Course Proposal: Modify Course

This proposal will change the following elements of the course.

**Course Title**  **Course Outline** **Prerequisites**

**Instruction Type** **Credit Hours**

1. Course prefix and number: **PHY 118**

2. Effective Term/Year: **FALL 2014**

3. CIP CODE/10 digit program code:

4. Short Course Title: **Musical Acoustics**

Modified Short Course Title: **Acoustical Physics**

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

**To prepare for a resubmission to the core curriculum committee. The committee   
thought that the course target audience was not broad enough. We are changing   
the emphasis to make it of broader appeal.**

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

**Waves, resonance, frequency, pitch, waveform, hearing, intervals, scales,   
strings, air columns, rods, plates, vocal apparatus, instruments. Computation   
of lecture and laboratory grades into one grade; same grade recorded for both   
lecture and laboratory. Prerequisite: Ability to read music. Corequisite: PHY   
118L.**

Enter modified course description exactly as it will appear in the general/graduate bulletin?

**Waves, resonance, frequency, pitch, waveform, hearing, intervals, scales,   
strings, air columns, rods, plates, and room acoustics. Computation of lecture   
and laboratory grades into one grade; same grade recorded for both lecture and   
laboratory. Corequisite: PHY 118L.**

7. Current Prerequisites:

**Prerequisite: Ability to read music.**

Modified Course Prerequisites:

**Prerequisite: None**

8. College: **College of Science and Mathematics**

9. Department Teaching Course: **Physics and Astronomy**

10a. Instruction Type: **Lecture** **No Change**

10b. Credit Hours:

Current - Maximum: **3** Minimum: **3** Maximum Hours counted toward degree: **3**

Modified- Maximum: **2** Minimum: **2** Maximum Hours counted toward degree: **2**

11a. Second Instruction Type: **Lab** **No Change**

11b. Second Credit Hours: **No Change**

Current - Maximum: Minimum: Maximum Hours counted toward degree:

Modified- Maximum: Minimum: Maximum Hours counted toward degree:

12. Maximum contact hours each week fall semester: **No Change**

Lecture: Lab: Other:

13. May this course be taken more than one time each semester: **No**

14. Grade Type: **Regular: A-F** **No Change**

15. Describe the place of the modified course within your current curriculum. Will it be

elective or required? Part of a major or a minor? (Enter NA if no change is being made.)

**NA**

16. How does the modified course differ from similar courses being offered at Stephen F. Austin?

(Enter NA if no change is being made.)

**NA**

17. Syllabus: Course Learning Goals

List course objectives; describe what students who complete the course will know or be able to do.

(Enter NA if no change is being made.)

**Demonstrate basic familiarity with the physics of vibrating systems.**

**Describe the concepts of auditory perception.**

**Describe the basics of room acoustics.**

**Demonstrate skills developed in critical thinking, communication (written and visual),**

**empirical and quantitative analysis, and teamwork.**

18. Syllabus: Course Outline

List the topics that the modified 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.

(Enter NA if no change is being made.)

**The Properties of Waves - 25%**

**Vibrating Systems (one and two dimensional) - 25%**

**Driven Oscillations and Room Acoustics - 25%**

**Loudness, Pitch, Musical Scales, and Tuning Properties - 25%**

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

**A previously assigned term paper will be dropped to accommodate the change to a   
two hour lecture.**

20. Any Other Information

Dept. Chair \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

College Curriculum Chair \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

College Dean \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Grad Dean/Univ Curr Chair \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_