

7/14/2022 DATE

☒ REQUIRED COURSE
☐ ELECTIVE COURSE

 Allied Health DIVISION
☐ NEW COURSE
☒ REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	DHY-089	TITLE: (30 Characters Max)		Laboratory Procedures/Dental Hygiene						
SEM CR HRS:	3	Lecture:	2	Lab:	2	SOE/Internship:	0	ECH:	4	
Course Level:	<input type="checkbox"/> Gen Ed / IAI <input type="checkbox"/> Baccalaureate/Non-IAI		<input checked="" type="checkbox"/> Career/Technical <input type="checkbox"/> Dev Ed/ Not in Degree Audit		Clinical Practicum:	0	SOE/Internship:	0	SOE ECH:	0
COURSE PCS #	12 - 51.0601		IAI Code				Contact Hours Per Week			
Repeatable (Y/N):		Pass/Fail (Y/N):		Variable Credit (Y/N):	Min:	Max:	16 Wks	200	8 wks	400
Prerequisites:	Admission into the Dental Hygiene Program									
Catalog Description: (40 Word Limit)	This course is a comprehensive study of the science of dental materials and their application in dental hygiene.									

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Non-Clinical Internship/ SOE
Introduction to Dental Materials	2	1		
Oral Environment and Patient Considerations	2	2		
Physical and Mechanical Properties of Dental Materials	2	2		
General Handling and Safety of Dental Materials in the Dental Office	2	2		
Principles of Bonding	2	2		
Composites, Glass Ionomers and Compomers	2	2		
Preventive and Desensitizing Materials	2	2		
Teeth Whitening Materials and Procedures	2	2		
Dental Ceramics	2	2		
Dental Amalgam	2	2		
Metals and Alloys	2	2		
Dental Implants	2	1		
Abrasion, Finishing, Polishing, and Cleaning	2	2		
Dental Cement	1	1		
Impression Materials	1	2		
Gypsum and Wax Products	1	2		
Polymers and Prosthetic Dentistry	1	1		
Provisional Restorations	1	1		
Preventative and Corrective Oral Appliances	1	1		
TOTAL	32	32	0	0

EVALUATION			
QUIZZES <input checked="" type="checkbox"/>	EXAMS <input checked="" type="checkbox"/>	ORAL PRES <input checked="" type="checkbox"/>	PAPERS <input checked="" type="checkbox"/>
LAB WORK <input checked="" type="checkbox"/>	PROJECTS <input checked="" type="checkbox"/>	COMP FINAL <input checked="" type="checkbox"/>	OTHER <input type="checkbox"/>

COURSE MATERIALS	
TITLE:	Dental Materials Clinical Applications for Dental Assistants and Dental Hygienists
AUTHOR:	Eakle, S. and Bastin, K.
PUBLISHER:	Elsevier
VOLUME/EDITION/URL:	4th
COPYRIGHT DATE:	2021

TITLE:	Darby's Comprehensive Review of Dental Hygiene
AUTHOR:	Blue, C.
PUBLISHER:	Elsevier
VOLUME/EDITION/URL:	8th
COPYRIGHT DATE:	2017

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
Introduction to Dental Materials	3	List and compare the agencies responsible for setting standards and specifications of dental materials.

Oral Environment and Patient Considerations	4	Define stress, strain, and ultimate strength and compare the ultimate strength of restorative materials during each type of stress to tooth structure.
Physical and Mechanical Properties of Dental materials	4	Describe the reaction stages a material undergoes to acquire its final state and describe the variables in the manipulation of a material.
General Handling and Safety of Dental Materials in the Dental Office	4	Explain the components of the Occupational Safety and Health Administration Hazard Communication Standard.
Principles of Bonding	4	List the factors that contribute to tooth sensitivity after bonding.
Composites, Glass Ionomers, and Compomers	4	Describe how fillers affect the properties of composites.
Preventive and Desensitizing Materials	4	List the components of sealant material. Recite the steps for applying sealants.
Teeth Whitening Materials and Procedures	4	Describe how whitening materials penetrate the tooth.
Dental Ceramics	4	Compare the clinical applications of restorations made from porcelain with those made from lithium desilicated.
Dental Amalgam	4	List the main components in dental amalgam and define creep, corrosion, and tarnish.
Metals and Alloys	4	Differentiate between high-nobles, noble, and base-metal alloys.
Dental Implants	3	Describe the components of an implant used for a crown and describe the most common materials used for dental implants.
Abrasion, Finishing, Polishing, and Cleanings	4	Define abrasion, finishing, polishing, and cleaning. Describe methods by which dental abrasives are applied.
Dental Cement	2	Compare the various types of cements for pulpal protection, luting, restorations, and surgical dressings. Identify the components of the various dental cements.
Impression Materials	3	Describe the purpose of an impression and describe the three basic types of impressions.

Gypsum and Wax Products	3	Differentiate between negative and positive reproduction. Differentiate among diagnostic cast, working cast, and dies. Identify common components of dental waxes.
Polymers for Prosthetic Dentistry	2	Describe the formation of long-chain polymers from monomers.
Provisional Restorations	2	Explain the purpose of provisional coverage.
Preventive and Corrective Oral Appliances	2	Describe the uses of mouth guards. List the materials for the fabrication of mouth guards.
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COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
	Define vocabulary terminology words as it applies to dental materials.
	Describe proper maintenance of dental materials and its relationship to the oral environment.
	List properties of dental materials.
	Identify certain dental materials as it pertains to its selection in the oral cavity.
	Demonstrate laboratory techniques as regards to dental materials.

* Course Outcomes will be used in the Assessment Software for Outcomes Assessment. Limit to 3 - 5.