

**Nashville State Community College**  
**STEM Division**  
**Civil and Construction Engineering Technology**

**2020 Master Course Syllabus**  
**CIVT 1250 Materials and Methods of Construction**

**Course Information:**

**Course Title:** CIVT 1250 Materials and Methods of Construction

**Credits:** 3

**Class Hours:** 3 class hours

**Course Description:**

The basic techniques and fundamentals essential in erecting wood frame, steel frame and reinforced concrete frame buildings. The study involves the various phases from site investigation through finished work. **Prerequisite(s):** None

**Instructor Information:**

**Name:**

**Email:**

**Office Phone:**

**Office Location:**

**Office Hours:**

**Required Textbook(s) & Other Materials:**

**Textbook:** Building Construction: Principles, Materials and Systems, by Mehta, Scarborough & Armpriest. Prentice Hall (Third edition only).

**ISBN:** 9780134454177

**Supplies:** Students are required to have and use a USB storage device i.e. USB Flash drive.

Once enrolled, all students should verify that they have the correct textbook and materials information by consulting the D2L/NS Online shell for the course. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center at 615-353-3721, 615-353-3741, or [accesscenter@nsc.edu](mailto:accesscenter@nsc.edu).

**Course Outcomes:**

Upon successful completion of this course, students should be able to:

1. Know the responsibilities of the owner, the designer, and the contractor for a construction project.
2. Understand the principles used to control forces, temperature, moisture, air, movement, and fire in a building.

3. Understand basic concepts relating to the materials and methods of construction including wood, steel, concrete, drywall, roofing, floors, drywall, windows, and doors.
4. Understand and use of appropriate technical terminology in construction.
5. Understand the basic construction components and methods involved in both light and heavy construction.
6. Develop writing skills by preparing a paper on construction materials or methods and give an oral presentation.
7. presentation.
8. Gain hands-on experience with the materials used in the construction industry.
9. Build a small structure using small groups.
10. Understand the principles of Leadership in Energy and Environmental Design (LEEDS).

### Course Competencies:

The following are detailed course competencies intended to support the course outcomes:

The Course Outcomes above will be used to measure objective examinations of the theory, principles, and by instructor observations of classroom activities. Your ability to communicate technical information will be assessed by your instructor as part of your oral presentation. The standards expected and the level of quality of meeting those standards is stated with the assignment.

### Topics to Be Covered:

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<u>Week</u>	<u>Class</u>	<u>Chapter and Topic</u>
<b>1</b>	1st Class	Introduction to Course Materials
	2nd Class	Chapter 1: An Overview of Building Delivery Process (How Buildings Come into Being) Chapter 2: Design and Construction regulations
<b>2</b>	3rd Class	Chapter 3; Loads on Buildings Chapter 4; Load Resistance (The Structural Properties of Materials)
	4th Class	Chapter 5; Properties of the Envelope – I (Thermal Properties) Chapter 6; Properties of the Envelope – II (Air and Water Vapor Control)
<b>3</b>	<b>NO Class</b>	<b>Labor Day; no class</b>
	5th Class	Chapter 7; Fire and Smoke Related Properties Chapter 8; Acoustical Properties of Materials
<b>4</b>	6th Class	Chapter 9; Principles of Joints and Sealants (Expansion and Contraction Control) Chapter 10; Principles of Sustainable Construction

	7th Class	<b>TEST #1 (Chapters 1-10)</b>
<b>5</b>	8th Class	Chapter 13; Materials for Wood Construction – I (Lumber) Chapter 14; Materials for Wood Construction – II (Engineered Wood Products, Fastener, and Connectors)
	9th Class	Chapter 15; Light Frame Construction – I Chapter 16; Light Frame Construction – II
<b>6</b>	10th Class	Chapter 33; Roofing - I (Low-Slope Roofs) Chapter 34; Roofing - II (Steep Roofs)
	11th Class	Chapter 31: Windows and Doors Chapter 35; Stairs
	12th Class	Chapter 36; Floor Coverings Chapter 37; Ceilings
	13th Class	<b>TEST #2 (Chapters 13-16, 31 and 33-37)</b>
<b>8</b>	<b>NO Class</b>	<b>Fall Break; no class</b>
	14th Class	Chapter 17; Structural Insulated Panel Construction Chapter 18; Material Steel, and Steel Components
<b>9</b>	15th Class	Chapter 19; Structural Steel Construction Chapter 20; Cold-Formed Steel Construction
	16th Class	Chapter 21; Lime, Portland Cement, and Concrete Chapter 26; Mason and Concrete Bearing Wall Construction
<b>10</b>	17th Class	Chapter 22; Concrete Construction - I (Formwork, Reinforcement and Slabs-on-Ground) Chapter 23; Concrete Construction – II (Site-Cast and Precast Concrete Framing Systems)
	18th Class	Chapter 24; Mason Materials - I (Mortar and Brick) Chapter 25; Mason Materials - II (Concrete Masonry Units, Natural Stone, and Glass Masonry Units)
<b>11</b>	19th Class	<b>TEST #3 (Chapters 17-26)</b>
	20th Class	Chapter 27; Exterior Wall Cladding - I (Principles of Rainwater Infiltration Control) Chapter 28; Exterior Wall Cladding – II (Masonry, Precast Concrete, and GFRC)
<b>12</b>	21st Class	Chapter 29; Exterior Wall Cladding - III (Stucco, Adhered Veneer, EIFS, Natural Stone, and Insulated Metal Panels) Chapter 32; Exterior Wall Cladding–IV (Wall Systems in Glass)
	22nd Class	Chapter 30; Glass, Glazing, and Light-Transmitting Plastics
<b>13</b>	23rd Class	Chapter 12; Below-Grade Construction (Foundation Systems)

		And Basements)
	24th Class	Chapter 11; Soils and Excavations
14	25th Class	<b>TEST #4 (Chapters 11, 12, 27-30 and 32)</b>
	<b>NO Class</b>	<b>Thanksgiving Break</b>
15	26th Class	Chapter Presentations
	27th Class	Chapter Presentations
16	<b>28th Class</b>	<b>FINAL EXAM (Comprehensive)</b>

### Course Assessments:

The following performance assessments will be used to demonstrate students' understanding, knowledge, and skills: *(include type and point/percentage breakdown here)*

### Grading Policy:

Four Tests (5% each)	20%
Final Exam	10%
Chapter Report	10%
Presentation	10%
Homework	25%
Attendance and Participation (see below)	25%
Total	100%

### Late Work Policy & Make-up Procedures for Missed Assignments and Work:

If you cannot take a test when scheduled, you must notify the instructor and make arrangements to take the test prior to the scheduled date. Chapter Reports not turned in on time is subject to a 10% grade reduction. Homework will not be accepted if more than one week late or after an assignment has been returned to the class, whichever comes sooner. Homework should reflect your understanding of the subject, not that of your classmates.

### Attendance Policy

The College is not an attendance taking institution as defined by 34 CFR 668.22(b)(1) in the Code of Federal Regulations; however, students are expected to attend all scheduled classes and laboratories.

- Absences in a course may affect a student's final grade.
- Tardiness may also affect a student's final grade.
- Students are responsible for all work/tests that occur during any missed class session(s) regardless of reason(s) for absence.
- Students who are sick or not well enough to attend class must notify the instructor as soon as possible before the scheduled class time, unless incapacitated or unable to do so. In that case, students must contact the instructor as soon as reasonably possible.
- If a student has an unavoidable conflict with a scheduled class session, students must notify the instructor, preferably before the class session, or as soon as possible.

For purposes of financial aid continued attendance is determined via engagement in the course. This can be accomplished in several ways including, but not limited to, continued attendance and/or participation in on-ground class sessions, participating in D2L as prompted (e.g., responding to an instructor’s email, posting to a discussion board), and/or completing and submitting assignments.)

To the extent that attendance is kept in this class it is not for the purpose of the College but is instead associated with the instructor’s individual grading rubric. The attendance policy for this class is: Students are expected to attend all scheduled classes. Every student will be permitted two excused absences for the semester. Unexcused absences beyond that will result in the deduction of five (5) percentage points for each class absence from the student’s final grade. If a student is absent from a class, he/she should give advanced notice to the instructor. The student is responsible for all assigned work/tests and/or quizzes in the course for an excused absence. Assigned Work/tests and/or quizzes cannot be made up for an unexcused absence. Tardiness may also affect a student’s final grade.

**Grading Scale:**

Letter Grade	Percentage Range
A	90-100
B	80-90
C	70-80
D	60-70
F	Below 60

**FA**

According to NSCC policy, an FA is awarded to students who do not officially withdraw from a course and do not attend after the cut-off date provided in the academic calendar. Please refer to the current academic calendar available on the Nashville State web site, looking for the date that indicates it is the “Last Day to Earn F for Attendance (FA).” Students who stop attending on or before this date receive an FA; students who stop attending after this date receive an F.

For online courses, attendance is defined by submission of assignments. Students who fail a course and whose last assignment is submitted on or before the FA date will earn an FA for the course. Students who fail a course and whose last assignment is submitted after the FA date will earn an F for the course. An FN is assigned to students who do not submit any assignments.

**FN**

An FN is awarded to students who never attended class.

**Technology Statement**

- All classes at the College are web enhanced.
- It will be essential for students to have access to a computer and an internet connection to complete assignments, engage in online discussions, and access various course materials through D2L/NS Online course shells.
- Students may also be required to use free video conferencing platforms (ex: Zoom, Teams) for classes and meetings.

- Students will be responsible for appropriate dress while on video, to ensure a distraction free environment (mute sound as needed) and to ensure their background is neutral for others to view.
- If you have questions or concerns regarding access to a computer or internet resources, please contact your instructor. Additional information available: <https://www.nsc.edu/current-students/student-online-resources/access-to-internet-and-technology>.
- Certain publisher materials may not work on cellphones.

## **Computer Labs**

Computers are available for student use at each campus during campus open hours. Open computer lab availability for Fall 2020 may vary from campus to campus.

Students should check NSCC website for current hours of operation.

## **D2L/NS Online and myNSCC**

It is students' responsibility to check D2L/NS Online course shells for all enrolled courses and myNSCC, including student email, on a regular basis. These are the official communication channels between the college and students, who are responsible for the information communicated through those channels. D2L/NS Online contains specific course information and myNSCC contains information important for other purposes.

## **ADA Compliance Statement**

Nashville State complies with the Americans with Disabilities Act (ADA). If you require accommodations for any courses in which you are enrolled, contact the Access Center at 615.353.3741 or 615.353.3721, or e-mail [accesscenter@nsc.edu](mailto:accesscenter@nsc.edu). If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center.

## **Classroom Misconduct**

Nashville State Community College has a zero-tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary measures. Please review the [Nashville State Student Code of Conduct policy](#). Please be aware that children are not allowed in class or to be left unattended on campus.

## **Academic Misconduct**

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. Students are responsible for understanding and abiding by the [Academic Misconduct Policy](#) in the Nashville State Student Code of Conduct. In addition to other possible disciplinary measures that may be applied through regular college procedures as a result of academic dishonesty, the instructor has the authority to assign an "F" or a "zero" for the exercise, paper, or examination, or to assign an "F" for the course. Students may appeal through the appropriate college grade appeal procedures.

*(Each instructor will outline his/her expectations for academic integrity and provide individualized information about consequences for academic misconduct.)*

## Academic Early Alert System

Nashville State Community College uses an Early Alert System to let students know of a faculty member's concern in one or more of these academic areas: lack of attendance, lack of classroom participation, late or missing assignments, and/or poor performance on assignments/tests. \*Please note that Early Alerts do not affect a student's academic standing. If you receive an Early Alert email, please see your instructor and your academic advisor as soon as possible.

## RAVE Emergency Alert System

Emergency events can happen at any time, and Nashville State Community College wants to notify students if and when they occur. For this reason, all students have been enrolled in the free RAVE alert system. If you have not already done so, please log in at <https://www.getrave.com/login/nsc> to confirm and update your contact information and notification preferences. It is critical that your information be correct so that you will receive any emergency notifications. Your RAVE Username is your NSCC email address. If you've never received an email from RAVE with your password, or if you need to reset your password, select "Forgot your password?" and a new password will be emailed to you. Should the RAVE system indicate "user not found", select Register and create your own RAVE account.

## Student Wellness

- The general well-being of students is an important component of their academic success. With this in mind, Nashville State Community College has several resources available to provide support when needed:
  - Students with general, non-academic questions and concerns about COVID-19 may email [virusinfo@nsc.edu](mailto:virusinfo@nsc.edu).
  - Five free telephone therapy sessions are available via Agape Counseling by calling 615-781-3000.
  - Online tutoring is available via NetTutor within the D2L course shells.
  - A comprehensive list of online student resources may be found at <https://www.nsc.edu/current-students/student-online-resources>
  - A comprehensive list of student support services may be found at <https://www.nsc.edu/current-students/on-campus-resources/student-support-services>

## Equity Statement

Nashville State Community College has a relentless commitment to the transformation of our institution through the intentional design of college experiences that expect and promote excellence from students, faculty, staff and administration. We consider equity to be an obligation of higher education. We strive to ensure that each student receives what that student needs to be successful, with goals of success beyond the classroom. We do this through an evidence-based and collaborative effort, understanding that our student population has diverse needs that must be addressed. We recognize that this effort may not always be comfortable and that partnering with students is the driving force to overcome barriers to success.

## **Inclement Weather & Campus Closings**

Nashville State will use the RAVE alert system to send a text message to students, staff, and faculty about adjusted hours of operation and/or closings at individual campuses. All students should check the Nashville State web site home page at [www.nsc.edu](http://www.nsc.edu) for announcements on campus closures, which may vary from campus to campus. Campus closures will also be announced on local television stations. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

Even when campuses are closed, students are still responsible for completing all assigned work. When classes are cancelled, faculty will post online assignments and any additional instructions in the D2L/NS Online course shell. Check D2L/NS Online for a message from your instructor regarding your online assignment requirements. Faculty have discretion over adjusting deadlines or due date for assignments, but students are responsible for completing all assigned work by the due date established by the instructor.

## **Class Cancellation Policy**

If the class is cancelled, the instructor will notify all students by posting in the D2L/NS Online course, e-mailing through D2L/NS Online, and/or by posting a sign on the classroom door. In the event of class cancellation, students must access D2L/NS Online to complete classwork and the assignment that will be posted in the course D2L site.

## **Communication Statement**

In this time of uncertainty due to COVID-19, communication between student and faculty is key. At times, situations arise for one or both that makes that communication difficult or delayed. This can include but is not limited to health issues and/or problems with technology. If you have attempted to contact your instructor, and have waited the turnaround time as outlined in the syllabus but have not yet received a response, please reach out for additional support using this survey:

<https://forms.gle/rM7rxFarksRFeA3b8>