



**IT 3324: Construction Materials
Department of Industrial Technology**

Instructor Information

Prof. Keith Nixon

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Class Times and Place

Lecture: Online

Office Hours: By Appointment Only

Final Exam Date & Time

Dec. 7-9, 2020

Catalog Description

A detailed look at an overview of the various materials us in construction. This course is designed to explore common construction materials and their behaviors, properties, and uses.

Course Description

Be sure to check Blackboard site regularly for class notes, assignments, and special announcements. Reading assignments will be given from the required textbook. The reading assignments, discussion boards, and homework will form the basis for the quizzes and tests given in the class. Tests will consist of a comprehensive multiple-choice section covering textbook material. Quizzes will be given weekly in the same multiple-choice format.

Course Outcomes

Following completion of this course, you will be able to exhibit strong technical understanding of the basic materials used in construction today. You will be able to demonstrate an understanding of wood, steel, concrete, masonry, waterproofing, roofing, window glazing, and more.

Required Materials

Textbook

Building Construction: Principles, Materials, Systems, 3rd Edition by Madan Mehta and Walter Scarborough and Diane Armpriest, Pearson; 3rd Edition ISBN-10: 0-13-445417-0 ISBN-13 978-0-13-445417-7

Student Learning Outcomes

This course is designed to meet one or more of the following Student Learning Outcomes:

1. Demonstrate a basic understanding of commonly used construction materials.
2. Understand the importance of specifications and material description data.
3. Develop and refine oral and written communication skills.
4. Understand and apply building material and assemblies.
5. Demonstrate the ability to understand construction details.

Marketable Skills

1. Students will demonstrate knowledge of project management, project planning, scheduling, and estimating.
2. Students will demonstrate knowledge of industry safety practices.
3. Students will understand and implement lean philosophies to improve efficiency and eliminate waste.
4. Students will demonstrate the ability to communicate information and ideas verbally and in writing so others will understand.

Time Commitment

Students should be prepared to spend approximately **3-5 hours per week outside of class** on assignments that will include: Reading Assignments, completing assignments, class projects, and studying for tests and quizzes.

Attendance and Late Assignment Policy

All assignments are due on posted due dates. NO LATE ASSIGNMENTS WILL BE ACCEPTED.

Participation, Attendance, and other assignments

A high degree of engagement is expected and will contribute to your learning as an active participant. This includes interacting with the instructor and other students, completing outside of class assignments and readings, and being prepared to participate in discussions. This class is the beginning of your journey to becoming a professional. Evidence of professionalism includes collegial attitude, participation, and punctuality.

Personalized assignments can be requested in the form of tailored exercises for each individuals' career/degree path. These will be in the form of extra credit or assignment substitute. Job site visits to provide a more detailed understanding of construction materials can also be arranged for credit.

Evaluation

A student's grade will be determined based on the following percentages:

60% - Discussion Boards

25% - Quizzes

15% - Exams

Grading Scale: 100-90 = A, 89-80 = B, 79-70 = C, 69-60 = D, 59-0 = F

All tests and quizzes will be OPEN BOOK.

Code of Classroom Conduct

- Maintain integrity on all assignments and tests
- Participate in all weekly discussions
- Turn in Assignments on time
- THERE WILL BE NO LATE WORK ACCEPTED.

Reasonable Accommodation Statement

Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the Student's responsibility to initiate a request. Please contact me, Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.

Course Outline

WK #		Subjects
1	8/24	Introduction to course, Schedule Office Hours Visit
2	8/31	Chapter 13 – Materials for Wood Construction I Chapter 14 – Materials for Wood Construction II
3	9/7	Chapter 15 – Wood Light-Frame Construction I Chapter 16 – Wood Light Frame Construction II
4	9/14	Chapter 18 – Material Steel and Steel Components
5	9/21	Chapter 21 – Lime, Portland Cement, and Concrete Chapter 22 – Concrete Construction I
6	9/28	Chapter 23 – Concrete Construction II
7	10/5	Chapter 24 – Masonry Materials I Chapter 25 – Masonry Materials II
8	10/12	Mid Term Exam
9	10/19	Chapter 28 – Exterior Wall Cladding II Chapter 29 – Exterior Wall Cladding III
10	10/26	Chapter 30 – Glass, Glazing, and Light-Transmitting Plastics
11	11/2	Chapter 32 – Exterior Wall Cladding IV
12	11/9	Chapter 33 – Roofing I
13	11/16	Chapter 34 – Roofing II
14	11/23	Thanksgiving Week – NO Class
15	11/30 -12/6	Chapter 35 – Stairs Chapter 37 - Ceilings
16	12/7- 12/9	Final Exam

Note: Class schedules subject to change