

Course Policy Statement

Last updated: 17 August 2015

1 Basic information

Time and place. Section 5041: T10 (CH237), R10 (CH225)

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

Extra instruction. I am generally available in my office M-R (not F) 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/sa421/>

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.

Computers. You are required to bring your computer to every class.

2 Course objectives

In this course, we will study the use of simulation as a decision-making tool. By the end of this course, you will be able to: (i) create discrete-event simulations using Python and SimPy, (ii) perform statistical tests to fit input data to probability distributions for use in simulation, (iii) perform statistical tests to compare the output of simulations of alternate systems, and (iv) apply these skills to study and improve an existing real-world system of moderate complexity.

These objectives aim to expand your repertoire of operations research tools, strengthen your ability to rigorously model and analyze complex problems, and develop your capacity to communicate technical ideas in an effective manner.

3 Course components

Class. In each class, you will be introduced to new concepts, and given examples of how these concepts work. 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. The homework problems are 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.

Quizzes. Most Thursdays, there will be a short quiz in class, based on recent course material. Be prepared for a quiz every Thursday. These quizzes are designed to make sure that you are keeping up with the course material. Quizzes will usually ask you about material covered recently in class or homework.

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

Exams. There will be 2 mid-semester 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 project, with milestones due throughout the semester, and a final report and presentation 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 analyze a real-world system. 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:

Final:

Exams	80%
Quizzes	20%
<hr/>	
Total	100%

Exams	60%
Project	30%
Quizzes	10%
<hr/>	
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, with your reason for requesting a regrade, on a separate piece of paper stapled to the front of the original quiz or exam. 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 homework, quizzes, exams, and projects is not permitted unless stated otherwise. Cheating also includes, but is not limited to: looking at another student's quiz or exam, 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 *2010 Honor Concept of the Brigade of Midshipmen* (USNAINST 1610.3H) for more information regarding academic honesty.

Classroom conduct. You are expected to behave professionally in class. In particular, do not use your computer for activities not related to the course material (e.g. looking at Facebook, watching YouTube videos, playing games). Other 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), texting on your phone. Persistent poor classroom conduct will be reported to your company officer.