

STAT 551, Statistical Consulting Practicum, 2025/2026 Term 1, Instructor: Harry Joe

Course description: Supervised statistical practice directed toward the solution of current problems posed by subject-area researchers.

Objectives: This course gives students practical experience in statistical consulting and in the application of statistical thinking and techniques to current subject-area research problems. Students will apply the basic skills of consulting, developed in STAT 550, to problems posed by subject-area researchers in response to a widely distributed announcement of STAT 551. Course activities include meeting with clients, formulating approaches to clients' problems, making oral presentations, and writing reports summarizing results and recommendations.

Goals include the following.

- Effectively communicate orally and in writing with non-statisticians so clients understand and can apply your advice.
- Gain practical consulting experience from one's own clients as well as from clients of classmates.
- Get practice in making short presentations and writing short reports that focus on take-home messages.
- Get practice in review and critique of written and oral presentations of peers to learn what are unclear presentation methods.
- Learn statistical terms and methods not seen in graduate courses, and explain them to the class.
- Get exposure to statistical methods not seen in core statistics courses, and add to your statistical toolkit.

Notes:

1. Students seeking an exemption from Stat 551 based on previous equivalent coursework or consulting experience must do so at least one month prior to the start of the semester.
2. STAT 551 is graded out of 100. To earn a Passing grade, the requirement is that all course work **MUST** be completed by the end of December 2025.
3. To imitate a real statistical consulting operation, promptness in working with and helping clients is required.
4. The skills developed in STAT 551 are essential for effective employment as an applied statistician, and for writing research from thesis work. The skills required to interact effectively with non-statisticians in collaborating on research problems will be valuable no matter what career path you are contemplating.