamental principles and techniques of treating partially and completely edentulous patients.

## **Required Textbooks (VS = Vital Source references), References, Manuals Online Resources:**

**VS** Zarb G, Hobkirk JA, Eckert SE, and Jacob RF. *Prosthodontic Treatment for Edentulous Patients*, 13th ed., St. Louis, Elsevier Mosby, 2013.

**VS** Phoenix R, Cagna D, DeFreest C. *Stewart's Clinical Removable Partial Prosthodontics*, 4th ed., Chicago, Quintessence, 2008.

**Download**: The Academy of Prosthodontics, *Glossary of Prosthodontic Terms*, 8th ed., Mosby, 2005. Dalhousie Dentistry Web page  $\rightarrow$  Removable Prosthodontics  $\rightarrow$ Docs  $\rightarrow$ Click on *Gloss Pros Terms* 05.pdf  $\rightarrow$ Save/Download

Loney, R. Removable Partial Denture Manual, Dalhousie University, Halifax, 2011.

Loney, R. Complete Denture Manual, Dalhousie University, Halifax, 2013.

Removable Prosthodontics Website: <u>http://removpros.dentistry.dal.ca/RemovSite/Welcome.html</u> OWL (Online Web Learning) / Blackboard Learning (BbL): Grades will be posted on BbL

DENT 2611: Removable Prosthodontics II

## **Recommended Textbooks, References, Manuals: (VS = Vital Source references)**

- VS Carr, A, Brown D. *McCracken's Removable Partial Prosthodontics*, 13<sup>th</sup> ed., St. Louis, Elsevier Mosby, 2016.
- VS Anusavice KJ, Shen C, Rawls HR. *Phillips' Science of Dental Materials*, 12th ed., St. Louis, Elsevier Saunders, 2013.
- VS Sakaguchi RL, Powers JM. Craig's Restorative Dental Materials (13th ed.), St. Louis, Elsevier Mosby, 2013.

#### **Department:**

**Dental Clinical Sciences** 

#### Instructors:

Course Director:	Dr. R. Loney	Phone: 7179	Room: 5187
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**Key Words:** prosthodontics, removable partial dentures, complete dentures, infection control, seminar, laboratory, clinic, examination, diagnosis, treatment plan, work authorization, problem solving, anatomy, preliminary and final impressions, impression materials, acrylic resin, tooth preparation, composite resin restorations, coordinating fixed and removable prosthodontics, interim removable partial dentures, custom tray, tissue conditioning, occlusal splint, oral hygiene, border mold, maxillomandibular relationships, occlusal vertical dimension, facebow, earbow, boxing and pouring impressions, centric positions, centric relation, centric occlusion, protrusive records, balanced occlusion, monoplane occlusion, esthetics, shade selection, occlusal adjustment, adjustments, continuing care, troubleshooting, ethical problems.

### **Teaching and Learning:**

Didactic information will be provided through assigned readings and will be supplemented by lectures, instructor demonstrations, seminars and self-instructional material.

Clinical and laboratory exercises including the fabrication of dentures for a patient will be used to help students to develop discrimination and motor skills.

This is a single discipline course. Removable Prosthodontics

#### **Evaluation:**

Students will evaluate their own performance prior to being graded by an instructor. The use of the selfevaluation is designed to help students improve their evaluation skills. A final grade of 65% is required to pass the course.

Projects and performance will be assessed according to criteria established for both formative and summative evaluation.

**Formative Evaluation**: A formal evaluation that is **not** used to calculate a student's final mark. The same criteria are used as in summative evaluation, but the evaluation is used only to provide feedback to the student on how they are performing and how they can improve.

**Summative Evaluation**: A formal evaluation that **is used** to calculate a student's final mark. The same criteria are used as in formative evaluation

**Clinical Motor Skills Assessments:** 'Motor Skills Assessments' represent an evaluation of a level of performance that requires some degree of speed and accuracy consistent with patient well-being. Students must be able to perform and evaluate their own work independent of instructor input, in a clinical environment similar to practice, on a consistent basis. There will be one 'Motor Skills Assessments' where students will design a removable partial denture on a diagnostic cast, complete a laboratory prescription and prepare the corresponding tooth modifications on a typodont model. Students must

100%

receive a passing grade on the Motor Skills Assessment. Students failing this assessment will be required to retake the test until a passing mark is achieved.

#### **Final Grade:**

The final grades in the course will determined by the following components:

Projects		20%
RPD preparation exercises	5	Due On Assigned Dates
Tissue conditioning exercise	5%	Due Feb 6, 2017, 4:30 PM
Boxing impression exercise	P/F	Due Feb 6, 2017, 4:30 PM
Denture tooth setup & occlusal refinement	10%	Due April 24, 2017, by 10AM
Complete denture therapy for patient	P/F	Completed by May 8, 2017
Removable partial denture motor skills assessment		
Skills assessment/Patient Management		
December written examination3		
Final written examination <u>3</u>		
TOTAL		100%

Each of the projects and the removable partial denture motor skills assessment must be completed and passed in order to pass the course. Failure to complete any one of the above components will result in an "Incomplete" (INC) grade in the course. A passing grade will only be granted upon successful completion of all components of the course. As per Academic Policy guidelines, incomplete work in a course must be completed by a time assigned by the relevant Academic Committee and approved by Faculty. An 'INC' will be converted to an earned grade if completed by the deadline, otherwise the course grade point value will be converted to a 0.0 in the student's grade point average and the INC grade will be converted to a failing grade. The final grade reported will be a letter grade as required by the Faculty.

#### **Class Time:**

Scheduled Curriculum Time per Student				
Lecture	Lab	Seminar	Clinic	
38.5 hours	33 hours	28 hours	66 hours	
U	Unscheduled Curriculum Time per Student			
Reading	Laboratory	Assignments	Other	
30 hours	15.5 hours	1 hours	0 hours	
	Evaluation Time per Student			
Tests	Quizzes	Mid-term Exams	Final Exam	
3 hours	0 hours	3 hours	3 hours	

#### **Faculty/Student Ratio:**

Lecture	Lab	Seminar	Clinic
1:5.3	1:5.3	1:5.3	1:5.3

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#### Educational Objectives. At the end of the course a student should be able to:

- 1. Provide informed consent to patients with regard to treatment options for replacing missing teeth (4, 5, 19, 20, 22, 23, 42)
- 2. Design an acceptable removable partial denture for any cast and case study information (42, 44)
- 3. Justify the design of a removable partial denture (42, 44)
- 4. Determine if a removable partial denture framework is acceptable or in need of correction (42, 44)
- 5. Prescribe and perform acceptable abutment modifications for any removable partial denture design (42)
- 6. Obtain and interpret a medical, dental and psychosocial history, including a review of systems as necessary, and evaluate physical or psychosocial conditions that may affect dental management. (4, 5, 6)
- 7. Complete a thorough clinical examination of a completely or partially edentulous patient (4, 5, 7, 9, 10, 42)
- 8. Determine what variations in anatomy will have a significant impact on the success of a removable prosthesis and explain those limitations to a patient (4, 10, 42)
- 9. Identify pathology or deviations from normal health (10).
- 10. Maintain accurate and complete patient records in a confidential manner (7)
- Develop an appropriate treatment plan for a completely or partially edentulous patient (13, 21, 22, 42)
- 12. Determine the sequence in which clinical and laboratory removable prosthodontic procedures must be performed (22)
- Make accurate diagnostic and final impressions for a completely or partially edentulous patient (41, 42, 43)
- 14. Determine if an impression can be used to provide clinically acceptable results (42, 43)
- 15. Fabricate accurate and complete diagnostic and master casts for a completely or partially edentulous patient (41, 42, 43)
- 16. Determine whether casts, models and prostheses are clinically acceptable. (42, 43, 44)
- 17. Identify clinical and laboratory problems that require intervention, provide a rationale for the intervention and successfully perform the required intervention. (42, 43, 44)
- 18. Select and provide a rationale for the use of appropriate instruments, equipment, materials or techniques which should be used to successfully clinical procedure or situation. (41, 42, 43)
- 19. Demonstrate the correct use of prosthodontic equipment, instruments and materials. (41, 42)
- 20. Determine and register an acceptable occlusal vertical dimension for an edentulous patient (42)
- 21. Make acceptable facebow/earbow, centric and protrusive records and accurately mount edentulous master casts on a semi-adjustable articulator (40, 42)
- 22. Determine if a complete denture occlusion is acceptable and make required corrections (40, 42)
- 23. Assess and prescribe corrections needed in the setting of anterior denture teeth to provide an esthetically pleasing complete denture (40, 42)
- 24. Deliver and adjust a set of complete dentures so that they are comfortable and functional for an edentulous patient (17, 40, 42)
- 25. Provide continuing care for a patient with complete dentures, including acceptable home care instructions (17, 25, 40, 42)
- 26. Complete an acceptable laboratory work authorization. (42, 44)
- 27. Conduct all interactions with patients, faculty members, staff and patients in an ethical and professional manner. (4, 5, 20, 45, 46, 47)
- 28. Demonstrate safe and responsible use sharp instruments and heat sources. (27, 42)
- 29. Demonstrate acceptable infection control skills in the laboratory and clinical settings. (8)
- 30. Use acceptable prosthodontic terminology with other students, faculty members and laboratory technicians (4, 42)

#### COMPETENCIES FOR BEGINNING DENTAL PRACTITIONERS IN CANADA

A beginning dental practitioner in Canada must be competent to:

	etency	Major	Mino
1.	recognize the determinants of oral health in individuals and populations and the role of dentists in health promotion, including the disadvantaged.		
	recognize the relationship between general health and oral health.		
	evaluate the scientific literature and justify management recommendations based on the level of evidence available.		
	communicate effectively with patients, parents or guardians, staff, peers, other health professionals and the public.	X	
	identify the patient's chief complaint/concern and obtain the associated history. obtain and interpret a medical, dental and psychosocial history, including a review of systems as necessary, and		X X
	evaluate physical or psychosocial conditions that may affect dental management. maintain accurate and complete patient records in a confidential manner.		X
	prevent the transmission of infectious diseases by following current infection control guidelines.	Х	
	perform a clinical examination.		X
).	differentiate between normal and abnormal hard and soft tissues of the maxillofacial complex.		X
	prescribe and obtain the required diagnostic tests, considering their risks and benefits.		v
2. 3.	perform a radiographic examination. interpret the findings from a patient's history, clinical examination, radiographic examination and from other diagnostic tests and procedures.		X X
ŀ.	recognize and manage the anxious or fearful dental patient.		
5.	recognize signs of abuse and/or neglect and make appropriate reports.		
ó.	assess patient risk (including, but not limited to, diet and tobacco use) for oral disease or injuries.		
'.	develop a problem list and establish diagnoses.		X
8.	determine the level of expertise required for treatment and formulate a written request for consultation and/or referral when appropriate.		
).	develop treatment options based on the evaluation of all relevant data.		X
).	discuss the findings, diagnoses, etiology, risks, benefits and prognoses of the treatment options, with a view to patient participation in oral health management.		X
	develop an appropriate comprehensive, prioritized and sequenced treatment plan.		X
	present and discuss the sequence of treatment, estimated fees, payment arrangements, time requirements and the patient's responsibilities for treatment.		X
8.	obtain informed consent including the patient's written acceptance of the treatment plan and any modifications.		X
ŀ. ,	modify the treatment plan as required during the course of treatment.		N/
5.	provide education regarding the risks and prevention of oral disease and injury to encourage the adoption of healthy behaviors.		X
ó.	provide therapies for the prevention of oral disease and injury.		
Ι.	recognize and institute procedures to minimize occupational hazards related to the practice of dentistry.		X
3.	achieve local anesthesia for dental procedures and manage related complications.		
).	determine the indications and contraindications for the use of drugs used in dental practice, their dosages and routes of administration and write prescriptions for drugs used in dentistry.		
).	manage dental emergencies. recognize and manage systemic emergencies which may occur in dental practice.		
2.	manage conditions and diseases of the periodontium, provide periodontal treatment when indicated and monitor treatment outcomes.		
3.	assess the risk, extent and activity of caries and recommend appropriate non-surgical and surgical therapy.		
ŀ.	manage dental caries, tooth defects and esthetic problems and, when restoration is warranted, use techniques that conserve tooth structure and preserve pulp vitality to restore form and function.		
i.	manage patients with orofacial pain and/or dysfunction.		
ó.	manage surgical procedures related to oral soft and hard tissues and their complications		
	manage trauma to the orofacial complex.		
3. ).	manage conditions and pathology of the pulp and provide endodontic treatment when indicated. manage abnormalities of orofacial growth and development and treat minor orthodontic problems.		
,. ).	recognize and manage functional and non-functional occlusion.		X
	select and, where indicated, prescribe appropriate biomaterials for patient treatment.		X
2.	manage partially and completely edentulous patients with prosthodontic needs including the provision of fixed, removable and implant prostheses.	X	
3.	make records required for use in the laboratory fabrication of dental prostheses and appliances.	Х	
ł.	design a dental prosthesis or appliance, write a laboratory prescription and evaluate laboratory products.	Х	
5.	apply accepted principles of ethics and jurisprudence to maintain standards and advance knowledge and skills.		X
6.	apply basic principles of practice administration, financial and personnel management to a dental practice.		X
7.	demonstrate professional behaviour that is ethical, supersedes self-interest, strives for excellence, is committed to continued professional development and is accountable to individual patients, society and the profession.		X

#### DEFINITION

To "manage" the oral health care needs of a patient is assumed to include all actions performed by a health care provider that are designed to alter the course of a patient's condition. Such actions may include providing education, advice, treatment by the dentist, treatment by the dentist after consultation with another health care professional, referral of a patient to another health care professional, monitoring treatment provided, but also may include providing no treatment or observation. "Manage" assumes the use of the least invasive therapy necessary to gain a successful outcome in accordance with patient wishes

#### **General Information for Students:**

- All students are expected to attend and participate actively in all didactic, seminar and clinical activities. In each term students receive a skills assessment/patient management evaluation by their seminar leader. This evaluation (5 marks each term = 10% of final grade) represents the faculty member's assessment of a student's theoretical knowledge, technical proficiency, patient & time management, attitude, participation and infection control in seminars and preclinical and clinical exercises.
- The weekly lecture/seminar sessions are meant to reinforce, emphasize, and provide additional information regarding each topic. It is important for students to complete the necessary assigned readings for the topics prior to each weekly session. This will familiarize students with some vocabulary and concepts which may not be discussed in the classroom but which may be important in understanding concepts.
- Whenever a concept in the textbook(s) is in conflict with the principles or a concept in the taught at the Faculty of Dentistry, Dalhousie University, emphasis will be placed on the rationale(s) for the differences. However, for the purposes of consistency in examination and patient treatment, you should uphold the concepts as accepted for use at Dalhousie University.

#### **Faculty of Dentistry Academic Policies**

#### **Professionalism**:

All students in the Faculty are expected to act in a professional manner in their dealing with other students, staff, faculty members and the public as defined by the Faculty of Dentistry. Repeated or blatant unprofessional behaviour and failure of remediation exercises may result in a temporary suspension or permanent dismissal from the Faculty. As an academic requirement, students are assessed in each year on their professionalism, knowledge, pre/clinical skills and degree of independence and competence for the profession of Dentistry. Faculty members and the Academic Standards Class Committees have the overall responsibility for evaluating students on professionalism, knowledge, pre/clinical skills and degree of independence. Assessment of students using the professionalism, knowledge, pre/clinical skills and degree of independence and competence and competence evaluation form will be performed by full and part-time faculty members on a periodic basis and multiple times throughout the academic year. Such assessment will be reviewed at each Academic Standards Class Committee meeting.

#### Plagiarism:

Plagiarism is a form of academic dishonesty and will not be tolerated. Students who require assistance should contact:

*Academic Integrity website* – <u>http://academicinegrity.dal.ca</u> (links to policies, definitions, online tutorials, tips on citing and paraphrasing

*Writing Center* – http://writingcentre.dal.ca/ (proofreading, writing styles, citations *Dalhousie Libraries* – http://www.library.dal.ca/How/ (workshops, online tutorials, citation guides, Assignment Calculator, RefWorks)

#### Academic Dishonesty:

Dalhousie University and the Faculty of Dentistry should be a model of intellectual honesty. Failure to meet the University's standards in this regard can result in an academic offence. The length of time a student has attended university, the "academic culture" of study at other universities, the presence of a dishonest intent and other circumstances may all be relevant to the seriousness with which the matter is viewed.

Academic offences will not be tolerated under any circumstances. Penalties for conviction

are severe and may include expulsion from the University.

The Assistant Dean for Academic Affairs is the Faculty's Academic Integrity Officer and is available to advise on academic matters such as this.

The current Dalhousie University Calendar, in the section "Intellectual Honesty" describes all aspects, processes and penalties associated with academic dishonesty.

#### Accommodation:

Students may request accommodation as a result of barriers related to disability, religious obligation, or any characteristic under the Nova Scotia Human Rights Act. Students who require academic accommodation for either classroom participation or the writing of tests, quizzes and exams should make their request to the **Office of Student Accessibility & Accommodation (OSAA)** prior to or at the outset of each academic term (with the exception of X/Y courses). Please see www.studentaccessibility.dal.ca for more information and to obtain Form A – Request for Accommodation.

A note taker may be required to assist a classmate. An honorarium is required. If you are interested, please contact **OSAA** at 494-2836 for more information.

Please note that your classroom may contain specialized accessible furniture and equipment. It is important that these items remain in the classroom so that students who require their usage will be able to participate in the class.

#### Writing Skills:

Students are expected to use an acceptable form of English grammar and spelling. Marks may be deducted for poor writing skills. Students who require assistance with their writing skills should contact the Assistant Dean for Student Affairs.

## **Faculty of Dentistry Grade Scale**

(refer to Academic Policy Manual for details of grading policies)

Numerical Score 95-100	LetterGrade Point GradeEquivalent A+	4.3
90-94	A	4.0
85-89	A	3.7
80-84	B+	3.3
75-79	B	3.0
70-74	B	2.7
65-69	C	2.0
0-64	F	0.0
N/A	INC	0.0
N/A	P (pass for credit)	Neutral
N/A	W (withdraw)	Neutral
Pending		Neutral

Student (print):	Date: M D Y	DDSIIIIIIV QPIII
Division:	Procedure:	
Faculty (print):	Faculty Signature:	

SKILLS ASSESSMENT CRITERIA Rating Considering the stage of development, the student: □ was exceptionally well prepared for the procedure; needed nominal instructor input at appropriate times; 3 performed the clinical procedure at a skill level higher than expected;  $\Box$  correctly evaluated the clinical result; А С used correct clinic protocol that ensured patient safety; С □ completed correctly, all documentation and computer entries by the end of the clinic block. DO NOT COMPLETE IF EVALUATION IS A "2". E Р Considering the stage of development, the student: Т • was properly prepared for the clinical procedure; А • used the instructor as a learning resource appropriately; 2 • performed clinical procedures at expected skill level with appropriate instructor input; В • adequately evaluated the clinical result; L E • with minimal instructor input, managed and informed the patient so the patient felt

		<ul> <li>comfortable and valued;</li> <li>with minimal instructor input, used correct clinic protocol that ensured the patient's safety;</li> <li>completed with minor corrections, all documentation, chart and computer entries by the end of the clinic block.</li> </ul>
U N A C C E	1	<ul> <li>Considering the stage of development, the student:</li> <li>was unfamiliar with most principles or techniques required to perform the procedures;</li> <li>either relied on instructor input excessively or did not request input at appropriate times;</li> <li>did not perform procedures at expected skill level or required significant instructor input;</li> <li>incorrectly evaluated clinical results;</li> <li>with correction, managed and informed the patient so that the patient felt comfortable and valued;</li> <li>with correction, used correct clinic protocol that ensured the patient's safety;</li> <li>completed correctly or with minor corrections, all documentation, chart and computer entries within 24 hours of the end of the clinic block.</li> </ul>
P T A B L E	0	<ul> <li>Considering the stage of development, the student:</li> <li>was totally unfamiliar with the principles or techniques required;</li> <li>generally made inappropriate use of instructor;</li> <li>did not perform procedures at expected skill level resulting in irreversible problems, or required that the instructor perform significant portions of the procedure to prevent or correct problems;</li> <li>did not manage the patient so that the patient was uncomfortable, upset or did not feel valued;</li> <li>did not follow clinic protocol;</li> </ul>

□ incorrectly completed or did not complete, all documentation, chart and computer entries within 24 hours of the end of the clinic block.

□ Correction/feedback given to student

Faculty Comments:

## **COURSE SCHEDULE**

#### (L = Lecture, S = Seminar, C = Clinic, LAB = Laboratory,)

#### Monday, September 12

9:00-10:00	L	Welcome
		Introduction to RPD's
		Prosthodontics defined
		Types of removable prostheses
		Parts of a removable partial denture
10:00-11:30	L	
		RPD Kennedy classification
		Kennedy Classification
		Anatomy Related to Removable Prostheses

Reading – Zarb – For both Maxilla and Mandible: read Anatomy of Supporting Structures; Anatomy of Peripheral or Limiting Structures; Phoenix et al, Chapter 1

1:30-4:15	С	Anatomy Tour: with partner: Use checklist in manual
		Anatomy Quiz: Self Test (formative evaluation)

## Monday, September 19

#### All Day LAB/C Path of Insertion, Surveying, Guiding Planes

Reading – Phoenix et al, pp 215-232 (Survey), 280-286 (Reshaping Teeth)

Survey and tripod mandibular or maxillary stone Class I and Class II mod. 1 casts listed below. Select path of insertion based on the degree of retentive undercut required and the position of the guide planes stipulated, on the tooth preparation summary you find a the end of this course schedule. Draw the heights of contour on the abutment teeth. Prepare guiding planes on the corresponding Class I and II typodont models mounted on phantom heads. Evaluate (**formative**)

You will need safety glasses, gloves, mask, highspeed handpiece, Ney surveyor, examination kit with an explorer ball burnisher and mirror, burs for the afternoon exercise and subsequent exercises where abutment preparations are scheduled. All tooth preparations will be performed mounted on a phantom head in the Clinic.

#### Monday, September 26

#### 9:00-10:30 L Components of RPD's: a. Rests and Rest Seats (Dr. Cook)

Reading – Phoenix et al, pp 45-52 (Rests and Rest Seats), 293-301 Rest Seat Preparations for Posterior Teeth, Rest Seat Preparations for Anterior Teeth

10:30-11:30	OUIZ	Rest seats

1:30-4:15 C Prepare the rest seats on the Class I and II mod. 1 typodont models based on the tooth preparation summary.

## Monday, October 3

9:00-10:00	L	Components of RPD's: b. Major connectors		
Reading – Phoenix et al, Ch. 2:19-38 (Major Connectors)				
10:00-11:30	QUIZ	Major Connnectors.		
1:30-4:15	С	USE SKU-2 Typodont (Class III & IV Arches – no need to survey, replace teeth with new teeth after exercises today). Prepare a <b>double embrasure rest between #1.6/1.7</b> . Prepare <b>retentive undercuts of 0.01</b> " on the mesiobuccal of 1.6 and distobuccal of 1.7.		

Place a **resin bonded cingulum rest on tooth #1.3** using the composite typodont tooth supplied. Use rubber dam isolation, etchant, primer and bonding agent. Finish with finishing burs and polish with 3M Soflex discs. Evaluate (formative).

You require a restorative kit, rubber dam, rubber dam clamps, mylar matrix, wooden wedges, Soflex discs.

Monday, October 10, Thanksgiving (No Class)

## Monday, October 17

9:00-10:00	L	<b>Components of RPD's:</b>	c.	<b>Minor connectors</b>
			d.	<b>Denture Bases</b>

Reading - Phoenix et al, pp 38-44

10:00-11:30	S	Review sequence of removable partial denture fabrication, RPD components, using casts, waxups & frameworks. Have path of insertion approved for Cl III & IV casts prior to afternoon.
1:30-4:15	С	Survey and tripod mandibular or maxillary stone Class III and IV casts. Select path of insertion based on the degree of retentive undercut required and the position of the guideplanes stipulated in the tooth preparation summary attached. Draw the heights of contour on the abutment teeth. Prepare guiding planes on the corresponding typodont models. Evaluate (Summative, 5% of Final Mark)

You will need your surveyor and red/blue pencil in addition to your tooth preparation supplies for today's exercise.

## Monday, October 24

9:00-10:30	L	Components of RPD's:	e. f.	Direct Retainers Indirect Retainers
Reading – Phoenix	et al, pp 53	-94, Ch 8		
10:30-11:30	S	Discussion of direct and ind	lirec	t retainers using models
1:30-4:15	С	*		s III and IV typodont models identified on the aluate (Summative, 5% of Final Mark)

You will need your surveyor and red/blue pencil in addition to your tooth preparation supplies for today's exercise.

## Monday, October 31

9:00-10:30	L	Principles of Removable Partial Denture Design
Reading – Phoenix	x et al, Ch 4	
10:30-11:30	QUIZ/S	Direct and indirect retainers. Bring surveyors to Seminar
1:30-4:15	LAB	RPD Design Laboratory on paper. Red & blue pencils required.
		Bring your casts with preparations to next class.
Monday, Noven	nber 7	
9:00-10:30	L	Clinical Protocol for Removable Partial Dentures Framework Try-in and Adjustments
10:30-11:30	S/LAB	Bring surveyors, red/blue pencils and plaster casts to seminar. Design and prescription writing for prepared Class I, II, III & IV RPD's
Reading – Phoenix	x et al, Ch 5-	6, Ch 9:305-308, Ch 11, 12
1:30-4:15	S/LAB	Design and prescription writing for prepared Class I, II, III & IV RPD's

**Homework:** Survey, tripod and mark the height of contour of all potential abutments, then draw an acceptable design on the distributed models II-1, II-2, II-3, II-7 & II-8 prior to next day. Note that models II-7 and II-8 articulate together properly when their posterior surfaces are placed on the desktop. Take occlusal analysis into consideration when planning treatment for these two cases.

#### Monday, November 14

9:00-11:30	L	Interim Removable Partial Dentures (Draw Design) - Dr. Cook
Reading – Phoeniz	k et al, Ch 18	
		Student-lead Seminar(s): Students will present their designs and prescriptions, discuss options and provide a rationale for their design choices for distributed models II-1, II-2, II-3, II-7 & II-8. Note that models II-7 and II-8 articulate together properly when their posterior surfaces are placed on the desktop. Take occlusal analysis into consideration when planning treatment for these two cases
1:30-4:15	L	Student-lead Seminar(s): Continued. Review Designs with Seminar Leader
Monday, Noven	nber 21	
9:00-11:30		Review
1:30-3:30	С	Motor Skills Assessment exam (2.5 hours) ( <b>Summative 10% of final mark</b> ) – Draw a design on a diagnostic cast

- Prescribe and complete abutment modifications on typodont model
- Write a laboratory prescription

Monday, Novem	iber 28	
9:00-11:30	Lab	<b>Midterm Exam</b> Exam
1:30-4:00 pm	5199	STUDENTS FREE; Instructors mark exam
Monday, Decem	ber 5	
10:00-11:30	L	Overview of complete denture therapy
Review videos on	mixing and u	Making edentulous preliminary impressions using irreversible hydrocolloid
11:30-11:45	L	Review of Midterm Exam
11:45-12:30	QUIZ	Edentulous Arches Quiz (six stations, formative)
Review Zarb et al,	pp 211-217	(Maxillary Anatomy) pp 232-243 (Mandibular Anatomy)
1:30-4:15	С	Demonstration of syringe technique for preliminary impressions Making of maxillary irreversible hydrocolloid impressions for par Pouring and trimming of casts – formative evaluation

Reading – Zarb et al, pp 218-225 (Preliminary Maxillary Impressions) pp 243-245 (Prelim. Mandibular Impressions)

You will need alginate mixing bowls, spatulas, 12 cc disposable syringe, and from the Dispensary an RPD instrument tray and a maxillary dentate stock impression tray that fits your mouth for the afternoon exercise (use a wax wafer to size the arch for the tray). **Keep your cast for an exercise in February.** 

## Monday, January 9

10:00-11:30	L	Custom trays and border molding
Reading – Zarb et a	al, pp 225-23	1, 245-251 (Final impressions & custom trays)
11:30-12:00	QUIZ	Custom Tray Quiz
1:30-2:30 2:30-4:15	LAB LAB	<b>Tissue conditioning lecture</b> and video demonstration Tissue conditioning exercise ( <b>Summative 5% of final mark</b> )

You will need a mixing spatula, a red handled knife, scalpel blade, Bunsen burner, safety glasses, and acrylic adjustment kit for these exercises. Acrylic resin, gloves, masks and separating medium will be supplied.

## Monday, January 16

10:00-11:00	L	Patient Education – Student Lead Seminar
Reading - Zarb et a	al, Commun	ication pp 177-189, Cleansers 202-205, Adhesives 442-447, Instructions 414-419
11:10-12:10	L	<b>Diagnosis and Treatment Planning</b> Reading – Zarb et al, pp 34-50, 73-99
12:10-12:30	LAB	Tissue conditioning Exercise (cont'd.)
1:30-4:15	LAB	Prosthodontic Olympics Practice Session

partners

### Monday, January 23

10:00-12:30		Prosthodontic Olympics (Diagnosis Clinic, Lab 3218)
2:00-3:00	L	Diagnosis of Denture Problems
3:00-4:15	LAB	Tissue conditioning Exercise (cont'd.)
Monday, Janua	ary 30	
10:00-11:00	L	Final Impressions/Post Palatal Seal – Dr. Cook View Boxing Video Tissue Conditioning Exercise due
Reading – Zarb et	al, pp 155-1	61, 175-181
11:10-12:30	LAB	Boxing Impressions – lab exercise
1:30-2:30	L	<b>Maxillomandibular Relationships – Raftus</b> Record bases and occlusal rims Occlusal vertical dimension Facebow/Earbow records
Reading – Zarb et	al, Ch 16	
2:30-4:00	QUIZZES	Record Bases and Occlusion Rims Quiz Final Impression Quiz Practice facebow registration in groups
Monday, Febru	ary 6	
10:00-11:30	L	<b>Maxillomandibular Relationships</b> Centric positions Protrusive records
Reading – Zarb et	al, Ch 16	
11:30-12:30	LAB	Adjust Wax Occlusion Rims for Setting Denture Teeth
1:30- 4:15	С	Examine, diagnose and treatment plan patients Irreversible hydrocolloid impressions of patients

For each clinic session from this point on, you should wear appropriate clinical attire, use appropriate barrier technique and have dental materials and equipment ready for use, including an RPD tray with acrylic adjustment burs from the dispensary. Always have a few pieces of gauze and a couple of cotton rolls, Hanau Torch, mirror, air/water syringe tip, lab handpiece, patient bib and patient safety glasses ready for use in your cubicle.

For this clinic session, you will need pre-dispensed alginate impression material, mixing bowl and spatula, 12 cc disposable syringe, appropriate sized stock alginate impression trays, and indelible sticks.

You must have cast poured and trimmed with lab prescription for your patient's custom trays ready and signed by an instructor by Tuesday AM, so they can be submitted to the lab for return next week.

#### Monday, February 13

10:00-11:30	L	Selection of Denture Teeth – Dr. Cook
11:30-12:30	S/QUIZ	Select and write prescription for denture teeth
1:30-4:15	С	Border mold demonstration Border mold for patients

You will need a red handled knife, scalpel blade, indelible sticks, Bunsen burner, low temperature water bath, ice water in a mixing bowl, your patient's custom trays.

## Monday, February 20-26 Study Break

#### Monday, February 27

10:00-11:30	L/LAB	Setting of Anterior Denture Teeth
		LAB Authorizations

Reading - Zarb et al, Denture Teeth pp 195-198, 298-314

11:30-12:30 LAB/QUIZ	Evaluation of Anterior Setups
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1:30-4:15 C Border mold/final impressions for patients

For final impressions you will need a red handled knife, scalpel blade, polyvinylsiloxane low viscosity impression material, tray adhesive, Bunsen burner, #4 Korecta wax, sticky wax and indelible sticks.

## Monday, March 6

10:00-11:30	L	Setting of Posterior Denture Teeth
		Monoplane and Lingualized Occlusal Schemes
		Videos: Setting Mand. Posterior Teeth, Set Max. Posterior Teeth

Reading - Zarb et al, pp 314-324 or

Watt & MacGregor, Designing Complete Dentures, 2nd ed., 1986, Bristol, Wright, pp 104-118,181-192 (good illustrations)

11:30-12:30	LAB/QUIZ	Evaluation of Posterior Setups
1:30-4:00	LAB	Set Anterior Teeth (Review Videos) Set Posterior Denture Teeth (Review Videos) (No Clinic) (Summative evaluation) – see project due dates

For the laboratory exercise, you will need a red handled knife, scalpel blade, Bunsen burner, Hanau Torch, baseplate wax, acrylic burs, laboratory handpiece, articulator and crown-removing forceps.

Homework: Review setup and use of your articulator and facebow

Monday, March 13 – Lab 3218 - All day set denture teeth (no patient in afternoon)

Monday, March 10 - Eab 5210 - Milday Set dentale teem (no panent in afternoon)						
Monday, March 20						
10:00-11:00	L	Wax Try-in Appointment (Dr. Raftus)				
11:00-12:30	LAB	Set Denture Teeth (Review Videos) (Summative evaluation) – see project due dates				
1:30-4:15	С	Establish vertical dimension & make facebow/earbow transfer				
	Forch, base	ationship records you will need a red handled knife, scalpel blade, Bunsen plate wax, PVS bite registration material, sticky wax, petroleum jelly, indelible ming instrument.				
Review videos prior to next day: Adjust Lateral Contacts, Adjust Protrusive Contacts						
Monday, March	27					
10:00-12:30	LAB	Adjust Denture Teeth on Articulators				
Reading - Zarb et al, Ch 18						
1:30-4:15	С	Make centric and protrusive records for patients				
Same materials and instruments as last day.						
Monday, April 3	3					
10.00 12.20	LAD	Adjust Dantura Teath on Articulators				

10:00-12:30 LAB Adjust Denture Teeth on Articulators

Reading - Zarb et al, Ch 18

1:30-4:15 C First Wax Tryin

Same materials and instruments as last day.

## Monday, April 10 – Dr. Cook

10:00-11:00 L Insertion and Delivery Denture base adjustments Clinical remounts

Reading – Zarb et al, pp 419-426

11:15-12:30 LAB Setting denture teeth exercise – Adjusting contacts (cont'd.)

1:30-4:30PM C Second Wax Try-in

For this appointment you will need a red handled knife, scalpel blade, Bunsen burner, Hanau Torch, baseplate wax, PVS bite registration material, sticky wax, petroleum jelly, indelible sticks, and Boley gauge.

Homework: Prior to next day review 3 videos on Adjusting Teeth – Centric, Lateral, Protrusive Contacts

## Monday, April 17

10:00-11:15	L	Troubleshooting Denture Problems – Pain
11:15-12:30	LAB	Completion of denture tooth setup and occlusal refinement exercise (Summative, 10% of final mark)
1:30-4:15	С	Complete Denture Insertion & Delivery

Same materials and instruments as last day. Send your remount jig with your mounted case to the lab, for fabrication of a remount index

Monday, April 24		<b>10AM -</b> Submission of denture tooth setup, Summative, 10% of final mark)		
10:00-11:30	L	Troubleshooting Denture Problems II – Looseness		
1:30-4:15	С	Insertion and Delivery/Adjustments		

For the Wax Try-in, you will need a red handled knife, scalpel blade, Bunsen burner, Hanau Torch, baseplate wax, PVS bite registration material, articulating film in a pair of articulating paper forceps, indelible sticks, Boley gauge, crown-removing forceps, lab handpiece and acrylic burs.

## Monday, May 1

### Anterior denture setup and occlusal refinement exercises are due by 12PM.

10:00-11:00	L	Single Complete Dentures - MacAdam
Reading – Zarb et a	ıl, Ch 21	
11:00-12:30	LAB	Review
1:30-4:15	С	Insertion and Delivery/Denture Adjustments

For Insertion and Delivery/Adjustments, you will need a Bunsen burner, PVS bite registration material, articulating film in a pair of articulating paper forceps, indelible sticks, pressure indicating paste with brush, plenty of gauze and cotton rolls.

#### Monday, May 8

10:00-12:30	S	Student-lead seminar of problems during delivery of care Assessment of treatment results
1:30-4:15	С	Last Adjustments/Continuing Care
Monday, May	15	
10:00-12:30		Final Exam
1:30-4:15	С	Faculty Mark Exam (Student don't attend)

# **Tooth Preparations for Partially Edentulous Arches**

## Class I:

Tooth #	3.4	3.3	4.3
Rests	М	Cing	Cing
Retention	MB .02"	_	MB .01"
Bracing	—	_	_
Guide Plane	D		D

## **Class II, modification 1:**

Tooth #	1.7	1.4	2.4
Rests	М	D	М
Retention	DB .01"	MB .02"	B .01"
Bracing	L	L	_
Guide Plane	М	D	D

# **Class III:**

Tooth #	3.7	3.4	4.4	4.7
Rests	М	D	М	D
Retention	DB .01"	MB .01"		MB .01"
Bracing	L	L		L
Guide Plane	М	D		D

# **Class IV:**

Tooth #	1.7	1.3	2.4	2.7
Rests	D	Cing	М	D
Retention	MB	В	DB	MB
	.01"	.01"	.01"	.01"
Bracing	L	_	L	L
Guide Plane	D	М	М	D