



## Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

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**Semester:** Spring

**Year:** 2025

**Course Prefix:** CMGT

**Course and Section #:** 1020-601

**Course Title:** Construction Materials and Methods I

**Credits:** 3:2:2

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### ***Course Description***

Provides a basic knowledge of the materials and methods used in heavy civil, commercial and residential construction projects. Includes lectures, site visits and engaged student presentations.

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### ***Course Attributes***

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- Writing Enriched Graduation Requirements
- Discipline Core Requirements in Program
- Elective Core Requirements in Program
- Open Elective

Other: *Click here to enter text.*

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### ***Instructor Information***

**Instructor Name:** Chris Dillman

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### ***Student Learning Outcomes***

Examine the construction industry through guest presentations, course lectures, reading and writing assignments and student research presentations. The text is organized following the Construction Specifications Institute (CSI) Masterform™. Each division pertains to a material or area of the construction industry. This course will cover divisions 1(review), 2-5.

Student outcomes for the Construction Materials and Methods I are the following:

1. An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
  
3. An ability to develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.

5. An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.

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## ***Course Materials and Texts***

CONSTRUCTION MATERIALS, METHODS, AND TECHNIQUES (4<sup>RD</sup> EDITION) by Spence and Kultermann - ISBN: 978-1-305-08627-2.

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## ***Course Requirements***

### **Course Assignments, Assessments, and Grading Policy**

**EXAMS/QUIZZES:** There will be two exams for this course. The questions will come from chapter review questions and lecture material. Exams and quizzes will be taken in class or online on scheduled dates. Pop quizzes will be given on a random basis, usually at the beginning of class and cannot be made up. The questions will come from chapter. The intent is to prepare students for in class discussion and to keep up with reading assignments and attendance.

#### **GRADING**

Research Papers      1 @ 100 points each = 100 points  
Exams                    2 @ 100 points each = 200 points  
Group Presentation   1 @ 100 points  
Class Participation                    50 points max. (varies with participation and attendance)  
Industry Site Visits or videos 100 points each (varies due to schedules)  
Pop quizzes                    40 points (varies based on material)  
TOTAL POINTS POSSIBLE 1240 points (Approx.)

**ASSIGNMENTS:** Assignments turned in on time will be given the full credit earned. Each "Research Paper" is due two (2) week after the presentation was given. Assignments turned in late will be given 50% of credit earned. All Research Papers must be APA formatted and double spaced. Each page should include a minimum of three references and must be cited on a reference page using a hanging indent. Please use the UVU writing lab for writing suggestions and APA formatting issues. The online writing lab (OWL) URL is: <http://www.uvsc.edu/owl/>

#### **GRADING SCALE PERCENTAGES:**

A = 94-100	C = 73-75
A - = 90-93	C - = 70-72
B+ = 86-89	D+ = 66-69
B = 83-86	D = 63-65
B - = 80-82	D- = 60-62
C+ = 76-79	E = 0-59

**PARTICIPATION:** Participation will be measured in three ways: 1) Class attendance and participation. 2) Group and individual assignments and presentations. 3) Engaged learning and outreach.

**GROUP ASSIGNMENTS:** Students will be divided into groups to participate in **One** assignment. The assignment types are as follows:

1. **First Assignment Type**— Student groups will be assigned to recruit a "guest lecturer" for one of the main field emphases in construction. The students must identify at least one candidate and get the instructors approval before recruiting the candidate. The dates will be predetermined. If the candidate is not available on the assigned date, another candidate may be selected. With

sufficient notice and with prior approval the schedule may be adjusted to accommodate a guest lecturer. In conjunction with recruiting a guest lecturer, the student group must do the following:

- **Determine if the lecture will be face to face or online.**
- Meet the guest lecturer to deliver a parking pass and escort the lecturer to the classroom. Parking passes can be ordered ahead of time through Tracy Eubanks, the Administrative Assistant in the Construction Technologies Dept. She can be reached at 863-7405 or via email at [Tracy.Eubanks@uvu.edu](mailto:Tracy.Eubanks@uvu.edu). Parking passes ordered in a timely fashion will be waiting in GT 613.
- Assist the guest with any needs such as PowerPoint, handouts, etc. These needs should be identified prior to the lecture.
- Introduce the guest at the beginning of class.
- Conduct question and answer period after class by encouraging the class to ask questions about the particular field and the lecturers' experience.
- Inform the guest that following the lecture and question and answer period they are free to leave if they wish (preferred for evening classes).
- Assist the guest to their vehicle if needed.
- Follow-up with a thank you card or email after their presentation.
- To help the guest lecturer be adequately prepared, here is a few suggestions of
  - ✓ Educational background and how it has helped. Would they do anything different?
  - ✓ Describe the particular industry as a whole as well as their individual company.
  - ✓ Describe the various opportunities in their industry. How can students' best prepare to enter their particular construction field?
  - ✓ What is their perspective on future opportunities in the next 2 to 5 years and projections on the next 15- 20 years?
  - ✓ What are the trends both pro and con that affect your particular industry?
  - ✓ If someone was interested in being self-employed, what are the opportunities and how difficult is this in your field?
  - ✓ How has your decision to enter this field benefitted or impacted your family and quality of life?

2. **Second Assignment Type - Group Presentation** – Each student group will be assigned one of the chapter topics for a group presentation. Groups will have as much of the class period as needed for their presentation. Anytime remaining will be used for class discussion regarding the topic. Attendance will be taken and will be part of the class participation grade. Group participants will fill out a matrix to assist in determining the individual scores of group participants the whole group. If a member of a group knows they will be unavailable for the presentation, they must notify the group beforehand and make other arrangements on how they can contribute to the whole group. The grade will be based on the following:

- Presentation preparedness and participation.
- Presentation quality. PowerPoint is recommended.
- Use of pictures, charts, graphs, etc. to assist learners in visualizing the topic.

- Engaging other learners in the topic through questions and discussion, etc.

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## Required or Recommended Reading Assignments

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### General Description of the Subject Matter of Each Lecture or Discussion

Week 1: Chapter 1 “Construction Industry” & 2 “Regulatory Constraints, Standards and Green Building”, choose groups for presentations

Week 2: Chapter 3 “Properties of Materials” & 4 “Building Site”

Week 3: Blueprint reading

Week 4: Chapter 5 “Soils” & 6 “Foundations”

Week 5: Rebar shop lab

Week 6: Chapter 7 “Concrete” and Job site Safety

Week 7: Chapter 8 “Cast-in-Place concrete”

Week 8: Chapter 9 “Precast Concrete” & 10 “Mortars for Masonry walls”

Week 9: Chapter 11 “Clay Masonry”

Week 10: Spring Break

Week 11: Chapter 12 “Concrete Masonry” and Brink DVD & Group Presentations

Week 12: Group Presentation & Chapter 14 “Masonry Construction”

Week 13: Group Presentation & Chapter 15 “Ferrous Metals”

Week 14: Group Presentation & Chapter 16 “Nonferrous Metals”

Week 15: Group Presentation & Chapter 17 “Steel Frame Construction”

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## Required Course Syllabus Statements

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### Using Remote Testing Software

This course does not use remote testing software.

This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers’ immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

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## Required University Syllabus Statements

### Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at [accessibilityservices@uvu.edu](mailto:accessibilityservices@uvu.edu) or 801-863-8747.

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Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at [DHHservices@uvu.edu](mailto:DHHservices@uvu.edu)

DHH is located on the Orem Campus in BA 112.

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### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

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### **Equity and Title IX**

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – [TitleIX@uvu.edu](mailto:TitleIX@uvu.edu) – 800 W University Pkwy, Orem, 84058, Suite BA 203.

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### **Religious Accommodation**

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at [accessibilityservices@uvu.edu](mailto:accessibilityservices@uvu.edu). If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.