BUS 339 – QUANTITATIVE METHODS
SPRING 2017

GENERAL INFORMATION:

Instructor: Dr. Suzy Carter

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Required Text: **MP Introduction to Management Science , 5th Edition**
Frederick S. Hillier, and Mark S. Hillier
Hardcover
©2014, ISBN- 978-0-07-802406-1

Text Web Site: http://highered.mcgraw-hill.com/sites/007809660x/student_view0/index.html

COURSE DESCRIPTION:

This course is an introduction to modern quantitative methods used in decision making. It is intended to expose you to the basic modeling techniques used in today's business environment and provide you the opportunity to apply those models in simulated situations. **Specific topics include linear programming, simplex methods, network and scheduling models, inventory models, decision theory, and transportation method.**

COURSE OBJECTIVES:

Students successfully completing this course should be able to:

- conceptually define the area of management science;
- describe the theoretical constructs included in the area of management science;
- apply the theoretical constructs of management science to simulated business situations;
- formulate decision models, identifying objectives and constraints
- work effectively using excel to solve decision problems in a variety of settings .

COURSE FORMAT:

This course uses a problem-based, as opposed to lecture-based, approach to learning. Problem-Based Learning (PBL) is defined as "the learning that results from the process of working toward the understanding or resolution of a problem" (Barrows & Tamblyn, 1980, p. 18).

We will start each class period with a brief lecture on the topic covering basic concepts, hints and tips. This should take no more than one hour. Next, a series of problems will be assigned. Students will work as individuals completing these problems. Hint or tip sheets and answers will be available to help students complete the problems. This should take two hours.

COURSE REQUIREMENTS:

Problems Sets
A set of problems (from the text) will be assigned. These are to be completed and emailed to the instructor. Because the work is cumulative, late assignments will be docked 2% for each day they are late. SEE ATTACHED SCHEDULE FOR DUE DATES AND ASSIGNMENTS

COURSE GRADING:

Item	Points
Problem sets	400
In-class problems	100
Total Points	500

Grading Scale	
Point Range	Letter Grade
372.0 – 400.0	A
332.0 – 371.9	B
292.0 – 331.9	C
240.0 – 291.9	D
< 240.0	F

* A plus (+) or minus (-) may be added to grades at the top or bottom, respectively, of each range.

COURSE ADMINISTRATION:

- There are four formal class meetings. (See the attached schedule) Most of these formal meetings last about 1 hour. The remaining time is reserved for students to complete an in-class assignment, their homework in class and to ask questions.

- YOU MUST COMPLETE ASSIGNEMTS ON TIME OR ARRANGE EXTRA TIME WITH THE INSTRUCTOR.

- Maintaining academic integrity is critical. Please read the Doane College policy on academic integrity in the Student Handbook, we will adhere to that policy. In most (probably all) cases, violation of the academic integrity policy will result in the receipt of an "F" for the course.

Note: The contents of this syllabus are subject to change as conditions dictate.

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Anticipated Course Schedule

WEEK		DUE		Chapter(s)		Assignment
1		**Class Meets**		**1, 2**		**2.5a, 2.6d, 2.7b-e, 2.8b-f, 2.9d,i,j, 2.10a,**
2				**2**		
3		**Class Meets** PROBLEMS 2.5-2.10 DUE after class				**2.11c, 2.12c, 2.13b, 2.15b, 2.19c, 2.20a, 2.22a, 2.23c, 2.24c, 2.27a**
4		PROBLEMS 2.11-2.27 DUE by 10 pm		**3**		
5		**Class meets**		**3**		**3.3a-c, 3.4a, 3.5a-c, 3.6d, 3.7b-d, 3.8, 3.10a-c, 3.11a-c, 3.12a-d, 3.13d, 3.14, 3.15b, 3.16b, 3.17b, 3.18b, 3.19c,**
6		**PROBLEMS 3.3-3.19** **DUE by 10 pm**		**5,12&13**		
7		**Class meets**				**3.20b, 3.21a, 3.22a, 3.23, 3.24, 3.25b, 3.26b, 3.28, 3.29, 3.30, 3.32, 3.33, 3.34b, 3.36b, 3.37a, 3.38a**
8		**ALL WORK DUE**				