

ME104: Engineering Mechanics II
Mondays, Wednesdays, and Fridays from 11:00am–12:00pm in
277 Cory Hall

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 GSIs for the course are Alyssa Novelia (a.novelia@berkeley.edu) and Xuance Zhou (xuance.zhou@berkeley.edu). Their office hours will be held in 136 Hesse Hall.

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Office Hours: Updated: December 10, 2015

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

- o Mondays: Prof. O'Reilly holds office hours from 10:00am–11:00am
- o Tuesdays: Alyssa Novelia holds office hours from 4:00pm–5:00pm.
- o Wednesdays: Xuance Zhou holds office hours from 9:00am–10am and Prof. O'Reilly holds office hours from 1:00pm–2:00pm.
- o Thursdays: Alyssa Novelia holds office hours from 4:00pm–5:00pm.
- o Fridays: Xuance Zhou holds office hours from 9:00am–11:00am.

You can also email either GSI to set up an appointment.

Discussion Sessions:

Discussion sessions will be held on

- S 101 DIS: Tuesdays 5:00pm–6:00pm in 3108 Etcheverry Hall (Alyssa Novelia).
- S 102 DIS: Thursdays 5:00pm–6:00pm in 3107 Etcheverry Hall (Alyssa Novelia).
- S 103 DIS: Mondays 4:00pm–5:00pm in 3113 Etcheverry Hall (Xuance Zhou)

Grading:

The course grade will be based on the following components:

Midterm Examination No. 1: Monday 2/23/2015 from 6:00pm–7:00pm in 145 Dwinelle Hall	20%
Midterm Examination No. 2: Monday 4/6/2015 from 6:00pm–7:00pm in 145 Dwinelle Hall	25%
Homework:	15%
Final Examination:	40%

In accordance with departmental guidelines, the mean GPA for the course will be ≈ 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

11:00am for electronic submission of solutions to e-problems &
1:00pm for written solutions in the drop-off box on the 3rd floor of Etcheverry Hall.

More is expected for the written solutions than is specified in Meriam & Kraige 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

J. L. Meriam and L. G. Kraige, *Engineering Mechanics: Dynamics*,
Seventh Edition, Wiley, New York, 2012.

You will need to purchase access to the electronic version of Meriam & Kraige at **Wileyplus** in order to be able to submit homework problems.

Week	Topic	Sections from Meriam & Kraige	Homework Problems E: electronic and W: written Due date in red
1	Kinematics of Particles	Sections 1/1–1/7 Sections 2/1–2/3	(1/30/15) E: 2/9, 2/11, 2/13 & 2/44. W: 2/39, 2/84, 2/93 & 2/95.
2	Kinematics of Particles	Sections 2/4–2/7	(2/6/15) E: 2/100, 2/107, 2/133 & 2/143. W: 2/120, 2/116, 2/117 & 2/128.
3	Kinematics of Particles Kinetics of Particles	Sections 2/8–2/9 Sections 3/1–3/4	(2/13/15) E: 2/165, 2/167, & 3/5. W: 2/184, 2/199, 2/218, 2/232, 3/19 & 3/38.
4	Kinetics of Particles	Section 3/5	(2/20/15) E: 3/47, 3/57 & 3/65. W: 3/53, 3/67, 3/81 & 3/85.
	FIRST MIDTERM EXAM	Monday 2/23/2015	6:00pm–7:00pm in 145 Dwinelle Hall
5	Work & Energy Methods	Sections 3/6 & 3/7	(2/27/15) E: 3/98, 3/106, 3/119 & 3/148. W: 3/100, 3/109, 3/129, 3/141 & 3/142.
6	Impulse & Momentum	Sections 3/8 & 3/9	(3/6/15) E: 3/173, 3/176 & 3/207. W: 3/193, 3/199, 3/209 & 3/211.
7	Angular Momentum & Impact	Sections 3/10–3/12	(3/13/15) E: 3/216, 3/222, 3/239 & 3/243. W: 3/219, 3/232, 3/237, 3/256 & 3/264.
8	Systems of Particles	Sections 4/1–4/5	(3/20/15) E: 4/11, 4/17 & 4/27. W: 4/5, 4/29, 4/100 & 4/106.
	SPRING BREAK		
9	Kinematics of Rigid Bodies	Sections 5/1–5/4	(4/3/15) E: 5/6, 5/10, 5/59 & 5/70. W: 5/7, 5/29, 5/64, 5/76 & 5/89.
	SECOND MIDTERM EXAM	Monday 4/6/2015	6:00pm–7:00pm in 145 Dwinelle Hall
10	Kinematics of Rigid Bodies	Sections 5/5–5/7	(4/10/15) E: 5/121, 5/126 & 5/130. W: 5/144, 5/162 & 5/176.
11	Moments of Inertia Dynamics of Rigid Bodies	Apps. A & B Sections 6/1–6/3	(4/17/15) E: B/57, B/59 & 6/15. W: B/36, B/44, B/63, 6/12 & 6/26.
12	Dynamics of Rigid Bodies	Section 6/4	(4/24/15) E: 6/33, 6/34 & 6/39. W: 6/44, 6/55, 6/60 & 6/61.
13	Dynamics of Rigid Bodies	Sections 6/5–6/6	(5/1/15) E: 6/73, 6/82, 6/109 & 6/122. W: 6/78, 6/79, 6/83, 6/118 & 6/133.
14	Dynamics of Rigid Bodies	Section 6/8	(5/8/15) E: 6/167, 6/179 & 6/216. W: 6/174, 6/177, 6/197 & 6/217.
15	RRR Week	Review Sessions for Final	
	FINAL EXAM	Tuesday, May 12, 2015	7:00pm–10:00pm Room TBD