



SYLLABUS

Course Title	Quantitative Methods
Course Number	BUS 339
Number of Credits	3 semester credits
Course Dates	10/14/19 - 12/14/19
Instructor	Dr. Suzy Carter
Email Address	suzy.carter@doane.edu
Office Hours/Availability	The instructor will be available one hour before class and at work session times on weekends. These sessions will be determined by the class as needed.
Phone Number	Phone 402-310-0853, accept texts but best way to contact me is using the email function in blackboard or direct email
Textbook Information: (e.g. title, edition, publisher, ISBN)	Introduction to Management Science, 5 th edition, Frederick S. Hillier and Mark S. Hillier, 2015, McGraw Hill publishers ISBN 978-0-07-802406-1
Additional Course Materials	Excel
Course Description	An introduction to modern quantitative methods used in decision-making in business. Topics include linear models, network

	and scheduling models, inventory models, decision theory, transportation method, and other methods. Students successfully completing this course will be able to 1) identify and comprehend management science issues and problems, 2) apply the theoretical constructs of operations research to simulated business situations, 3) construct appropriate models using computer software, and 4) develop professional reports using the information generated using the developed models.
Program Outcomes	<p>a. Develop and use analytical and creative thinking skills to gather and analyze information, to identify and solve problems, to determine potential outcome alternatives, and to make appropriate decisions</p> <p>b. Gain knowledge and understanding of the ethical and legal issues involved in business</p> <p>c. Gain knowledge and understanding of the various components of a business enterprise and the interrelationship of those components</p> <p>d. Gain knowledge and understanding of the nature of change and develop a willingness to anticipate, adapt, and respond effectively to change</p> <p>e. Obtain an understanding of the value of diversity</p>
Course Learning Outcomes/Objectives	<p>Students successfully completing this course should be able to:</p> <ul style="list-style-type: none"> · 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 Prerequisites	Math certification and cognates, or permission. (MTH 115 or MTH 235 recommended.)
Instructional Details	(Details on the instructional approaches to be used in the course. Example: <i>This course will use a combination of lecture, large class discussion, and small group conversations for the development of course topics and themes.</i>)

Technology Requirements	https://www.doane.edu/faq/minimum-computer-requirements
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Course Schedule

Week or Module	Topic	Content	Assessments Matched to Learning Outcomes	Due Date & Time
1 3/14	What is managerial science?	Read chapters 1 and 2	2.5a, 2.6d, 2.7b-e, 2.8b-f, 2.9d,i,j, 2.10a,	Class session 2
2 3/21	Linear programming	Chapters 2	In class quiz 2.11c, 2.12c, 2.13b, 2.15b, 2.19c, 2.20a, 2.22a, 2.23c, 2.24c, 2.27a	Due class session 4
3 3/28	No formal class – work session			
4 4/4	Linear programming part 2	Chapter 3	In class quiz 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, 3.14d, 3.15, 3.16b, 3.17b, 3.18b, 3.19c,	Due class session 6
5 4/11	No formal class – work session			

6 4/18	Transportations networks	Examples chapter 5	In class quiz 3.20b, 3.21a, 3.22a, 3.23, 3.24, 3.25b, 3.26b, 3.28, 3.29, 3.30, 3.31, 3.33, 3.34b, 3.36b, 3.37a, 3.38a	Due session 8
7 4/25	No formal class – work session			
8 5/2	Final problems		In class quiz	

Grading Assessments

Type of Assessment	Points	Total possible points
In class quiz – 4 see schedule	25	100
Problems – see schedule	48	480
total		580

Grade Scale

A+ = 97-100% A = 94-96% A- = 90-93% B+ = 87-89% B = 84-86% B- = 80-83%
 C+ = 77-79% C = 74-76% C- = 70-73% D+ = 67-69% D = 64-66% D- = 60-63%
 F= 59% or below

Participation Policy	A student is expected to be prompt and regularly attend on-ground classes in their entirety. Regular engagement is expected for on-line courses. Participation in class discussions is an integral part of your grade.
Study Time	Expectation of the amount of time the course requires students to spend preparing and completing assignments. Typically, students could expect to spend approximately 12 hours a week preparing for and actively participating in this 8-week 3 credit hour course. This actual time for study varies depending on students' backgrounds.
Late Work	YOU MUST COMPLETE ASSIGNMENTS ON TIME OR ARRANGE EXTRA TIME WITH THE INSTRUCTOR. Assignments 1 week late are penalized 10%. Assignments 2 weeks late are not accepted.
Submitting Assignments	All assignments are completed in excel and submitted through Blackboard
Communication Policy including Assignment Feedback	Students who contact the instructor via email should expect to receive a response within 24 hours. Phone messages may take longer.
Academic Integrity Policy	<p>Doane University expects and requires all its students to act with honesty and integrity and respect the rights of others in carrying out all academic assignments. Academic dishonesty, the act of knowingly and willingly attempting or assisting others to gain academic success by dishonest means, is defined in four categories:</p> <ol style="list-style-type: none"> 1. Cheating - "Intentionally using or attempting to use unauthorized information or study aids in an academic exercise." 2. Fabrication - "Intentional and unauthorized falsification of invention or any information or citation in an academic exercise." 3. Facilitating Academic Dishonesty - "Intentionally or knowingly helping or attempting to help another to commit an act of dishonesty," and/or coercing others to do the same. 4. Plagiarism - "Intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise," in both oral and written projects.

	<p><i>Gehring, D., Nuss, E.M., & Pavela, G. (1986). Issues and perspectives on academic integrity. Columbus, OH: National Association of Student Personnel Administrators</i></p> <p>For more information on the sanctions for academic dishonesty, please visit the website:</p> <p>http://catalog.doane.edu/content.php?catoid=18&navoid=1448#Academic Dishonesty</p>
Academic Support	<p>Please contact academicsupport@doane.edu</p> <p>https://www.doane.edu/graduate-and-adult/academic-support</p>
Disability Services	<p>https://www.doane.edu/disability-services</p> <p>Doane University supports reasonable accommodations to allow participation by individuals with disabilities. Any request for accommodation must be initiated by the student as soon as possible. Each student receiving accommodations is responsible for his or her educational and personal needs while enrolled at Doane University.</p>
Military Services	<p>https://www.doane.edu/graduate-and-adult/military</p>
Anti-Harassment Policy	<p>http://catalog.doane.edu/content.php?catoid=5&navoid=452</p>
Grade Appeal Process	<p>http://catalog.doane.edu/content.php?catoid=5&navoid=238</p>
Credit Hour Definition	<p>Doane University follows the federal guideline defining a credit hour as one hour (50 minutes) of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks (one semester), or the equivalent amount of work over a different time period (e.g., an 8-week term). This definition applies to courses regardless of delivery format, and thus includes in-person, online, and hybrid courses (combination of in-person and online). It also applies to internship, laboratory, performance, practicum, research, student teaching, and studio courses, among other contexts.</p>
Syllabus Changes	<p>Circumstances may occur which require adjustments to the syllabus. Changes will be made public at the earliest possible time.</p>

Doane Syllabus Addendum	Each student is responsible for being aware of the policies, resources, and expectations as specified in the Doane Syllabus Addendum located at https://www.doane.edu/Syllabus .