GENERAL PHYSICS I*

PHY-1510 Sec. 01, MTWRF 11:25 am - 2:00 pm, 130 Congdon Hall

Instructor: Dr. Brad N. Barlow, 363 Congdon Hall, Email: bbarlow@highpoint.edu

Office Hours: TBD, 363 Congdon Hall (**Dr. Barlow**)
TBD, 129 Congdon Hall (**Damon Smith**, TA)

Overview: An algebra/trigonometry-based study of mechanics. Topics include Newton's laws of motion, properties of matter, momentum, and energy.

Course Website: `physics.highpoint.edu/~bbarlow/courses/phy1510.html`

WebAssign: We will be using WebAssign throughout the semester to manage homework assignments. Go to `http://www.webassign.net/` and click "I Have a Class Key" (right side of page). Enter **highpoint 2236 8072** into the three fields. After submitting our class key, click the button that says "Yes, this is my class." And then, if you haven't done it before, create an account in WebAssign. If you already have a WebAssign account, you can enter your account information and log in. *Do not create more than one account.* Please note that there is a separate WebAssign page for PHY-1511, the laboratory course that goes with PHY-1510.

Prerequisites: MTH 1210 (Pre-calculus) or higher

Important Dates:

Last day to drop without record or add a course	Jun 4
Exam #1	**Jun 9**
Last day to drop with a *W*	Jun 13
Exam #2	**Jun 16**
Exam #3	**Jun 23**
FINAL EXAM	**Jun 26th (1:30–4:30pm)**

Required Materials: (1) WebAssign account (see above). This account pays not only for access to WebAssign, which we will use throughout our course, but also for personal access to the electronic textbook we will be using. (2) You will need to have a scientific calculator. **Bring this with you to class and lab each and every day.**

Textbook: Andrew Duffy, *Essential Physics*, 1^{st} edition (available online through WebAssign)

Expectations / Daily Schedule: At the beginning of each class session, we will start with a short reading quiz based off of the previous day's reading assignments. The instructor will then give a short mini–lecture on the day's topics. This lecture will be proceeded by a series of in–class problems the class and instructor will work together and mini–experiments. Each day, homework problems will be assigned on WebAssign that must be completed that night, along with additional reading assignments preparing students for the next day's topics. Because of the accelerated nature of summer courses, it is imperative

*I reserve the right to change this syllabus based on feedback from you and what I determine is best for the course. If the syllabus is updated, I will place an electronic copy of the syllabus on the course website.

that students be sure to stay on top of course work and complete assignments as efficiently as possible. Missing one day's worth of material in the summer is like missing an entire week of classes during a regular semester. Students should expect to spend about 24 hours per week on this course, outside of our class time.

Attendance: Each day of a summer course is similar to **one week** of a normal, semester–long course. Consequently, the attendance policy must be strict in this course. You *may* be put on attendance probation if you miss a single class. If you miss two classes, I reserve the right to withdraw you from the course.

Late Policy/Missing Exams: There will be NO make-up exams (see Grading Policy). Late assignments will NOT be accepted. If you have a *legitimate* excuse to miss an exam, let me know one week **in advance** so we can make alternate arrangements. NO early exam scheduling.

Course Conduct & Class Etiquette: Out of courtesy and respect for your instructor and fellow classmates, please refrain from using cell phones (for any purpose) during class. Also, computers may only be used for class activities such as taking notes, investigating a topic, doing homework, collecting data, etc. Facebook, Twitter, and other social networking sites are not allowed during class. Please check texts, voicemail, email, and other communication during our break between lecture and lab.

Grade Policy: Your grade will be based on four regular exams plus one final exam, online homework assignments, an observing project, robotic telescope labs, and class participation. The percentage breakdown is as follows:

Three Exams	60%
Final Exam	25%
Homework	10%
Reading Quizzes	5%

Reading Quizzes: At the beginning of each class session, we will have a short reading quiz on the previous day's reading assignment.

Homework: These assignments will consist of **daily** homework quizzes administered through WebAssign. These assignments will each have equal weight; together, they account for 10% of the total course grade. Students may work individually or in groups and use any materials available to answer them (class notes, the textbook, Wikipedia, etc.). Late assignments will NEVER be accepted (work out any WebAssign issues ahead of time).

Exams: There will be three regular exams to be taken in–class. Exams will be multiple choice and will typically consist of two types of questions: (1) exercises; and (2) critical thinking/problem solving. The exercises will be based on low–level skills such as plug–and–chug calculations, knowledge of units, memorization of definitions, application of one equation or concept, proportional reasoning, etc. Critical thinking questions and problems will be based on higher-level skills such as multiple-step calculations, application of multiple concepts or equations, synthesis of concepts, and solving unfamiliar problems. I expect you to memorize some equations for tests, and I will give you an equation sheet with other equations. I will tell you ahead of time the equations I expect you to memorize and the equations that will be given with the test.

Final Exam: The final exam will be comprehensive and will be given on Thursday, June 26. Note that it is NOT at the regular class meeting time; instead, it's from 1:30-4:30 PM. You will not be allowed to reschedule the final exam (early or late). **No exceptions.**

Letter grades will be assigned based off of the following scale:

≥ 97	A+
93.0 - 96.99	A
90 - 92.99	A−
87 - 89.99	B+
83 - 86.99	B
80 - 82.99	B−
77 - 79.99	C+
72 - 76.99	C
70 - 71.99	C−
60 - 69.99	D
< 60	F

To estimate your course average at any point during the semester, before the final exam:

$$Grade = (0.769 \times E) + (0.077 \times RQ) + (0.385 \times HW)$$

where: HW = average of homework assignment, E = average of exam grades, RQ = average of reading quizzes. Please note that I reserve the right to decrease minimum scores if it is appropriate.

Extra Credit: No extra credit is currently planned; however, the instructor reserves the right to provide extra–credit assignments to the entire class when deemed necessary. *If* such an opportunity is provided, details will be announced during the lectures.

Honor Code: The High Point University Honor Code asserts that:

- Every student is honor-bound to refrain from conduct which is unbecoming of a High Point University student and which brings discredit to the student and/or to the University;
- Every student is honor-bound to refrain from collusion;
- Every student is honor-bound to refrain from plagiarism;
- Every student is honor-bound to confront a violation of the University Honor Code;
- Every student is encouraged to report a violation of the University Honor Code.

My obligation is to promote academic integrity and to enforce the University Honor Code. This obligation includes appropriately interpreting the Honor Code, promoting conditions favorable to academic integrity, and reporting violations of the Honor Code.

I encourage collaboration on homework. I encourage you to work together to solve problems. You may check your work with others. You may use solutions manuals, tutors, books, and any other resource on homework. However, you must know how to solve problems independently so that you can solve unfamiliar problems on exams.

You must do your own work on an exam. You may not look at another persons exam. You may not use any other resource except the equation sheet that is given to you and your calculator. You may not store programs or equations in your calculator, and you may not use data stored in your calculator on an exam. Calculators may only be used to input numerical values and perform calculations.

Violation of the honor code will be handled according to procedures outlined in the Faculty Handbook.

Accommodations: Students who require classroom accommodations due to a diagnosed disability must submit the appropriate documentation to Disability Support in the Office of Academic Development on the 4th floor of Smith Library. Students' needs for accommodations must be made at the beginning of the course. Accommodations are not retroactive. To request accommodation letters, please contact Rita Sullivant in Academic Services, 841-9061, rsulliva@highpoint.edu.