

UNIVERSITY OF SOUTHERN CALIFORNIA
Sonny Astani Department of Civil and Environmental Engineering

FALL 2018

CE 541a DYNAMICS OF STRUCTURES

Instructor: Sami F. Masri
KAP 206A; Telephone: (213) 740-0602, 740-0603
email: *masri@usc.edu*

Office Hours: Monday: 1:30 - 3:30 p.m.; Thursday: 10:00-11:00 am

Teaching Assistant: *TBA* ; KAP 239, Telephone: 213-740-2036; email: ?
T.A. Office Hours: M,W: 1:00-3:00 p.m., (KAP 239)

Class No. 29779R, 29780D

Class time & Place: Monday 6:40 - 9:20 p.m.; Room: OHE 100C

Textbook: “Fundamentals of Vibrations,” by L. Meirovitch (Waveland Press), 2010
“Mathematica Navigator,” (3rd Edition) by Heikki Ruskeepaa, Academic Press, 2009

Prerequisite: (Graduate Standing)

Drop Dates: 7-SEP-2018 without “W”; 9-NOV-2018 with “W”

Final Exam: Monday, 10 December 2018, 7:00-9:00 p.m.

Grades: Homework/Midterm/Final: 20% / 30% / 50%

Remarks: Weekly assigned homework problems and bi-weekly computer projects

Late Homework or projects will not be accepted.
No make-up on any examinations.

COURSE OUTLINE

1. Single-Degree-of-Freedom Systems
2. Systems With Several Degrees-of-Freedom
3. Energy Methods
4. Elements of Analytical Dynamics
5. Vibration of Continuous Systems (Exact Methods)
6. Vibration of Continuous Systems (Approximate Methods)
7. Computational Techniques