

## MANE 4170 Machine Dynamics Syllabus Spring 2020 ONLINE

**Tentative Online Syllabus Modifications (adjustments will be made as needed):**

### Schedule:

Week	Lecture	Date	Topic/Event	Due
10			<i>No class - extended spring break</i>	
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11	15	3/24	Constrained Problems	
	16	3/27	Mass Distribution, CM, Linear Momentum (post project)	HW3
12	17	3/31	Angular Momentum	
		4/3	Quiz 2	
13	18	4/7	Time derivative of angular momentum	
	19	4/10	Newtons-Euler equations	
14	20	4/14	Newton-Euler Equations & Solving ODEs	HW4
	21	4/17	Mass matrix and Solving ODEs	
15	22	4/21	Introduction to Energy methods	
	23	4/24	Course Review	HW5
16		4/28	Quiz 3	Project

### Lecture Material:

- Available Online in PDF and Video (OneNote screen capture with Audio)
- Will be posted at least one class in advance
- **Students are required to review all material before live lectures**

### Live Lectures (discussion/open office hours):

- **Tuesday/Friday 2PM EST (to 4PM EST if needed)**
- Will be recorded and posted
- WebEx links will be provided in LMS for the lectures
- Students:
  - Do not need a webcam (and please don't use video even if you do have it)
  - Ask questions via the chat feature. I will initiate audio if I need clarification for questions and relay this to the rest of the students
- Instructor:
  - display OneNote screen capture to answer student questions
- In-class attendance or in-class Exercises (will be posted to LMS) will be recorded during this time

### Homework:

- A homework template word document will be posted on Blackboard
- Students must copy/past their solutions in this word template and upload ONLY the word document. This must include all your work (the same content you would have normally submitted), but placed in the correct areas of the template.

**Exams:**

- An exam template word document will be posted on Blackboard, and submitted just like the homework.
- Students must copy/past their solutions in this word template and upload ONLY the word document
- Will be available the day of the exam at 2PM and there will be 2.5 hours available to submit (30 minutes to accommodate cut and paste of answers and submission)

**Office Hours:** Live Lectures Tues./Fri. 2PM EST (to 4PM EST if needed) via WebEx

**TA Office Hours:** Monday 4-5:30, Thursday 5-6 EST via WebEx

**Notes:**

Since primary lecture material is available for recording and everyone can attend the “live class” for discussion these live lectures also serve as open office hours. For this reason they serve as the primary office and discussion hours for class. Only 2 of these sessions are offered as of right now to limit the number of recorded sessions to make it easier for students to review the material. Since all students will have access to this this should be adequate to answer all questions.

**Questions?**

Please contact me.