Course Syllabus - Spring 2012

Course Number: PHYSICS 2426A Course Title: Physics II Course Director: James Tison, Ph D email: jtison@parker.edu, tel: x7303 Trimester Credit Hours: 4 Total Contact Hours Per Trimester: 120

Office Hours: T-Th 1-2 PM

Lab Hours Per Week: 4

Lab Director/Instructors: Dr J Tison

Lab Contact Hours/Trimester: 30

COURSE DESCRIPTION: Physics is the most basic of the sciences. It deals with behavior and structure of matter. Physics II will deal with fluids and gas laws; Heat and temperature; Sound; Vibraions and Wave Motion; electricity, charges and fields

The student will meet for lecture 8 hours per week for 7-1/2 weeks and 4 hours each week for laboratory

GENERAL APPROACH TO TEACHING: Physics concepts will be presented and relevant mathematical formulations developed with a strong emphasis on problem solving. Participatory involvement in the problem solving is encouraged.

ESTIMATE OF STUDENT WORKLOAD: A minimum of 8-12 hours per week out of class study is recommended for a student to achieve a grade of B

LEARNING OUTCOMES: Upon completion of the Physics II lecture and Labs the student should be able to:

- 1. Student will gain knowledge and understanding of the principals and laws of physics as they apply to fluids, heat, sound and waves, and electricity.
- 2. Student will learn to apply concepts to solve theoretical problems and explain phenomena in the laboratory and the outside world.
- **3.** Gain an understanding and appreciation of how other fields of study incorporate the precepts of physics
- 4. Student will learn to perform laboratory experiments that illustrate important concepts
- 5. Student will learn how to apply various experimental and mathematical methodologies for presenting data and results.
- 6. Development of skills for analytical thinking that will be useful for problem solving in other fields

ASSESSMENT: Four exams (72%), Lab Report/Quizzes (16%), Homework (12%)

PREREQUISITES: Algebra and Trigonometry (co-requisite minimum)

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REQUIRED TEXTBOOKS: Physics: Principle and Applications: 6th edition by Douglas Giancoli

RECOMMENDED ADDITIONAL TEXTBOOKS: None

SUPPLIES: Scientific calculator

GRADING SYSTEM:

Evaluation is an integral part of the educational process and is used as an educational tool to help students identify problem areas, to recognize and reward achievement, and to identify students who are unable to meet the rigors of the curriculum. Final course grades and their interpretation are listed below:

Grade	Numerical Value	Grade Point Average	Interpretation of Academic Achievemen
А	89.5 - 100	4.0	Excellent
В	79.5 - 89.49	3.0	Above Average
С	69.5 - 79.49	2.0	Satisfactory
F	69.49 or Below	0.0	Unacceptable

This grading scale is strictly adhered to. There are NO exceptions.

Four exams (72%), Lab Report/Quizzes (16%), Homework (12%)

LABS: Six Laboratory Experiments will be performed and a group laboratory report will be produced.

OPEN LABS: N/A

90/90 RULE: N/A

EXTRA CREDIT: 1-2 additional problems on exams

A complete listing of all Academic policies is found on the https://my.parker.edu/ICS/Academics_-Coursework/Academics/Common Policies/:

Absences for Religious Holidays Academic Dishonesty Academic Promotion, Probation and Dismissal Policy Altering Grades on Exams Appeals Assistance and Accommodations Attendance Policy Audio/Video Taping Cell Phones and Electronic Devices in Class Classroom Behavior Communications Computer Usage Exam Review Examinations (Make up Exams/Lab Practicals) Excused Absences Final Examinations Grading System Late Instructors to Lecture/Lab Grade Appeals Process Missed Exam Policy Professional Decorum Special Needs Consideration Student Bereavement Policy

DISCLAIMER

The lecture outlines contained in the lecture booklet are NOT intended to represent the entire content of the course. A lecture outline is intended to be a guide to the lecture. The responsibility of the instructor is to follow the outline, expand the concepts and give explanation and illustrations to clarify content. The role of the student is to attend lecture and take notes over material presented by the lecturer that explains and illustrates the material listed in the outline. It is also the responsibility of the student to question the instructor if explanations and illustrations are not clearly presented or understood.

The instructors take no responsibility for the accuracy or completeness of old notes, quiz questions or exam questions that students may purchase, acquire from off of the internet or be given by previous students.

IMPORTANT NOTE:

The provisions contained in this syllabus do not constitute a binding contract between the student and the Parker University, College of Chiropractic. These provisions may be changed at any time and for any reason at the discretion of the Course Director. When it is necessary to make changes to this document, appropriate notice (at least one week, if at all possible) will be given to the student(s).