

**M.E. Rinker, Sr.**  
**School of Building Construction**  
**University of Florida**  
**Semester Course Outline**

**BCN 1210 – Construction Materials      Spring 2022      3 Credits**

**Instructor:** Dr. Aladdin Alwisy, RNK 311, Rinker Hall  
[aalwisy@ufl.edu](mailto:aalwisy@ufl.edu), Phone: 273-1157

**Prerequisites:** None

**Description:** The course provides a general overview of basic construction materials, properties, manufacture, and uses.

**Objectives:** Students will learn elements relating to the principles of construction methods and techniques. Basic understanding of the built world that surrounds us and how it is constructed.

**Recommended Text:** *Basic Construction Materials*, Theodore Marotta, 8<sup>th</sup> Edition.  
*Olin's Construction Principles, Materials and Methods*; Simmons, H. Leslie: John Wiley & Sons, 9th Edition

**Classes** M,W,F | Period 4 (10:40 AM - 11:30 AM) RNK 238

Zoom Link *(By Request ONLY)*  
<https://ufl.zoom.us/j/9273239846>

**Office Hours** Wednesdays: **RNK 311**  
(Period 5) 11:45 am - 12:35 pm

**By Appointment:**  
Email [aalwisy@ufl.edu](mailto:aalwisy@ufl.edu). Subject line should read *BCN 1210 APPOINTMENT REQUEST-<your name>*.  
Provide a brief description of what you want to discuss. Also please suggest one or two alternate times for scheduling other student requests. I will send you an e-mail about the appointed time.

**TA:** TBD

**Attendance:** Attendance is mandatory. You have three unexcused absences. To have an absence excused, you need to bring proof of why it was unavoidable (doctors note, etc.)

**Quizzes:** *NO MAKEUP QUIZZES.* There will be Nine (9) online quizzes given during the semester. You will have about 3 days (from Friday after class till Sunday) in which to start your quiz, but after starting it you will only have 50 minutes to complete it. Quiz results must be discussed in person within 24 hours after the quiz has been taken. After 24 hours the grade is final. *Makeup exams will not be given.*

**Quiz Grades:** The lowest quiz grade will be dropped while calculating final grade because of low performance or absences due to medical reasons, school-related activities, family issues, emergencies, work-related issues and other unforeseen circumstances. No make-up quiz will be given.

**Bonus points:** Bonus points opportunities will be given through the semester in class.

**Grade Makeup:** Final grades will be calculated as follows:

Attendance	100
Homework	225
Top 8 of 9 in-term quiz grades @ 50 points	400
Team Project Reports	75
Individual Course Paper	200
	<b>1000</b>

**Grade Scale:** Divide the total points you earn by **1000 total possible points**. Grades will be given according to the following scale. **Decimal points will not be Rounded.**

Letter Grade	Numeric Grade
A	$\geq 93$
A-	$\geq 90$ AND $< 93$
B+	$\geq 87$ AND $< 90$
B	$\geq 83$ AND $< 87$
B-	$\geq 80$ AND $< 83$
C+	$\geq 77$ AND $< 80$
C	$\geq 73$ AND $< 77$
C-	$\geq 70$ AND $< 73$
D+	$\geq 67$ AND $< 70$
D	$\geq 63$ AND $< 67$
D-	$\geq 60$ AND $< 63$
F	$< 60$

**Student Evaluations:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/> .

**Accommodations:** Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting

accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

<b>Honor Code:</b>	All students in this course are subject to the requirements of the University of Florida's Honor Code <a href="https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/">https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/</a> . Cheating will not be tolerated. Although joint work on assignments may be acceptable in some cases, duplication of an assignment either manually or electronically will be dealt with as an act of academic dishonesty. "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."
<b>Counseling:</b>	Contact information for the Counseling and Wellness Center: <a href="http://www.counseling.ufl.edu/cwc/Default.aspx">http://www.counseling.ufl.edu/cwc/Default.aspx</a> (Links to an external site.), 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies
<b>Reservations And Remedies:</b>	The instructor reserves the right to modify the course schedule, grade make-up, grade scale, modules, and any other aspect of the course as deemed fit throughout the term without notice. The updated Syllabus will be uploaded on the course's Canvas. For any questions, issues, or concerns about the course (assessment, policies, schedule, etc.), please contact the instructor to remedy them.

#### **Weekly Course Schedule:**

Week/ Date	Activity	Topic/Assignment (Question/Subject)
Week 1	<b>Topic</b>	<b>Module 1</b> BCN 1210 – Introduction Masterformat_2016
	<b>Assignment</b>	N/A
	<b>Quiz</b>	N/A
Week 2	<b>Topic</b>	Work Sequence Building Projects Construction Industry Participants Bidding and Negotiation
	<b>Assignment</b>	Assignment #1: Masterformat
	<b>Quiz</b>	Unit Quiz
Week 3	<b>Topic</b>	Project Delivery Process Owner-Contractor Relationships Feasibility Studies
	<b>Assignment</b>	N/A
	<b>Quiz</b>	Quiz #1
Week 4	<b>Topic</b>	<b>Module 2</b> Standards codes and specifications Material Properties Division 2 – Existing Conditions
	<b>Assignment</b>	Assignment #2: Material Properties
	<b>Quiz</b>	Quiz #2

Week/ Date	Activity	Topic/Assignment (Question/Subject)
Week 5	Topic	<b>Module 3</b> Division 3 Portland Cement Concrete Introduction Division 3 PCC Joints, Hardened Concrete Testing Division 3 PCC Manufacturing, Testing and Placement
	Assignment	Assignment #3: Concrete
	Quiz	Quiz #3
Week 6	Topic	<b>Module 4</b> Division 4 Introduction and clay units Division 4 part 2 CMU
	Assignment	Assignment #4: Concrete
	Quiz	N/A
Week 7	Topic	Division 4 Part 3 Mortar and Grout Division 4 Reinforcement, Anchor, Ties and Flashing
	Assignment	Assignment #5: Masonry
	Quiz	Quiz #4
Week 8	Topic	<b>Module 5</b> Division 5 Iron and Steel Metals aluminum, copper
	Assignment	Assignment #6: Metal
	Quiz	Quiz #5
Week 9	Topic	<b>Module 6</b> Division 6 Wood - General Information Division 6 Wood - Strength of Wood Division 6 Wood - Classification and Protection
	Assignment	Assignment #7: Wood
	Quiz	Quiz #6
Week 10	Topic	<b>Module 7</b> Division 32 Asphalt materials, types and testing Division 32 Asphalt operations, design mix and construction
	Assignment	Assignment #8: Asphalt
	Quiz	Quiz #7
Week 11	Topic	<b>Module 8</b> Division 7 - Thermal Protection Division 8 – Openings
	Assignment	N/A
	Quiz	N/A
Week 12	Topic	<b>Module 8</b> Division 8 – Openings Division 9 - Finishes Walls and Ceilings Division 9 - Finishes flooring and painting
	Assignment	N/A
	Quiz	Quiz #8

Week/ Date	Activity	Topic/Assignment (Question/Subject)
Week 13		<b>Module 9</b> Division 21 - Fire Suppression Division 22 - Plumbing
	<b>Assignment</b>	N/A
	<b>Quiz</b>	N/A
Week 14	<b>Topic</b>	Division 23 - HVAC
		Division 26 - Electrical
	<b>Assignment</b>	N/A
Week 15	<b>Quiz</b>	Quiz #9
	<b>Topic</b>	Overview
	<b>Assignment</b>	N/A
	<b>Quiz</b>	N/A