

## FLORIDA STATE COLLEGE AT JACKSONVILLE

## COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: DES 1101L

COURSE TITLE: Dental Materials Laboratory

PREREQUISITE(S): Acceptance into the Dental Hygiene Program

COREQUISITE(S): DES 1100

CREDIT HOURS: 1

CONTACT HOURS/WEEK: 1

CONTACT HOUR BREAKDOWN:

    Lecture/Discussion:

    Laboratory: 2

    Other \_\_\_\_\_:

FACULTY WORKLOAD POINTS: 1.6

STANDARDIZED CLASS SIZE ALLOCATION: 12

CATALOG COURSE DESCRIPTION:

Manipulation and application of materials used in the laboratory and clinical practice of dentistry.

SUGGESTED TEXT(S): Powers, & Wataha. Dental Materials, Mosby, 9<sup>th</sup> Edition, 2008

IMPLEMENTATION DATE: Fall Term, 2004 (20051)

REVIEW OR MODIFICATION DATE: Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. Introduction to Laboratory Equipment	2
A. Vibrators	
B. Lathe	
C. Model	
D. Bunsen Burner	
II. Gypsum	2
A. Manipulation	
B. Constructing a Cast	
III. Varnishes, Cavity Liners and Bases - Manipulation	2
A. Armamentarium	
B. Mixing	
IV. Dental Cements	3
A. Phosphate Cements	
1. Manipulation	
a. Armamentarium	
b. Mixing	
2. Zinc Oxide and Eugenol Cement	
a. Manipulation	
b. Armamentarium	
c. Mixing	
B. Polycarboxylate Cement - Manipulation	
1. Armamentarium	
2. Mixing	
C. Resin Cements	
1. Armamentarium	
2. Mixing	
D. Glass Ionomer Cements - Manipulation	
1. Armamentarium	
2. Mixing	
V. Mixing Resins	3
VI. Amalgam - Manipulation	3
A. Proportion	
B. Mixing	
C. Condensation	
D. Finishing	

COURSE TOPICS (CONTINUED)	<u>CONTACT HOURS PER TOPIC</u>
E. Polishing	
VII. Dental Metals - Manipulation	3
VIII. Impression Materials	3
A. Irreversible Hydrocolloids	
1. Manipulation	
2. Storage	
B. Reversible hydrocolloid	
1. Manipulation	
2. Storage	
C. Impression Compound	
1. Manipulation	
2. Storage	
D. Zinc Oxide and Eugenol Impression Paste	
E. Elastomeric Impression Materials	
IX. Pouring and trimming Study Models	6
X. Constructing Bleaching Trays	3
Total Contact Hours	30

PROGRAM TITLE: Dental Hygiene  
COURSE TITLE: Dental Materials Laboratory  
CIP NUMBER: 0317.010200

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

16.0 IDENTIFY, DESCRIBE, MAINTAIN AND UTILIZE DENTAL INSTRUMENTS AND EQUIPMENT - The student will be able to:

- 16.01 Identify various types, functions and operations of dental operator and laboratory equipment.
- 16.02 Identify types and functions of operative, restorative, surgical, prosthodontic, orthodontic and endodontic dental instruments.

20.0 IDENTIFY PROPERTIES AND USES, AND MANIPULATE DENTAL MATERIALS - The student will be able to:

- 20.01 Identify properties and uses and manipulate gypsum.
- 20.02 Identify properties and uses and manipulate restorative materials.
- 20.03 Identify properties and uses and manipulate dental cements.
- 20.04 Identify properties and uses and manipulate impression materials.
- 20.05 Identify properties and uses and manipulate acrylics and/or thermoplastics.
- 20.06 Identify properties and uses and manipulate waxes.
- 20.07 Perform dental laboratory procedures to include the fabrication of casts, custom trays and/or temporary crowns and bridges.
- 20.08 Clean and polish removable dental appliances.



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

<b>Section 1</b>	
<b>COURSE PREFIX AND NUMBER:</b> <u>DES 1101L</u>	<b>SEMESTER CREDIT HOURS:</b> <u>1</u>
<b>COURSE TITLE:</b> <u>Dental Materials Laboratory</u>	

**Section 2**  
**TYPE OF COURSE: (Click on the box to check all that apply)**

<input type="checkbox"/> AA Elective	<input checked="" type="checkbox"/> AS Required Professional Course	<input type="checkbox"/> College Prep
<input type="checkbox"/> AS Professional Elective	<input checked="" type="checkbox"/> AAS Required Professional Course	<input type="checkbox"/> Technical Certificate
<input type="checkbox"/> Other _____		
<input type="checkbox"/> General Education: (For General Education courses, you must also complete Section 3 and Section 7)		

**Section 3 (If applicable)**  
**INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:**

<input type="checkbox"/> Communication	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities	

**Section 4**  
**INTELLECTUAL COMPETENCIES:**

<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input type="checkbox"/> Quantitative Skills	<input checked="" type="checkbox"/> Scientific Method of Inquiry
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input checked="" type="checkbox"/> Information Literacy	<input checked="" type="checkbox"/> Ethical Judgment	<input checked="" type="checkbox"/> Working Collaboratively

<b>Section 5</b>	<b>LEARNING OUTCOMES</b>	<b>METHOD OF ASSESSMENT</b>
•	Upon successful completion of this course, students will be able to manipulate gypsum	Laboratory Competency
•	Upon successful completion of this course, students will be able to manipulate dental cements	Laboratory Competency
•	Upon successful completion of this course, students will be able to manipulate impression materials	Laboratory Competency
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**Section 6**  
 Name of Person Completing This Form: Jeff Smith                      Date: 4/29/2008