



Please, click on the following link to access A&M-Commerce Covid 19 Information, <https://new.tamuc.edu/coronavirus/>

## **CONE 441-01E Highway and Heavy Construction**

COURSE SYLLABUS: Fall 2024

### **INSTRUCTOR INFORMATION**

Instructor:	Eddie Oh
Office Location:	AG/ET 208
Office Hours:	Monday 10 am ~ 1 pm / Wednesday 10 am ~ 12 pm
Office Phone:	903. 886. 5474
Office Fax:	903. 886. 5468
University Email Address:	Eddie.Oh@tamuc.edu
Preferred Form of Communication:	email
Communication Response Time:	one day

### **COURSE INFORMATION**

Textbook(s) Required: Traffic & Highway Engineering, Garber, 5<sup>th</sup>, Cengage, 9781337631020

Software Required: None

Optional Texts and/or Materials: None

Lecture/Lab: Mondays & Wednesdays 2:30 – 3:45pm, AG/ET 118A

### **Course Description**

Highway planning, driver characteristics, geometric design, traffic flow and control, highway materials, pavement design, and how highways are constructed, maintained, and upgraded. Students will apply the knowledge of estimating and scheduling to heavy construction projects such as highways, bridges, approaches, pipelines, or related structures.

Prerequisites: CONE 321 and CONE 351.

## Student Learning Outcomes

1. Discuss the principles of traffic engineering
2. Apply the fundamental principles of traffic flow and prepare intersection designs
3. Develop geometric design of highway
4. Design flexible/rigid pavement structures
5. Develop construction execution strategies for heavy civil construction projects

## COURSE REQUIREMENTS

Prerequisite : CONE 321 and CONE 351

## Instructional Methods

In-Class, Face-to-Face, D2L

## Student Responsibilities or Tips for Success in the Course

Weekly assignments & quizzes

## GRADING

Final grades in this course will be based on the following scale:

A	B	C	D	F
100 - 90	89 - 80	79 – 70	69 - 60	59 – 0

Weights of the assessments in the calculation of the final letter grade.

Assignments & Quiz

Midterm Exam

Final Exam

30%

30%

40%

## Assessments

## TECHNOLOGY REQUIREMENTS

### LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

[https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\\_support.htm](https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm)

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

## ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

## COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

## **Interaction with Instructor Statement**

Preferred Form of Communication: email

# **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

## **Course Specific Procedures/Policies**

### **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

## **University Specific Procedures**

### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <https://www.britannica.com/topic/netiquette>

### **TAMUC Attendance**

For more information about the attendance policy please visit the [Attendance Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

### **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)  
[Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

*Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.*

*Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).*

*Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.*

*In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.*

13.99.99.R0.03 Undergraduate Academic Dishonesty  
13.99.99.R0.10 Graduate Student Academic Dishonesty

## **Students with Disabilities-- ADA Statement**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

### **Office of Student Disability Resources and Services**

Texas A&M University-Commerce

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

*The syllabus/schedule are subject to change.*

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

### **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

### **A&M-Commerce Supports Students' Mental Health**

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

### **Department or Accrediting Agency Required Content**

*The syllabus/schedule are subject to change.*

## COURSE OUTLINE / CALENDAR

Week #	Week of	Course Topic
1	26-Aug	The Profession of Transportation / Transportation Systems & Organizations
2	02-Sep	Labor Day Characteristics of Driver, Pedestrian, Bicyclist, Vehicle, and Road
3	09-Sep	Traffic Engineering Studies
4	16-Sep	Highway Safety / Principles of Traffic Flow
5	23-Sep	Intersection Design
6	30-Sep	Intersection Control / Capacity & Level of Service for Highway Segments
7	07-Oct	Capacity & Level of Service at Signalized Intersections
8	14-Oct	Exam I
9	21-Oct	Transportation Planning Process / Forecasting Travel Demand / Evaluating Transportation Alternatives
10	28-Oct	Highway Surveys & Location / Geometric Design of Highway Facilities
11	04-Nov	Highway Drainage
12	11-Nov	Soil Engineering for Highway Design / Materials for highway construction
13	18-Nov	Design of Flexible Pavements / Design of Rigid Pavements
14	25-Nov	Pavement Management Thanksgiving Break
15	02-Dec	Course Review
16	19-Dec	Final Exam

*The syllabus/schedule are subject to change.*