

EGM 3503 Applied Mechanics

Spring 2021 [U01 and U02] Hybrid/HYFlex (Mode Q) and Remote Mode

LOGISTICS

Instructor: Dr. Leonel E. Lagos, PMP®
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Online Office Hours: Dr. Lagos: By appointment (via Zoom)
TA (Day/Time): Thursday 10 am – 12 pm (via Zoom)

Class Schedule/Location: **Wednesdays & Fridays** 8:00 am - 9:50 am (**Remote via Zoom**). In-class exams and some lectures/quizzes will be given in room EC1112 (a schedule is provided below)

Textbook: “*Engineering Mechanics: Statics and Dynamics*”, by R.C. Hibbeler, 14th edition, Pearson Prentice Hall, 2016. ISBN-10: 0-13-391542-5; ISBN-13: 978-0-13-391542-6.

Teacher Assistant: Kivash Ram – Kram001@fiu.edu

COURSE OBJECTIVES

1. Identify appropriate models (particle, rigid body or deformable body for systems)
2. Analyze systems in static equilibrium
3. Understand and mathematically describe relationship between motion and forces
4. Use different methods to solve problems, including energy and momentum methods

MAIN TOPICS

	Chapters
1. Statics	1-6 & 8-10
2. Kinematics of Particles, Force and Acceleration	12-13
3. Kinetics of Particles, Work, Energy, Impulse/Momentum	14-15
4. Kinematics of Rigid Bodies	16

COURSE GRADING

Course-Work Evaluation

6 Quizzes (combination of unannounced via Canvas & in-class scheduled quizzes)*	10%
Exam 1 (in-class) and Remote	30%
Exam 2 (in-class) and Remote	30%
Final Exam (in-class) and Remote	30%
TOTAL	100%

Grading Scale:

<u>GRADE</u>	<u>SCORE RANGE</u>	<u>GRADE</u>	<u>SCORE RANGE</u>
A	94 - 100	B-	77 - 79
A-	90 - 93	C+	73 - 76
B+	85 - 89	C	67 - 72
B	80 - 84	D	60 - 66

Grades below 60 are considered as an F

* one lowest quiz scores will be dropped

COURSE POLICIES:

Homework: Selected problems are assigned in class. It is recommended that student complete these problems by the next lecture period for which they are assigned. The instructor will not collect any of these problems for grading. Answers to selected homework problems are provided in the text, and detailed solutions for some problems related to the topic will be available on the website <http://web.eng.fiu.edu/leonel>

Hybrid/HYFlex/Remote Class Attendance:

For Spring 2021, two sections are available for this course: Hybrid/HYFlex (Mode Q) and Remote. Due to the Covid-19 pandemic, FIU has placed a limit on the number of students per classroom. The classroom assigned for Mode Q session is EC1112. This room currently has a maximum capacity of 24 students. Based on this restriction, the class will be divided into two groups (Group A and Group B). For students registered for Mode Q section, in-class exams and lectures/quizzes have been scheduled (see schedule below).

Zoom Online/Remote Class: Most of the lectures and unannounced quizzes will be given via Zoom and Canvas. Students will be expected to mute their microphone during all lectures. Since about 50 students are registered for this online course, it will be impossible to open the lecture for questions/interaction. Questions may be posted using the “chat” Zoom feature and the instructor will try to address as many questions at possible. If question (s) is not addressed during the lecture, please email question to the instructor immediately following the lecture.

Quizzes and Exams: Because of the nature of this semester’s EGM3503 course, there will be a combination of online (remote) and in-person quizzes and exams:

Quizzes: **Unannounced quizzes** will be given during regular Zoom class times. Announced In-class quizzes will be given at the end of the class during dates/times indicated below. Students registered in remote session will be given quizzes via Canvas. In-class quizzes have also been scheduled as shown below. **No make-up quiz will be granted for any excuse.**

Exams: Three in-class exams will be given to students registered in Hybrid/HYFlex course. Online (remote) exams via Canvas will be given to students registered in remote session. Excusable absence from the exams is accepted **only if** the student informs the professor **before** the event such as illness and non-reschedulable prior appointment, or after the event such as last-minute medical or other emergencies, within a reasonable time frame and with a **valid documentary proof** shown (e.g., medical memo from doctor, letter from employer, etc.). Under this condition, a make-up test will be honored. **In all cases, academic honesty is expected.**

In-Class Scheduled Exam and Quizzes: The following in-class exam and quizzes will be given:

Group A: Exam 1 (02/10/21), Exam 2 (03/17/21), Final Exam (04/23/21)

Group B: Exam 1 (02/12/21), Exam 2 (03/19/21), Final Exam (04/23/21)

Group A: Lectures/Quiz 5 (03/31/21) and Lecture/Quiz 6 (04/14/21)

Group B: Lectures/Quiz 5 (04/02/21) and Lecture/Quiz 6 (04/16/21)

Learning Strategy: Simply reading the solutions is absolutely the worst strategy for this course.

You need to practice as much as possible.

Dishonesty: Any form of dishonesty during the semester will result in a final grade of “F” for the course and a recommendation for expulsions to the Provost. No exceptions. Please avoid dishonesty or any other form of misconduct. If you are having personal problems, come and talk to me.

This syllabus is subject to change based on the evolving Covid-19 situation. Any deviations to the syllabus will be announced in class and new syllabus will be provided to the students.