

PHYS B. S. Major Portfolio Cover Sheet

Student name: _____
 Date admitted to major _____ Catalog Year: _____
 Intended Graduation Year and quarter: _____

Approved, June 2, 2008

Major Outcomes. The graduate will:	Artifact	Evaluation
1. apply the following concepts to analyze and interpret the physical behavior of systems of intermediate complexity: classical mechanics, modern physics, thermodynamics, optics, classical field theory, and quantum mechanics Include evidence for applying one of the concepts from an upper-level class or equivalent		
2. apply the following mathematical tools to analyze and interpret the physical behavior of systems of intermediate complexity: integral and differential calculus, vector mathematics, vector calculus, differential equations, approximation techniques, linear algebra and eigenvalues Include evidence for applying one of the tools from an upper-level class or equivalent		
3. communicate scientific ideas through both oral and written means to a scientific audience and/or the public. Include evidence for meeting this outcome.		
4. use physics or physics-related knowledge to contribute to their community. Include evidence for meeting this outcome.		
5. apply the following in analyzing physical systems:		
Experimental Techniques		
Computational Techniques		
6. recognize, understand and value the relationship between the CWU physics curriculum and current research in physics as published in a peer-reviewed journal.		
7. recognize, understand, value and be able to apply the process of science		
8. effectively utilize library and electronic information resources		

Explanation of the criteria

E – Exceeds standard means the artifact: 1) clearly addresses the outcome, 2) is exceptionally well presented, 3) has no errors or the errors have been corrected or reflected upon in a written reflection, and 4) provides overwhelming evidence that the student has met the outcome.

M – Meets standard means the artifact: 1) clearly addresses the outcome, 2) is well presented, 3) has no distracting errors, and 4) provides sufficient evidence that the student has met the outcome.

F – Fails standard means the artifact: 1) does not address the outcome OR 1) is not well presented and 2) has numerous errors.