

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	DES 1030
COURSE TITLE:	Oral Histology and Embryology
PREREQUISITE:	BSC 2085C and Acceptance into the Dental Hygiene Program
COREQUISITE:	None
CREDIT HOURS:	1
CONTACT HOURS/WEEK:	1
CONTACT HOURS BREAKDOWN:	
Lecture/Discussion:	1
Laboratory:	
Other_____:	
FACULTY WORKLOAD POINTS:	1
STANDARDIZED CLASS SIZE ALLOCATION:	24

CATALOG COURSE DESCRIPTION:

This course is designed to provide students with the embryological basis for the initiation, growth and development of the oral facial/dental complex. Emphasis is given to the various components of the oral cavity, including tooth development, eruption and shedding, enamel, dentin, dental pulp, periodontium and oral mucosa.

SUGGESTED TEXT (S):	Melfi, Alley: <u>Permar's Oral Embryology and Microscopic Anatomy</u> , Lippencott Williams and Wilkins, Latest Edition
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>
Introduction to Course:	1
I. Development and Structure of Cells and Tissues	1
A. Cell Structure and Function	
B. Cell Division	
C. Origin of Human Tissue and Periods of Prenatal Development	
D. Development of Basic Tissues	
II. Structure and Function of Tissues	1
A. Epithelial Tissue	
B. Neural Tissue	
C. Connective Tissue	
D. Muscle Tissue	
E. Organ Systems	
III. Orofacial Structures	1
A. Development of the Oropharynx	
B. Development of the Branchial Arches	
C. Development of the Craniofacial Skeleton	
IV. Development of the Face and Palate	1
A. Facial Development	
B. Palatal Development	
C. Malformations	
V. Tooth Development	2
A. Stages of Tooth Development	
B. Dentinogenesis	
C. Amelogenesis	
D. Development of the Tooth Root	
E. Development of Supporting Structures	
VI. Eruption and Shedding of Teeth	1
A. Preeruptive Stage	
B. Prefunctional Eruptive Stage	
C. Functional Eruptive Stage	
D. Sequence and Chronology of Tooth Eruption	

COURSE TOPICS (CONTINUED)	<u>CONTACT HOURS PER TOPIC</u>
VII. Enamel	1
A. Physical Properties of Enamel	
B. Structure of Enamel	
VIII. Dentin	1
A. Physical Properties of Dentin	
B. Dentin Classification	
C. Structure of Dentin	
IX. Dental Pulp	1
A. Anatomy of the Pulp	
B. Histology of the Pulp	
C. Functions of the Pulp	
D. Regressive Changes of the Pulp	
X. Periodontium: Cementum	1
A. Development of Cementum	
B. Cellular and Acellular Cementum	
C. Physical Properties of Cementum	
D. Functions of Cementum	
XI. Periodontium: Periodontal Ligament	1
A. Organization of the Periodontal Ligament	
B. Cells of the Periodontal Ligament	
C. Functions of the Periodontal Ligament	
XII. Periodontium: Alveolar Process	1
A. Alveolar Bone Proper	
B. Supporting Bone	
C. Tooth Movement	
XIII. Oral Mucosa	1
A. Structure of the Oral Mucosa	
B. Nerves and Blood Vessels	
C. Epithelial Nonkeratinocytes	
Total Contact Hours	15

PROGRAM TITLE: DENTAL HYGIENE
COURSE TITLE: ORAL HISTOLOGY AND EMBRYOLOGY
CIP NUMBER: 0317.010200
LIST PERFORMANCE STANDARD ADDRESSED:
NUMBER(S): TITLE(S):

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY

- The student will be able to:

- 02.01 Develop basic listening skills.
- 02.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 02.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 02.05 Compose written communication using correct spelling, grammar and format.
- 02.11 Demonstrate ability to give and follow directions.

23.0 IDENTIFY AND EXPLAIN FUNCTIONS OF DENTAL ANATOMICAL LANDMARKS AND DESCRIBE PATHOLOGICAL CONDITIONS OF THE TEETH, SOFT TISSUES AND SUPPORTING STRUCTURES OF THE ORAL CAVITY - The student will be able

- 23.01 Describe and differentiate between normal and malocclusion.
- 23.02 Identify the elements of the chemical basis of life, cellular metabolism and the structure of the major tissue types of the human body.
- 23.03 Describe the metabolism of nutrient foods, vitamins and minerals by the human body and pathological conditions related to nutrient deficiencies.
- 23.04 Identify anatomical structures and physiological function of the principle systems of the human body including the skeletal, muscular, integumentary, circulatory, lymphatic, endocrine, digestive, reproductive, respiratory, urinary, and nervous systems.
- 23.05 Recognize and describe oral pathological conditions related to the teeth and their supporting structures.
- 23.06 Identify teeth and their landmarks, and the morphological characteristics of each individual tooth.
- 23.07 Recognize and describe developmental anomalies related to the teeth, face, and oral structures.



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

Section 1	
COURSE PREFIX AND NUMBER: <u>DES 1030</u>	SEMESTER CREDIT HOURS: <u>1</u>
COURSE TITLE: <u>Oral Histology and Embryology</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

Section 5	LEARNING OUTCOMES	METHOD OF ASSESSMENT
•	Upon successful completion of this course, students will be able to recognize and describe oral pathological conditions related to the teeth and their supporting structures	Written Examination
•	Upon successful completion of this course, students will be able to recognize and describe developmental anomalies related to the teeth, face, and oral structures	Written Examination
•	Upon successful completion of this course, students will be able to identify the elements of the chemical basis of life, cellular metabolism and the structure of the major tissue types of the human body	Written Examination
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Section 6

Name of Person Completing This Form: Jeff Smith Date: 4/29/2008