Physics 201-General Physics
Section 1M, 7:30-8:25 am MWF
Beauregard Hall 165

Dr. Chad Young
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Catalog Description: Phys 201. General Physics. 3-3-0. Prerequisite: Credit or registration in Math 165 and Phys 203. A technical study of mechanics, heat, and sound. Credit toward graduation will not be given for both Phys 101 and 201.

Prerequisite: Credit or registration in MATH 165 and PHYS 203.

http://goo.gl/OYovay

Course documents will periodically be placed on the Moodle site for download.
The course website will hold all public course materials:
http://www.nicholls.edu/phsc-faculty/physics/phys201/

Student Outcome Objectives:
- The student will understand the scientific method and be able to apply it in observing and explaining a physical system.
- The student will be able to understand and manipulate vector quantities; they will apply these skills in various physical problems.
- The student will be able to analyze motion in multiple dimensions and apply these skills to everyday occurrences.
- The student will use differential calculus to describe motion and solve problems of motion.
- The student will understand forces and how they affect bodies of mass in motion. She will apply Newton’s Laws to physical systems.
- The student will apply concepts of potential and kinetic energy and momentum in analyzing bodies of mass in motion and static.
- The student will understand how angular motion is similar to linear motion and will be able to understand similar analyses (momentum, forces, motion, etc.) in these scenarios of angular motion. Similarly, they will use calculus to describe angular motion.
- The student will demonstrate knowledge of the methods in describing oscillatory motion and how this is relevant to the study of waves. The student will use calculus to analyze the motion of waves.
- The student will apply the concept of equilibrium of forces and torques to analyze systems in static and dynamic situations.

Course Content:
Sections:
- Introduction, Measurement, Estimating Motion in 1 Dimension
- Vectors and 2-Dimensional Motion
- Laws of Motion
- Energy
- Momentum and Collisions
- Rotational Motion
- Elasticity, Equilibrium, and Dynamics
- Vibrations and Waves

Testing: All exams will be closed book. Data and constants will be provided. The following are the exam dates:
Exam #1: Friday, 4 September
Exam #2: Wednesday, 30 September
Exam #3: Wednesday, 21 October
Exam #4: Friday, 20 November
Final Exam: 8 am, Wednesday, 9 December

Homework: Each chapter has a homework assignment the student is required to complete. I will not collect the homework, but exams will be based heavily on homework questions.

Class Participation: Students will be able to receive a total and maximum of 50 points for class participation. These points will primarily come from clicker questions. To receive the maximum credit, the student must answer all of the questions and answer, at least, one-half of them correctly.

In case of classroom disturbances, 3 points will be deducted from the student’s class participation credit. The class participation credit will not have a negative value.

Grading:
There are a total of 600 points. Each exam counts 100 points, and the final exam is worth 150 points (550 points). Class participation credit comprises 50 points. The grading scale is percentage-based with A (90-100%), B (80-89%), C (70-79%), D (60-69%), and F (0-59%) grades being assigned at the end of the semester.

For example, a student might receive these grades:
Hour exams: 80, 80, 75, 60
Class participation: 42
Final Exam: 120
This student’s final grade would be the total of these points divided by 600, or 76.2% (C).

Make-up Policy: Make-ups for examinations will be determined by the instructor on a case-by-case basis. Excused absences include illness, university-sponsored activities, or other adverse situations; the student must have written documentation justifying their absence. For unexcused absences, I will deduct fifteen points from your exam grade for the first missed day and 3 points for every subsequent weekday until you contact me to arrange a make-up. For example, if you miss the exam on Tuesday and contact me on the following Monday, 24 points will be deducted from your exam grade.

Academic Honesty Policy: Dishonesty in taking examinations will follow the guidelines set in the “Code of Student Conduct” manual. Consequences for academic dishonesty span from a failing grade on the assignment to suspension from the university.

Attendance Policy: Attendance is essential and mandatory.

Drop Date: Friday, 23 October is the final date to receive an automatic “W” when dropping a course or resigning from Nicholls State University.

Clickers: You are required to purchase an i>clicker2 remote for in-class participation. i>clicker2 is a response system that allows you to respond to questions I pose during class, and you will be graded on that feedback and/or your in-class participation. You will register your clickers in class. If you have the older iClicker, you may also use it in the course.