

COURSE SYLLABUS

Course Title:	Dental Materials for the Dental Hygienist	Date submitted:	May 2019 (AAC: 19-25)	
Department:	Allied Health			
Curriculum:	Dental Hygiene			
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101)	DHY*225	Prerequisites:	
	Course Type:	L/D		C or better in Concepts of Chemistry (CHE*111) AND Anatomy & Physiology I (BIO*211).
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: M: Seminar Internship P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/ Clinical/Lab Z: Combined Lecture/Studio	Elective Type:	G	Corequisites:
	E: English FA: Fine Arts G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences FL: Foreign Language M: Math S: Science SS: Social Science	Credit Hours:	2	
	Developmental: (yes/no)	No	None	
	Lecture:	1		
	Clinical:	0		
	Lab:	2		
	Studio:	0		
	Other:	0		
Contact Hours:	TOTAL:	3	Other Requirements:	
Class Maximum:	36	None		
Semesters Offered:	F/SP			
Catalog Course Description:	This course provides a comprehensive study of dental materials, including the properties and manipulation, biomechanical function, physical and chemical properties, and biocompatibility of dental materials. An emphasis will be placed on those materials and skills utilized by the dental hygiene practitioner for dental hygiene diagnosis and treatment planning. Critical analysis of current evidenced based on literature will be an integral part of this course. This is a hybrid online course and requires students to be proficient in the use of web browser, electronic mail, and navigation of WebCT.			
Topical Outline: List course content in outline format.	<ol style="list-style-type: none"> 1. Structure of dental materials 2. Biological, chemical, and physical properties of dental materials. 3. Hydrocolloids: science, manipulation, and application 4. Impression techniques for study casts 5. Study cast preparation for case presentation 6. Resins: Science, manipulation, and application 7. Ceramics: Science, manipulation, and application 8. Dental Metals: Science, manipulation, and application 			

	<ol style="list-style-type: none"> 9. Investing and Casting Procedures 10. Dental Amalgam: Science, manipulation, and application 11. Cements: Science, manipulation, and application 12. Thermoplastic Materials: Science, manipulation, and application 13. Tooth Whitening Procedures: Science, manipulation, and application
<p>Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>Upon successful completion of this course, the student will be able to do the following:</p> <p>COURSE:</p> <ol style="list-style-type: none"> 1. discuss the chemical, physical, and biological properties of various dental materials 2. demonstrate and explain the various uses of gypsum 3. explain the uses and properties of the various categories of dental impression materials 4. explain the rationale and process of gingival retraction used in taking prosthetic impressions 5. explain and demonstrate the use of irreversible hydrocolloid impression material 6. explain the process of the production of diagnostic study casts and their purpose 7. demonstrate the procedure for the fabrication of study casts 8. identify the uses of dental resins and ceramics and their relevance to the practice of dental hygiene 9. explain the basic science of dental resin polymerization and the uses of the various dental resins 10. demonstrate an understanding of the dental metals used in dentistry, including the science of alloys, amalgam, and the process of investigating and casting alloys 11. demonstrate an understanding of the science, manipulation, and uses of the various categories of dental cements 12. explain the uses of thermosplastic materials, including the production of trays for tooth whitening, athletic mouthguards, and topical application 13. explain home and in office tooth whitening procedures, including armamentarium, concentrations, indications, contraindications, adverse reactions, and client education process 14. discuss and demonstrate the procedure for prescribing an athletic mouthguard, it's fabrication, indications, and client education <p>NOTE: Students must achieve at least a 75% in both lab and lecture for successful completion of this course.</p> <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i></p> <p>GENERAL EDUCATION: <i>(Numbering reflects General Education Outcomes as they appear in the college catalog)</i></p> <p>11. Written Communication (embedded) - Students will be prepared to develop written texts of varying lengths and styles that communicate effectively and appropriately across a variety of settings.</p> <p style="padding-left: 40px;">Demonstrates: Writes articulate texts using appropriate evidence and appeals as determined by the rhetorical situation.</p> <p style="padding-left: 40px;">Does Not Demonstrate: Writes texts lacking appropriate evidence and appeals as determined by the rhetorical situation.</p>
<p>Evaluation: List how the above outcomes will be assessed.</p>	<p>Assessment will be based on the following criteria:</p> <p>Quizzes Exams Projects in didactic and laboratory</p>

<p>Instructional Resources:</p> <p>List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p>	<p>Required: Dental Materials Laboratory and Equipment</p> <p>Desired:</p>
<p>Textbook(s)</p>	<p>Textbook: Refer to current academic year</p>