# Undergraduate Programs—NEW COURSE PROPOSAL

**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  
**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  
- 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 with 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 Course:**

- Yes  
- No  
- X

WAC/Gordon Rule criteria must be indicated in syllabus. Guidelines: [www.fau.edu/WAC](http://www.fau.edu/WAC)

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

**General Education Requirement (Mark X in Front of Selection):**

- 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/deanmgstudies/GeneralEdCourseApprovalRequests.php](http://www.fau.edu/deanmgstudies/GeneralEdCourseApprovalRequests.php)

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

Department of Ocean & Mechanical Engineering

**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](http://www.fau.edu/academic/registrar/UUPCinfo)

2. Review Provost Memorandum: Definition of a Credit Hour  

3. WAC approval (attach if necessary)

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

5. Consent of affected departments (attach if necessary)

FAUnewCourseUG—Revised September 2012