OR 542 Stochastic Models
George Mason University, SEOR Dept., Fall 2014
Thursdays, 7:20-10:pm, Nguyen Engineering Building 2608

Instructor: Ben Crain

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Office hrs: See below

Text: Wayne L. Winston, *Operations Research: Applications and Algorithms* (4th ed.)

Course Web: Blackboard. See below.

Prerequisite: Stat 344 or Math 351, or equivalent. Also, basic calculus is assumed.

Distant Learning: See sections below on Blackboard Collaborate and Exam Proctoring.

Topics	Chapters
Review of Calculus & Probability	12
Decision Making Under Uncertainty	13
Deterministic Inventory Models	15
Probabilistic Inventory Models	16
Markov Chains	17
Queuing Theory	20
Forecasting	24

Not all sections of each chapter will be covered. You will be responsible for all the sections we cover in class – including those we cover only lightly. I will announce the sections, or parts of sections, that can be skipped.

Exams:
Midterm: Oct. 9
Final: Dec. 11

The exams are closed book, no notes. You may, however, have one sheet of formulas. Calculators are permitted.

The Exams are not cumulative. The Midterm will cover everything up to Oct. 9. The final will cover everything after the Midterm.

Make-up exams are possible, but only for a very valid reason. You should notify me in advance, with that reason. I may require documentation. Make-up exams will be somewhat harder than the regular exams.

Homework:

HW will be assigned every week, except midterm and finals. Each week some of the HW will be graded. Typically, two or three problems will be graded. Most of the problems to be graded will be randomly selected, though I may, at times, designate a particular problem that will definitely be graded.

The Honor Code will be in force. However, you have considerable freedom on HW. You may discuss the problems with others, work with them, seek help. The only requirement, to which the Honor Code applies, is that you do the work you hand in. That is, after all discussion, collaboration, help, sit down and work the problems yourself.

The 3 lowest HW grades will be dropped. For that reason, there will be no HW make-ups or late submissions. Late HW will not be accepted. (That is because I may go over some HW problems in class.) So you can miss up to 3 HWs, for any reason whatsoever, without penalty.

I will post HW, on Blackboard, no later than the day after each class. It will be due at the start of the next class. You may hand it in then, or submit a pdf copy via Blackboard prior to class. (See below for Blackboard submission.) . If you submit a pdf copy via Blackboard, please ensure it is legible.

Grading:	Homework	20%
	Midterm	40%
	Final	40%

Grading Philosophy: I grade, primarily, the method you use to solve a problem. If the method is correct – if it clearly demonstrates you know how to do it – but you make a trivial mistake, you will get generous partial credit. This requires that you show your work, clearly. And it means you get no credit if, by luck, you happen to get the right answer, but do not show a valid method for getting it.

Office hours: I will be at GMU only on Thursdays. The best time to see me will be immediately after class. (I can stay as late as needed.) You will need to inform me that you want to see me, though that need not be in advance. During the class break, or even at the end of class, will suffice. Meetings Thursday afternoon or before class may also be possible, but you will need to request that, by email, at least a day in advance.

Blackboard

Access to Blackboard is through MyMasonPortal: https://mymasonportal.gmu.edu/ . Once there go to Courses and click on the link for this course.

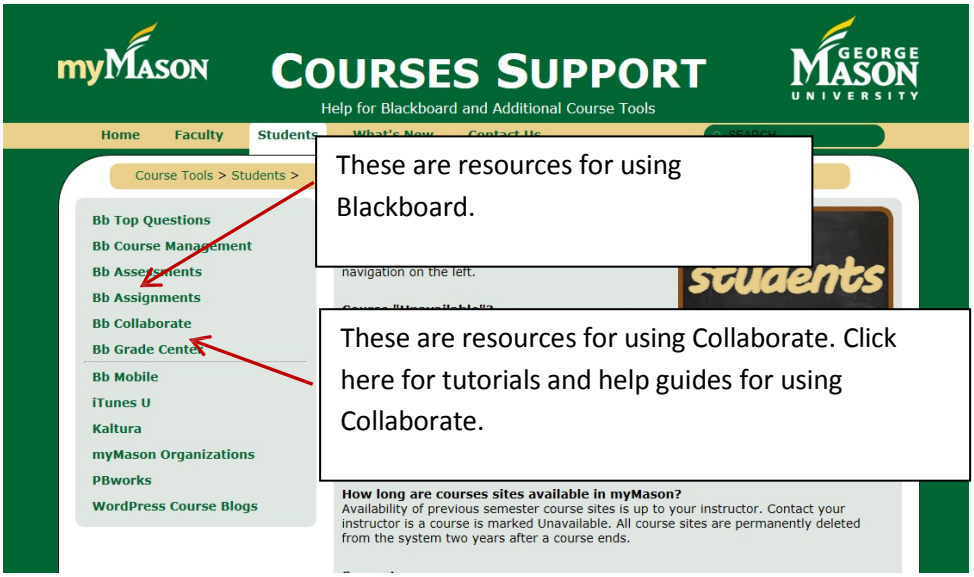
Blackboard will be used for announcements, posting the syllabus, HW, HW submissions (see below), and PowerPoint slides. The discussion board will be open for you to post comments or questions. (I will try to monitor it every other day, or so.) HW, slides, and possibly other material will appear under the Course Content tab. Blackboard will not be used for posting your grades. They will be on the HW and exams I return to you.

Distant Learning Students: Blackboard Collaborate

DL students will access the course via Blackboard Collaborate. Instructions on how to use it will be sent to each DL student.

Help Files for Blackboard and Collaborate

Student help for Blackboard and Collaborate can be found at:
https://coursessupport.gmu.edu/Students which will take you to:



HW submissions via Blackboard

DL students will submit HW via Blackboard. (Or in person, should you come to class, which you are always welcome to do.) Others may submit HW via Blackboard if they want to. (Otherwise in person, at the start of class.) Submissions via Blackboard are time-stamped. Submissions past 7:20 pm on the night of the class are deemed late, and not accepted. The procedure is: (1) Go to Courses, select this course; (2) under Home Page (in panel on the left), click on Course Content; (3) Click on " 'date'…homework" for the relevant date; (4) Next to "Attach File" click on "Browse My Computer"; (5) Find your hw pdf and select it; (6) Click on "Submit" at bottom of page. Word documents could also be submitted, but inserting lots of math into Word docs can be tedious. Writing it out and scanning the pages into a pdf is generally much easier – provided you write clearly!

Graded HW and Exams

will be returned in class, if you are there. If not, they will be returned via Blackboard – assuming I can figure out how to do that.

Exam Proctoring Requirements

Distant Learning students may take exams in-class, on the given exam date, or with a proctor at an off-side location. DL students are responsible for finding an approved proctor. Procedures for proctored exams will be sent to DL students early in the semester.