

# Graduate Course Department Statement

## UCSC Astronomy Department

This document is to be reviewed by faculty at the beginning of each year and during faculty teaching seminars. Incoming first year students should be presented this document during the department new student orientation. This document will be attached to the Graduate Course Evaluation forms and should be reviewed by faculty while writing their student evaluations.

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The purpose of classes is to provide the students with a strong grounding in the core physical concepts and research techniques used in astrophysics, and to provide a broad overview of the current state of astrophysical research. At the end of the course work, students should be equipped to undertake research in any area of astrophysics and should be well prepared to pass the Preliminary Exam.

### **Core Classes**

The purpose of core classes is to teach fundamental astrophysical concepts. These classes are expected to be rigorous. Regular homework should be issued and there should be a final exam or other cumulative evaluation of a student's understanding.

Suggested (out of class) workload for students: ~10hrs/week

### **Elective Classes**

The purpose of elective classes is to provide an overview of the current state of research at a level that allows students to read the literature and participate in discussions of that field. Assignments and/or presentations are required but need not be as rigorous as core classes.

Suggested (out of class) workload for students: ~7 hrs/week

Students are expected to come prepared to class and attend class regularly. Assignments should be submitted in a timely manner.

Faculty are expected to be well prepared for class. Lectures should be prepared and reviewed before class. Assignments should be graded and returned in a timely manner. Faculty are expected to provide thoughtful individual evaluations in a timely manner (within the first few weeks of the following quarter).

The department requirement for a graduate student to complete and submit their First-Year Project for publication by the Board Review of their second year requires that students spend a significant fraction of their time on research while taking classes during their first two years. The department recommends that 1<sup>st</sup> and 2<sup>nd</sup> year students spend 50% of their time on research during the school year and 100% on research during the summers. First-Year Projects should be well thought out by faculty and should be manageable for 1<sup>st</sup> and 2<sup>nd</sup> year graduate students (with limited research experience) to complete with the above time balance between research and classes.