

Course Policy Statement

Last updated: 21 August 2016

1 Basic information

Time and place. Section 3002: ☉ MWF3 📍 CH107 Section 4001: ☉ MWF4 📍 CH107

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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/sa402/>

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

2 Course objectives

By the end of this course, you will be able to (1) formulate algorithmic models of real-world systems as general stochastic processes, (2) identify when a Poisson process, Markov chain, or birth-death queueing process is an appropriate model for a real-world system and construct such a model, and (3) analyze these models by computing and interpreting state probabilities and performance measures.

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, but will not be collected or graded. Use the homework problems to practice and reinforce the material introduced to you in class, on your own time. Homework assignments and solutions will be posted on the course website.

Quizzes and exams. Most Wednesdays, there will be a short quiz in class, based on recently due homework. Be prepared for a quiz every Wednesday. There will also be 2 midterm exams (see the syllabus for tentative dates) and a final exam (to be scheduled). Quizzes and exams are meant to (1) make sure you are keeping up with the course material, and (2) assess 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 investigate how the techniques you learned throughout the semester can be applied to a real-world problem. Details will be provided later in the semester.

4 Grading

Course standards. This course will use standards-based grading. Your grades will be determined by how well you have demonstrated mastery of concepts and skills called course standards. You will be assessed on approximately 30 course standards during the semester (see the list of course standards).

Assessments and grading rubric. Assessments (i.e. quizzes, exams, project) will look similar to those you have seen in other courses. However, you will not receive a score for each assessment. Instead, you will receive a score for each standard on the assessment, following the rubric below:

- | | | |
|---------|----------|--|
| Highest | M | Mastery. Your solution is complete and correct. Any error is trivial. You have provided sufficient justification and your arguments are easy to follow. |
| | P | Proficiency. One of the following holds: (1) Your solution demonstrates understanding of the relevant topics, but there are some minor errors. (2) Your answer is correct, but you have not provided sufficient justification or your arguments are difficult to follow. |
| | B | Basic ability. Your solution demonstrates a partial understanding of the relevant topics, but has significant gaps. The gaps in your solution may be related to a significant error using a concept or skill, inadequately communicating your reasoning, or an inability to solve the problem completely. |
| Lowest | N | Novice ability or no basis for assessment. One or more of the following holds: (1) Your solution uses inappropriate skills or concepts. (2) Your solution contains too many errors to correct each one individually. (3) You provided an insubstantial response or no response. |

For example, the first quiz may contain problems that involve standards A1 and B1. Instead of receiving “8/10” for the quiz, you might receive “M” for A1 and “P” for B1.

Course grades. Your scores on all the course standards will be tracked throughout the semester. Each course standard will be assessed at least once during the semester; many will be assessed more than once. For example, a standard may be assessed once on a quiz, once on a midterm exam, and once on the final exam. Your score for a course standard will be the highest score you achieved for that standard.

To illustrate, suppose you receive “P” on standard E4 on a quiz. Later, on a midterm exam, you receive “B” on the same standard. At this point, your score for standard E4 is “P”. On the final exam, you receive “M” on the same standard. At the end of the semester, your score for standard E4 is “M”.

You will receive a summary of your scores on the course standards about once a week.

6-week and 12-week grades. Your scores on the course standards will be converted to a letter grade as follows:

- A** P or M in all standards assessed so far, M in at least 50% of standards assessed so far
- B** P or M in all standards assessed so far
- C** P or M in 75% of standards assessed so far
- D** P or M in 50% of standards assessed so far
- F** otherwise

Final grades. The course standard scores you earn on the final exam will also factor into your final letter grade as follows:

A	$\left[\begin{array}{l} \text{P or M in all standards,} \\ \text{M in at least 50\% of standards} \end{array} \right]$	and	$\left[\begin{array}{l} \text{B, P or M in all final exam scores,} \\ \text{P or M in at least 50\% of final exam scores} \end{array} \right]$
B	P or M in all standards	and	B, P, or M in all final exam scores
C	P or M in 75% of standards	and	B, P, or M in 75% of all final exam scores
D	P or M in 50% of standards	and	B, P, or M in 50% of all final exam scores
F	otherwise		

I reserve the right to lower the benchmarks described above if I deem it necessary. I will not raise these benchmarks.

Re-assessments. You may re-assess any course standard outside of class: that is, if you did not perform well on a course standard, you can attempt a problem involving that standard again. Re-assessments will take place in my office. You may re-assess at most one standard per week.

To request a re-assessment, use the request form on the course website, which will ask you to (1) provide the course standard you want to re-assess, (2) describe specifically what you have done to improve your understanding of the standard, and (3) provide some times you are available for re-assessment.

Why this grading system?

- **Opportunities to improve.** Since course standards will generally be assessed multiple times and can be re-assessed, you have the opportunity and incentive to improve your mastery of the course material throughout the semester.
- **Better feedback.** By keeping track of grades for different skills and concepts, we can both easily monitor which topics you understand well, and which topics you need to work on.
- **Encouraging mastery.** This system encourages working out problems in a completely correct way, since doing many problems poorly is not advantageous.
- **Encouraging retention.** The benchmarks on the final exam ensure that a poor performance on the final exam does not overshadow your demonstrated mastery throughout the semester. At the same time, they encourage you to retain your understanding of the course material.

Questions about grading. One downside to this grading system is that it is complicated! If you have any questions about how you're doing in this course, please ask.

Makeup quizzes and exams. No makeup quizzes or exams will be given unless you have an excusal or movement orders, or are sick-in-quarters. Makeup quizzes or exams will not count as re-assessments; in other words, you may still re-assess one additional standard during the week of the quiz or exam that you missed.

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

Regrading. You should ask for a regrade of an assessment if you feel it is appropriate; I make mistakes sometimes! 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 assessment. Regrading requests should be submitted no later than one week after the assessment was returned to you. If you submit an assessment exam for a regrade, your entire assessment may be regraded.

5 Academic honesty and classroom conduct

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 containing work you have done for a graded assignment 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 submitting an altered assessment 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. checking Facebook, texting your friends). Persistent poor classroom conduct will be reported to your company officer.

/s/

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