

FLORIDA ATLANTIC UNIVERSITY™

Undergraduate Programs—NEW COURSE PROPOSAL¹

UUPC APPROVAL _____
 UFS APPROVAL _____
 SCNS SUBMITTAL _____
 CONFIRMED _____
 BANNER POSTED _____
 CATALOG _____

DEPARTMENT: OCEAN & MECHANICAL ENGINEERING

COLLEGE: ENGINEERING & COMPUTER SCIENCE

RECOMMENDED COURSE IDENTIFICATION:

PREFIX **EGN** COURSE NUMBER **4323** LAB CODE (L or C) _____

(TO OBTAIN A COURSE NUMBER, CONTACT RSHIMAN@FAU.EDU)

COMPLETE COURSE TITLE: **Vibration Synthesis and Analysis**

EFFECTIVE DATE

(first term course will be offered)

FALL 2015

CREDITS: **3**²

TEXTBOOK INFORMATION:

Mechanical Vibrations by Rao, Prentice Hall, 5th edition 2013, or equivalent text at the discretion of the instructor, and/or lecture notes

GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR **X**

PASS/FAIL _____

SATISFACTORY/UNSATISFACTORY _____

COURSE DESCRIPTION, NO MORE THAN THREE LINES:

Free and forced vibration of mechanical systems; damping; periodic and transient excitations; two degree of freedom, and continuous systems.

PREREQUISITES W/MINIMUM GRADE*:

1. **MAP 3305 Engineering Mathematics I or MAP 2302 Differential Equations**
2. **EGN 3321 – Dynamics**

COREQUISITES*:

REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)*:

*DEFAULT MINIMUM PASSING GRADE IS D-. PREREQUISITES, COREQUISITES AND REGISTRATION CONTROLS WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE: **PhD IN RELATED ENGINEERING DISCIPLINES**

WAC/GORDON RULE COURSE³

YES _____ NO **X**

WAC/Gordon Rule criteria must be indicated in syllabus. Guidelines: www.fau.edu/WAC

GENERAL EDUCATION REQUIREMENT (MARK X IN FRONT OF SELECTION):⁴

____ Written Communication ____ Society/Human Behavior
 ____ Mathematics/Quant. Reas. ____ Global Citizenship
 ____ Science/Natural World ____ Creative Expression

Must attach the appropriate General Education Course Approval Request:
www.fau.edu/deanugstudies/GeneralEdCourseApprovalRequests.php

Faculty contact, email and complete phone number:
 Dr. Edgar An, pan@fau.edu, 561-297-2792

Please consult and list departments that might be affected by the new course and attach comments.

Department of Ocean & Mechanical Engineering⁵

Approved by:

Department Chair: _____

College Curriculum Chair: _____

College Dean: _____

UUPC Chair: _____

Undergraduate Studies Dean: _____

UFS President: _____

Provost: _____

Date:

1. Syllabus must be attached; syllabus checklist recommended; see guidelines and checklist:
www.fau.edu/academic/registrar/UUPCinfo

2. Review Provost Memorandum:
Definition of a Credit Hour
www.fau.edu/provost/files/Definition_Credit_Hour_Memo_2012.pdf

3. WAC approval (attach if necessary)

4. Gen. Ed. approval (attach if necessary)

5. Consent of affected departments (attach if necessary)