

RUTGERS UNIVERSITY

School of Environmental and Biological Sciences
Department of Agricultural Food and Resource Economics, DAFRE
Majid Sani

Economics of Production
11:373:321:01 MW 5:35-6:55 PM
Fall

Course Outline

Important: Read this syllabus thoroughly and carefully. You are responsible for all the material in it.

Course Description:

This is an applied intermediate microeconomics course that focuses on Economics of Production and its application in agricultural and business management. The Economics of Production is looked at from the inside as concerns production, cost, profitability, and competitive strategy considerations, and it is examined from the outside as concerns the influences of market demand, competition, market structure, and resource supply. The course uses examples and applications to bridge the gap between theory and practice. The course also gives a good grounding in the terminology of Operations Management and an overall perspective of Operations Management within the context of a business organization.

Learning Goals:

In this class you will learn:

- Production in regard to perfect completion and imperfect markets.
- Operation strategies, forecasting, and project management.
- Project management
- Supply chain and inventory management
- An introduction to risk and uncertainty
- Linear Programming
- Transportation models

- **Textbooks:**
 1. Principles of Operations Management, 9th Edition
By J. Heizer and B. Render
Pearson publishing. (Higher Education)

(You might go for an older edition, but you will be **responsible** for all the possible changes)

2. Economics of Production.

By Dhillon

P.S. Of which Chapters 1-4 (the copy of chapters will be provided).

Pre-requisites:

01:640:135 & 11:373:121 or 01:640:135 & 01:220:102 or 01:640:139 & 11:373:121 or
01:640:139 & 01:220:102

Student Disability:

Reasonable accommodations will be provided for students with documented disabilities.

Students who have registered with The Office of Disability Services should make this known to the instructor. Students who have not yet registered their documented disability should do so immediately.

Office Hours:

Monday 10:45-1:45 PM
Thursday 10:30-11:45 AM (by appointment)

Cook Office Building, Room 116
55 Dudley Road, New Brunswick, NJ 08901-8520

You can reach me either by e-mail: sani@econ.rutgers.edu (Weekend e-mails will be answered on Monday, except the weekend before the exams)

Lecture Topics:

The following is a list of lecture topics. On some I will go into great detail, others I will but mention in passing.

Introduction to Operation management	Chapter 1
Theory of the firm	Chapter 2 , Dhillon
Production with one variable input	Chapter 3 , Dhillon
Production with two or more inputs	Chapter 4 , Dhillon

First Exam:

OM: Operations Strategy	Chapter 2
OM: Project Management	Chapter 3
OM: Forecasting	Chapter 4
OM: Supply chain Management	Chapter 11
OM: Inventory Management	Chapter 12

Second Exam:

OM: Short-term scheduling	Chapter 15
An introduction to risk and uncertainty	Quantitative modules A
Linear Programming	Quantitative modules B
Transportation model	Quantitative modules C

If time permits:
Waiting-Line (Queuing) Quantitative modules D

Final Exam:

Exams are not cumulative.

Grades will be posted on “Sakai Gradebook: <https://sakai.rutgers.edu/portal>” a week after the test. For the course information, announcements, problem sets, and practice test questions please visit Sakai: sakai.rutgers.edu/

Evaluation of Students:

There are three exams: Two Mid terms and one final. Exams will consist of multiple choice questions and/or short problems.

The course grade will be determined based on examinations, class participation, and homework assignments as follows:

- Problem set.....0
- First Exam.....33%
- Second Exam.....33%
- Final Exam.....34%

I will not collect the problem sets but they are essential to do well on examinations.

There will be NO opportunity to MAKE UP an exam. If you miss an exam, you will receive a grade zero for that exam. There are NO extra-credit assignments. Plan to do well on the required material.

If a need warrants to curve the grades, it will be considered on the overall grades.

Grades **will not be** given by the e-mails. No exceptions.

Attendance and Participation:

Regular class attendance is expected and class participation will be encouraged. Students will be responsible for all work missed during an absence, no matter what the reason for the absence. Consistent class attendance and worthwhile class participation will be viewed favorably in assigning grades for "borderline" cases.

Examination Rules:

Only pencils, pens, erasers, pencil sharpeners, and a watch are allowed. You are best off not bringing anything else to the exam. If you do, put it in a bag under your seat.

A note about the calculator: You are allowed to use just a regular calculator. You are **NOT** allowed to use smartphones or smartwatches or any electronic/digital device with wireless and storage capability as a calculator. Using such these devices during the examinations considered as a cheating.

I would like to remind everyone that violations of the university code of academic integrity, including plagiarism and cheating, will not be tolerated by the department or the university. Such violations are harmful to everyone and only serve to poison the atmosphere of openness and mutual trust on which an academic department depends. If there any questions regarding the integrity code, please refer to the graduate school pamphlet dealing specifically with these matters. For more details please visit the following:

The policy statement on student conduct:

http://catalogs.rutgers.edu/generated/nb-ug_current/pg21725.html

For academic integrity policy:

http://catalogs.rutgers.edu/generated/nb-ug_current/pg21724.html

Problems to Work on:

The text contains a very good set of problems. You should work out all of them. These problems are a guide for your learning and you will be held responsible for understanding their content. The problems I consider most important will be mentioned in class. This does not mean that you should not work through the other problems, only that I think these will be of the greatest value at the margin. I also strongly suggest that you do not look at the answers until you have spent several hours working out a problem. If you "cheat" the exercise will prove of no value to you.

Note:

Should I be forced to miss a class, I will make every effort to provide prior notice. In the absence of such notice, please wait for 20 minutes past the hour.

P. S. Note that I reserve the right to alter the contents of this syllabus during the semester.

No makeup exam No grade by email For all information please visit the "sakai"

Assignments from the book:

Chapter 1 #s 1.6, 1.7

Chapter 2 #s TBA

Chapter 3 #s 3.14, 3.15, 3.16, 3.17

Chapter 4 #s 4.3, 4.5, 4.6, 4.13, 4.16, 4.23, 4.24

Chapter 12 #s 12.1, 12.2, 12.3, 12.4, 12.5

Chapter 13 #s TBA

Chapter 14 #s TBA

Module A #s A.1, A.2, A.3, A.7

Module B #s B.1, B.2, B.3, B.5

Module C #s TBA