



PHYS&223 - Engineering Physics III

Document Type: Master Course Outline Supplemental

Proposal Type: Revision

Requester(s): Rick A Downs Elizabeth Schoene

College: South

Origination Approved: 06/11/2014 - 10:08 AM

BASIC INFORMATION

Requester(s): Rick A Downs
Elizabeth Schoene

College: South Seattle Community College

Division/Dept: Academic Programs

Dean: Laura Kingston

Peer Reviewer(s): Sean Rogers

COLLEGE SUPPLEMENTAL

Proposed Quarter of Implementation: Winter 2015

Request Provisional Exception

Class Capacity: 24

Modes of Delivery: (Check all that apply)

Fully On Campus

Fully Online

Hybrid

Other Explanation:

Select the Special Designation(s) this course will satisfy, if applicable:

(No Special Designations Selected)

Class Schedule Description:

Intro to waves and oscillations and the study of sound, and geometric and physical optics. Covers the dualistic particle-wave nature of microscopic phenomena as an introduction to modern physics. Lab included. Prereq: MATH& 152 with a 2.0 or higher and PHYS& 222 with a 2.0 or higher. Transfer class. Lab fee.

Student Learning Outcomes:

Computation

Use arithmetic and other basic mathematical operations as required by program of study

Apply quantitative skills for academic and career purposes

Critical Thinking and Problem-Solving

Think critically in evaluating information, solving problems, and making decisions

Technology

Select and use appropriate technological tools for academic and career tasks

Program Outcomes:

SLO #	Included in Course Objective Number	SSCC Student Learning Outcomes
SLO 1.1		Communication - Read and listen actively to learn and comm
SLO 1.2		Communication - Speak and write effectively for academic and purposes.
SLO 2.1	1, 5	Computation - Use arithmetic and other basic mathematical required by program of study.
SLO 2.2	1, 3, 4, 5	Computation - Apply quantitative skills for academic and car
SLO 3.1		Human Relations - Use social skills to work in groups effectiv
SLO 3.2		Human Relations – Have knowledge of the diverse cultures r our multicultural society.
SLO 4.1	1, 2, 3, 4, 5	Critical Thinking—Think critically in evaluating information, s problems, and making decisions.
SLO 5.1	1, 5	Technology - Select and use appropriate technological tools and career tasks.
SLO 6.1		Personal Responsibility – Uphold the highest standards of ac honesty and integrity.
SLO 6.2		Personal Responsibility – Respect the rights of others in the online, and in all other school activities.
SLO 6.3		Personal Responsibility – Attend class regularly, complete as time, and effectively participate in classroom and online disc work, and other class-related projects and activities.
SLO 6.4		Personal Responsibility – Abide by appropriate safety rules ir shops, and classrooms.
SLO 7.1		Information Literacy—Independently access, evaluate, and s information from a variety of appropriate sources.
SLO 7.2		Information Literacy – Have knowledge about legal and ethi related to the use of information
SLO 7.3		Information Literacy - Use information effectively and ethica specific purpose.

Course Outcomes / Objectives:

Upon successful completion of the course, students will be able to:

1. Solve problems involving oscillations, waves, and optics.
2. Identify assumptions when solving problems.

3. Represent information in multiple ways, such as graphical, pictorial, mathematical, etc.
 4. Explain the limitations of physical models (e.g. Newton's Laws, Hooke's Law, etc.) developed in the course sequence.
 5. Design experiments to test hypotheses.
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Explain the student demand for the course and potential enrollment:

This class is offered five times a year with an enrollment of about 70 students.

Explain why this course is being revised:

The contact hours were changed from 66 to 77.

What challenges, if any, do you foresee in offering this course:

None.

This is to certify that the above criteria have all been met and all statements are accurate to the best of my knowledge.

Faculty involved in originating this program:

Rick A Downs

Print Name

Rick A Downs

Signature

1/1/0001

Date

Elizabeth Schoene

Print Name

Elizabeth Schoene

Signature

1/1/0001

Date

Dean:

Laura Kingston

Print Name

Laura Kingston

Signature

5/30/2014

Date

Results of SSCC Curriculum Coordinating Council Findings

Participating Faculty Response and Remarks

Recommended for approval

Not recommended for approval

Chairman, Curriculum Coordinating Council:

Diane Schmidt

Print Name

Diane Schmidt

Signature

6/10/2014

Date

Vice President for Instruction:

Donna Miller-Parker

Print Name

Donna Miller-Parker

Signature

6/11/2014

Date