

Senior Project in Statistics and Data Science S&DS 491/492

Students majoring in Statistics and Data Science may fulfill the senior requirement either by taking S&DS 491/492, or the Senior Seminar (S&DS 490), or Statistical Case Studies (S&DS 425). Both 491/2 and 490 require the completion of an independent research project. The first hurdle to completing a research project is finding an advisor. Ideally, a student will first think of a research project, and then find a faculty member who is willing to help supervise it. The faculty member will often suggest changes to the proposed project. Other students find advisors by approaching faculty members they know and asking if they can propose projects. Sometimes they can.

Students who take S&DS 491/2 should:

1. Submit a project proposal to a DUS within three weeks of the start of the semester (ideally by the end of the second week). The proposal should be between 1 and 2 pages, and should roughly describe the project the student has in mind. It should list the name and email of the advisor, and should be approved by the project advisor. The proposal should be uploaded as the first assignment. The advisor should send email to a DUS indicating their approval of the project.
2. Spend the semester working on their research project and meeting regularly with their research advisor.
3. Submit a report of their project to the advisor and a DUS by the end of reading period. This report will be graded by the research supervisor and the DUS. So, the student should be sure that this deadline is acceptable to the research supervisor.

Your report should explain what you have done and why. It should include an explanation of the state of the field to put your work in context. Your report will be read by both your research advisor and a DUS. As the DUSes are probably not experts in your area, you should make sure that most of your report is readable by a well-educated applied mathematician. Students are advised to begin writing early, as it is often difficult to explain one's field to outsiders.

There is no preferred method of citation or format. Most reports are around 20 pages, except that those with a lot of data or code often run longer. It is unlikely the DUSes will have time to read anything over 50 pages.