

Course Proposal: Modify

CID and Name:

Downing, Harry - 10031237

1. Course: **PHY 108 Intro to Engineering/Physics**

2. Term/Year: **Fall 2014**

3. CIP CODE/10 Digit Program Code: **4008010002**

4. Current Course Title: **Intro to Engineering/Physics**

Modified Course Title: **N/A**

5. What is the primary reason you are modifying this course:

Change the course description, the instruction type and the contact hours to more accurately portray the faculty member's teaching load. We wish to make this a three hour credit course with a zero credit laboratory. The lecture will meet two hours per week and the laboratory will also meet two hours per week.

6. Enter course description exactly as it now appears in the general/graduation bulletin.

(Max Characters: 1000)

Introduction to Engineering /Physics - Three semester hours, two hours lecture and two hours recitation per week. Introductory course on engineering /physics analysis with practice in analyzing and solving problems in physics and engineering. Includes use of computational devices and methods.

7. Enter modified course description exactly as it will appear in the general/graduation bulletin:

Introduction to Engineering /Physics - Three semester hours, two hours lecture and two hours laboratory per week. Introductory course on engineering /physics analysis with practice in analyzing and solving problems in physics and engineering. Includes use of computational devices and methods.

8. Current Prerequisites:

N/A

9. Modified Prerequisites:

N/A

10. College: **College of Science/Mathematics**

11. Department Teaching Course: **Physics & Astronomy**

12. Instruction Type: **Lecture**

13. Modified Credit Hours Maximum: **N/A**

Credit Hours Minimum: **N/A**

Maximum Hours counted toward degree: **N/A**

14. Maximum contact hours each week Fall Semester: **2**
15. May this course be taken more than one time each semester? **N/A**
16. Grade Type: **N/A**
17. Describe the place of the modified course within your current curriculum. (Will it be elective or required? Part of a major or a minor?)
NA
18. How does the modified course differ from similar courses being offered at Stephen F. Austin?
NA
19. Syllabus: Course Learning Goals
List course objectives; describe what students who complete the course will now or be able to do.
1. Demonstrate the ability to analyze and solve introductory physics and engineering problems.
2. Demonstrate the ability to communicate analysis of problems in a professional manner.
3. Exhibit the ability to work in teams effectively.
20. Syllabus: Course Outline
List the topics that the proposed course will cover and indicate the approximate proposed amount of time to be devoted to each, either by percent of course time or number of weeks. Please indicate which topics will be required in all sections of the course and which may vary.
N/A
21. Any Other Information.
NA

----Course Syllabus----

Must accurately reflect the course syllabus. (N/A is not acceptable response)

22. Program Learning Outcomes
List the program learning outcomes addressed in this course as identified in the course matrix for your degree program. If your department requires a listing of all Program Learning Outcomes (PLOs) on the syllabus, please identify those that are directly taught in this course. If this is a general education core curriculum course and no PLOs are taught in this course then insert the following statement under this heading:

This is a general education core curriculum course and no specific program learning outcomes for this major are addressed in this course.

There are no specific program learning outcomes for the physics program addressed in this course.

23. General Education Core Curriculum Objectives/Outcomes

List the Exemplary Educational Objectives (EEOs) for this course if the course is included in the general education core curriculum. If you have reworded the EEOs as outcomes for your course, please be sure that the original intent of the EEO is retained.

NA

24. Student Learning Outcomes

List all student learning outcomes (SLOs) for this course including the course specific student learning outcomes that support the PLOs above. In general, SLOs in a course that support the PLOs are specific and include the exact knowledge, skill or behavior taught in the course that supports the more global PLOs. For additional information on meaningful and measurable learning outcomes see the assessment resource page <http://www.sfasu.edu/assessment/index>

- 1. Demonstrate the ability to analyze and solve introductory physics and engineering problems.**
- 2. Demonstrate the ability to communicate analysis of problems in a professional manner.**
- 3. Exhibit the ability to work in teams effectively.**

25. Syllabus: Modified Textbook/Assigned Reading Materials for course:

Introduction to Physics for Physics and Engineering Students by Dr. Thomas Callaway

26. Course Requirements

Describe the major course requirements, assignments, examinations, projects.

Portfolio: A portfolio of all the problems presented in class will be required. The problems must be presented in standard format on engineering paper. The portfolio will count 100 points toward the final grade. Homework: Several problems will be selected for grading from each chapter. The total homework grade will be normalized and count a maximum of 100 points toward the final grade. Exams: There will be six timed exams this semester. The exam will consist of three or four problems similar to those worked for homework. Each test will be worth a maximum of 100 points toward the final grade. Students will have one week after the exam is returned to discuss any possible error in the grading. After that time no change will be made in the grade.

27. Course Calendar

Create a tentative timeline for the course. At a minimum, list the topics that the course will cover and indicate the approximate amount of time to be devoted to each, either by percent of course time or number of weeks. The calendar should provide information for the maximum number of weeks scheduled for the course.

Content Schedule:

DATE			SUBJECT	
AUG	26	M	INTRODUCTION	CH1
	28	W	AVERAGE SPEED	CH1
SEP	4	W	LINEAR MOTION CONSTANT	CH1
	9	M	FALLING OBJECTS	CH1
	11	W	EXAM 1	EXAM 1, CH1
	16	M	MOTION IN TWO DIMENSIONS	CH1
	18	W	RELATIVE MOTION IN TWO DIMENSIONS	CH1
	23	M	PROJECTILE MOTION	CH1
	25	W	EXAM 2	EXAM2, CH2
	30	M	CONCURRENT FORCES	CH2
OCT	2	W	NEWTON'S FIRST LAW & EQUILIBRIUM	CH2
	7	M	SOLVING EQUILIBRIUM PROBLEMS	CH2
	9	W	EXAM 3	EXAM3, CH3
	14	M	NEWTON'S SECOND LAW	CH3
	16	W	SOLVING FORCE & ACCELERATION	CH3
	21	M	SOLVING FORCE & ACCELERATION	CH3
	23	W	WORK	CH4
	28	M	ENERGY	CH4
	30	W	EXAM 4	EXAM4, CH4
NOV	4	M	MECHANICAL ENERGY	CH4
			CONSERVATION OF ENERGY IN	
	6	W	MECHANICAL SYSTEMS	CH4
	11	M	POWER	CH4
	13	W	MOMENTUM AND IMPULSE	CH5
	18	M	CONSERVATION OF MOMENTUM	CH5
	20	W	EXAM 5	EXAM5, CH 5
	25	M	ANGULAR MOTION IN A PLANE	CH6
DEC	2	M	ROTATIONAL KINEMATICS	CH6
	4	W	RIGID BODY MOTION	CH7
	9	M	EXAM 6	EXAM6

28. Grading Policy

Describe how the grade for the course is determined.

The final grade will be based upon the weighted average of all the grades obtained for the course requirements listed above. The following are the averages required to obtain the grade indicated: Average Grade 90-100 A, 80-89 B, 70-79 C, 60-69 D, 0-59 F

29. Attendance Policy

State your attendance policy.

If you have an unexcused absence 3 times or late 6 times, your final grade will be reduced one letter grade. If you have 4 unexcused absences, you will receive an "F" in the course. A written and signed notice is required for an excused absence within three class days of the absence.

30. Academic Integrity (A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the

components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

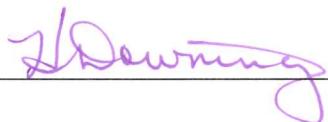
Please read the complete policy at
http://www.sfasu.edu/policies/academic_integrity.asp

31. Withheld Grades Semester Grades Policy (A-54)

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

32. Students with Disabilities

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to <http://www.sfasu.edu/disabilityservices>.

Dept. Chair  Date: 10-31-13

College Curriculum Chair _____ Date: _____

Dept. Dean _____ Date: _____

College Curriculum Dean _____ Date: _____

Course Proposal: Add

New Course

1. Please select which course you wish to Add: **PHY 108 L**

3. Effective Term/Year: **Fall 2014**

4. CIP CODE/10 Digit Program Code: **4008010002**

5. Short Course Title: **Intro to ENG/PHY Laboratory**

6. Prerequisites (Max Characters: 1000):
None

7. College: **College of Science/Mathematics**

8. Department Teaching Course: **Physics & Astronomy**

9. Instruction Type: **Laboratory**

10. Credit Hours Maximum: **0** Minimum: **0** Maximum Hours counted toward degree: **0**

11. Maximum contact hours each week fall semester: **2**

12. May this course be taken more than one time each semester? **NO**

13. Grade Type: **Not Graded/Zero Credit Lab etc.**

14. Will this course require additional library resources? **NO**

If YES, please explain:

15. Does this course replace a course on the current/previously listed inventory? **NO**

If YES list the prefix and number; If not applicable enter N/A: **N/A**

16. What is the primary reason you are proposing this course? Describe the need this new course will fill or the problem it is designed to solve.
(Max Characters: 1000)

We wish to change PHY 108 from a lecture/recitation course to a course that is lecture with an integrated laboratory. This change in instruction type and the contact hours will more accurately portray the faculty member's teaching load. We wish to make this a three hour credit course with a zero credit laboratory. The lecture will meet two hours per week and the laboratory will also meet two hours per week.

17. Describe the place of the proposed course within your current curriculum. (Will it be elective or required? Part of a major or a minor?) (Max Characters: 1000)

It will be integrated into PHY 108 lecture.

18. How does the proposed course differ from similar courses being offered at Stephen F. Austin? (Max Characters: 1000)

This is a zero credit lab that is integrated into the PHY 108 course. There is no other course that has this proposed content.

19. Syllabus: Course Learning Goals

List course objectives; describe what students who complete the course will now or be able to do. (Max Characters: 1000)

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- 2. Demonstrate the ability to communicate analysis of problems in a professional manner.**
- 3. Exhibit the ability to work in teams effectively.**

20. Any other Information: (Enter N/A if not applicable): N/A

----Course Syllabus----

Must accurately reflect the course syllabus. (N/A is not acceptable response)

21. Enter course description exactly as it will appear in the general/graduation bulletin:

This zero credit laboratory will not appear in the general bulletin.

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Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

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Dept. Chair *Z/Downing* Date: *10-31-13*

College Curriculum Chair _____ Date: _____

Dept. Dean _____ Date: _____

College Curriculum Dean _____ Date: _____