

Oklahoma State University Institute of Technology
Face-to-Face Common Syllabus
FALL 2017

CET 2323 - STATICS

Students learn and apply concepts of forces, moments, reactions, free-body diagrams, friction, internal forces and moments of inertia.

Course Purpose:

This class is the foundation for Civil Engineering and lays all of the ground work for future classes.

Type of course: *Theory*

Credit Hours: 3; Total clock hours of theory per semester: 45;

Total clock hours of lab for the semester: 0; Total clock hours of clinical per semester: 0.

Class length - Full Semester

Class days and times: TR 8:30 –9:55 AM times are CST

Prerequisites: *MATH 1613*

Instructor Name: Adrian Lee

Instructor Phone: (918) 293- 5073(offices)

Office: Bld 300 Rm 146

Instructor email: Adrian.lee@okstate.edu

Contact: My preferred method of contact is email. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours: *See chart at end of syllabus or by appointment*

School Name: School of Engineering Technologies **Division's Main Phone:** 918-293-5150

REQUIRED TEXT, REFERENCES, AND MATERIALS

Texts: *Applied Statics and Strength of Materials*, 6th edition,
Spiegel/Limbrunner, Prentice Hall,
ISBN-10 #0133840549

Approx. \$201.00

References: N/A

Materials: Engineering paper, Scientific Calculator,
Notebook, Pen or pencils.

Uniform/Tools: N/A

Estimated Cost for Materials: \$ 50.00

Estimated Cost for Uniform/Tools: N/A

Optional Resources: N/A

Upon completion of the course, students should:

Course Objectives	Assessment of Objectives
Recall trigonometric functions.	Quiz
Determine the forces in truss members.	Class Activity
Extrapolate shear and moment values based on a loaded beam.	Homework, Exam*
Associate Vector and Scalar forces.	Homework
Use Equations of equilibrium for basic calculations.	Homework
Compute reactions for a beam.	Homework
Use equations to solve friction problems.	Homework
Locate the centroid for a built up shape.	Homework

Aspects of the course objective assessments may be used in the university's assessment of student learning. If applicable, an asterisk (*) above indicates this assignment is used in the university assessment program.

(Please asterisk the assignment above if utilized for the assessment assignment.)

COURSE ACTIVITIES

In this course students will:

(Please list the specific activities in the course)

- *Participate in class discussions and activities.*
- *View videos that depict the various concepts.*
- *Compile a portfolio of work produced.*
- *Take examinations.*
- *Complete reading assignments.*
- *Complete quizzes and homework assignments.*
- *Use D2L to view assignments and grades.*

EVALUATION - GRADES WILL BE BASED ON THE QUALITY AND COMPLETION

OF THESE TASKS: *(NOTE-Please indicate the course specific evaluations. List assignment(s) used in the university's assessment of student learning as separate line items and marked with an asterisk.)*

Quizzes.....20%
 Homework..... 20%
 Class Activities...10%
 Unit Exams..... 30%
Final Exam*..... 15%
 Notebook.....5%
 Total.....100%
 Optional Exam....**

OSUIT Grading Scale
A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% & below

*The student's grade for this assignment will be used in the university's assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student's course grade. **See testing.

Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week.

Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

RECOMMENDED STUDENT COMPETENCIES/SKILLS

List any competencies/skills recommended for student success in the course, e.g., reading placement level, PowerPoint, etc.

AUTHORIZED TOOLS

Scientific and/or graphing calculator, textbook and notebook

Students may use any/all course materials, including books and notes, while participating in classroom activities and homework. All quizzes and exams are to be completed independently with no access to any tools other than a calculator; no collaboration with classmates is permitted and any instance of such will be considered academic dishonesty. Unauthorized collaboration on homework is also prohibited..

LATE WORK

A tentative course schedule is provided with this syllabus. **Homework will be dropboxed before the start of class and hard copies** are due at the beginning of class as assigned unless otherwise noted. Quizzes will take place at the beginning of class when they occur unless noted otherwise. It is important that you plan to attend every scheduled class. Should you be sick or have an excused absence you **MUST** contact the instructor or make arrangements before the class period begins on that day. Excused absences include but are not limited to: participating in a required university activity such as a field trip, fulfilling a military obligations, mandatory court appearances, death in the immediate family, extreme illness or accident to oneself or immediate family. Instructors, at their discretion, may require proof of such events.

Emails, texts, and phone messages will be time stamped. If you let me know you will be absent the work due that day is to be made up the next day that you attend class. Otherwise, **LATE WORK IS NOT ACCEPTED.**

TESTING

All tests are closed book and closed notes. Tests may not be made up on other days and any missed exams will receive a zero grade. **In addition to the final, I offer an optional exam at the end of the semester. This is the only comprehensive exam and serves several purposes. This will be a replacement for any missed unit exam. Also, should a student be unhappy with any unit exam or the final exam, you may take the optional exam to replace a lower grade. This option will NEVER hurt or lower your grade. This is only an option to help you. Should your optional exam grade not help your overall score it will not be used.

OTHER LAB AND CLASSROOM POLICIES

(Indicate any rules/guidelines for your course.)

SYLLABUS ATTACHMENT

View the Syllabus Attachment, which contains other important information, by visiting http://osuit.edu/center/student_syllabus_information

ADRIAN LEE

FALL 2017

	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	
M			OFFICE HOURS		OFFICE HOURS		OFFICE HOURS		LUNCH		ENGINEERING MATH (CET 3533) ONLINE				OFFICE HOURS					
T			STATICS (CET 2323) DWRC 226			OFFICE HOURS			LUNCH		STEEL (CET 3213) DWRC 153		CONCRETE (CET4213) DWRC 153							
W			OFFICE HOURS		OFFICE HOURS		OFFICE HOURS		LUNCH		ENGINEERING MATH (CET 3533) ONLINE				OFFICE HOURS					
R			STATICS (CET 2323) DWRC 226			OFFICE HOURS			LUNCH		STEEL (CET 3213) DWRC 153		CONCRETE (CET4213) DWRC 153							
F			OFFICE HOURS		OFFICE HOURS		OFFICE HOURS		LUNCH											

		STATICS		
	DATE	Topic	Assignment	Assignments Due
WEEK 1	Tuesday, September 05, 2017			
	Thursday, September 07, 2017	Syllabus review, expectations, Trig review, Units	<i>Ch 1 - #2, 8, 28, 32</i>	
WEEK 2	Tuesday, September 12, 2017	Ch 1		
	Thursday, September 14, 2017	Ch 1, quiz Ch 2 Notes	<i>Ch 2 - #4, 6, 12, 18, 20</i>	
WEEK 3	Tuesday, September 19, 2017	Ch 2 Quiz Vector Lab		<u>Ch 1 hw due</u>
	Thursday, September 21, 2017	Ch 7 - Centroids	<i>Ch 7 - #7, 10, 22, 24</i>	<u>Ch 2 hw due</u>
WEEK 4	Tuesday, September 26, 2017	Ch 7 quiz		<u>Ch 7 hw due</u>
	Thursday, September 28, 2017	Review Ch 1,2, 7		
WEEK 5	Tuesday, October 03, 2017	Test 1		Test 1
	Thursday, October 05, 2017	CH 3 NOTES		
WEEK 6	Tuesday, October 10, 2017	Ch 3 quiz, Ch 3 Lab	<i>Ch 3 - #6, 14, 28, 36, 56</i>	
	Thursday, October 12, 2017	Ch 4 Notes		<u>Ch 3 hw due</u>
WEEK 7	Tuesday, October 17, 2017	Ch 4 quiz Ch 4 - Equilibrium lab	<i>Ch 4 - #1, 16, 20, 26, 44</i>	
	Thursday, October 19, 2017	Ch 5 - Trusses and frames	Ch 5 - #2, (#12 find forces in BC and DE only by method of sections), #18, (#35 find forces in AB by method of joints and GF by method of sections only) - due EOC	<u>Ch 4 homework due</u>
WEEK 8	Tuesday, October 24, 2017	Ch 5 quiz A Ch 5 - Trusses and Frames		
	Thursday, October 26, 2017	No Class		
WEEK 9	Tuesday, October 31, 2017	Ch 5 quiz B		<u>CH 5 HOMEWORK DUE EOC</u>
	Thursday, November 02, 2017	Review Ch 3, 4, 5		
WEEK 10	Tuesday, November 07, 2017	Test 2		
	Thursday, November 09, 2017	CH 6 NOTES	<i>Ch 6 - #4, 9, 32</i>	
WEEK 11	Tuesday, November 14, 2017	Ch 6 quiz Friction lab		
	Thursday, November 16, 2017	Ch 13 Notes	<i>Ch 13 - #16, 20, (40 is a bonus problem)</i>	<u>Ch 6 hw Due</u>
WEEK 12	Tuesday, November 21, 2017	Ch 13 quiz		
	Thursday, November 23, 2017	No Class - Break		

WEEK 13	Tuesday, November 28, 2017	Ch 8 Notes	<i>Ch 8 - #10b,</i>	<u>Ch 13 hw due</u>
	Thursday, November 30, 2017	Ch 8 quiz		<u>Ch 8 hw due EOC</u>
WEEK 14	Tuesday, December 05, 2017	Review Ch 6, 8, 13		
	Thursday, December 07, 2017	Test 3 Final		
WEEK 15	Tuesday, December 12, 2017	Optional Exam		
	Thursday, December 14, 2017			
	Friday, December 15, 2017	Graduation		
	All quizzes and homework are due at the beginning of class unless noted end of class (EOC)			
	Schedule is subject to change at instructor discretion.			