

Phys 171L (Section 004) Syllabus

Philippe Binder – Spring of 2013

Contacting me:

Office hours: see the card outside my office, or by appointment. My office is STB 220. E-mail is pbinder@hawaii.edu, and my office phone is (97)4-7650 (dial only the last 5 digits from campus phones).

Special accommodations:

If you have a documented learning disability, let me know how I can help and I will do my best.

Guidelines for a successful report

Lab number and Experiment title. Example: Lab #3: Finding the Fountain of Youth

Your name (and also that of your partner, in parenthesis). Example:

Bob Stark (with Jim Lannister)

Objective: What is the main purpose of this experiment? (e.g., to estimate the value of a famous physical constant, to verify a certain formula or theory)

Procedure: Explain briefly and concisely what you *did*. Do not parrot the Manual, especially with warnings like “do not touch the live wire with wet fingers”, since that is not part of what you did. If you deviate significantly from Manual instructions, explain what you did instead and why.

Raw data: In nice tabulated form, with SI units. Try to keep this to one page. Use symbols consistently.

Calculations: If data need to be processed, show an example all the way through. ***Heed the instructions on significant figures.***

Graphs: should be well-proportioned with understandable scales, symbols and labels. Show error bars whenever you can. Explain how you fitted your points to a curve, if applicable.

Discussion: Present your main result(s) (for example, “The Fountain of Youth is 3.2 ± 0.1 m deep”). Perform statistical analysis if appropriate (it almost always is). Clearly state whether your data supports the hypothesis, or give the estimated value and standard deviation of the quantity you are measuring, and how these compare to “published” or “accepted” results. (“This depth is in statistical disagreement with Targaryen’s reported value of 4.0 ± 0.2 m”). If your results do not agree with published data, thoughtfully explain why (largest sources of errors, poor experimental design and ways to improve it, effects of room lights or earthquakes, etc.)

Notes:

Your raw data should exactly agree with those of your lab partner. Please keep Lab notebooks to document your actual data. However, the report should be entirely your own (you can get feedback from me before turning it in, but hopefully not right before it's due). Failure to follow either instruction could constitute fraud.

Neatness matters. Timeliness matters. Reports are due at the following Lab meeting, and at most one week after Lab for the final exercise. There will be a 25% deduction for 1 to 24 hours late, and 50% for 25 to 48. After that, you will need to re-do the lab in order to have your report graded.

Other class rules:

If you are more than 15 minutes late you will not be able to participate in that day's Lab. People who have persistent issues with this (another class very far away, mobility problems, etc.) can discuss the situation with me.

You can make up *one* lab with no valid excuse or explanation, and up to *two* more that have a valid excuse (documented illness, official participation in school events). Please try to discuss planned absences (sports team participation, a wedding in New England) with me in advance. Make-up dates will be announced.

If you fail to *turn in* more than 3 lab reports within 2 days of the due date (even if you showed up for the corresponding labs) you will get an "F" for the course.

You cannot turn in reports for labs you missed. Exceptionally you may be given permission to perform a Lab in a different section. This needs to be cleared with both instructors in advance and cannot be done on a regular basis.

About statistics:

Regardless of what your manual says, please use sample (not population) standard deviation. This is the appropriate quantity in this course.

Grading scale:

I will average your labs (0-10 scale), multiply by 10, and use the standard scale (90 or more = A or A-, 80-89 = B-, B or B+, etc.) If I adjust this scale it can only be in your favor.

Advising helps students complete their degree and major requirements. Students should consult with their advisor at least once a semester. Advising is a shared responsibility, but students have final responsibility for meeting degree requirements.

Any student with a documented disability who would like to request accommodations should contact the University Disability Services Office at 933-0816, 933-3334 (TTY), Campus Center 311, as early in the semester as possible.

Student Academic Expectations and Responsibilities

Develop an academic plan.

Outline your educational goals and objectives, keeping in mind the requirements of your planned degree. Use this to construct a realistic academic plan. In deciding on courses and academic load, carefully consider your level of preparation, as well as any extracurricular commitments and responsibilities.

Read and understand the syllabus for each course you are enrolled in.

The syllabus is more than a listing of course times and material. It also outlines what an engaged and responsible student can expect to learn; describes examination, grading, and student conduct policies; outlines the permitted use of electronic devices; and informs students how they may contact their professor for additional guidance.

Develop your own set of study skills, and use them regularly.

Learn what study techniques work for you personally. Plan adequate time for studying class material (a useful estimate is at least 3 hours of extracurricular work per lecture hour). Set aside extra time to complete big assignments, such as term papers or presentations. Expect to have material covered at a much faster pace than in high school. Additionally, expect that the pace and difficulty of material will increase as a student progresses from 100-level to 400-level courses.

Come to class prepared.

As a student, it is your responsibility to come prepared to each and every class. This includes completing reading, problem-solving or other assignments prior to the lecture. This also means coming to class mentally prepared, being awake and attentive, and taking useful notes.

Take full advantage of available academic resources.

*Attend office hours regularly and get to know your instructors. Frequent **the** Edwin H. Mookini Library and become familiar with all library services and resources such as reserve materials, article databases, and the extensive book collections (both print and e-books). Be aware of your academic performance throughout the semester, and should you need additional help, advising and tutoring services are available.*

Participate in your own education.

Become engaged in your own education. It is your responsibility to ask questions when you don't fully understand course material, and to seek additional help if needed.

Adhere to the UHH Student Conduct Code.

You have a responsibility to familiarize yourself with and adhere to the tenets of the UH Hilo Student Conduct Code. Violations of the Code (e.g. academic dishonesty, disruptive behavior, personal threats) are subject to disciplinary procedures that may include expulsion from the University.

Keep a healthy mind and body.

Excessive stress, fatigue, or unhealthful habits can interfere with your academic success. Be aware of your mental and physical state and how it impacts your performance in class. Counseling services are available, and take advantage of these services in a proactive manner should you be experiencing personal or academic difficulties.

Approved by Faculty Congress January, 2012

Approved by Interim Vice Chancellor for Academic Affairs February 2012