

## THE SENIOR PROJECT FOR MATHEMATICS: BA OR BS

In order to do a senior project, you must first find a faculty member who will agree to supervise the project. Often, students ask a professor that they already know (a former instructor or adviser). Before you can get a permission number to register for the course, this professor must let the undergraduate office know that he or she has agreed to be the supervisor. Therefore, you need to complete and submit to 115 VinH the form for 49xxx Directed Study, Independent Study, Senior Project available from our office, 115 Vincent Hall, or our web page under the topics "Registration" and "Closed Class":  
[www.math.umn.edu/undergrad](http://www.math.umn.edu/undergrad).

As early as possible in the semester, you should meet with the professor to discuss possible topics for the project. A suitable topic can be just about anything, as long as it relates to mathematics in a reasonable way. It can be something that shows an application of mathematics to science, politics, sports, the arts, medicine, entertainment, etc. It can be an expository piece, which means that you learn about some mathematical concept and explain it in some appropriate way. It can be something about the history of mathematics, or about teaching mathematics, or about the role of mathematics in society, etc. The level of the material should be consistent with the usual level expected in 4xxx math courses.

Most senior projects result in a written paper, roughly 10 pages in length. But a senior project could be a computer program, or a lesson plan for a class, or a video, or a talk given to a group of students, or possibly even a work of art. (However, if you decide to do the "writing-intensive" senior project, Math 4997W, then it must include at least 10 pages of written material that goes through at least one revision.) Whatever form the senior project takes must be agreed upon by the professor.

The amount of work expected of the student depends on the number of credits. For each credit, the student should do about 3 hours of work per week, for a total of 45 hours in the semester. This work includes background reading and other information gathering, meeting with the professor, and creating the actual product (written paper, computer program, etc.). The project is graded by the professor. It must be completed by the end of the semester, in time for the professor to grade it and submit the grade before the end of the semester deadline.