Course Title: **General Physics**

Year: **2011** Quarter: **Winter**

BCUSP: **144 A** SLN#: **10738**

Instructor: **Matt DePies**

Credits: **5**

Instructor Contact: depies@phys.washington.edu

Areas of Knowledge (VLPA, I&S, NW)

Office Hours: T Th 2:00-3:00pm

Time (MW, TTh etc) TTh 3:30-5:10 pm

Office Hours location: CUSP Office (UW1-343) shared office

Course meets in room **UW1-021**

Lab on Th: **CC1-380**

Tentative Weekly Course Schedule:

<>The schedule for BCUSP 144 is available on the course website.

This will be followed as closely as possible, and changes will be announced as necessary.

**Course Description:**

First and foremost I would like to say welcome to physics at the UW Bothell and I hope you enjoy many facets of this intellectual endeavor. I will do my best to make the quarter an enjoyable experience and appreciate in class participation and questions from students. Always feel free to ask questions, and if I can’t respond in class, please come to my office.

- BCUSP 144 is the second of a three-quarter sequence of algebra-based introductory physics courses. You should find this course challenging and stimulating, though perhaps it will not fit your preconceptions of what a university physics course should be. I hope that you also find it to be interesting and enjoyable. Have a great quarter!

- You are strongly encouraged to visit with me regularly during office hours, by appointment, by e-mail, etc. Get used to the idea of seeing the Professor outside of class during the quarter; it will pay off for you in many ways as the years go by! This will not happen unless YOU take the initiative, and now is a great time to start.

- Memorization of material is not particularly helpful in this class. Your goal in this class should be to understand how each new topic is related to all of the previous material, and how the concepts, rules and formulae can be applied to solve real-world problems. Never let anything go by if you do not understand. Generally, ask questions immediately. If it is inconvenient to interrupt, make a quick note to yourself and inquire later.

- My sincere hope is that you will come to view the world in a new way, as I have after learning physics. For the most part the hard work of succeeding in a physics course is up the student. One can think one has understood the material, but if one is unable to apply the knowledge, the subject was not truly learned!
General Comments

• Expect to study hard for this course. Physics is by no means an easy subject, and you must pay for the knowledge you gain with time and effort.

• For many the mathematics will be challenging. Don't worry too much, it is fairly typical in physics courses for the math requirements to be ahead of students' current placement. This is remedied by in-class work and homework.

• Be aware that many technical majors have a minimum grade requirement for a core of lower-division technical classes including the General Physics sequence. Therefore, each student is strongly urged to discuss departmental entry requirements with their undergraduate or departmental advisors, and plan their course loads accordingly. The course grading policy is detailed below.

Course Learning Goals:

At the end of this course, students will be able to:

1. Understand the nature of science and scientific theories
2. State how physics differs from other sciences, and how it is similar
3. Apply your knowledge of mechanics to everyday systems
4. Use mathematics to describe the motion of objects in space and in a gravitational field.
5. Know the three great mechanical conservation laws in the universe and describe them mathematically: energy, momentum, and angular momentum.

Required Texts, media, and e-reserves (http://library.uwb.edu/reserve.html):

• Course Texts: Walker, "Physics", 4th edition (UW custom Volume 2)
• Webassign.com homework will be due as announced, typically weekly.

Grading Criteria:
Concurrent enrollment in BCUSP 144 lecture and LAB BCUSP 147 lab is recommended; students will receive separate grades for lecture and lab. The final course grade is based on the midterms, the final exam, the HW, potential supplemental HW, and lecture exercises. The lecture instructor may adjust individual final grades by no more than 0.2 grade points (about 5% out of 4.0 possible) based on records from the lecture infrared response system and/or the supplemental homework related to the lecture. All percentages in the summary below are used to determine your raw grade, before this adjustment is applied.

• Midterm exams: There will be two closed-book midterm exams. Each midterm will emphasize recent material, but may include questions dealing with topics from far earlier in the course. The exams may include both multiple choice and essay-style questions. After correcting for different average scores on different midterms, the midterms will contribute 40% to your final raw grade. You are permitted to bring one 8.5"x11" page of notes (front only) to each midterm. Calculators are permitted. Cell phones, radios, etc. are not permitted. Laptop computers are not permitted, and the use of the text-storage capability now available on many calculators is not permitted.
Exams are to be your own work; you are **not** permitted to collaborate with any other person. The University reserves the right to ask for valid identification from any student during examinations.

- **Note that there will be no make-up exams.** Students with outside professional, service, or career commitments (i.e. military service, ROTC, professional conference presentation, NCAA sports, etc.) conflicting exactly with the exam dates must contact the instructor *early in the quarter* to establish alternate examination procedures. Students who miss an exam without making prior arrangements with the lecture instructor will drop that exam score. Except for extreme circumstances, a final grade of 0.0 may be assigned to any student who misses two midterm exams.

- **Final Exam:** A one or two-hour closed-book comprehensive final exam worth 25% of the final raw grade will take place on Tuesday, March from 3:30 to 5:10pm. This examination will cover material from the entire course. You are permitted to bring one 8.5"x11" page of notes (front and back) to the final exam. Calculators are permitted. Cell phones, radios, etc. are **not** permitted. Laptop computers are not permitted, and the use of the text-storage capability now available on many calculators is not permitted. The final exam is to be your own work; you are **not** permitted to collaborate with any other person. The Physics department reserves the right to ask for valid identification from any student during examinations. A final grade of 0.0 may be assigned to any student who does not take the final exam.

- **Exam Re-grades:** If you believe that the points on the examination were incorrectly totaled or if there is a gross error in the grading, you may return an exam for regrading. To do so, you must resubmit the examination no later than at the beginning of the lecture following the one in which the exams are returned. You must write a brief note on the front page or attached to the front page of the exam explaining the possible error in the grading. **Do not make *any* changes or marks on the other pages of the examination.** Portions of each examination are scanned or photocopied. You should be aware that any request for a regrade may result in a regrading of the entire exam. Therefore your total score may increase or decrease.

- **Labs and In-class Tutorials:** You must pass all of the labs in order to pass the lab class, which is graded as C/NC. Do not skip these important activities!

- **Homework:**
  1. Lecture homework will be assigned and collected weekly through the webassign.com system. The problems will be assigned directly from the course textbook.
  2. In-class assignments may be given and completed at home
  3. Some homework will be supplementary to regular homework and in-class work

- **Your responsibility:** Check your grades on the webassign.com system every week or two and report any problems to both the lecture instructor immediately. Lab, tutorial and exam grades should be recorded for your review within one week from the date that papers are submitted for grading. Tycho homework grades should be recorded within 24 hours of submission. Supplemental HW should be recorded every two weeks or so. Grading problems that are reported in a timely fashion will be investigated and, if action is warranted, corrected. The instructor may choose to ignore grading complaints that are not reported in a timely fashion.

For UWB grading policies and procedures, see [http://depts.washington.edu/grading/](http://depts.washington.edu/grading/)
CUSP Learning Goals (http://www.uwb.edu/cusp/learninggoals):

- Critical and Creative Inquiry
- Communication
- Quantitative and Qualitative Literacy
- Inclusive Practices
- Ethics and Social Responsibility

Attendance Policy: Since *participation is vital for a successful experience*, please *arrive on time for class*. Late arrivals interrupt our in-progress activities and discussions. If you must miss a class session, let the instructor know as soon as possible so that you can make up the work that you miss.

Technology in the Classroom: Since technology is profoundly linked to education, there will be many times when I ask that you employ different tools in the gathering and expression of knowledge. Since, however, education is also more than technology, please turn off all laptops, cell phones, iPods, etc before the start of class and I will let you know when we'll make use of them. (There are exceptions for students with specific note-taking and other needs.)

Incompletes: University rules state that “an incomplete is given only when the student has been in attendance and has done satisfactory work until within two weeks at the end of the quarter and has furnished proof satisfactory to the instructor that the work cannot be completed because of illness or other circumstances beyond the student’s control.” We *strongly* discourage incompletes.

Academic integrity: See [http://www.uwb.edu/studentservices/academicconduct](http://www.uwb.edu/studentservices/academicconduct) for crucial information regarding academic integrity. The library also has an extremely useful website with resources at [http://libguides.uwb.edu/ai](http://libguides.uwb.edu/ai). You are responsible for knowing what constitutes a violation of the University of Washington Student Code, and you will be held responsible for any such violations whether they were intentional or not. Plagiarism is one of the most common violations of academic integrity, so please pay attention to both the web information and when your instructor explains all of this in class.

Americans with Disabilities Act:
If you believe that you have a disability and would like academic accommodations, please contact Disability Support Services at 425.352.5307, 425.352.5303 TDD, 425.352.5455 FAX, or at dss@uwb.edu. [http://www.uwb.edu/studentservices/dss](http://www.uwb.edu/studentservices/dss)

H1N1 and Other Communicable Diseases Action Steps:
As part of the campus community’s shared responsibility for minimizing the possible spread of H1N1 virus and other diseases this year, it is critical that all students are familiar with the symptoms of H1N1 Flu described on the UW Bothell website at [http://www.uwb.edu/flu](http://www.uwb.edu/flu). Any student or instructor with flu-like symptoms is encouraged to stay at home until at least 24 hours after they no longer have a fever without the use of
fever-reducing medications. If you are sick and have an extended absence, please speak with me regarding alternative ways to maintain your progress in your courses. If I am sick and need to cancel class, I will post an announcement on Blackboard.

**Inclement Weather:**
Please check if the campus may be closed due to weather. Information about suspension of operations will be made public and available through the media. Students can learn of campus operations status from the website or by calling the Campus Information Hotline 425.352.3333. You may also sign up with an alert system that will contact you via email or text message if classes are canceled. For more information on the alert process, please see [http://www.uwb.edu/alert](http://www.uwb.edu/alert). Class activities will be rescheduled as needed.

**Student Support Services:**
Library: [http://library.uwb.edu/](http://library.uwb.edu/) 425-352-5340
Writing Center: [www.uwb.edu/WritingCenter/](http://www.uwb.edu/WritingCenter/) 425-352-5253
Quantitative Skills Center: [http://www.uwb.edu/qsc](http://www.uwb.edu/qsc) 425-352-3170
Student Success and Career Services: [http://www.uwb.edu/studentservices/success-services](http://www.uwb.edu/studentservices/success-services) 425-352-3776
Student Counseling Services: [http://www.uwb.edu/studentservices/counseling](http://www.uwb.edu/studentservices/counseling) 425-352-3183

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