ASTR 598 - Statement of Work

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Spring 2016

Topic

The topic of this course will be Coronal Seismology. This is rather broad, which should help to put my previous research into context, as well as reveal other possible thesis topics.

Coursework

The four points of emphasis as laid out by the syllabus for ASTR 598, along with the portion of allotted time to be spent on them are addressed as follows:

1. **30% Literature review capabilities:** This will be the main component of the course. I will read at least one review article each week. I will continuously update the writeup, and possibly the presentation (both described below) to develop this habit permanently.

2. **30% Scientific writing skills:** I will complete a writeup describing the background information from the literature, general relevance to science/astronomy, possible projects, and how the research I have done so far ties into the main topic of coronal seismology. I will probably use the `aastex` style.

3. **30% Scientific presentation skills:** I will present the results of this course at a pizza lunch talk on April 25th at 12:30pm.

4. **10% Experience with one or more research investigation tools:** As most of the work I have done so far has involved data analysis, this part will comprise the smallest bit of the time spent specifically for this course, though I will continue to work on it for my regular research. This portion will primarily consist of adding my methods, scientific question, etc. to the writeup and connecting to the topic for this course.

Grading

The grading scheme for this course will be based on the fraction of time dedicated to each of the four tasks listed above (i.e., each portion contributes the specified percentage to my grade). 100% completion will be an A, 80% will be a B, and 60% will be a C.

Milestones

We will meet every Thursday at 11am to discuss the assigned reading for that week, ensure that I am still on track, and make any necessary changes or additions to the statement of work. Outside of this meeting, I plan on spending at least eight hours a week addressing the points listed above. At the time of writing (2/4/2016) my plan is to read two papers a week, and add to both the writeup and the presentation. This may be changed to a two week block, with the reading taking place one week and the writing taking place the next. A detailed schedule is including on the next page (to be revised and adjusted as needed throughout the semester).

Date	Tasks to be completed by the following week
1/28	⋄ Discuss syllabus ⋄ Set up a github account for a598 ⋄ Set up aastex for writeup ⋄ Write a 'Statement of Work' ⋄ Select another review article
2/04	⋄ Add a complete schedule to the statement of work ⋄ Read section 2 in Nakariakov ⋄ Read Ch. 6 on MHD in Aschwanden ⋄ Start formulating a list of ∼6 topics for the semester
2/11	⋄ Read Ch. 7 on MHD Oscillations in Ashwanden ⋄ Read section 2 in Nakariakov ⋄ Read CORONAL LOOP OSCILLATIONS OBSERVED WITH THE TRANSITION REGION AND CORONAL EXPLORER -Aschwanden et al. ⋄ Read Excitation and damping of broadband kink waves in the solar corona -D. J. Pascoe et al. ⋄ Summarize papers in writeup ⋄ Create presentation slide for papers ⋄ Add a description of research to writeup
2/18	⋄ Read [paper 1] on topic 2 ⋄ Read [paper 2] on topic 2 ⋄ Summarize papers in writeup ⋄ Create presentation slide for papers
2/25	⋄ Read [paper 1] on topic 3 ⋄ Read [paper 2] on topic 3 ⋄ Summarize papers in writeup ⋄ Create presentation slide for papers
3/03	⋄ Read [paper 1] on topic 4 ⋄ Read [paper 2] on topic 4 ⋄ Summarize papers in writeup ⋄ Create presentation slide for papers
3/10	⋄ Read [paper 1] on topic 5 ⋄ Read [paper 2] on topic 5 ⋄ Summarize papers in writeup ⋄ Create presentation slide for papers
3/17	- - Spring Break - - - - - - - - - - - - - - - -
3/24	⋄ Read [paper 1] on topic 6 ⋄ Read [paper 2] on topic 6 ⋄ Summarize papers in writeup ⋄ Create presentation slide for papers
3/31	⋄ Read [paper 1] on topic 7 ⋄ Read [paper 2] on topic 7 ⋄ Summarize papers in writeup ⋄ Create presentation slide for papers
4/07	⋄ Complete draft of writeup ⋄ Complete draft of presentation
4/14	⋄ Discuss Revisions for paper and presentation ⋄ Revise writeup