

Course Policy Statement

Last updated: 8 January 2016

1 Basic information

Time and place. Section 5002: MWF5 (MI003) Section 6002: MWF6 (MI003)

Instructor. Asst. Prof. Nelson Uhan, CH348, uhan@usna.edu

Extra instruction. I am generally available in my office during the day. Feel free to stop by without notice if you have quick questions. If you need extensive help, or if you want to guarantee that I will be available, contact me to schedule an appointment.

Course website. <http://www.usna.edu/Users/math/uhan/sa305/>

All course materials (e.g. this course policy statement, syllabus, homework assignments, lesson notes) and important course announcements will be posted on the course website.

2 Course objectives

The overall focus of this course is *linear programming*, a fundamental technique used in operations research. By the end of this course, you will be able to: (1) model real-world decision making problems as linear programs, (2) implement such linear programs in the GMPL modeling language, (3) solve linear programs by hand using improving search techniques (in particular, with the simplex method), and (4) construct duals of linear programs and interpret solutions to these duals.

3 Course components

Class. In each class, you will be introduced to new concepts, and guided through examples that illustrate these concepts. You will also work in small groups on exercises to help you learn these new concepts.

Homework. Homework will be assigned almost every class. You are expected to complete each assignment by the next class. Homework is designed to reinforce the material introduced to you in class, on your own time. Homework assignments will be posted on the course website. Homework will not be collected or graded, except GMPL exercises (see below).

GMPL exercises. Some homework exercises will ask you to write code in GMPL, a programming language for mathematical optimization models. These exercises will be collected and graded. There is no partial credit for this portion of your course grade; you must submit correct solutions for all assigned GMPL exercises in order to receive credit. However, you may attempt these exercises as many times as necessary.

Quizzes. Most Wednesdays, there will be a short quiz in class, based on recently due homework. Be prepared for a quiz every Wednesday. These quizzes are designed to make sure that you are keeping up with the course material. Your 2 lowest quiz grades will be dropped when computing your final course grade.

Exams. There will be 2 in-class exams (see the syllabus) and a final exam (to be scheduled). Exams are designed to assess the depth of your understanding of the course material.

Project. There will be a small project, with milestones due throughout the semester, and a final report due at the end of the semester. For the project, you will work in teams to apply the techniques you learned throughout the semester to a real-world problem. Details will be provided later in the semester.

4 Grading and academic honesty

Course grading. Your course grade will be computed as follows:

6-week and 12-week marking periods:

In-class exams	75%
Quizzes	20%
GMPL exercises	5%
Total	100%

Final:

In-class exams	45%
Final exam	30%
Quizzes	10%
Project	10%
GMPL exercises	5%
Total	100%

Remember that your 2 lowest quiz grades will be dropped when computing your final course grade.

A course grade of $x\%$ corresponds to the letter grade

A	if	$90 \leq x \leq 100$,	B	if	$80 \leq x < 90$,	C	if	$70 \leq x < 80$,
D	if	$60 \leq x < 70$,	F	if	$0 \leq x < 60$.			

I reserve the right to lower these standards at the end of the semester if deemed necessary. These standards will not be raised.

Makeup exams and quizzes. No makeup exams or quizzes will be given unless you have an excusal or movement orders, or are sick-in-quarters.

It is your responsibility to arrange for a makeup exam or quiz. Arrangements for a makeup exam or quiz must be finalized within 1 week of the original exam or quiz date.

Regrading. You may ask for a regrade of a quiz or exam if you feel it is appropriate. This should be done in writing on a separate piece of paper stapled to the front of the original quiz or exam, with your reason for requesting a regrade. Regrading requests should be submitted no later than one week after the quiz or exam was returned to the class. If you submit a quiz or exam for a regrade, your entire quiz or exam may be regraded.

Academic honesty. You are encouraged to work with other midshipmen whenever possible. Discussing the course material and homework assignments is a great way to learn.

However, cheating will not be tolerated. In particular, exchanging electronic files with work you have done for any assignment is not permitted unless stated otherwise. Cheating also includes, but is not limited to: looking at another student's quiz or exam, copying someone else's homework, using unauthorized material during a quiz or exam, and turning in an altered quiz or exam for a regrade. Any act of academic dishonesty will be reported to your company officer, the department chair, and your academic advisor.

See *Policies Concerning Graded Academic Work* (USNAINST 1531.53B) and *Brigade Honor Program* (USNAINST 1610.3J) for more information regarding academic honesty.

Classroom conduct. You are expected to behave professionally in class. Unprofessional conduct includes, but is not limited to: sleeping (stand in the back or the side of the classroom if necessary), side conversations, eating food (beverages are OK), and non-class-related use of electronic devices in class (e.g. browsing Facebook, texting your friends). Persistent poor classroom conduct will be reported to your company officer.