Physics 494: Physics Seminar
Sonoma State University
Department of Physics and Astronomy
Fall 2012

General Information
Instructor: Dr. Scott A. Severson
Class Schedule: 4:00 – 5:00 PM Monday
Classroom Location: Darwin 103
Office Hours: Monday 11 – 11:50 AM
Tuesday 1 – 1:50 PM
Office: Darwin 300L
Email: scott.severson@sonoma.edu
Phone: (707) 664-2376
Course Website:
http://www.phys-astro.sonoma.edu/people/faculty/severson/p494
Course Moodle site available via login to SSU Online Services:
http://login.sonoma.edu/

Course Description
A series of lectures on topics of interest in physics, astronomy, and related fields. May be repeated for credit up to 3 units maximum.

Prerequisite
Consent of instructor.

Textbook
None
There may be occasional readings presented in the form of articles, and web references. These will be made available at the course Moodle site listed above.

Course Goals
- Students will learn about active research topics in physics and astronomy through public lectures presented by professional scientists.
- Students will learn important research and critical thinking skills by preparing for the talks through web-based research and reporting.
Policies

University Policies
There are several important University policies of which you should be aware, such as the add/drop policy; cheating and plagiarism policy, grade appeal procedures; accommodations for students with disabilities and the diversity vision statement. Go to this URL for details: 
http://www.sonoma.edu/uaffairs/policies/studentinfo.shtml

Grading

Relative Weighting

Attendance and Participation 50 %
Attendance is mandatory. There will be a sign-in sheet at the lecture. More than 3 absences in class will result in a failing grade for the course. Arrive at the lecture in advance. Missing a substantial portion of a talk will be treated as an absence.

The course Moodle site has a Discussion section. It is encouraged for students to participate in pre-lecture discussions about the speaker and topics of the lectures throughout the semester. It is required for students to participate post-lecture in these discussions. Students will post in each discussion a minimum of one time per lecture and may either pose two questions based on their attendance of the speaker’s presentation or may write down at least two “take home” points from the lecture. Asking a question of the speaker the day of the talk is encouraged.

Pre-lecture assignments 50 %
Prior to each of the lectures in the series students will upload a short summary (approximately 200 words) of their research on the topic and speaker of that lecture. Research may be web-based and must include a list of at least two references used.

The writing assignments will be graded according to a rubric and assigned a numerical grade. These grades will be averaged, dropping the lowest, in order to determine your final grade. Writing assignments will be submitted via Moodle and checked for originality. Rubric categories for assignment grading include;
• Ideas – how interesting and complete is the summary of the topic,
• Organization/Mechanics – is it well structured with correct grammar,
• Support – do you provide appropriate citations (at least two),
• Questions – are the questions appropriate and well-formed.

Instructor Discretion
I reserve the right to raise your grade if exceptional effort and class participation are observed through the semester. Improvement throughout the semester is also noted.
Other opportunities
Many of our invited speakers stay for a dinner with the faculty and any interested parties. It is recommended that each student attend at least one of the dinners during the semester. Furthermore, by regular attendance of this series and completion of pre-lecture assignments, students enrolled in PHYS 494 are poised to have productive and enjoyable discussions of these topics. Brown-bag lunch discussions or other informal meetings are encouraged.

Final discussion
During class time on the final week of regular classes (December 3rd, 4:00-5:00 PM in Darwin 103) we will have a final discussion of the Fall 2012 What Physicists Do lecture series. All PHYS 494 students are required to attend.

Speakers
The final schedule is being completed at the time of writing of this syllabus. The following is the current schedule for the class.

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<tr>
<th>Date</th>
<th>Speaker/Activity</th>
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<tbody>
<tr>
<td>8/27/12</td>
<td>Orientation</td>
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<tr>
<td>9/3/12</td>
<td>Labor Day</td>
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<td>9/10/12</td>
<td>Dr. Jon Jenkins</td>
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<tr>
<td>9/17/12</td>
<td>Dr. Gabriel Orebi Gann</td>
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<td>9/24/12</td>
<td>Dr. Samantha Edgington</td>
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<td>10/1/12</td>
<td>Dr. Robert Rohde</td>
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<td>10/8/12</td>
<td>TBA</td>
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<td>10/15/12</td>
<td>Dr. Kathy Cooksey</td>
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<td>10/22/12</td>
<td>Dr. Alexander Pines</td>
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<td>10/29/12</td>
<td>Dr. Howard Haber</td>
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<td>11/5/12</td>
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<td>Dr. Heino Nitsche</td>
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<td>Dr. David Schlegel</td>
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<td>12/3/12</td>
<td>Discussion</td>
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Updated schedule and details will be available at the course Moodle site and:

http://www.phys-astro.sonoma.edu/wpd

Other Class Policies
- Questions are encouraged.
- Turn off phones and small electronics.
- Arrive to class on time.
- Try your best to attend every class.
- Read any subject material before each class.
- Start and complete all assignments.
- Come to office hours with questions