

**PHY 1033C Discovering Physics
(Fall 2013: Section 3776, 3 credits)**

Tentative Syllabus (Version of 23 August 2013)

<http://www.phys.ufl.edu/~meisel/PHY1033C-Fall-2013.html>

Instructor:

Mark W. Meisel, Department of Physics, University of Florida

Office: NPB 2358, Tel: 392-8867, Fax: 392-3591

BEST Place to Find Me: NPB B133, Tel: 392-9147, Email: meisel@phys.ufl.edu

Office Hours: posted online, <http://www.phys.ufl.edu/~meisel/schedule.htm>, and by appointment.

Email Correspondence with Instructor:

Professor Meisel will attempt to respond, within 24 hours, to email (**from UF email accounts**) if the message contains the name of the student. **Email will only be sent to UF Email addresses.**

Prerequisite:

“Zero. Zip. Nada. Goose eggs.” *The Tale of Despereaux* by Kate DiCamillo, a famous graduate of UF. In other words, you need to have an imagination and a willingness to ask questions.

Meeting Times:

Tuesdays: 8th and 9th periods (3:00 pm – 4:55 pm); and Thursdays: 8th period (3:00 pm to 3:50 pm) in NPB 1002. Students are expected to attend the lab and lecture sessions.

Textbook:

The “official” textbook, which is required, is “Newton to Einstein: The trail of light” by Ralph Baierlein. The “official” UF Bookstore has this book for about \$57 (buy) and about \$30 (rent) [tax not included] as of August 2013. However, I was able to find used versions of this book, both in hardcover and paperback, available from online sources for about \$6 but tax and shipping are not included in this price. In fact, I secured one copy of each in this manner, for less than \$20 per copy. As far as I can tell, the content of the paperback and hardcover are the same, as there seems to be only one edition. I was surprised to note that the overall weight of each one is about the same, at least as I held them in my hand, due to the fact that the paperback is published on durable heavyweight paper. For my class, either one will be fine.

Posting:

Materials and information concerning the course, including important dates and an “*in vivo*” schedule will be posted on the Course Webpage, see <http://www.phys.ufl.edu/~meisel/PHY1033C-Fall-2013.html>.

Subject and Focus of the Course:

Following the trail of light from Newton to Einstein, this course is designed to provide you with an inside view of how the “unknown” becomes “known” or becomes “better understood”. The goal is to increase your critical thinking skills about issues facing science and technology in today’s world by providing a set of hands-on, eyes-on, brain-engaged experiences that complements the readings and discussions.

Attendance:

Attendance in class is definitely expected since material outside the textbook will be presented. You are responsible for all material covered in the text and in class. All of this material is relevant for any graded exercise, unless otherwise stated.

General Education:

This course is designated “P” for Physical Sciences Requirement of the General Education Requirement at the University of Florida. The significance of this designation and the associated details, including the Student Learning Outcomes (SLOs) and their connection to the Academic Learning Compacts (ALCs), are discussed at the official UF General Education Webpage, see <http://gened.aa.ufl.edu>.

Grading:

Essentially each class period will be graded on a scale of 5 points. In other words, generally speaking, Thursday classes are worth 5 points and Tuesday classes are worth 10 points, so 15 points are generally available each week. The weeks with exceptions are: Week 1, when the first class period is 5 points; Week 8, when there is a Mid-term Exam worth 50 points, and Week 15, when the Tuesday class period is dedicated to the Observing Exercise (worth 15 points), collected on the last day of classes (Tuesday of Week 16). In addition, there will be a Final Exam, which is scheduled by the registrar and which will cover all the material in the course, worth 100 points. In summary, there is 1 week of 5 points, 13 weeks of 15 points (13 X 15 points = 195 points), 1 week of a Mid-term worth 50 points, and a Final Exam worth 100 points, totaling 350 points available for the course. The regular Tuesday and Thursday class points will be collected in a number of ways, including lab book review, HITT exercises, and pop-quizzes. Some extra-credit points may be available, and these opportunities will be described during the course. The letter grade assignment based on percentage of points earned is given in the next paragraph and any potential adjustment of this scale will be discussed in class. Finally, the UF grading policies can be found at found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Summary of Points Available

Class Meetings	200 points	57%
Final Exam	100 points	29%
Mid-term Exam	50 points	14%

Total	350 points	100%

Final Course Grade Scale

A	85% - 100%
A-	80% - 84.999999%
B+	75% - 79.999999%
B	70% - 74.999999%
B-	65% - 69.999999%
C+	60% - 64.999999%
C	55% - 59.999999%
C-	50% - 54.999999%
D+	45% - 49.999999%
D	40% - 44.999999%
D-	35% - 39.999999%
E	0% - 34.999999%

Make-Up of Graded Material:

Only in the event of extraordinary circumstances will students be allowed to take a make-up graded material. The only way students will be allowed to take a make-up exercise is if they have a legitimate excuse, accompanied by some documentation from a medical doctor, an attorney, or a UF official. Notes from family members are not acceptable. When possible, the student should inform the Instructor in advance of absences from graded assignments.

Academic Honesty:

Each student is expected to generate graded work by an individual and original effort. It is understood that some students benefit from "group study". However, all quizzes, tests, and the final examination will be individual efforts, using only the materials authorized by the Instructor. Any violation of this policy will be treated according to UF policy (e.g. usually a zero grade is given on the assignment). Please review the University Policies on Academic Honesty, and helpful links are: <http://www.dso.ufl.edu/sccr/> and <http://www.dso.ufl.edu/studenthandbook/studentrights.php>. Note that the process is one that involves the faculty member and the students:

"In adopting this Honor Code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. A student-run Honor Court and faculty support are crucial to the success of the Honor Code. The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the Honor Code."

Accommodations and Advising:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. The Dean of Students Office maintains a webpage at <http://www.dso.ufl.edu/>.

Advising and Counseling:

The Department takes part in "UFTeach", a program designed to develop the next generation of Florida's math and science teachers. For more details see <http://ufteach.clas.ufl.edu>. Due to the nature of the environment at the university, it is not uncommon for students to experience stressful situations, and "study harder" sometimes does not seem to work. If you find yourself in this situation, you are encouraged to seek confidential counseling, see: <http://www.counseling.ufl.edu/cwc/>.

Incomplete Policy:

A grade of incomplete is typically given to students who endure a situation in which they are incapable of completing the coursework. The I-grade is not to be given to students who are simply dissatisfied with their performance in the course. If you find you are in a situation that might qualify you for an I-grade in this course and you want to pursue this potential option, then you must contact me immediately and be sure to have the necessary documentation from a medical doctor or an attorney. Again, letters from family members are not acceptable. A letter of understanding indicating when and how the incomplete grade will be made up will eventually be drafted and signed by the student and the Instructor. A PDF of the policy is posted at: <http://www.phys.ufl.edu/downloads/gradepolicy.pdf>.

Final Exam and Special Notes about the Syllabus:

Please note that the dates for all graded materials, except the Final Exam, are TENTATIVE. The schedule will be finalized during the course and will be announced in class and posted to the "in vivo" schedule, see <http://www.phys.ufl.edu/~meisel/PHY1033C-Fall-2013.html>. The Final Exam is NOT tentative and is: **Final Exam (Group 12A): Thursday, 12 December, 07:30 am to 09:30 am, NPB 1002, and the Final Exam covers material from the entire course.**

HITT Points:

During the class periods, the HITT System (Remote Response System) will be used to monitor the understanding of the topics being discussed. The HITT System may be used at any time during the class period. In some instances, the responses will not be graded as correct or incorrect, so the point is awarded for participation. For the other cases, the exercise will be graded in either a "2-1" (2 points for the correct response and 1 point for an incorrect response) or "5-2" (5 points for the correct response and 2 points for an incorrect response) formats. In most instances, the HITT exercises will be open book and "chat with a neighbor"; however, electronic devices linked to the web and calculators will NOT be permitted. The specific rules covering each exercise will be explained when the problem is presented.

HITT Remote Responder Required:

You need to have your own HITT remote transponder. Before purchasing a new one or borrowing an old one from a friend, please review the hardware requirements at: <http://www.phys.ufl.edu/~hitt/>.

HITT Registration Required:

You must correctly register your unit before Thursday, 29 August. The registration web-based site is at: <http://www.phys.ufl.edu/~hitt/>. **YOU MUST USE YOUR UF EMAIL ADDRESS!**

HITT Comments:

You are responsible for having an operational and appropriately registered device. Testing will occur during classes prior to Thursday, 29 August. On Thursday, 29 August, the recording of the points will begin.

Comments on Materials Allowed for Quizzes, Tests, and Examinations:

Calculators are permitted for this course, but they may not be an integral part of a device that links to the internet or any remote Wi-Fi system. A formula sheet will be provided as needed and will be the same for each student. For tests and the final exam, this sheet will be distributed.

Comments on Knowing Your Grades:

It is expected that graded material will be returned to each student at the start of the first class period after which it was generated. Students should NOT mark on the graded sheets. The material and rubric will be reviewed in lecture. After the review, if a student has any question about the grading of the work, it should be returned to the Instructor. In a timely manner, the student should meet with the professor to review the grading. If a student decides that the work is correctly graded, then the student may keep the graded work. At that point, the student yields any opportunity to debate how the work was graded. The student should keep the hardcopy until the end of the semester in case there is any dispute about the total number of points earned during the course. The E-Learning system is used to electronically post the grades, <https://lss.at.ufl.edu/>. If you have any questions about your points on any material or for the course, please contact the Instructor.

General Classroom Behavior:

The reading of newspapers, the working of puzzles, and the use of electronic devices such as cell phones, laptops, and tablets are not permitted unless approved for use to make classroom accommodations. Please mute your personal electronic device, and if you need to attend to an emergency, please quietly exit the classroom to handle the text message or phone call in the atrium.