

**ME104: Engineering Mechanics II**  
**Mondays, Wednesdays, and Fridays from 1:00pm–2:00pm in**  
**105 North Gate**

**Instructor:**

Oliver M. O'Reilly, 5131 Etcheverry Hall, phone: 642-0877 and email: oreilly@berkeley.edu.

To help facilitate a prompt response, please use ME104 in the subject line for all emails pertaining to ME104.

**Graduate Student Instructors (GSI):**

The GSI for the course are Emily Lindberg (emily\_lindberg@berkeley.edu) and Erden Yidizdag (yildizdag@berkeley.edu). Their office hours will be held in 136 Hesse Hall.

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**Office Hours:** Updated: January 20, 2018

Prof. O'Reilly's office hours are held in 5131 Etcheverry Hall and the GSI's office hours are held in 136 Hesse Hall. The schedule of office hours is

- o Mondays: Emily Lindberg holds office hours from 9:00am-10:15am and Prof. O'Reilly holds office hours from 11:15am-12:30pm.
- o Tuesdays: Emily Lindberg holds office hours from 3:45pm-5:00pm
- o Wednesdays: Prof. O'Reilly holds office hours from 11:15am-12:30pm.
- o Thursdays: Emily Lindberg holds office hours from 3:45pm-5:00pm
- o Fridays: Erden Yidizdag holds office hours from 11:15am-1:00pm.

You can also email the GSIs to set up an appointment.

**Discussion Sessions:**

Discussion sessions will be held on

S 101 DIS: Tuesdays 1:00pm–2:00pm in 101 Moffitt Library (Emily Lindberg).

S 102 DIS: Thursdays 2:00pm–3:00pm in 3108 Etcheverry Hall (Erden Yidizdag).

**Grading:**

The course grade will be based on the following components:

Midterm Examination No. 1: <b>Monday 2/26/2018 from 6:15pm–7:15pm in TBD</b>	20%
Midterm Examination No. 2: Monday 4/9/2018 from 6:15pm–7:15pm in 100 GPB and 1 Leconte Hall	25%
Homework:	10%
End of Semester Evaluation:	5%
Final Examination:	40%

In accordance with departmental guidelines, the mean GPA for the course will be  $\approx 2.9$ .

If a student is found guilty of committing **academic misconduct**, such as cheating and plagiarism, then the student will be reported to the **Center for Student Conduct** and will receive a grade of F for the course.

**Homework:**

Homework problems will be assigned each week and are due on the Friday of the following week by

1:00pm for electronic submission of solutions to e-problems &  
1:00pm for written solutions in the drop-off box on **the 1st floor of Etcheverry Hall**.

Far more is expected for the written solutions than is specified in Meriam, Kraige, & Bolton and you should look at the **Homework Assignments File** that are posted weekly on **bcourses**. Your written homework solutions will be graded *primarily* on method and presentation. Late homeworks or homeworks which are deemed illegible will be returned ungraded and no credit will be given to the student. Solutions to the homework will be posted on **bcourses**.

**Text, Reader and Supplemental Material:**

All of the lectures will be taken from my book

O. M. O'Reilly, *Engineering Dynamics: A Primer*, Second Edition  
Springer-Verlag, New York, 2010.

The electronic version of this text is available for free [here](#). Homework problems, both written and electronic, *only* will be assigned from

You will need to purchase access to the electronic version of Meriam, Kraige, & Bolton at [Wileyplus](#) in order to be able to submit homework problems.

Week	Topic	Sections from Meriam, Kraige, & Bolton	Homework Problems E: electronic and W: written Due date in <b>red</b>
1	Kinematics of Particles	Sections 1/1–1/7 Sections 2/1–2/3	<b>(1/26/18)</b> E: 2/9, 2/14, 2/31 & 2/35. W: 2/36, 2/88, 2/95 & 2/96.
2	Kinematics of Particles	Sections 2/4–2/7	<b>(2/2/18)</b> E: 2/102, 2/111, 2/131 & 2/147. W: 2/122, 2/123 & 2/128.
3	Kinematics of Particles Kinetics of Particles	Sections 2/8–2/9 Sections 3/1–3/4	<b>(2/9/18)</b> E: 2/114, 2/169, & 3/7. W: 2/190, 2/205, 2/215, & 3/39.
4	Kinetics of Particles	Section 3/5	<b>(2/16/18)</b> E: 3/47, 3/48 & 3/52. W: 3/50, 3/80, 3/85 & 3/88.
	<b>FIRST MIDTERM EXAM</b>	Monday 2/26/2018	6:15pm–7:15pm in TBD
5	Work & Energy Methods	Sections 3/6 & 3/7	<b>(2/23/18)</b> E: 3/97, 3/103, 3/104 & 3/143. W: 3/100, 3/106 & 3/140.
6	Impulse & Momentum	Sections 3/8 & 3/9	<b>(3/2/18)</b> E: 3/175, 3/177, 3/194, & 3/201. W: 3/195, 3/198 & 3/203.
7	Angular Momentum & Impact	Sections 3/10–3/12	<b>(3/9/18)</b> E: 3/217, 3/231, 3/246, & 3/248. W: 3/216, 3/230, 3/237, & 3/260.
8	Systems of Particles	Sections 4/1–4/5	<b>(3/16/18)</b> E: 4/2, 4/9, 4/11, 4/19, & 4/27. W: 4/15, 4/29, & 4/33.
9	Kinematics of Rigid Bodies	Sections 5/1–5/4	<b>(3/23/16)</b> E: 5/15, 5/22, 5/61 & 5/68. W: 5/6, 5/7, 5/30, & 5/77.
	<b>SPRING BREAK</b>	Week of March 26	
10	Kinematics of Rigid Bodies	Sections 5/5–5/7	<b>(4/6/18)</b> E: 5/122, 5/125 & 5/127. W: 5/138, 5/139, 5/160 & 5/179.
	<b>SECOND MIDTERM EXAM</b>	Monday 4/9/2018	6:15pm–7:15pm in TBD
11	Moments of Inertia Dynamics of Rigid Bodies	Apps. A & B Sections 6/1–6/3	<b>(4/13/18)</b> E: B/57, B/63 & 6/4. W: B/33, B/54, 6/15, 6/17, & 6/25.
12	Dynamics of Rigid Bodies	Section 6/4	<b>(4/20/18)</b> E: 6/34, 6/42 & 6/46. W: 6/36, 6/58, & 6/60.
13	Dynamics of Rigid Bodies	Sections 6/5–6/6	<b>(4/27/18)</b> E: 6/77, 6/78, 6/111 & 6/125. W: 6/79, 6/86, & 6/227.
14	Dynamics of Rigid Bodies	Section 6/8	<b>(5/4/18)</b> E: 6/168, 6/181, 6/217, & 6/225. W: 6/175, 6/178, 6/183 & 6/191.
15	RRR Week	Review Sessions for Final Exam	
	<b>FINAL EXAM</b>	Week of May 7	????m–????m Room TBD