Course Description

STAT580 provides an opportunity to gain practical experience in consulting through lectures and various projects with clients. Applications of commonly encountered statistical methods and ethical aspects of practicing consulting are introduced and explored in the consulting environment. Written and oral communication skills are emphasized.

Course Instructor

Instructor: Xiaoyue (Maggie) Niu, PhD. Kirsten Eilertson, PhD.
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Meeting Time

Tuesday 1-2:15pm 008 Life Science

Course Requirements

You are required to attend lectures and class discussions each week. You will need to complete 3 client projects in pairs throughout the semester.

Evaluation

Participation 10%
Projects 75% (25% per project, including process, draft, and final)
Presentation 15%

Grading Scale

A: 93%; A-: 90%; B+: 87%; B: 83%; B-: 80%; C+: 77%; C: 70%; D: 60%; F: <60%

Possible Lecture Topics

Consulting introduction
Ethics
Consulting practice in industry
Student presentations about their internships
Multivariate analysis
Experimental design
Generalized mixed models
Factor analysis and Structural equation models
Bayesian statistics
Statistics in medical research
Other topics by demands

Reference Book

Academic Integrity
All Penn State and Eberly College of Science policies regarding academic integrity apply to this course. See [http://www.science.psu.edu/academic/Integrity/index.html](http://www.science.psu.edu/academic/Integrity/index.html) for details.

ECOS Code of Mutual Respect and Cooperation  The Eberly College of Science Code of Mutual Respect and Cooperation: [http://www.science.psu.edu/climate/Code-of-Mutual-Respect-final.pdf](http://www.science.psu.edu/climate/Code-of-Mutual-Respect-final.pdf) embodies the values that we hope our faculty, staff, and students possess and will endorse to make The Eberly College of Science a place where every individual feels respected and valued, as well as challenged and rewarded.

Disability Policy Notice:
Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site at [http://equity.psu.edu/ods/](http://equity.psu.edu/ods/).

In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines at [http://equity.psu.edu/ods/guidelines/documentation-guidelines](http://equity.psu.edu/ods/guidelines/documentation-guidelines)). If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.