Text: "Introduction to Management Science & Quantitative Tools"
A Custom Edition for the University of Memphis
Taken from: “Statistics for Managers Using Microsoft Excel”, 5th Edition
by Levine, Stephan, Krehbiel, and Berenson and “Managerial Decision Modeling
with Spreadsheets”, 2nd Edition by Nagraj Balakrishnan, Barry Render, and Ralph
Stair, Jr.

ISBN: 0558209890

Course Description: Analytical concepts and tools useful in understanding, assessing, and
controlling operations of business. The major objectives are both an understanding of the
analytical methods introduced in the course and comprehension of a framework for the application
of these tools to business problems and business research activities.

Evaluation: The final grade in the course is determined by three regular semester exams,
homework assignments, and quizzes. Failure to turn in all homework assignments
could result in a drop of one letter grade. The following scale is used:

A = 92 percent of total points possible
B = 82 - 91
C = 72 - 81
D = 68 - 71
F = 67 and less

Class participation and attendance: No make-up work is provided for assignments or tests. All
work must be turned in ON TIME to receive credit. Because of the difficult nature of this material,
attendance is required. Class time will be divided between lectures, problem solving, class
discussions/presentations, pop quizzes, and examinations. Missing classes may cause a drop in
grades.

Content: A brief review of basic statistics and probability on day one. Chapters 13-16 of the
Levine book will follow. Various sections of chapters 1, 2, 5, 6, 8, 9, and 10 of the Balakrishnan
book will conclude the course. Topics to be covered will include: simple linear regression,
multiple regression, model building, time-series forecasting, linear modeling: graphical and
computer methods, queuing models, transportation/assignment/network models, integer
programming, decision analysis, and simulation models. See table of contents in book for full
detail of coverage. Also attached to the syllabus are detailed lists of reading and homework
assignments. Homework assignments to be turned in are TBA. Certain topics may be stressed
more or less than other topics.

Note: Reasonable and appropriate accommodations will be provided to students with disabilities
who present a memo from Student Disability Services (SDS).
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**Grading**

Hmwk., Quizzes, & presentations  25%
Exam I                        25%
Exam II                       25%
Exam III                      25%

WARNING: A prerequisite and/or upper division check **may** be done once the first class roll has been issued. If you do not have the appropriate upper division approval designated on your advisor form and/or prerequisite for this course, you may be administratively dropped. This check will not be completed until after the "add" period. If you do not have the required upper division approval or prerequisites, it is your responsibility to correct the situation during the official "add" period. In this regard, please make sure you contact your advisor and/or student handbook to fully understand the policies regarding drops, incompletes and other university policies that might affect academic progress. Please don't wait until the last day of class to get problems resolved.

**Statistics Scheduled Reading Assignments**

The following schedules are strictly tentative. The instructor may adapt the pace and the order of presentation to fit the needs of the class.

**Week 1**

**Week 2**
Sec. 13.8, 13.9, 14.1, 14.2, 14.3, 14.4

**Week 3**
Sec. 14.5, 14.6, 15.1, 15.2, 15.3, 15.4, 15.5, Review for Test 1 (Chapters 13, and 14)

**Week 4**
Sec. 16.1, 16.2, 16.3, 16.4, 16.5, 16.6, 16.7, 16.9

**Week 5**
Sec. 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.3, 2.4, **Test 1**

**Week 6**
Sec. 2.5, 2.6, 2.7, Review for Test 2 (Chapters 15 and 16)

**Week 7**
Sec. 5.1, 5.2, 5.3, 5.5, 5.6, 5.7, 5.8, 6.1, 6.2, 6.3 **Test 2**

**Week 8**
Sec. 8.1, 8.2, 8.3, 8.4, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8
Week 9
Sec. 10.1, 10.2, 10.3, 10.4, Review for Test 3 (Chapters 1, 2, 5, 6, 8, 9, and 10)

Business Statistics Homework Assignments
(Note: class discussion problems are not listed.)

Homework Chapter 13:  1, 2, 3, 4, 11, 12, 16, 40, 56
Homework Chapter 14:  2, 3, 4, 10, 12, 18, 24, 32, 34
Homework Chapter 15:  1, 2, 12, 13, 14, 19
Homework Chapter 16:  1, 2, 3, 4, 9, 10, 11, 13, 23, 24, 25, 26, 32, 33, 34
Homework Chapter 1:   19, 21, 27
Homework Chapter 2:   13, 22
Homework Chapter 5:   12, 27
Homework Chapter 6:   13, 14
Homework Chapter 9:   1, 2, 3, 4, 5, 6, 11
Homework Chapter 10:  1, 2, 3, 4, 15