Undergrads in CS267

Every year we have a few undergrads taking CS267 (about 10%). The class is targeted towards graduate students from diverse backgrounds, including computer science, all types of engineering, physical sciences, biology, economics and other disciplines. We will briefly cover areas of computer architecture, algorithms, applied math, and various examples of scientific simulation and data analysis. Most students will find they are familiar with some parts of the course material and unfamiliar with others; they will be expected to do enough outside study to build up the necessary background in missing areas.

For undergraduate computer science majors in your senior year, you should have taken the CS61 series (including 61C) and some upper division software courses -- CS162 or some other familiarity with threads is especially useful. You need a solid knowledge of linear algebra, so Math54 is also expected.

The main issue for most students is the course load. Most graduate students are taking only 2 courses per semester, since they are also doing research. The workload in CS267 is bursty – there are some substantial programming assignments (4) and a final project of your choosing. This workload can be difficult to schedule with the homeworks, midterm exams, and projects in a normal undergraduate classes. The biggest problem most students have is underestimating the time required for these assignments. You should not take more than 1-2 other technical courses at the same time as 267.

In addition, the work is more open-ended and not as well defined as in an undergraduate course. While grades tend to be somewhat higher than in undergrad courses, you won't have as much feedback on grades during the semester. The final project is 50% of the grade and requires finding a topic and team, design and implementation work, experiments, a poster presentation and a final paper.

Professors Buluç, Demmel, and Yelick (CS267 co-instructors)