

FALL 2024

NEW YORK CITY COLLEGE OF TECHNOLOGY
THE CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF
RESTORATIVE DENTISTRY

DEPARTMENT: RESTORATIVE DENTISTRY
COURSE CODE & TITLE: RESD 1115 FIXED PROSTHODONTICS I

LECTURE INSTRUCTOR: PROF. AVIS SMITH
CONTACT INFORMATION: Office: A601
Office Hours: Tuesday 10:00-2:00 pm
(Also, by appointment if needed).
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COURSE DESCRIPTION:

An introduction to the theory and practice of fabricating fixed prostheses including the construction of casts and dies, identifying margins, trimming, ditching, and articulation. Creation of provisional, composite resin and full metal coverage restorations including inlay/onlay, full anterior and posterior crown. Development of wax patterns for provisional restoration, as well as for full metal coverage, inlay and crown. Development of functional occlusal relationships, spruing, investing, burnout, casting, finishing and polishing of single unit restorations.

This course maybe hybrid/partially online course with possibly some lecture part being held partially online and partially in class.

CLASS HOURS: Laboratory: 6 in-class laboratory hours

Lecture: 1 lecture hour

CREDITS: 3 credits

NUMBER OF WEEKS: 15 Weeks

CURRICULUM LEVEL: First Semester

PREREQUISITES: Eligibility for ENG1101 or ENG 1101CO or ENG 1101ML; Eligibility for MAT1190 or MAT1190CO or higher

COURSE REQUIREMENTS: Standard college and department attendance and grade regulations.
Proper uniform and conformity to safety regulations.

RULES for MY CLASSES: Department Policies Supersedes Rules for My Classes if there are conflicts.

1. All students are required to read, know, and practice Restorative Dentistry Department Policies.
2. Students are required to be present in both lab and lecture classes "on time".
3. Students are required to sign in on the attendance sheet upon entering all classes.
4. Students are required to sign "only their names" on the attendance sheets when they enter the class.
5. Students can lose points from their grades for signing other students' names on the attendance sheet.
6. Students are required to be totally prepared for exams, which includes having something to write with.
7. Students should not have to ask other students for something to write with, but have their own items to write with, and are subject to point reduction for not being prepared.
8. Students must be prepared to take notes in the laboratory class, and participate in Gen Ed Assessment activities, in both lab, and lecture.
9. Students must demonstrate after seeing demonstrations on the various techniques being taught, the ability to

independently perform the techniques. They can also refer to You Tube video demonstrations as well as their Air Force Manual.

10. Students who do other students work for them, will be reported to the department Chair for disciplinary measures.
11. Students must read all of the Department Policies listed below.
12. Students must clean after themselves, and will loose points from their grades for not doing so after each class.
13. Students have the option to track how they are being graded, and why they are being graded. They will not be required to do this, but are advised to do this to have their own record of the grading process. If students fail to take advantage of the offer to independently track the professor's grading in the first week, the offer expires.
14. Extra Credit in both lab, and lecture are at the discretion of the professor/instructor.
15. All exams will be scheduled for the 4th, 8th, and 15th lectures; however, if students have numerous exams at one time, the professor may change the dates for the convenience of the students. All students are required to take all exams on the dates scheduled. Students are required to put their name, date, title of exam, course code and section on the answer key, and have their own #2 pencil. or pens for all exams. The professor will not search to find any student who does not put their name of exams, or answer keys, and the student will not receive credit.
16. Students are required to return ALL materials and items used in the lab after each lab class to the professor, or CLT. Leaving materials and items after class around the laboratory will affect each students' grade and one point will be taken from all students grade each time items are not returned. It is the responsibility of every student to be sure that ALL materials and items are returned. All students are responsible to return All items used.
17. Missing exams: will cause the student a 5-point deduction for each exam.
18. Talking During an Exam: talking during an exam will cause a student a 5-point reduction of points from their exam grades. This includes asking another student for a pencil and/or eraser.
19. Come independently prepared.

DEPARTMENT POLICIES:

ACADEMIC INTEGRITY

CUNY Policy on Academic Integrity

Academic dishonesty is prohibited in The City University of New York. Penalties for academic dishonesty include academic sanctions, such as failing or otherwise reduced grades, and/or disciplinary sanctions, including suspension, or expulsion.

Source: NYCCT College Catalog: <http://www.citytech.cuny.edu/academics/academic-catalog.aspx>

NYCCT Academic Integrity

Students and all others who work with information, ideas, texts, images, music, inventions, and other intellectual property owe their audience and sources accuracy and honesty in using, crediting, and citing sources. As a community of intellectual and professional workers, the College recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity.

Source: NYCCT College Catalog: <http://www.citytech.cuny.edu/academics/academic-catalog.aspx>

Restorative Dentistry

1. All Restorative Dentistry students must submit completed assignments or projects (in lab or theory) by the assigned due date as stated in the course outline.
2. Plagiarism in lecture or laboratory assignments, exams or projects will not be accepted. Student will not receive a grade if papers, exams or assignments were done by someone else or completed in ways other than stated in course documentation. The department will adhere and follow the Academic Integrity Policy and Procedures as per NYCCT & CUNY Policies.
3. Students are responsible for knowing all material covered in reading assignments and handouts for both lecture and laboratory. Students are responsible for knowing information from reading assignments regardless of whether it has been covered during class sessions or not.
4. RESD students are responsible for being in class on time and for participation in laboratory demonstrations. Failure to observe laboratory demonstrations may affect student's performance and contribute to the failure of the course.

NYCCT REASONABLE ACCOMODATIONS

Qualified students with disabilities, under applicable federal, state and city laws, seeking reasonable accommodations or academic adjustments must contact the Center for Student Accessibility for information on City Tech's policies and procedures to obtain such services. Students with questions on eligibility or need for temporary disability services should also contact the Center at : The Center for Student Accessibility, 300 Jay Street room L-237, 718 260-5143,

<http://www.citytech.cuny.edu/accessibility/>

ATTENDANCE

NYCCT Attendance & Lateness

Attendance and class participation are essential and excessive absences may affect the final grade. Courses with laboratory, clinical or field work may have specific attendance policies.

Source: NYCCT College Catalog: <http://www.citytech.cuny.edu/academics/academic-catalog.aspx>

Restorative Dentistry Professionalism & Participation

The Department of Restorative Dentistry follows NYCCT, CUNY and Dental Laboratory Technology industry standards in order to educate, develop, advance and guide future dental technology professionals, preparing graduates for workplace readiness. In order to successfully complete Restorative Dentistry courses, students must consistently participate in classes and meet deadlines as stated in course syllabus.

- It is strongly advised that students are present for all classes during the semester including 30 laboratories and 15 lectures.
- Classes will begin promptly at the scheduled time.
- Students enrolled in RESD course must meet all course requirements as stated in course syllabus in order to pass it. Failure to submit or complete the assignments, tasks, projects or exams by specified due dates, place and time will result in a zero (0) grade and possible failure of the course.
- Make-up exams, projects, assessments will not be issued. If student requires reasonable accommodations, proper documentation from the Center for Student Accessibility should be submitted to the instructor within reasonable time to fulfill course requirements before semester ends.
- The students are required to observe course instructor's demonstrations and complete all fabrication tasks under course instructor's supervision. Laboratory demonstrations are usually conducted at the beginning of the session and cannot be redone for the convenience of the student who arrives late, walks out of the classroom, or is absent.
- When student is given instructor's permission to leave the class, the student must return to class in a reasonable time.

GRADING

Restorative Dentistry courses include didactic or didactic and laboratory sections which are graded accordingly. In didactic and laboratory sessions, the final grades will be computed based on grading included in course syllabus. Most courses are graded based on 60% of the laboratory and 40% of the lecture grades. Student must achieve a passing grade of at least 70% in the laboratory and at least 70% in the lecture sections of the course in order to receive the minimum passing grade of "C" for the entire course. Failure to meet the minimum of 70% average in either component of the course confirms that the student has not met the minimum requirements for successful completion of the course and a grade of "D" or "F" will be given based on student's performance in the failing section of the course. RESD student is required to repeat any RESD course for which he/she receives a grade below minimum of "C". For courses with laboratory and lecture components, the student needs to repeat both, the lecture and the laboratory sections, even though the score in one of the sections may have been greater than 70%.

College grading scale

A	= 93- 100%
A-	= 90-92.9%
B+	= 87-89.9%
B	= 83-86.9%
B-	= 80-82.9%
C+	= 77-79.9%
C	= 70-76.9%
D	= 60-69.9%
F	= 59.9% and below

SATISFACTORY PROGRESS

Students are expected to maintain 2.0 G.P.A. or higher in all classes. Students who's cumulative G.P.A. fall below the minimum 2.0 G.P.A. will be placed on academic alert or academic probation by the College. Students on academic probation may be subject to attempted credit restrictions which can affect progress in taking all courses needed for a semester. Failure to raise cumulative G.P.A. to the appropriate level could result in dismissal from the College.

Any students receiving a grade of "D" or "F" in a RESD courses will be required to repeat that course. RESD course may only be repeated once requiring the full duration and fulfillment of all requirements of the lecture and laboratory sections of the course. Failure to satisfactorily complete a repeated RESD course will be considered a failure to maintain satisfactory progress in the major and will result in dismissal from the major.

PROFESSIONALISM & ETHICS

1. Since practice of dentistry carries with it a high degree of responsibility, a mature, professional, and ethical conduct is expected of all students at all times (lecture & laboratory sessions, hybrid & online sessions, externship sites, professional events/seminars, etc.). Unprofessional behavior that shows inattentiveness and disrespect for others will be taken into consideration during the grading process. Points may be deducted at the discretion of any faculty member regardless of what course is in session. This

includes incidents in the hallways, by lockers, or anywhere on NYCCT campus. Students will conduct themselves in a professional manner. No horseplay, offensive language, shouting or any other misconduct will be allowed.

2. Netiquette: Online Etiquette-Students will conduct their online posts and replies with respect for others, which include courtesy, dignity, and appropriate language at all times. Inappropriate behavior of any kind in online settings will not be tolerated and will negatively affect student's grade.
3. All faculty members will be addressed by their proper title.
4. Students are required to use proper dental terminology when discussing dental prosthesis.
5. Students are to have all required instruments and supplies when attending laboratory sessions.
6. Students are not permitted to do other students' work although assistance and teamwork are strongly encouraged.
7. All electronic devices must be turned off during all RESD classes unless otherwise specified by the instructor.
8. Each RESD student will be assigned a locker in the beginning of each semester and will vacate the locker by the last day of the semester. If the locker is not returned back in clean condition by the end of the semester, the locker will be broken by CLT. The student will not receive another locker the next semester.
9. Students should make arrangements to attend all department events and professional development seminars in which an invitation is extended. Students are strongly encouraged to attend events, professional development seminars and meetings sponsored by the department to elevate their knowledge, skills and understanding of the field of study.
10. Department offices and stock rooms contain sensitive and personal information, classroom materials, supplies and equipment, and should be used for official use only. Students and unofficial personnel should not be allowed in the department offices unless to fulfill official business.

DRESS, SUPPLIES & TEXTBOOKS

1. Laboratory smocks (lab coats) with Restorative Dentistry Department emblem must be worn at all times in the laboratory. Emblems are to be attached to the left breast pocket. Smocks must be clean and kept completely buttoned or tied when worn. Failure to wear smocks will necessitate students being barred from laboratory and marked absent.
2. Closed-toe shoes are required while working in the laboratory.
3. No hats/caps of any type are to be worn in the laboratories. (*Except for religious reasons*)
4. Students must purchase and have in their possession the required tools, supplies, PPE and textbooks by the 2nd week of scheduled classes. A list of all course materials will be available in the department's main office or in CLT's office. All personal tools should be clearly labeled with student's name.
5. Students should acquire required textbooks for each course and are expected to read assigned pages and review procedures *prior* to attending lecture and laboratory classes. The list of required textbooks will be listed in all course syllabi.
6. RESD students are responsible for their belongings at all times. Restorative Dentistry Department does not take responsibility for left over items.

HEALTH & SAFETY

1. No eating, drinking or smoking is permitted in laboratories or classrooms.
2. No electronic devices (i.e. phones, headphones, computers or tablets) will be permitted in the laboratories or classrooms unless requested for classroom use by the instructor.
3. No outerwear, shopping bags, attaché cases, luggage etc., are permitted in laboratories.
4. Bunsen burners when lit are a potential danger. Bunsen burners must be turned off when you leave your bench. Long hair and hair spray are flammable items. Pay particular attention to any Bunsen burner flame. Do not lean over the open flame.
5. Chucks must be securely placed onto bench engine shaft to avoid chuck flying off when engine is turned on.
6. Boiling water can result in serious burns. Extra caution should be taken when boiling out or using boiling water.
7. Burnout furnaces and porcelain furnaces are potentially dangerous. Tongs should be used when picking up hot casting rings or ceramic work.
8. Students with long hair must wear a hairnet or tie back their long hair to prevent accidental burning from Bunsen burners or other serious accidents. Hair can easily get caught in hand piece or lathe.
9. Safety eye glasses must be worn by all occupants of the laboratory while any procedures are being conducted that produce dust or airborne particles. Safety eye glasses with side shields may be obtained from a hardware store. They are essential to the students' safety.
10. Eye protection measures should be taken when working with curing lights, lasers, and heating or melting metal.
11. Proper mask (N95) should be worn when grinding metals, ceramics, and acrylics or when using materials creating dust.
12. Students not enrolled in a RESD course, from this and other departments, will not be permitted to visit during laboratory sessions.
13. Students will not use any equipment until demonstrated by the instructor.

CLEANLINESS

1. Students must have a plastic place mat to protect bench top during laboratory sessions.
2. Students are required to clean-up working areas and equipment at the conclusion of any procedure. Timely clean-up is important to prepare the area for the next student and ensure equipment remains in working order. Especially important is that stone or investment is not allowed to harden in the sinks, in the mixing bowls or in contact with the equipment.
3. Each student is required to leave work station spotless by removing all debris, papers, wax, plaster, etc. from drawers, work station tops and floors in the immediate vicinity of the seat before leaving.
4. Each student is assigned responsibility for maintaining the cleanliness of an area used in common by all members of the class.

5. Equipment such as duplicating flasks, articulators or any other equipment that belongs to the department and is used by the student during the laboratory session or during the entire semester must be returned clean and in good working condition otherwise the student is financially responsible for repaying broken or missing equipment, and hold may be placed throughout CUNY system for registration to any courses until the payment is made.
6. 5% of final grades will be deducted in each course for student who will not adhere to neatness, cleanliness and safety measures in the classroom.

TEXTBOOK: *Dental laboratory technology: basic sciences, removable prosthodontics, and orthodontics.* (2005). Air Force Pamphlet 47-103, Vol. 1.

Dental laboratory technology: fixed and special prosthodontics. (2005). Air Force Pamphlet 47-103, Vol. 2.

Neff, P. A., (1999). *TMJ occlusion and function* (8th ed.). Georgetown University School of Dentistry.

REFERENCES:

Brand, R., Isselhard, D. *Anatomy of orofacial structures* (7th ed.). St. Louis, MI: C.V. Mosby.

Budny, R. (2011). *RESD 1115 fixed prosthodontics I: laboratory section.*

Murray, H., Sluder, T. (1989). *Fixed restorative techniques* (Rev. ed.). Univ. Of North Carolina Press.
* on reserve in the library

COORDINATOR: Revised 5 June 2023 by Prof. Smith, AAS, CDT, BS, MS, EMBA, Inventor

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**DEPARTMENT OF
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LEARNING OUTCOMES FOR RESD 1115:

Upon successful completion of the course each student should be able to:

1. **Describe** the clinical and laboratory procedures for constructing a fixed single unit restoration including handling and treatment as related to blood borne infectious diseases.
2. **Identify** proper terminology used in dental offices and laboratories during fabrication of fixed prostheses.
3. **Fabricate** fixed single unit restorations in accordance with a given prescription.
4. **Identify** step-by-step procedures in constructing provisional restorations.
5. **Describe** the procedures and **identify** the failures in constructing models and dies.
6. **Restore** anatomically and functionally proper tooth form, margins, embrasures and contact areas. **Utilize** proper anatomical and occlusal concepts and terminology.
7. **Demonstrate** Wax, sprue, invest, cast, finish and polish an inlay, onlay and a full crown.
8. **Identify** the casting failures associated with improper spruing, investing, burnout and casting procedures.
9. **List** the materials used and **describe** the step-by-step procedures for finishing and polishing a cast alloy restoration.
10. **Utilize** the knowledge gained in the classroom and the news from dental lab technology publications to gain better understanding of the profession.

GENERAL EDUCATION LEARNING OUTCOMES FOR RESD 1115:

1. **Knowledge:** develop dental technology knowledge from a range of disciplinary perspectives and develop ability to deepen and continue learning:
 - Depth of knowledge: engage in an in-depth, focused and sustained program of dental technology study;
 - Utilize dental technology publications to gain understanding and dynamics of the profession.
2. **Skill:** develop tools needed for communication, inquiry, analysis, and productive work:
 - Inquiry/Analysis: derive meaning from experience in the dental laboratory, as well as gather information from observation in laboratory and lecture sessions of the course;
3. **Integration:** work productively within restorative dentistry and across disciplines like computer literacy, English composition, etc:

- Information literacy: gather and apply information discerningly from a variety of sources
 - Systems: understand and navigate systems
4. **Values, Ethics and Relationships:**
- Professional/Personal development: demonstrate intellectual honesty and personal responsibility toward fellow students, faculty, staff as well as the rest of the college community;

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**RESD 1115 FIXED PROSTHODONTICS I
ASSESSMENT & GRADING**

LECTURE	40%
LABORATORY	60%
<u>*TOTAL - FINAL GRADE</u>	<u>100%</u>

* Final grade will be computed on the basis of 60% of laboratory grade and 40% of lecture grade. Each individual's performance will be assigned a conventional letter grade.

LETTER GRADE SCALE:

A	= 93- 100%
A-	= 90-92.9%
B+	= 87-89.9%
B	= 83-86.9%
B-	= 80-82.9%
C+	= 77-79.9%
C	= 70-76.9%
D	= 60-69.9%
F	= 59.9% and below

ASSESSMENT CRITERIA: RESD 1115 LECTURE

QUIZ EXAM	10%
MIDTERM EXAM	15%
FINAL EXAM	15%
<u>*TOTAL – LECTURE</u>	<u>40%</u>

* Student must achieve a passing grade of at least 70% in the lecture section to pass the class

**RESD 1115 - FIXED PROSTHODONTICS I
COURSE OUTLINE**

Note: Scheduling of work times may vary plus or minus, based on combined skill levels of students.

I. THE WORKING CASTS, DIES, AND ARTICULATION

EIGHT LABORATORY SESSIONS, FOUR LECTURE HOURS RANGE (17 Oct. Compete) students late will lose points for lateness.

- A. WORK AUTHORIZATION
- B. DIRECT AND INDIRECT METHODS OF CONSTRUCTING FIXED SINGLE UNIT RESTORATIONS
Murray & Sluder, pp. 79, 122, AFP II pp. 14-20
- C. HANDLING AND TREATMENT OF IMPRESSIONS AS RELATED TO BLOODBORNE INFECTIOUS DISEASES
Murray & Sluder, pp. 28, 59-63, 65-66, AFP I pp.32-38, 52-55 (also in power-point presentation)
- D. TYPES OF IMPRESSION MATERIALS (refer to Air Force Manual)
- E. DIRECT AND INDIRECT METHODS OF CONSTRUCTING PROVISIONAL RESTORATIONS; AFP II pp.24-25
- F. DIE CONSTRUCTION - Murray & Sluder, pp. 60-68, AFP II pp. 28-39 (refer to power-point presentation & Air Force Manual)
- G. DIE PREPARATIONS AND MARGINS; AFP II pp. 45-47 (refer to Air Force Manual)
 - 1. trimming and ditching - Murray & Sluder, pp. 79-88
 - 2. types of preparations
 - 3. identifying margins
- H. WORKING CAST CONSTRUCTION - Murray & Sluder, pp. 107,110,124 (refer to the Air Force Manual & power-point presentation)
- I. ARTICULATION & SELF ARTICULATION - Murray & Sluder, pp. 131,132,134, AFP I pp. 173-178

* 8TH LABORATORY SESSION - COMPLETE CASTS AND DIES DUE FOR EVALUATION (due for grading 17 October 23)

II. DEVELOPMENT OF WAX PATTERNS, PROVISIONAL AND COMPOSITE RESIN RESTORATIONS

- ONE ANTERIOR PROVISIONAL RESTORATION
 - TWO POSTERIOR FULL COVERAGE WAX-UPS FOR **INLAY** AND **CROWN** RESTORATIONS
 - ONE COMPOSITE RESIN **ONLAY** RESTORATION
- EIGHT LABORATORY SESSIONS, ONE LECTURE HOUR RANGE

- A. METHODS OF WAXING - Murray & Sluder, pp. 151-175; AFP II pp. 54-71
 - 1. free hand waxing – Bunsen burner, electric waxer, No Flame unit
 - 2. dipping – wax pot
- B. DEVELOPMENT OF TOOTH FORM AND FUNCTION - Murray & Sluder, p. 139, AFP I pp. 123-153, AFP II pp. 48-54
 - 1. tooth anatomy - Brand & Isselhard, pp. 77-152
 - 2. centric occlusion, centric relation
 - 3. occlusion: cusp to fossa vs. cusp to embrasure /marginal ridge, AFP I pp.145-161
 - 4. marginal fit
 - 5. interproximal embrasures - Brand & Isselhard, pp. 22-24
 - 6. esthetics
- C. DEVELOPMENT OF PROVISIONAL RESTORATIONS – presentations
 - 1. wax pattern
 - 2. matrix
 - 3. temporary material application and finish
- D. DEVELOPMENT OF COMPOSITE RESIN RESTORATIONS - AFP II pp. 188-194, presentations
 - 1. separating medium for gypsum products
 - 2. composite resin application
 - 3. surface texture, finish and polish

*** QUIZ EXAMINATION – FOURTH LECTURE SESSION**

16TH LABORATORY SESSION RANGE- COMPLETED WAX PATTERNS, PROVISIONAL AND COMPOSITE RESIN RETSIRATIONS DUE FOR EVALUATION

III. SPRUING AND INVESTING; AFP II pp.71-82
THREE LABORATORY SESSIONS; TWO LECTURE HOURS

- A. THE SPRUE: PURPOSES AND CHARACTERISTICS - Murray & Sluder, pp. 177-182
 - 1. spruing techniques
 - 2. reservoirs
 - 3. venting
- B. POSITION OF WAX PATTERNS IN THE MOLD
- C. CASTING FAILURES DUE TO IMPROPER SPRUING
- D. PREPARATION OF CASTING RING
- E. SELECTION OF INVESTMENT
 - 1. weighing, mixing and investing
 - 2. vacuum investing
 - 3. hygroscopic investing
- F. CASTING FAILURES DUE TO IMPROPER INVESTING - Murray & Sluder, pp. 224-226

*** MIDTERM EXAMINATION – EIGHT LECTURE SESSION**

IV. BURNOUT AND CASTING, AFP II pp. 82-87
FIVE LABORATORY SESSIONS, TWO LECTURE HOURS RANGE

- A. SETTING TIME OF HIGH TEMPERATURE INVESTMENT - Murray & Sluder, pp. 199
- B. PURPOSE, IMPORTANCE AND PROCEDURES FOR BURNOUT - Murray & Sluder, p. 199
 - 1. the burnout furnace - Murray & Sluder, pp. 197-198
 - 2. burnout temperatures - Murray & Sluder, p. 197
 - 3. heat soaking - Murray & Sluder, p. 199
- C. CASTING FAILURES DUE TO IMPROPER WAX ELIMINATION
- D. CENTRIFUGAL CASTING EQUIPMENT: BALANCE PROCEDURES - Murray & Sluder, p. 202
- E. GAS/AIR TORCH: PROPER FLAME FOR CASTING - Murray & Sluder, p. 206
- F. HEAT TREATING GOLD ALLOY CASTINGS - Murray & Sluder, p. 200
 - 1. annealing
 - 2. hardening
- G. CASTING FAILURES DUE TO IMPROPER CASTING - Murray & Sluder, pp. 224-226

*** 24TH LABORATORY SESSION - CASTINGS DUE FOR EVALUATION**

IV. FINISHING AND POLISHING; AFP II pp. 88-91
SIX LABORATORY SESSIONS, TWO LECTURE HOURS RANGE

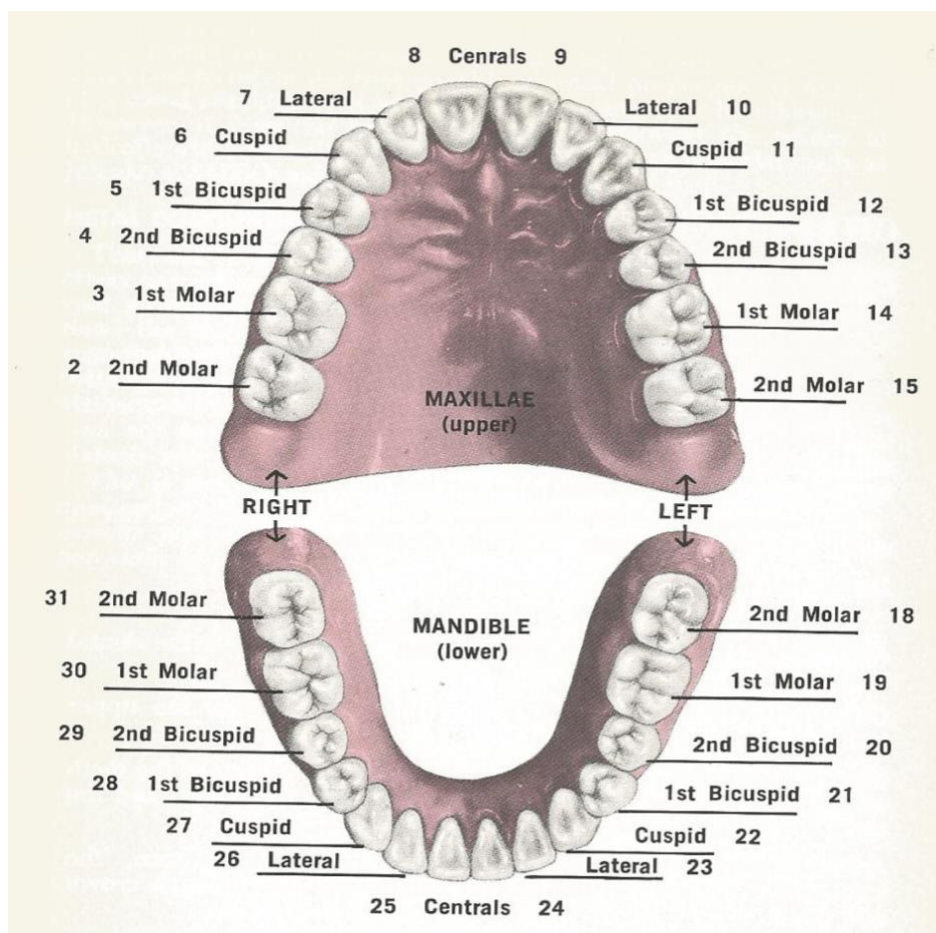
- A. RECOVERY OF CASTINGS - Murray & Sluder, p. 207
- B. PICKLING - Murray & Sluder, pp. 211-213
- C. FITTING THE CASTINGS TO THE DIES - Murray & Sluder, p. 210
- D. FINISHING AND POLISHING PROCEDURES - Murray & Sluder, p. 220, 221

*** 30TH LABORATORY SESSION - COMPLETED RESTORATIONS DUE FOR EVALUATION RANGE**

*** FINAL EXAMINATION – BETWEEN THE TWELFTH AND FIFTEENTH LECTURE**

The pages ten to twelve are the grading assessment that will be used by Prof. Smith, in Fall 2023, RESD 1115 Fixed Prosthodontics Course. The items being assessed are the same as all instructors teaching this course. If a student achieves 60 total points in the laboratory class, they would have obtained an A average in the Laboratory portion. Students are advised to track all instructors grading processes who are teaching this Fall RESD 1115 course. Use the “ITEMS FOR GRADING AND CRITERIA FORM”, below, to help students to know how well they are doing in the course by Mid-Semester and give a reasonable explanations of how they should complete the course.

Model Work
Wax-Ups
Articulation
Spruing
Investing
Casting
Recovery of Casting
Finishing, Polish, and High shine Casting



FALL 2024 FIXED PROSTHODONTICS GENERAL GRADING SHEET
ITEMS for GRADING, and CRITERIA

I. MODEL/DIE PREPARATION: 10 POINTS MAXIMUM

Number of Lab lasses to complete	Date Completed	Total Points Earned
1. Pins glued in place/Parallel/Centered		
2. Sleeves properly placed		
3. Rubber tips placed (if they hold in place)		
4. Dies sawed out and parallel		
5. Margins properly ditched highlighted with red pencil		
6. Apply die hardener and two layers of die spacer		
TOTAL:		
<u>ARTICULATION: 8.5 POINTS MAXIMUM</u>		
1. Proper articulator settings		
2. Centric occlusion of tooth surfaces		
3. Cast properly centered on articulator		
4. Plaster neat/clean appearance		
TOTAL:		
<u>WAX-UP POSTERIOR/ANTERIOR: 10 POINTS MAXIMUM</u>		
1. Buccal/Lingual emergence profiles acceptable		
2. Mesial/Distal marginal ridges proper height		
3. Mesial/Distal inter-proximal room/contacts proper		
4. Centric occlusion		
5. All margins identified and sealed		
6. Labial/Lingual Contours properly contoured		
7. Incisal edge in proper length with adjacent central		
8. Interproximal tissue space accurate		
9. Contact points proper		
TOTAL:		
<u>SPRUE and INVEST: 9.5 POINTS MAXIMUM</u>		
1. Short thick sprue/placed at 45-degree angle at the heaviest portion of the wax-up and centered on the crucible former,		
2. Debubblizer applied to the wax-up, and dried before mixing investment for investing.		
3. Wax-up centered between sides and top of investment ring.		
4. Place invested ring in Beggo Unit, and in a Humidor if casting not done on the same day.		
TOTAL:		
<u>BURNOUT/CASTING/RECOVERY: 6.6 POINTS</u>		

<u>MAXIMUM</u>		
1. Pay attention to safety of burnout and casting process.		
2. Properly recovers casting from investment		
3. Sand-blast casting to remove excess investment.		
TOTAL:		
<u>FINISHING/POLISHING/HIGHSHINE: 15.4 PONITS</u>		
<u>MAXIMUM</u>		
1. Follow finishing polishing, and high shine process according to the Air Force Manual and Power-Point presentation.		
2. Restore proper occlusion		
3. Have sufficient mesial and distal contacts		
4. Remove scratches (use rubber wheels/brushes/Tripoli		
5. Smooth surface of metal and acrylic restorations		
6. Produce sufficient acceptable high-shine on both metal and acrylic provisional restorations		
7. Restorations must be clean and acceptable		

Student	Exam Grade	Lab-Grade	Combined 40%/60% Grades
Quiz			
Mid-Term			
Final			

Listed below are pictures to assist you in identify items in the
Additional Supply Kit

Chuck Arbor w/3/4"Rubber (Right)



Alcohol Torch Needle Flame



Bunsen Burner #100 Natural Gas



Plaster Bowl



Washout Brush Wood Handle



**Muslin Rag Wheel
4"x20ply**



Brush Lab Wheel B20 &



Robinson #12 Brushes Soft

Acrilustre Polish 1Lb

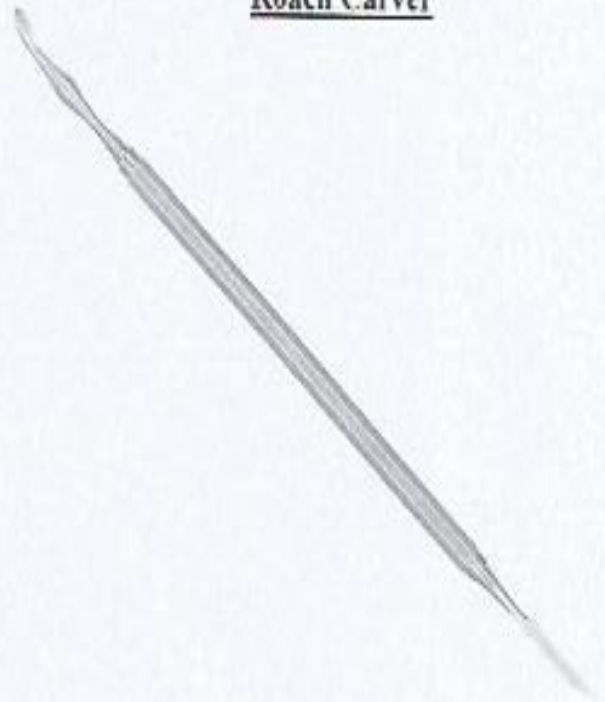


Listed below are pictures to assist you in identify items in the
"ESSENTIAL I KIT INCLUDES"

Knife #6r



Roach Carver



Boley Gauge



Wax Caliper



Listed below are pictures to assist you in identify items in the
Additional Supply Kit

Safety Glasses



Metal Gauge



Face Masks Blue



Casting Ring & Rubber Sprue Former



BBC Buffing Compound



Felt Cone 1"x2"



Occlusal Plane



Listed below are pictures to assist you in identify items in the
"ESSENTIAL I KIT INCLUDES"

Amalgam Carver



Hollenback



Gritman #31



Le Cron Craver



Woodson Carver



Zahle Carver



Beale #7



Mosquito Straight



PKT 1



