Course Name and Number: **PhysV01**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_**10/8/09\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Faculty Participating in Meeting: \_Dr. Paul Swanson, Dr. Steve Quon, Dr. William Barber, Dale Synnes\_\_\_\_\_\_\_\_\_\_

Student Learning Outcome: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Student outcomes: At the end of this course, the student should be able to:** | **Assessment** |
| **Use technology to acquire and process information** | **Student use of data acquisition computers in laboratory exercises** |
| **Apply lessons from the past or learned knowledge to new situations** | **Inquiry instructional modality** |
| **Apply principles of scientific reasoning to solve problems** | **Question & answer****Working group discussion****Exams** |
| **Approach problems by choosing from variety of mathematical techniques** | **Question & answer****Working group discussion****Exams** |
| **Defend a logical hypothesis to explain observed phenomenon** | **Working group discussion** |
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| **Component** | **A / Excellent** | **B / Good** | **C / Satisfactory** | **D / Below Satisfactory** |
| **Use technology to acquire and process information** | **Student is a leader and initiator in a technology –driven lab group** | **Student regularly assists leader in a technology-driven lab group** | **Student does what is asked of him in lab group** | **Student is passive throughout lab session** |
| **Apply lessons from the past or learned knowledge to new situations** | **Student frequently (each week) applies past answers as a point of inquiry for new topics** | **Student occasionally (every 2 weeks) applies past answers as a point of inquiry for new topics** | **Student seldom applies past answers as a point of inquiry for new topics** | **Student does not apply past answers as a point of inquiry for new topics** |
| **Apply principles of scientific reasoning to solve problems** | **Student has mastered the principles of scientific reasoning to solve problems as evidenced by Q&A, discussions, and excellent exam scores (90% and above)** | **Student has facility in the principles of scientific reasoning to solve problems in most situations as evidenced by Q&A, discussions, and good exam scores (80 – 89%)** | **Student at times uses the principles of scientific reasoning to solve problems as evidenced by Q&A, discussions, and average exam scores****(65 – 80%)** | **Student does not show facility in the principles of scientific reasoning to solve problems as evidenced by Q&A, discussions, and poor exam scores****(< 65%)** |
| **Approach problems by choosing from variety of mathematical techniques** | **Student has full facility in using a variety of math techniques (algebra, geometry, and trigonometry) to address problem solving** **(90% and above)** | **Student frequently uses a variety of math techniques (algebra, geometry, and trigonometry) to address problem solving (80 – 89%)** | **Student on occasion uses a variety of math techniques (algebra, geometry, and trigonometry) to address problem solving (65 – 80%)** | **Student lacks confidence in using a variety of math techniques (algebra, geometry, and trigonometry) to address problem solving****(< 65%)** |
| Component | A / Excellent | B / Good | C / Satisfactory | D / Below Satisfactory |
| **Defend a logical hypothesis to explain observed phenomenon** | **Student is able to consistently (>90%) defend his/her logical hypothesis to explain observed phenomenon in working group discussion** | **Student is able to (80-89%) defend his/her logical hypothesis to explain observed phenomenon in working group discussion** | **Student shows some ability to (65-79%) defend his/her logical hypothesis to explain observed phenomenon in working group discussion** | **Student does not show ability to (<65%) defend his/her logical hypothesis to explain observed phenomenon in working group discussion** |
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