Physics 4000 and Physics 6000  
Spring 2010  
Syllabus

Course Logistics:

Class Time: Thursdays 4pm to 5pm  
Room 202 in the Physics Building

Instructor: Dr. Robin Shelton

Office Hours: By appointment  
Room 306A in the Physics Building

Format:

This course is designed to help students gather information from scientific colloquia. The course utilizes the Physics and Astronomy colloquium series presented by researchers in various subtopics of physics, astronomy, and related fields.

Our spring lineup of colloquia covers a vast array of topics, from the optical behavior of new materials to quantum computing. The current schedule can be found at http://www.physast.uga.edu/eventscol.html.

The colloquia are given between 4pm and 5pm on Thursdays in Room 202 (i.e. the large lecture hall) in the Physics Building. There will be cookies and coffee free of charge for you to enjoy before each colloquium. There is time set aside for you to talk with each speaker in a casual environment after his/her colloquium. We encourage you to ask the speakers about their research. In addition, since each of the speakers has been through graduate school and various research positions, you may also find them to be good sources of information, advice, and inspiration pertinent to your career path. If you would like me to introduce you to a speaker, I would be happy to do so.

Assignments:

The first assignment is to attend the colloquia. It is possible that, due to illness or scheduling conflicts, you might not be able to attend every single colloquium. For this reason, the required attendance is set at 3/4 (rounding up) of the total number of colloquia. So that we know who
attended and who did not, the department requires that you have one of the department’s profes-
sors sign a piece of paper verifying that you attended the colloquium from start to finish. If you
are working with a professor in the department, that professor is disqualified from verifying
your attendance. I would be happy to verify your attendance if you ask me at the colloquium.
After you have obtained a verification of attendance, please either give it to me or put it in
my department mailbox within 24 hours of the colloquium. The receptionist in the department
office can help you find my department mailbox.

The second task is to write an analysis of one of the colloquia. The analysis will answer
these questions:

1.) What was the main question being addressed by the research?
2.) What was the motivation for addressing this question/doing this research?
3.) What was the technique used and what was the logic used for answering the question?
4.) What was the answer to the question?

Sometimes scientists use a single laboratory set-up to answer several questions. In these cases,
they sometimes split their talks into sections, for example study A, study B, study C, and
study D. If you write about such a talk, you need only provide the analysis for 1 study, but
that analysis must be complete. The write-up is due before the midpoint of the semester.

Grading:

This course is graded on a Satisfactory/Unsatisfactory basis. If you do all of the above (at
a reasonable level), then you will receive a Satisfactory grade. Please do all of the above and
don’t try to skimp on the colloquia or the write-up.

Revisions:

The syllabus may be revised in the future.