

Syllabus

Last updated: 10 January 2018

Course description. In this capstone course, students will work in teams on a semester-long project that applies operations research and statistical methods to improve the operations of some part of USNA. Students will be expected to work closely with the stakeholders of their project. Students will present their results in a final written report summarizing their project work, and in a poster or presentation on USNA Capstone Day.

Course objectives. By the end of this course, you will be able to: (1) apply various operations research and statistical techniques in tandem to solve a real-world problem, (2) collect and manipulate large amounts of data using computer programming and spreadsheet software, (3) write a technical report describing your problem and solution, and (4) give a technical presentation to a lay audience summarizing your problem and solution.

Project milestones. Below is a summary of the project milestones. Specific deadlines will be given during the semester.

Week	Milestone	
3	22 Jan – 26 Jan	Written report: introduction
6	12 Feb – 16 Feb	Written report: previously written sections + literature review
9	5 Mar – 9 Mar	Written report: previously written sections + model and experiment setup
13	2 Apr – 6 Apr	Written report: previously written sections + input data analysis
16	25 Apr	Presentations and posters – Capstone Day
17	1 May	Written report: all sections