NOVA SOUTHEASTERN UNIVERSITY
College of Dental Medicine

CDM 2095 - Pre-clinical Removable Prosthodontics lecture 1

I. Course Information

Course: CDM 2095 - Pre-clinical Removable Prosthodontics lecture 1
Semester and Year: Fall 2021
Course Start and End Dates: 07/26/2021 - 12/12/2021
Course Reference Number: 23999
Semester Credit Hours: 2.0
Building and Room: HPD-Assembly I Building - 2107AUDA

II. Instructor Information

Professor: Chiu-Jen Hsu
Email: chiujen@nova.edu
Office Hours:
Monday AM by appointment only

III. Class Schedule and Location

Day	Date	Time	Location	Building/Room
T	07/27/2021 - 08/10/2021	8:10 AM - 9:59 AM		HPD-Assembly I Building-2107AUDA
T	08/17/2021 - 12/07/2021	8:10 AM - 9:59 AM		HPD-Assembly I Building-2101TERY

IV. Course Description

The goal of the Preclinical Removable Prosthodontics Lecture 1 is to familiarize the student with all the aspects of this discipline of removable prosthodontics-theoretical, technical and clinical so that he or she will be able to confidently and accurately provide removable prosthodontic treatment for the complete or partially edentulous patient in clinical practice.

V. Course Objectives / Learning Outcomes

Course Learning Outcomes
At the end of this course, the students will have the knowledge to perform the following procedures, together with knowing and understanding the principles underlying them.
1) Examine patient with complete or partially edentulous ridge, including those already wearing removable prostheses and evaluate the likelihood of achieving successful treatment with new removable prostheses.
2) Identify and refer for appropriate treatment patients with pathological conditions in the complete and partially edentulous mouth.
3) Preliminary Impressions: Make preliminary impressions with modeling compound, alginate and other elastomeric materials.

4) Custom Trays of complete or partially edentulous patients: Fabricate custom trays from light-cured acrylic resins.
5) Final Impressions: Make final impressions and develop master casts.
6) Record bases: Fabricate record bases with the attached occlusion rims.
7) Jaw Relations: Record and understand concepts of centric relation and occlusal vertical dimension and other aspects of relationships of complete and partially edentulous arches.
8) Occlusion Rims: Provide the students with basic knowledge to contour occlusion rims and articulate edentulous casts
9) Zero/30 Degree Denture Teeth: Set and balance zero degree and 30 degree teeth.
10) Wax Up Gingival Contours: Wax up gingival contours for a complete or partial denture.
11) Removable Partial Denture : Introducing the components of RPD and principle of RPD design.
12) Survey crown / restoration: principle and practice of survey crowns

COLLEGE OF DENTAL MEDICINE COMPETENCY STATEMENTS Faculty Note: Use the most updated version of the CDM Predoctoral Competency document to select the corresponding competencies for this course. Be sure to select the number of the competency statement and the verbatim competency statement as it appears on the competency document.For each competency indicate the type of assessment (formative or summative) that will be employed to measure the attainment of the competency

Core Competencies:

1. Graduates must be competent in patient assessment, diagnosis, comprehensive treatment planning, prognosis, and informed consent.

[CODA Predoctoral Standard 2-24(a)]
*Formative a*ssessments class participation small group discussion
Summative Assessments written exam

[CODA Predoctoral Standard 2-24(c)]

*Formative a*ssessments class participation small group discussion
Summative Assessments written exam
7.. Graduates must be competent in communicating and managing dental laboratory procedures in support of patient care.

[CODA Predoctoral Standard 2-24(g)]
*Formative a*ssessments class participation small group discussion
Summative Assessments written exam
8. Graduates must be competent in the replacement of teeth including fixed, removable and dental implant prosthodontic therapies.

[CODA Predoctoral Standard 2-24(h)]
*Formative a*ssessments class participation small group discussion
Summative Assessments written exam

- This refers to the same as the items in the CDM Competency Document; please see them listed below.

FOUNDATION KNOWLEDGE

STATEMENTS FOR THE GENERAL DENTIST

FK1: Apply knowledge of molecular, biochemical, cellular, and systems-level development, structure and function to the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.

Foundation Knowledge disciplines covered by FK1 include: Gross and Head and Neck Anatomy, Regional Anatomy, Dental Anatomy, Gnathology, Occlusion (including TMJ), General and Oral Histology, Embryology, Physiology, Cell Biology, Biochemistry, Molecular Biology, Genetics, Neuroscience, Nutrition, Oral Biology, General and Systemic Pathology, Cancer Biology, etc.

FK3: Apply knowledge of physics and chemistry to explain the characteristics and use of technologies and materials used in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.
Foundation Knowledge disciplines covered by FK-3 include: Basic Radiology, Dental Material Sciences, Biomaterials, Biophysics, etc.

FK6: Apply knowledge of general and disease-specific pathology to assess patient risk in the prevention, diagnosis, and management of oral disease and the promotion and maintenance of oral health.
Foundation Knowledge disciplines covered by FK6 include: Cellular and Molecular Pathology, General and Systems Pathology, etc.FK6-4: Explain the impact of systemic conditions on the treatment of dental patients. (Encompasses Systemic Pathology, Internal Medicine, Medically Complex Patient, etc.).

VI. Materials and Resources

Course Required Texts and Materials: Removable Prosthodontics Laboratory Manual
Faculty Note: Please indicate the textbooks that are **required** for the class and if available, a hyperlink to the textbook. Also, indicate if there are articles or links to **required readings** that are required for the class *and* the site where the articles are available for the student (such as: Canvas, library, database).
Course Supplemental Materials: Phoenix, Rodney D. Stewart's Clinical Removable Partial Prosthodontics, 4th Edition. Quintessence Publishing, 2008
Carr, Alan B., David Brown. McCracken's Removable Partial Prosthodontics, 13th Edition. Mosby, 2016
Zarb, George. Prosthodontic Treatment for Edentulous Patients, 13th Edition. Mosby, 2013.
Glossary of Prosthodontic Terms, 9th ed. Mosby 2017
- Supplemental, Recommended, Optional, NOT required.
The access to all instructional resources included in this course, such as, lectures, handouts, manuals, PowerPoint presentations, videos, photographs, pictures, articles and web links is limited to students who are enrolled in the course and is not for public distribution. The use of these instructional resources is exclusively for non-commercial and non-profit educational use. Students are recommended to download the instructional resources provided in the course, UNLESS, the course director instructs NOT to download specific files. We recommend that all students download, save, and keep the instructional materials from all the courses. These instructional resources will be very helpful references as you progress from year to year in the program.

VII. Course Schedule and Topic Outline

Course Schedule:

08/03	**Lecture 1**	**Course introduction** **1. Introduction to REMOVABLE PROSTHODONTICS** **2. Problems related to teeth loss** **3. What is an RPD? Complete dentures? Overdentures?** **4. Retention, Support, Stabilization** **5. Tooth-supported vs tissue-supported removable prostheses** **McCracken's: Chapter 1, 2, 13** **Phoenix: Chapter 1** **Zarb: Chapter 1 & 4**	**Lab 1**	**Project P1:** **Mounted partial edentulous casts (set# 1) with record bases and wax rims** **Preliminary impression of partially edentulous typodont diagnostic casts** **1. Preliminary impressions with alginate and stock trays** **2. Make 2 sets of Microstone diagnostic casts:** **- Set # 1 – Mounted diagnostic/design casts** **- Set # 2 – Turn in for test purposes** **3. All finished casts need to be evaluated by Instructors before proceeding to the record base fabrication.**	

08/10	Lecture 2	Diagnosis Data collections of complete or partially edentulous patients 1. PDI and Kennedy Classification 2. Occlusal considerations of removable prosthodontics 3. Centric relation, Hinge axis, Vertical Dimension History and Examination McCracken's: chapter 3, 10 Phoenix: Chapter 6 Zarb: Chapter 5 & 9	Lab 2	Project P1: Mounted partial edentulous casts (set# 1) with record bases and wax rims and set # 2 Fabrication of record bases/ wax rims/ mounting diagnostic casts(set 1) 1. Survey and marking the undercuts of the casts 2. Outline the record bases 3. Blockout the undercuts of the casts 4. Fabrication of TRIAD record bases and wax occlusal rims on diagnostic casts (set # 1) 2. Interocclusal Aluwax record obtained from Dentoform 3. Casts mounted on articulator	

DATE	LECTURE	CONTENT	LAB	EXERCISES AND PROJECTS	PROJECT DUE
08/17	Lecture 3	Prosthetic requirement- Retention, stability, support Introduction of Survey and RPD components Principles of RPD design I McCracken's: Chapter 4-9, 11 Phoenix: Chapter 4, 5, 9 Zarb: Chapter 5, 9	Lab 3	Project P1: Mounted partial edentulous casts (set# 1) with record bases and wax rims and set # 2 Project P2: 1.5X Viade teeth Rest seat /Guide plane preparation Follow the Demo samples prepare and submit: 2 MO or DO rest seats on maxillary and mandibular molars 1 MO or DO rest seats on premolar 2 Cingulum rest seats 2 Guide plane preparations 1 Dimple preparation	Project P1 Due at **5 PM**

08/24	Lecture 4	Rest seat and guide planes preparation Survey crowns McCracken: Chapter 6,7, 8, 10 Phoenix: Chapter 4, 5, 8, 9	Lab 4	Project P2: 1.5X Viade teeth Rest seat /Guide plane preparation Follow the Demo samples prepare and submit the following preparation on the 1.5X teeth: 2 MO or DO rest seats on maxillary and mandibular molars 1 MO or DO rest seats on premolar 2 Cingulum rest seats 2 Guide plane preparations 1 Dimple preparation	Project P2 Due at 5 PM
DATE	LECTURE	CONTENT	LAB	EXERCISES AND PROJECTS	PROJECT DUE
08/31	Lecture 5	Principles of RPD design II Final tooth Preparation Clinical visit McCracken: Chapter 14,15 Phoenix: Chapter 10, 11	Lab 5	Project P3: Complete the design drawing on the mounted diagnostic casts and design form Survey diagnostic casts Tripod the casts, survey lines and undercut areas Draw design on design casts and design form Project P4: Completed guide planes, rest seats and modifications preparations on typodonts Practice rest seat preparations on typodont teeth Small group discussion Pt. A, B, C	

09/07	Lecture 6	Principles of RPD impression Final impression of RPD Impression material selection Principle of RPD design review :RPI systemMcCracken: Chapter 16 Phoenix: Chapter 11, 12	Lab 6	Project P3: Complete the design drawing on mounted diagnostic casts and design form Survey mounted diagnostic casts Tripod the casts, survey lines and undercut areas Draw design on casts and design form Project P4: Completed guide planes, rest seats and modifications preparations on typodonts Prepare rest seats, guide planes and modifications on typodont teeth Small group discussion Pt. D, E, F	
DATE	LECTURE	CONTENT	LAB	EXERCISES AND PROJECTS	PROJECT DUE
09/14	Lecture 7	Principles of RPD impression Final impression of RPD Impression material selection Master casts fabrication RPD laboratory procedures Laboratory prescription McCracken: Chapter 16-20 Phoenix: Chapter 4, 5, 8, 9	Lab 7	Project P3: Complete the design drawing on mounted diagnostic casts and design form Survey mounted diagnostic casts Tripod the cast, survey lines and undercut areas Draw design on casts and design form Project P4: Completed guide planes, rest seats and modifications preparations on typodonts Mouth preparations on typodont teeth	Project P3 Due at **5 PM**

09/21	Lecture 8	Preliminary Impressions and cast fabrication of complete or partially edentulous patients anatomical considerations Anatomical landmarks Zarb: Chapter 8 & 9	Lab 8	Project C1: Alginate preliminary impression complete edentulous preliminary casts Preliminary casts outlined Project P4: Completed guide planes, rest seats and modifications preparations on typodonts Prepare rest seats, guide planes and modifications on typodont teeth	Project P4 Due at **5 PM**
09/28	Lecture 9	Border molding & final impression for edentulous patients Impression of edentulous ridges Fabrication of the master cast Zarb: Chapter 8, 9	Lab 9	Project C1: Maxillary and mandibular edentulous preliminary casts outlined Maxillary and mandibular custom trays Demonstration of border molding, impression and boxing of the impression	Project C1 Due at **5 PM**

DATE	LECTURE	CONTENT	LAB	EXERCISES AND PROJECTS	PROJECT DUE

10/05	**Lecture 10**	**Record bases and Occlusion Rims Fabrication** **Jaw Relation records** **1. The facebow and articulators** **2. Centric relation, Hinge axis, Vertical Dimension** **3. Clinical jaw relation procedures** **Zarb: Chapter 9, 10**	**Lab 10**	**Project C2:** **1. Border molding maxillary and mandibular patient casts** **2. Box mandibular Final Impression with Com-plaster** **3. Fabrication of mandibular master cast** **4. Turn in maxillary custom tray with completed border molding and mandibular master cast** **Project P5:** **RPD definitive impression made and poured ResinRock master casts. Tripoded master casts with survey lines, and design drawn on casts and laboratory prescriptions** **Project P5 due 11/23**	
10/12	**Lecture 11**	**Denture esthetics and selection of denture teeth** **Arrangement of anterior denture teeth** **Zarb: Chapter 9**	**Lab 11**	**Project C2:** **1. Border molding maxillary and mandibular patient casts** **2. Box mandibular Final Impression with Com-plaster** **3. Fabrication of mandibular master cast** **4. Turn in maxillary custom tray with completed border molding and mandibular master cast** **Project P5:** **RPD definitive impression made and poured ResinRock master casts. Tripoded master casts with survey lines, and design drawn on casts and laboratory prescriptions** **Project P5 due 11/23**	**Project C2 Due at 5 PM**

10/19	**MIDTERM WRITTEN EXAM 8-10AM**		**RPD Design and mouth preparations Practical 10:00-2:00**		
DATE	**LECTURE**	**CONTENT**	**LAB**	**EXERCISES AND PROJECTS**	**PROJECT DUE**
10/26	Lecture 12	**Denture occlusion (1)** Selection of posterior teeth Zarb: Chapter 10	Lab 12	Project C3: 1. Patient casts with proper block out and record bases outline 2. Fabricate 2 sets of Triad Record Bases on Maxillary/Mandibular patient casts 3. Wax Occlusion Rims 4. Posterior palatal seal scribed on maxillary casts	
11/02	Lecture 13	**Denture occlusion (2)** Arrangement of posterior teeth Zarb: Chapter 10	Lab 13	Project C3: 1. 2 sets of Triad Record Bases on patient casts 2. Wax Occlusion Rims 3. Adjust the height of the wax rims 4. Cut-back and v-shaped notches 5. Aluwax jaw relation registration 6. Mounted patient casts on articulators	Project C3 Due at **3 PM**
11/09	Lecture 14	Denture try-in visit Complete Denture Soft Tissue contours: Waxing and Festooning Zarb: Chapter 9, 10, 11	Lab 14	Project C4: Arrangement of anterior teeth Arrangement of 30-degree anatomical balanced setup Waxing and Festooning	
11/16	Lecture 15	Denture insertion Remount procedures and post insertion denture care Zarb: Chapter 10, 12, 14	Lab 15	Project C4: Arrangement of anterior teeth Arrangement of 30-degree anatomical balanced setup Waxing and Festooning	

11/23	Lecture 16	Denture occlusion (3) Monoplane occlusion Zarb: Chapter 10 Denture repair, reline, rebase	Lab 16	Project C4: Arrangement of 30-degree anatomical balanced setup Waxing and Festooning	Project C$ due today at 3 PM Project P5 Due at 3 PM
11/30 TUE	FINAL PRACTICAL EXAMINATION 8:00-12:00 Arrangement of anatomical denture teeth with balanced occlusion				
12/01 WED	FINAL WRITTEN EXAM 8AM				

Topic Outline:
Please see the table above

"Important note – The NSU-CDM Office for Academic Affairs may modify the course schedules and course activities, if needed. Faculty and students are responsible for continuously reviewing the syllabus and/or course announcements to remain informed about any course changes and adjusting their schedules accordingly."

VIII. Assignments

Description of Assignments, Point Value and Rubrics
As described in class

IX. Grading Criteria

Provide a List of all the graded work in the course (Assessments, Class Activities, Classwork and Assignments) with Point or Percentage Values, or required Completion item.
Grading Scale:
The final grade will be based upon three written examinations and unannounced quizzes. The cumulative passing grade for all written instruments is 70 %

- Midterm 40%
- Final 50%
- Unannounced Quizzes 10%

Course Final Grade Mode for the course (Pass/Fail, PR/NPR or Letter Grade). For a continuum course, please specify the grade mode for each semester.
Grade Mode:
Letter grade

Course Grading Scale

Letter Grade	GPA	Equivalence
A	4	93 to 100
A-	3.75	90 to < 93
B+	3.5	86 to < 90
B	3	83 to < 86
B-	2.75	80 to < 83
C+	2.5	76 to < 80
C	2	70 to < 76
F	0	<70

X. Course Policies

COURSE ATTENDANCE REQUIREMENTS, REMEDIATION POLICY, ALL CDM POLICIES

Attendance Policy : Please refer to appropriate pages of the NSU-CDM 2020-2021 Student Handbook.

Link to the handbook:
https://liverootnova.sharepoint.com/dentmed/Active%20Docs/Policies%20and%20Procedures/Pre%20a2020%20CDM%20PreDoctoral%20Student%20Handbook.pdf?wa=wsignin1.0

Remediation Policy: Please refer to appropriate pages of the NSU-CDM 2020-2021 Student Handbook.

"Successful completion of each CDM course requires compliance with the CDM Code of Behavioral Conduct."

CDM College Attendance Policy

Please note that the Office of Student Services manages excused absences including sick days, mission trips, dental meetings, externships, interviews, family events, and other personal leave time, etc. and all student absences will continue to be tracked in axiUm.
Please refer to the NSU Wide Religious Holidays Policy in the Student Handbook at:
https://www.nova.edu/studentconduct/religious-holiday-policy.html
Contact: NSU Assistant Dean for Student Development - Benjamin Johnson at bj379@nova.edu

- **Planned excused absences:** please fill out the SREA form, with backup documentation (e.g. physician's note), and submit on the online portal for the Office of Student Services (Absence portal link: https://liverootnova.sharepoint.com/cdm/srea/) prior to the scheduled absence, so that we can approve the leave time, and help you map out a plan to make up the work. It is the student's responsibility to inform the course director for any courses you will be missing, your team leader for any clinic sessions that will be missed and/or the Academic Program Coordinator (Aixa Diaz), etc. of your planned absence(s). (Please be sure to submit your request for absence prior to purchasing tickets for travel to be sure all dates have been approved.)
- **Unplanned excused absences**: please email Dr. Galka at agalka@nova.edu with a cc to cdmservices@nova.edu to report that you will be out, the reason for your absence and to also let us know if you plan to return to school the following day. You should also email the course director for any courses you will be missing, Aixa Diaz adiaz4@nova.edu for any rotations you will be missing and/or your team leader for any clinic sessions scheduled for that day. You should continue to email us daily to keep us updated if you will be out additional days and you can submit your SREA form together with backup documentation when you know the date you will return to school.
- The student will be responsible for making up all missed rotations, all material presented in lectures, all laboratory projects, all written and practical examinations (including OSCEs) and must fulfill all didactic and clinical responsibilities as outlined in the individual course syllabi. Also, please review the attendance policy in the individual course syllabi.
- Please do not schedule externships or interviews when you are scheduled for an examination or rotation.
- Remember, it is your responsibility to reach out to our office for any unexcused absences to see if these fall under excused absences and/or to see how the unexcused absence will be managed. Also, please contact Aixa Diaz directly to arrange makeup of any and all missed rotations, which will take place during optional clinic weeks.
- Please reach out to the Office of Student Services (cdmservices@nova.edu) if you need assistance with filling out the SREA Form.

Please note, it is the student's responsibility to notify all course directors, team leaders, and/or the Academic Program Coordinator, etc. that are affected by your absence(s).

XI. University Policies

Academic Integrity: Cheating or inappropriate behavior during any written examination, quiz, any

assignment, any project; plagiarism of any work(s), or other unethical behavior will not be tolerated; the student risks receiving a grade of zero (0) for said examination, quiz, assignment, project and may be referred to the Associate Dean for Academic Affairs and the Student Progress Committee. Please refer to appropriate pages of the NSU-CDM 2020-2021 Student Handbook. and the NSU Student Handbook located at https://liverootnova.sharepoint.com/dentmed/Active%20Docs/Policies%20and%20Procedures/Pre%20and%202020%20CDM%20PreDoctoral%20Student%20Handbook.pdf?wa=wsignin1.0 .

Plagiarism Policy: All assignments, exams, works, patient care - written, laboratory, oral, clinical must be done as the independent work of each individual student. Plagiarism, copying or sharing the work of another or altering documentation to reflect something is your own work that is not; reflect false attendance, are considered serious offences that will not be tolerated. THESE ACTIONS WILL BE CONSIDERED IN VIOLATION OF THE UNIVERSITY AND THE CDM CODE OF BEHAVIORAL CONDUCT AND WILL BE REFERRED FOR APPROPRIATE ACTION. Students who need assistance in their learning goals should communicate with the appropriate NSU-CDM course director and/or faculty. Please refer to appropriate pages of the NSU and the CDM 2020-2021 Student Handbook. Following a link to the NSU Student Handbook https://liverootnova.sharepoint.com/dentmed/Active%20Docs/Policies%20and%20Procedures/Pre%20and%202020%20CDM%20PreDoctoral%20Student%20Handbook.pdf?wa=wsignin1.0