

General Information

Course Bulletin Listing/Subject Area	Physics
Fiscal Unit/Academic Org	Physics - D0684
College/Academic Group	Arts And Sciences
Level/Career	Graduate, Undergraduate
Course Number/Catalog	5800
Course Title	Engineering Physics Design I
Transcript Abbreviation	EngPhys Design 1
Course Description	Presents fundamentals of engineering-physics design and leads to skills development relevant to a specific design proposal. Technical communication skills, both written and oral, are employed throughout.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Laboratory, Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites	Physics 2301 (263); a second writing class; senior standing in Engineering Physics.
Exclusions	

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	40.0801
Subsidy Level	Baccalaureate Course
Intended Rank	Senior

Quarters to Semesters

Quarters to Semesters	Modified or re-envisioned course that includes substantial parts of the content and learning goals of one or more quarter courses
-----------------------	---

List the current courses by number and title that are to be subsumed into proposed course
Physics 780.20 Special Topics

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

Course Details

Course goals or learning objectives/outcomes

- Students will learn methods needed to explain complex technical material to diverse audiences in clear and understandable ways.
- Students will learn how to make effective written and oral presentations.
- Students will learn the principles of engineering design as applied to a capstone experience.
- Students will research and design a complex system.
- Students will learn to work effectively in teams.
- Students will learn to develop management skills needed to oversee the design of complex engineering projects, with consideration to economic, environmental, sustainability, manufacturability, ethical, health and safety, social and political issues

Content Topic List

- Technical writing: reports, proposals, audience, manuals, etc
- Oral presentations: graphics, multimedia
- Teamwork: organization, brainstorming, meetings
- Design: the design process with realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability

Attachments

- EngPhys5800.pdf
(Syllabus. Owner: Hughes, Richard E)

Comments

- Made change to Course Title: "Engineering Physics Design I" *(by Hadad, Christopher Martin on 01/20/2012 10:23 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Hughes, Richard E	01/19/2012 09:17 AM	Submitted for Approval
Approved	Hughes, Richard E	01/19/2012 01:38 PM	Unit Approval
Approved	Hadad, Christopher Martin	01/20/2012 10:23 AM	College Approval
Pending Approval	Nolen, Dawn Jenkins, Mary Ellen Bigler Meyers, Catherine Anne Vankeerbergen, Bernadette Chantal Hogle, Danielle Nicole Hanlin, Deborah Kay	01/20/2012 10:23 AM	ASCCAO Approval