

ESC 201 (Section 3) – STATICS – (Fall 2020)

Course Information

- Class Hours: **Remote Delivery – 9:10 AM to 10:00 AM on Monday, Wednesday, and Friday**
- Instructor: Kai Jongho Kwon, PhD, PE (Office: FH 242)
- Email: j.kwon3@csuohio.edu
- Office Hours: Tuesday and Thursday; 4:00 PM - 6:00 PM (Online only via email or Zoom meeting)

Course Delivery and Evaluation

- All course information will be posted on **Blackboard**; such as announcements, syllabus, lecture slides and online videos, assignments, exams, and grades. Students are expected to check Blackboard regularly.
- **Students will be able to participate in online lectures through invitation email from instructor.**
- **Lecture slides and videos** will be posted according to the course schedule provided in the next page.
- After the class hours, **each lecture video will be posted on Blackboard by 11:59 PM on the scheduled day**; that is, students must **watch the video on the scheduled day**.
- For the **attendance**, students must **click ‘Mark Reviewed’** button for each content in Blackboard.
- **Online office hours** are available with a prior appointment via email, then instructor will invite the student to Zoom meeting.
- **Homework and online exams** also will be posted on Blackboard with the detail instructions.
- Students may contact the instructor using the email tool on the left menu in Blackboard.
- The instructor will respond to email messages within 24 hours.

Textbook (Required)

- Engineering Mechanics: STATICS (*14th Edition*); R. C. Hibbeler (by Pearson)

Course Description

- Prerequisites: MTH 181, PHY 241 or 243. Mechanics of forces and force systems; static equilibrium, forces in structures and machines, friction, centroids, moments of inertia, radii of gyration, and virtual work.

Grading Distribution

- Attendance: 10% (28 lectures × 0.35%) *Online registration required; click ‘Mark Reviewed’*
- Homework: 18% (3 homework × 6%) *Not graded for late submission.*
- Exams: 72% (3 exams × 24%) *Available only in the scheduled exam hours.*

Grading Scale

A	94% – 100%	B+	87% – 89%	C+	75% – 79%	D	60% – 69%
A–	90% – 93%	B	83% – 86%	C	70% – 74%	F	0% – 59%
		B–	80% – 82%				

Course Schedule

- The course is designed to cover the following chapters in the textbook:

Chapter 1: General Principles	Chapter 6: Structural Analysis
Chapter 2: Force Vectors	Chapter 7: Internal Forces
Chapter 3: Equilibrium of a Particle	Chapter 8: Friction
Chapter 4: Force System Resultants	Chapter 9: Center of Gravity and Centroid
Chapter 5: Equilibrium of a Rigid Body	Chapter 10: Moments of Inertia

Week	Date	Topic
1	08/24 (Monday)	Lecture #00. Introduction
	08/26 (Wednesday)	Lecture #01. Chapter 1 (Sections 1.1-1.6)
	08/28 (Friday)	Lecture #02. Chapter 2 (Sections 2.1-2.4)
2	08/31 (Monday)	Lecture #03. Chapter 2 (Sections 2.5-2.6)
	09/02 (Wednesday)	Lecture #04. Chapter 2 (Sections 2.7-2.8)
	09/04 (Friday)	Lecture #05. Chapter 2 (Section 2.9)
3	09/07 (Monday)	Labor Day (No Class)
	09/09 (Wednesday)	Lecture #06. Chapter 3 (Sections 3.1-3.3)
	09/11 (Friday)	Lecture #07. Chapter 3 (Section 3.4)
4	09/14 (Monday)	Lecture #08. Chapter 4 (Sections 4.1-4.4)
	09/16 (Wednesday)	Lecture #09. Chapter 4 (Section 4.5)
	09/18 (Friday)	Lecture #10. Chapter 4 (Section 4.6)
5	09/21 (Monday)	Lecture #11. Chapter 4 (Sections 4.7-4.8)
	09/23 (Wednesday)	Lecture #12. Chapter 4 (Section 4.9)
	09/25 (Friday)	Review & Practice (Chapter 2)
6	09/28 (Monday)	Review & Practice (Chapter 3)
	09/30 (Wednesday)	Review & Practice (Chapter 4)
	10/02 (Friday)	Exam #1 (Chapters 2 to 4)
7	10/05 (Monday)	Lecture #13. Chapter 5 (Sections 5.1-5.2)
	10/07 (Wednesday)	Lecture #14. Chapter 5 (Sections 5.3-5.4)
	10/09 (Friday)	Lecture #15. Chapter 5 (Sections 5.5-5.7)
8	10/12 (Monday)	Lecture #16. Chapter 6 (Sections 6.1-6.3)
	10/14 (Wednesday)	Lecture #17. Chapter 6 (Section 6.4)
	10/16 (Friday)	Lecture #18. Chapter 6 (Section 6.6)
9	10/19 (Monday)	Lecture #19. Chapter 7 (Section 7.1)
	10/21 (Wednesday)	Lecture #20. Chapter 7 (Section 7.2)
	10/23 (Friday)	Lecture #21. Chapter 7 (Section 7.3)
10	10/26 (Monday)	Review & Practice (Chapter 5)
	10/28 (Wednesday)	Review & Practice (Chapter 6)
	10/30 (Friday)	Review & Practice (Chapter 7)
11	11/02 (Monday)	Review & Practice (Chapter 7) continued
	11/04 (Wednesday)	Exam #2 (Chapters 5 to 7)
	11/06 (Friday)	Lecture #22. Chapter 8 (Sections 8.1-8.2)
12	11/09 (Monday)	Lecture #23. Chapter 8 (Sections 8.3, 8.5)
	11/11 (Wednesday)	Veterans Day (No Class)
	11/13 (Friday)	Lecture #24. Chapter 9 (Section 9.1)
13	11/16 (Monday)	Lecture #25. Chapter 9 (Section 9.2)
	11/18 (Wednesday)	Lecture #26. Chapter 10 (Section 10.1)
	11/20 (Friday)	Lecture #27. Chapter 10 (Sections 10.2-10.4)
14	11/23 (Monday)	Lecture #28. Chapter 10 (Section 10.8)
	11/25 (Wednesday)	Review & Practice (Chapter 8)
	11/27 (Friday)	Thanksgiving Recess (No Class)
15	11/30 (Monday)	Review & Practice (Chapter 9)
	12/02 (Wednesday)	Review & Practice (Chapter 10)
	12/04 (Friday)	Exam #3 (Chapters 8 to 10)

Academic Misconduct

- Cheating or copying on any exam or assignment will give you a zero score and will be reported to the University. For details see the CSU policy on academic misconduct at <https://www.csuohio.edu/sites/default/files/3344-21-02.pdf>

Disability Accommodation

- Educational access is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Disability Services at (216) 687-2015. The office locates in Rhodes West 210. Accommodations need to be requested in advance and will not be granted retroactively.