DLA 1201 Dental Materials I
Lecture Syllabus

Fall 2021
Lecture 2.0 credit hours (two hours contact time)
Lab 2.0 credit hours (4 hours contact time)

Lecture: TIME 9:00am-9:50am
DAY Monday & Wednesday
ROOM B-215

Instructor: Mrs. Heather Seghi Email: heather_seghi@ivcc.edu

Office Hours: Monday- 11:00am-1:00pm
Tuesday- 11:00pm-1:00pm
Wednesday 12:40pm-2:40pm
Thursday No office hours
Friday No office hours
*Available by appointment

*Syllabus is subject to change
*Homework is due by the beginning of class
*All homework, including outlines, quizzes, and worksheets are to be submitted via blackboard by the due date.
*All readings and assignments, unless otherwise noted, are from Dental Materials: Clinical Applications for Dental Assistants and Dental Hygienists (3rd Edition).

Date	Lecture Topic	Learning Outcome	CODA Standard	Reading Assignment	Homework
8/18/21 **WEEK 1**	Review Syllabus/Outline ADA Seal of Acceptance **Dental Cements** *Key Terms* *Uses of Dental Cements*	3.1, 3.7	2-16c	220-224	
8/23/21 **WEEK 2**	**Dental Cements** *Properties of Dental Cements*	3.2, 3.3, 3.4, 3.5, 3.8	2-10d 2-16c	224-229	BB Review Questions Ch. 14
8/25/21	*Zinc Oxide Eugenol* *Zinc Phosphate* *Zinc Polycarboxylate* *Glass Ionomer Cements* *Resin-Based Cements*	3.5, 3.6, 3.7	2-16c	229-234 85-89	**Blackboard Quiz Available**

	Periodontal Dressings *Calcium Hydroxide*				
8/30/21 **WEEK 3**	**Exam 1** *Ch. 14*				ZOE Infographic
9/1/21	**Impression Materials** *Key Terms* *Overview of Impressions* *Impression Trays* *Hydrocolloids* *Criteria for Clinically Acceptable Alginate Impressions* **Disinfecting Impressions** *Disinfecting Casts* *Sterilizing Impression Trays*	5.1, 5.3, 5.6, 5.8, 5.10	2-10j 2-16d 2-16g	243-251	Zinc Phosphate Infographic
9/6/21 **WEEK 4**	**NO CLASS- LABOR DAY**				
9/8/21	**Gypsum Products** *Key Terms* *Uses and Desirable Qualities* *Properties and Behaviors* *Classification* *Manipulation* *Infection Control and Safety Issues* *Trimming* *Metal-Plated and Epoxy Dies*	2.1, 2.2, 2.3, 2.4, 2.5	2-16a	277-286	
9/13/21 **WEEK 5**	**Composition and Properties of Dental Waxes** *Classification of Waxes* *Manipulation* *Lost Wax Technique*		2-16f	286-290	BB Review Questions Ch. 16 **Blackboard Quiz Available**
9/15/21	**Exam 2** *Ch. 15*, 16*				
9/20/21 **WEEK 6**	**Physical and Mechanical Properties of Dental Materials** *Key Terms* *Physical Structure*	1.4		19-25	BB Review Questions Ch. 3

	Application *Composition* *Reaction* *Manipulation*				
9/22/21	**Oral Environment** *Key Terms* *Classification of Dental Materials* *Biocompatibility* *Biomechanics* *Moisture and Acid Levels* *Galvanism* *Temperature*	1.1, 1.2, 1.3, 1.5, 1.7, 1.8		4-13	BB Review Questions Ch. 2
9/27/21 **WEEK 7**	*Retention* *Microleakage* *Esthetics* *Oral Biofilm and Dental Materials* *Detection of Restorative Materials*	1.6		13-17	
9/29/21	**Dental Amalgam** *Key Terms* *Alloys Used* *Composition* *Amalgamation* *Setting Reactions* *Manipulation* *Selection*	4.1, 4.2, 4.3, 4.4	2-16b	149-154	BB Review Questions Ch. 10
10/4/21 **WEEK 8**	**Dental Amalgam** *Dispensing* *Trituration* *Placement and Condensation* *Burnishing and Carving* *Finishing and Polishing* *Longevity* *Repair* *Bonding Amalgam* *Allergy to Amalgam* *Mercury Safety Procedures*	4.8, 4.9	2-16b	154-161	**Blackboard Quiz Available**
10/6/21	**Exam 3** *Chapter 2, 3, 10*				Zinc Polycarboxylate Infographic

10/11/21 **WEEK 9**	**Composites and Compomers** *Key Terms* *Direct-Placement Esthetic Restorative Materials* *Composite Resin* *Classification of Composite by Filler Size*	4.1, 4.2, 4.3, 4.4	2-16b	64-69	
10/13/21	*Flowable Composites* *Pit and Fissure Sealants* *Bulk-Fill Composites* *Packable Composites* *Core Buildup Composites* *Provisional Restorative Composites*		2-16b	69-72	
10/18/21 **WEEK 10**	**Physical and Mechanical Properties of Composites** *Biocompatibility* *Strength* *Wear* *Polymerization Shrinkage* *Degree of Conversion* *Thermal Conductivity* *Coefficient of Thermal Expansion* *Elastic Modulus* *Water Sorption* *Radiopacity*		2-16b	72-73	Glass Ionomer Infographic
10/20/21	***In-Class Activity***				
10/25/21 **WEEK 11**	**Clinical Handling of Composites** *Uses of Composite Resins* *Selection of Materials* *Shade Guides* *Incremental Placement* *Resin-to-Resin Bonding* *Contaminants* *Layering (stratification)* *Shelf-life* *Dispensing and Cross-Contamination*	4.7	2-16b	73-76	

10/27/21	**Matrix Systems** *Matrix bands* *Wedges* *Sectional Matrix Systems* *Circumferential Matrix Systems* *Cervical Matrices* **Light Curing** *Factors Affecting the Cure* *Methods* *Composite Repair* *Finishing and Polishing* **Indirect-Placement Composite Resins** *Laboratory-Processed Composites* **Compomers** **Giomers**	4.8		76-85 89-90	BB Review Questions Ch. 6 **Blackboard Quiz Available**
11/1/21 **WEEK 12**	**Exam 4** *Ch. 6*				
11/3/21	**Principals of Bonding** *Preparation for bonding* *Bonding to the Etched Surface* *Surface Wetting* *Bond Strength* *Enamel Etching* *Dentin Etching* *Enamel and Dentin Bonding*	4.4, 4.7	2-16b	44-49	
11/8/21 **WEEK 13**	**Bonding Systems** *History of the Development of Bonding* *Total-Etch Bonding Systems (4-5 gen)* *Self-Etch Bonding Systems (6-7 gen)* *Universal Bonding Systems (8th gen)* *Modes of Cure* *Oxygen-inhibited Layer* *Biocompatibility*	4.5, 4.6	2-16b	49-53	Resin-Based Cement Infographic
11/10/21	**Bonding Systems** *Compatibility with other Resins*	4.1, 4.2	2-16b	54-58	BB Review Questions Ch. 5

	Microleakage *Contamination of Bonding Site* *Postoperative Sensitivity* **Clinical Applications of Bonding** *Bonding of Restoration* *Ceramic Bonding and Repair* *Metal Bonding* *Amalgam Bonding* *Composite Resin Repair* *Orthodontic Bracket Bonding* *Bonding of Ceramic Veneers* *Bonding of Endodontic Posts*				**Blackboard Quiz Available**
11/15/21 **WEEK 14**	**Exam 5** **Ch. 5**				
11/17/21	**Impression Materials Cont.** *Polyethers* *Condensation Silicones* *Addition Silicone (Polyvinyl Siloxane)*	5.1, 5.4, 5.6, 5.7	2-10j	251-257	
11/22/21 **WEEK 15**	**Digital Impressions** *Scanning Devices* *Advantages/Disadvantages* *Soft Tissue Management* **Inelastic Impression Materials** *Dental Impression Compound* *Impression Plaster* *Zinc Oxide Eugenol Impression Material* *Impression Wax*		2-16d	261-265	BB Review Questions Ch. 15 **Blackboard Quiz Available**
11/24/21	**NO CLASS** **THANKSGIVING BREAK**				
11/29/21 **WEEK 16**	**Exam 6** *Partial Chapter 16*				
12/1/21	In-Class Activity				
12/6/21	Review for Final Exam				
FRIDAY 12/10/21	**FINAL EXAM** **8-10am** **B-215**				

Instructor Policies
Please feel free to ask questions regarding the content in class or by contacting me outside of class time. For assignment and testing questions I will not give you the answer, however I will guide you to finding the correct answer.
I will have the most current copy of the syllabus available on blackboard. Please check periodically for changes in due dates or exam dates. I will notify you of any changes during scheduled class hours.

Email
I will only open emails from an IVCC email address. Please feel free to contact me with any questions or concerns. You can expect a response to your email within 24 hours Monday – Thursday and 48 hours Friday – Sunday. There are times I will provide advanced notice, which I will be out of internet availability. Please remember during these times I will still be reachable by cell phone.

While you are in class
While you are in class I expect you to treat the instructor and fellow students with respect. Please leave your cell phones off and in your purse or school bag. Texting is not allowed in class, whether reading or typing. If you need to use your phone please leave the classroom to do so. Sleeping, talking, or and any other activity that the instructor feels is disrupting the learning process will not be tolerated and you will be asked to leave class. If you are asked to leave class it will be counted as an unexcused absence for the day.
If campus is closed or class is canceled
If IVCC closes the campus or cancels our classes, we will still have the course material available. Please log into blackboard (direct link: ivcc.blackboard.com) or check your email. Homework will be required to be posted on blackboard at the time of the original class. I will also have course materials for you to review. You are responsible for the posted material. You will be required to complete all posted assignments/discussions and you are responsible for it at the next class meeting. I will be viewing the discussion boards to answer questions at the designated class time and at a posted time that evening.

Grading
All grades will be posted on blackboard. Please log into the course regularly so you can stay notified to any missing assignments or quizzes. The contents of following categories are calculated equally, and will be explained in more detail later in this document.
(29) Attendance: 10%
(8) Homework: 10%
(6) Quizzes: 20%
(6) Exams: 25%
(5) Cement Infographics: 15%
(1) Final Exam: 20%

Attendance
Attendance in lecture is mandatory and is worth 10% of your grade. You will receive full credit (100%) if you are in attendance, 50% if you are tardy and 0% if you have an unexcused absence. Attendance is calculated for each lecture session. Excused absences are exempt from the grading

scale.
Excused absences include, but are not limited to a doctor's note stating that you were not able to participate in lab for a specific period of time, an absence that was predetermined and approved by the instructor and the program coordinator, notifying the instructor and the program coordinator *prior* to the absence and scheduling a make-up date.
Unexcused absences include, but are not limited to, failure to notify the instructor and program coordinator *prior* to missing a lecture period; over-sleeping; tardy with no valid excuse.

Homework
Homework is due at the beginning of class. If the assignment is not given to the instructor at the start of the class it will not be accepted. If you are absent, your homework may be emailed to the instructor before the designated class time to receive full credit. **Homework accounts for 10% of your final grade.**

Projects
There will be FIVE Infographic projects assigned throughout the semester. They will each give the pertinent details of the five major cement types we discuss in lecture and in lab. **They will be worth 15%** of your overall grade in the course. A rubric can be found on blackboard under the assignments tab. You may use any program to design your Infographic, but I recommend using www.canva.com because it is very user friendly and free!

Exams
There will be 6 hourly exams and one final exam. **All hourly exams will be weighted and total 25% of your grade**. I will drop the lowest hourly exam grade at the end of the semester.
Your final exam will be worth 20% of your total grade for the course.
If you are absent on the day of the test you will take the test in the Assessment Center. You will have ONE week (7 calendar days) from the date of the test to complete it. If the test is not completed within that week a ZERO will be received for that test. You will be allowed one test in the Assessment Center without penalty. If you take more than one test in the Assessment Center 5% will be deducted from each. In addition to the deducted points you will not receive any bonus questions with your test. Lastly if you make up a test I have the right to give you a different test than the one taken during the scheduled class period.

If a quiz is missed
Quizzes may be announced or unannounced. I will not be giving make up quizzes. There are 6 announced blackboard quizzes. There may be additional quizzes given if I deem it necessary. I will drop the lowest quiz grade at the end of the semester. If you miss a class, excused or unexcused, quizzes will not be made up for a grade, but you may have access to the quiz to help you study for zero points. **Quizzes will account for 20% of your final grade.**

Disability Statement
If you are a student with a documented cognitive (learning disability), physical or psychiatric disability (anxiety, depression, bipolar disorder, AD/HD, post-traumatic stress, and others) you may be eligible

for academic support services such as extended test time, texts in audio format, note taking services, etc... If you are interested in learning if you can receive these academic support services, please contact Tina Hardy (tina_hardy@ivcc.edu, or 224-0284), or stop by the Disability Services Office in C-211.