

Computer Science Seminar for Service Learning Internship CS-190SS (1 unit), CS-191SS (0 units)

DESCRIPTION

In this course, students will spend one hour (CS-191SS) or three hours (CS-190SS) per week either (1) tutoring elementary, junior high, or high school students, primarily in computer science or mathematics, or (2) running after-school enrichment programs in computer science or mathematics in local elementary, junior high, or high schools.

The purpose of the course is to provide participants with opportunities to use the knowledge and skills they have gained in the classroom to serve others, particularly females and children of color who are underrepresented in mathematics and computer science. As they use their skills, students will have opportunities to reflect on issues of justice as they observe the effects of gender, race, and ethnicity on children's education.

COURSE REQUIREMENTS

1. Attend four hours of course meetings: an orientation, a midterm seminar, and a final seminar.
2. Prepare for the midterm seminar by reading the assigned material, reflecting on its connection to the tutoring experience. Students will discuss the reading at the midterm seminar.
The readings will include the following:
Margolis and Fisher, *Unlocking the Clubhouse: Women in Computing*
Margolis, *Stuck in the Shallow End: Education, Race, and Computing*
3. Serve at the tutoring or after-school program placement site a minimum of 3 hours per week (CS-190SS) or 1 hour per week (CS-191SS), for 13 of the 14 weeks of the semester (4 hours of the semester are devoted to the seminars.)
4. Write a 3-5 page paper reflecting on the tutoring experience, the assigned readings, and issues related to gender, race, and ethnicity. The paper is due at the time of the final seminar.

CONNECTIONS WITH STUDENT LEARNING STANDARDS

By working with girls and children of color that may be underrepresented in mathematics and computer science, students will have opportunities to “cultivate habits of . . . justice [and] service” (Christian Orientation Standard). They will also gain experience bringing “the dimensions of social class, gender, ethnicity, and culture to the discussion and analysis of issues within their disciplines, as well as to discussions of broader social, cultural and political issues” (Diversity Standard) and they will be exposed to situations with the potential for cultivating in them “broad and expansive sympathies for all those in conditions of confusion, suffering, and vulnerability” (Active Societal and Intellectual Engagement Standard).

The tutoring and program presentations will allow students to develop their speaking skills (Written and Oral Communication Standard) and will expose them to vocations in teaching, thus developing in them “a sense of Christian vocation that will inform career goals, marital choices, and other central lifestyle decisions,” and “the skills, knowledge, and motivation to be effective participants in the civic, charitable, and cultural lives of their communities” (Active Societal and Intellectual Engagement Standard)

CONNECTIONS WITH DEPARTMENTAL LEARNING OUTCOMES

Students will have opportunities to improve the oral communication skills (Departmental Learning Outcome C2) as they tutor and make presentations. They will also gain experience incorporating their discipline-specific skills and knowledge into their thinking about their vocations as followers of Christ as they reflect on issues of education, justice, gender, race and ethnicity (Departmental Learning Outcome C4).

GRADING

This course will be graded pass/fail, based upon the completion of the above requirements. No incomplete grades will be issued.