

**Course Evaluation Measures Menu**

**Course number: PHY 284**

**Course title: Oscillation and Waves**

**Campus location(s): Stanton**

**Effective semester: 202051**

**Core Course Performance Objectives**

1. Analyze simple harmonic motion (SHM) using mechanics concepts and techniques. (CCC 2, 6)
2. Analyze damped and forced oscillations in mechanical and electrical systems. (CCC 2, 6)
3. Analyze coupled oscillators and models of physical system using coupled oscillators. (CCC 2, 6)
4. Compare and contrast the mechanics of traveling and standing waves. (CCC 2, 6)
5. Differentiate interference and diffraction of waves. (CCC 2, 6)
6. Analyze the physical properties of dispersive waves. (CCC 2, 6)
7. Analyze waves and oscillation principles using experimental techniques. (CCC 1, 2, 3, 6)

**Summative Evaluations**

*Please note: All courses must have a* ***minimum******of four*** *summative evaluation measures, and those measures should include a variety of evaluation methods (e.g., test, oral presentation, group project).* ***Please list all summative evaluation measures.*** *In addition to these summative measures, a variety of formative exercises/quizzes/other assignments should be used to guide instruction and learning* *but do not need to be included on this template.*

*For each measure, please include a scope of the assignment: for example, if requiring a research paper, include the range of required number of words and number and types of sources; for a test, include the types and number of questions; for a presentation, include the minimum and maximum time, and so on.*

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| --- | --- |
| **Evaluation Measures:** Include each agreed upon measure and scope of that measure (see above). | **Which CCPO(s) does this evaluation measure?** |
| Test: 2 – 3 multi-part word problems. Calculations required, with written explanation of calculations or explanation of results as appropriate. | 1, 2 |
| Test: 2 – 3 multi-part word problems. Calculations required, with written explanation of calculations or explanation of results as appropriate. | 3, 4 |
| Test: 2 – 3 multi-part word problems. Calculations required, with written explanation of calculations or explanation of results as appropriate. | 5, 6 |
| Final Exam: 6 -8 multi-part word problems. Calculations required, with written explanation of calculations or explanation of results as appropriate. | 1- 6 |

**FINAL COURSE GRADE**

(Calculated using the following weighted average)

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| **Evaluation Measure** | **Percentage of final grade** |
| 3 Unit Tests \* (summative) (equally weighted) | 45% |
| Final Exam\*\* (summative) | 25% |
| Labs (summative) (equally weighted) | 20% |
| Other – Homework, Quiz, Projects (formative) | 10% |
| TOTAL | 100% |

(Electronic Signature Permitted)

**Submitted by (Collegewide Lead):** \_ Jyotsna Sau \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_June 1, 2018\_\_\_\_\_\_\_

**Approved by counterparts**  Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Kathy Vezmar (email, 06/01/2018)

John Kaminski (email, 05/31/2018)

Jeff Hall (email, 05/31/2018)

Darlene Winnington (05/30/2018)

Wayne Manrakhan (05/30/2018)

John Hilton (email, 05/31/2018)

Joe Pent (email 05/31/2018)

Lary Trincia (Kaminski’s email, 05/31/2018)

**Reviewed by Curriculum Committee**  Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_