

University of Florida
Department of Decision and Information Sciences
QMB 6755: Managerial Quantitative Analysis I
Summer A 2017

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Office Hours : M-W: 3-4 periods

Website:

The course website is maintained on the [e-learning site](#). Please login to the system for syllabus, class communication, class notes, grades, updates to this document, etc.

Text: Spreadsheet modeling and decision Analysis: Cliff Ragsdale, 7th ed. (optional)

I work much more from my notes and slides than a book but the one above is a good reference if you find a book helpful in studying.

One case will be required. I will post a link where you can buy it.

Goals:

This course provides an introduction to the concepts and applications of Management Science. The objective of management science is to solve decision-making problems that confront managers in organizations both in the public and private sector by developing mathematical models of those problems. Another important goal is to encourage a more disciplined thinking process in the way you approach management situations. As a result of this course you will become more confident in understanding and using models, both in other courses and on the job.

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

1. Formulate linear programming problems from word descriptions;
2. Solve linear programs using computer-based techniques;
3. Interpret and apply LP shadow prices, reduced costs, and other sensitivity analysis data to economic and business problems;
4. Identify, formulate, and solve transportation problems, integer programming problems, etc.
5. Understand issues involved in the successful implementation of Management Science projects in actual practice.

Details regarding the course contents, critical deadlines, etc. can be found in a separate document called “Schedule”, which will be updated from time to time, and will be found on the class website.

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 specifically mapped to **QMB6755**.

The **ISOM** program goals and objectives that apply to this course are:

Learning Goal 1: Our graduates will be knowledgeable in core Information Technology, Decision Support, and Analytical Skills.

1B. Students will demonstrate competency in: Database Design; Systems Analysis and Design; Telecommunication Strategies and Technologies; Network Security; Analytical Tools, and Project Management.

Grading scheme:

Case Assignment	30%
Quizzes	15%
Exam I	25%
Exam II	30%

The grades for this course will be based on a curve. This means the grade that you get for this course will depend on your relative rank in the class. As per college norms, the grading will maintain a *maximum* mean grade point average of 3.50 (*for example*, 20% A, 20% A-, 50% B+, 10% B is one possible distribution). Grades of C+, C and below can and will be given when student performance warrants.

Proposed Schedule:

Week	Topic	Readings and Deliverables
Week 1	Introduction to Managerial Decision Modeling	Chapter 1
Week 1	Linear Programming Models: Graphical Methods	Chapter 2
Week 2	LP modeling applications	Chapter 3
Week 2	LP modeling applications	Chapter 3 (Quiz #1)
Week 3	Sensitivity Analysis	Chapter 4
Week 3	Exam I	Case 1 (Coal Trains) due
Week 4	Sensitivity Analysis	Chapter 4
Week 4	Transportation models	Chapter 5 (Quiz #2)
Week 5	Network models	Chapter 5
Week 5	Integer programming/goal programming	Chapter 6 (Quiz #3)
Week 6	Other forms of optimization modeling defined	Chapter 6 Case 2 (JCG) Case Due
Week 6	Exam II	FINAL in class

This is a draft schedule and subject to change at the Instructors discretion.

Class policies:

Assignments and quizzes:

All assignments in this section will be team based. Quizzes should be individual submissions, unless otherwise announced in class. Students are free to discuss the assignments with me or with each other. The assignments are due at the beginning of the designated class day. The due date will be strictly enforced.

Exams and make-up exams:

The exams will be closed book unless otherwise announced. THERE WILL BE NO MAKEUP EXAMS. Conflicts for the exams must be resolved before the exam dates. You should contact me at least two weeks prior to the exam date and let me know in writing. Last minute requests will not be entertained. The only reasons for not being able to sit for an examination in its announced time should be part of University policy, or a documented medical excuse.

“Re-grade” requests:

Any request to re-grade any component of your submissions (assignment or quiz or exam or project) has to be made within a week after the grade has been published online on the e-learning site. Given the size of the class, and the speed with which the course progresses, any request beyond this deadline cannot be considered. The only exception to this rule is a documented emergency.

Class participation:

Attendance is not compulsory during regular classes but if you miss any class you would be responsible for all material that was discussed in class or was in the assigned readings for that class. You are expected to be punctual in class attendance and remain in the classroom for the entire class session, as you would in any business appointment, unless an urgent need arises or prior arrangements have been made with me. There will be no make-up quizzes. You should complete the assigned readings before coming to class. I would expect you to be ready with answers to questions related to the readings.

Laptops and other electronic devices should be used with discretion and only as permitted for work directly related to the class session. Emailing, accessing the internet, and working on matters unrelated to the work at hand are inappropriate behaviors because they are disrespectful and distracting to the class and to the instructor.

Classroom discussion is an important part of the pedagogy. Students should be fully prepared to engage in class discussion, and they should use the opportunity to develop positive and professional communication skills. This includes according respect for differing perspectives and contributions to discussion, as well as building on the base for discussion laid by student colleagues and the instructor.

Discipline in class:

I would expect you to maintain the decorum of the class at all times. As with any other group activity, be acutely aware that your actions in class can have negative externalities that can collectively affect the performance of the entire group.

Teaching policies (academic honesty, student illness, religious holidays, accommodating students with disabilities and others):

For an updated list of UF teaching policies, please visit <http://www.registrar.ufl.edu/staff/policies.html>.

Academic integrity:

Academic integrity and honesty are essential in the development of a professional manager. This society is not willing to tolerate dishonest or otherwise unethical professional business managers. Students must attend to, and follow, the University of Florida code of student conduct, with special attention to academic integrity and academic honesty. They must never appropriate the ideas and work of others, including

both academic sources and fellow students, without appropriate attribution or by claiming others work as their own. They must exercise complete honesty in following the conditions established by the instructor for examinations and other assignments. Finally, they must be honest with one another, be willing to be accountable for their own failures of honesty and integrity, and not tolerate such failures in classmates.

Communication:

I will be available at my office during the office hours. I will also be available by appointment and I am very accessible via email. If you need to set up an appointment other than during my regular office hours, please send me e-mail at abmunson@ufl.edu, I will respond as quickly as I can. Most of my communication that is meant for the entire class will be through the e-learning platform (other than occasional emails to the mailing list, which will come into your Gatorlink mailbox), so do log in to the system regularly.

Further, make sure that you are not over quota with your Gatorlink mailbox, since in such cases you will not be aware of the latest emails pertaining to this class.