



**Course Title: Concrete & Masonry Construction**  
**Course #: CT 104-6A**

**Credit Hours: 3 hrs.**  
**Semester: Fall semester -2021**  
**Cap: 10**

**Faculty:** Jones Lee

**E-mail:** [joneslee@navajotech.edu](mailto:joneslee@navajotech.edu)

**Office:**

**Office Phone:** 928-882-3154 - ext.3021

**Office Hours** (face-to-face): 8am-9am

**Preferred Communication** (email and/or text; will respond within 24 hours):

**Modality** (face-to-face):

**Class Location and Meeting Times** (Tuesday, 9:00am -11:40am)

**Meeting Hours and Online Hours** (if hybrid):

**Required Materials:**

**Textbooks:** Modern Masonry, Eighth Edition

**Tools:** PPE. Masonry Tools

**Lab Fee: (\$125.00)**

**Mission, Vision, and Philosophy**

*Mission:* Navajo Technical University honors Diné culture and language, while educating for the future.

*Vision:* Navajo Technical University provides an excellent educational experience in a supportive, culturally diverse environment, enabling all community members to grow intellectually, culturally, and economically.

*Philosophy:* Through the teachings of Nitsáhákees (thinking), Nahátá (planning), Íina (implementing), and Siihasin (reflection), students acquire quality education in diverse fields, while preserving cultural values and gaining economic opportunities.

**Course Description**

A study of the versatility, durability, and mix design of quality concrete. Also included is the study of the use of masonry in modern construction. Both classroom and laboratory experiences will assist students in developing a firm understanding of use concrete and masonry materials.

**After successfully completing this course;**

1. students will learn the function of various hand tools used in masonry / Concrete finish trade.
2. students will learn to volume estimates for concrete quantity requirements.
3. students will learn the safety equipment associated with the concrete and masonry trade.
4. Explain how masonry units (CMS's or blocks are used in construction).
5. Explain how clay masonry bricks/stone are used in construction.
6. Describe how mortar and grout are used.
7. Describe how to lay out masonry units.
8. Be involved in community engagement.

| Course Outcomes   | Course Assessments                 |
|---|------------------------------------|
| An ability to properly use a trowel to spread and furrow bed joints and butter head joints.       | Tests, quizzes, and hands-on exams |
| An ability to perform volume estimates for concrete quantity requirements.                        | “                                  |
| Be able to put eye protection, respiratory protection, and safety harness on while at a job site. | “                                  |
| Be involved in community Engagements.   | “                                  |

### Connections to Program Assessment (Course-Embedded Measures)

#### Course Activities

| Week | Date               | Class Topics/Reading Due             | Assignments Due | Assessments |
|------|--------------------|--------------------------------------|-----------------|-------------|
| 1    | 08/24              | Syllabus/Introduction                |                 |             |
|      | <b>08/27</b>       | <b>Last day to add/drop</b>          |                 |             |
| 2    | 08/31              | Chapter 1                            | TBA             | quiz        |
| 3    | 09/07              | Chapter 2                            | TBA             | test        |
| 4    | 09/14              | Chapter 3                            | TBA             | quiz        |
| 5    | 09/21              | Chapter 4                            | TBA             | test        |
|      | <b>10/01</b>       | <b>Graduation Petition due</b>       |                 |             |
| 6    | <b>09/28</b>       | <b>Chapter 5</b>                     | <b>TBA</b>      | quiz        |
| 7    | <b>10/11-10/15</b> |                                      | <b>Midterm</b>  |             |
| 8    | 10/05              | Chapter 6                            | TBA             | test        |
| 9    | 10/12              | Chapter 7                            | TBA             | quiz        |
|      | <b>11/01</b>       | <b>Last day to withdraw with “W”</b> |                 |             |
| 10   | 10/19              | Chapter 8                            | TBA             | test        |
| 11   | 10/26              | Chapter 9                            | TBA             | quiz        |
| 12   | 11/02              | Chapter 10                           | TBA             | test        |
| 13   | 11/09              | Chapter 11                           | TBA             | quiz        |
| 14   | 11/16              | Chapter 12                           | TBA             | test        |
| 15   | 11/23              | Chapter 13                           | TBA             | quiz        |
| 16   | <b>11/30</b>       | <b>Chapter 14</b>                    | <b>TBA</b>      | test        |
| 17   | 12/07              | Chapter 15                           | TBA             | quiz        |
|      | <b>12/13-12/16</b> |                                      | <b>Finals</b>   |             |
|      | <b>12/16</b>       | <b>Graduation</b>                    |                 |             |
|      | <b>12/16</b>       | <b>Grades due to the Registrar</b>   |                 |             |

## **Grading Plan**

Attendance/participation 10%  
Homework & class assignments 30%  
Tests/quizzes 30%  
Final exam/group projects 30%

A = 100-90%  
B = 89-80%  
C = 79-70%  
D = 69-60%  
F = 59% or less

## **Grading Policy**

Students must do their own work. Cheating and plagiarism are strictly forbidden. Cheating includes (but is not limited to) plagiarism, submission of work that is not one's own, submission or use of falsified data, unauthorized access to exams or assignments, use of unauthorized material during an exam, or supplying or communicating unauthorized information for assignments or exams.

## **Participation**

Students are expected to attend and participate in all class activities. Points will be given to students who actively participate in class activities including guest speakers, field trips, laboratories, and all other classroom events.

## **Cell phone and headphone use**

Please turn cell phones off **before** coming to class. Cell phone courtesy is essential to quality classroom learning. Headphones must be removed before coming to class.

## **Attendance Policy**

Students are expected to attend all class sessions. A percentage of the student's grade will be based on class attendance and participation. Absence from class, regardless of the reason, does not relieve the student of responsibility to complete all course work by required deadlines. Furthermore, it is the student's responsibility to obtain notes, handouts, and any other information covered when absent from class and to arrange to make up any in-class assignments or tests if permitted by the instructor. Incomplete or missing assignments will necessarily affect the student's grades. Instructors will report excessive and/or unexplained absences to the Counseling Department for investigation and potential intervention. **Instructors may drop students from the class after three (3) absences unless prior arrangements are made with the instructor to make up work and the instructor deems any excuse acceptable.**

## **Study Time Outside of Class for Face-to-Face Courses**

**For every credit hour in class, a student is expected to spend two hours outside of class studying course materials.**

## **Study Time for Hybrid or Blended Courses**

**For a hybrid or blended course of one credit hour, a student is expected to spend three hours per week studying course materials.**

## **Study Time for Online Courses**

**For an online course of one credit hour, a student is expected to spend four hours per week studying course materials.**

### **Academic Integrity**

Integrity (honesty) is expected of every student in all academic work. The guiding principle of academic integrity is that a student's submitted work must be the student's own. Students who engage in academic dishonesty diminish their education and bring discredit to the University community. Avoid situations likely to compromise academic integrity such as: cheating, facilitating academic dishonesty, and plagiarism; modifying academic work to obtain additional credit in the same class unless approved in advance by the instructor, failure to observe rules of academic integrity established by the instructor. **The use of another person's ideas or work claimed as your own without acknowledging the original source is known as plagiarism and is prohibited.**

### **Diné Philosophy of Education**

The Diné Philosophy of Education (DPE) is incorporated into every class for students to become aware of and to understand the significance of the four Diné philosophical elements, including its affiliation with the four directions, four sacred mountains, the four set of thought processes and so forth: Nitsáhákees, Nahát'á, Íina and Siih Hasin which are essential and relevant to self-identity, respect and wisdom to achieve career goals successfully.

At NTU's Zuni Campus, the A:shiwí Philosophy of Education offers essential elements for helping students develop Indigenous and Western understandings. Yam de bena: dap haydoshna: akkya hon detsemak a:wannikwa da: hon de:tsemak a:ts'umme. *Our language and ceremonies allow our people to maintain strength and knowledge.* A:shiwí core values of hon i:yyułashik'yanna:wa (respect), hon delank'oha:willa:wa (kindness and empathy), hon i:yyayumola:wa (honesty and trustworthiness), and hon kohoł lewuna:wediyahnan, wan hon kela i:tsemanna (think critically) are central to attaining strength and knowledge. They help learners develop positive self-identity, respect, kindness, and critical thinking skills to achieve life goals successfully.

### **Students with Disabilities**

Navajo Technical University is committed to serving all students in a non-discriminatory and accommodating manner. Any student who feels that she or he may need special accommodations should contact the Accommodations Office (<http://www.navajotech.edu/student-services#accommodations-services>) in accordance with the university's Disability Accommodations Policy (see [http://www.navajotech.edu/images/about/policiesDocs/Disability\\_Exhibit-A\\_6-26-2018.pdf](http://www.navajotech.edu/images/about/policiesDocs/Disability_Exhibit-A_6-26-2018.pdf)).

### **Email Address**

Students are required to use NTU's email address for all communications with faculty and staff.

### **Final Exam Date:**