

QMB 6756
Managerial Quantitative Analysis II
Fall 2016, Module 2

Instructor: A.Paul
Office: STZ 333
E-mail: paulaa@ufl.edu
Phone: 846-1239

Office Hours: M 2:00 PM to 4:00 PM, and by appointment

TA: Yoel Lapscher (yoel@lapscher.com)

Description

This course provides an introduction to the concepts and applications of Managerial Quantitative Analysis. The primary goal of this course is to complete the study of quantitative analysis techniques begun in QMB 6755. **The main theme is the analysis of quantitative business models under uncertainty.**

Upon successful completion of this course, you will be able to:

1. Utilize **probabilistic models** to enhance effective decision making;
2. Analyze **waiting line systems**;
3. Effectively formulate and utilize **simulation** techniques
4. Understand issues involved in the successful implementation of analytics in actual practice.

Resources

Required Textbook: Winston and Albright, *Practical Management Science*, 5th Edition, Southwestern Cengage Learning.

Lecture notes and additional material will be posted online. **I often cover material that is outside the scope of the textbook in class**, and I **leave out several sections covered in the textbook**, so it is important for you to keep track of exactly what is covered in class by consulting the online notes. **The online notes, and the notes you take in class, should be considered to be your primary learning resource**, with the textbook as a back-up.

Homework Exercises provide opportunities to practice the skills of modeling and analysis introduced in the course. The only way to learn this course well is to work out problems on your own, and so many practice exercises will be given. I encourage **active in-class learning**; this means that I expect you to come prepared to think and work out problems in class. **I will now and then dedicate the second period of class to a tutorial session in which students spend the time attempting to solve a problem or case which may be the basis of a homework assignment.**

Examinations

There will be 2 exams: **Exam 1 in the 4th week of class** and the **Exam 2 in the last week of class**. They will involve basic theory and problem solving. The exams will test mainly your grasp of the material directly covered in class, but **some questions will involve novel and unfamiliar situations and will challenge your creativity and grasp of fundamentals.**

There is no formal class participation grade but I will make a note of students who participate regularly in class, solve problems that I pose to the class for in-class solving, etc., and may adjust their grade favorably in borderline cases.

Group HW Assignments

The class will divide into groups of 5 students each. There will be **at least 3 group assignments**, with exactly one submission required per group, for each assignment. **Group assignments may be initiated in class**; a problem will be introduced in class and **your group may be required to turn in the complete solution the same day or before the next class.**

GRADING

Final grades will be assigned using the following weights:

	<u>Percent of Final Grade</u>
HW	30%
Exam 1	35%
Exam 2	35%

Overall letter grades will be *assigned by curve*. That is, the letter grade you receive will be determined by *your ranking among all students in your class*. Please note that – as per departmental policy - the average course grade will generally be no higher than B Plus (that is, 3.33).

Assurance of learning

Each program at the Warrington College of Business Administration has developed goals and objectives that express the most valued skills and knowledge that students should be

able to demonstrate upon completion of the total learning experiences in that program. The following goals and objectives are mapped to **QMB 6756**

- Our graduates will be able to think critically and analytically in formulating business solutions.

Academic honesty

For any academic class activity, students must follow the University of Florida Student Honor Code (<http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php>).

Any violation of the honor code will automatically result in a grade of E (Fail) for this course and further sanctions that may include a suspension or expulsion from the University through the Dean of Students Office. All incidents will be reported to Student Conduct and Conflict Resolution at the University of Florida.

Class policies

I expect students in class to actively participate in class. **If your laptop is switched on in class, it must be mainly to help you follow the lecture (perhaps by making notes on a Powerpoint slide).**

Attendance is not compulsory but you are responsible for all material covered in class.

You **cannot make-up missed exams, or quizzes** unless you have proof that you had a **legal or medical emergency** (neither regular medical appointments nor scheduled trips constitute an emergency) or had to be on a **job interview** (I require a letter from the potential employer and proof that you actually went to the interview). You are required to let me know of these conflicts in advance when possible.

Assignments should be submitted on time. **I do not accept late submissions.**

There will be **no extra credit work available** at any time for any part of the coursework.

By enrolling in this course you agree to abide by the course policies described above.

Tentative Class Schedule (may change; tune in regularly for updates)

Week	Date	Topics	Textbook chapter (to supplement class notes)
1	Oct 25	Modeling uncertainty and risk	
	Oct 27	Modeling uncertainty and risk	
2	Nov 1	No class	
	Nov 3	Little's Law and its applications	
3	Nov 8	Little's Law and its applications	
	Nov 10	Queueing Models	Chapter 13
4	Nov 15	Queueing Models	
	Nov 17	Exam 1	
5	Nov 22	Simulation Basics	
	Nov 24	No class (Thanksgiving holiday)	
6	Nov 29	Simulation Modeling	Chapters 10, 11
	Dec 1	Simulation Modeling	Chapters 10, 11
7	Dec 6	Review	
	Dec 8	Exam 2	
