QMM5100 Quantitative Methods for Managers Winter 2018

Professor:	Karl Majeske	E-mail: majeske2@oakland.edu	**Grading:** Homework 36%
Office:	423 Elliott Hall	Office Phone: 248-370-4976	Quizzes 24%
Office Hours:	Mon 2-3, Wed 2-3	Fax: 248-370-4275	Module Workbooks 12%
			Final Exam 28%

Textbook:
This course will use the textbook *Business Analytics Data Analysis and Decision Making* by Albright and Winston,
You may purchase or rent new or used copies of either the 5th edition ISBN: 978-1-133-62960-3 or the 6th edition ISBN: 978-1-305-94754-2.

Computer and Software Requirements:
This class meets in the computer lab which has IBM compatible PCs. In this course we will use Excel along with two add-ins: JMP and PrecisionTree. JMP is a statistical software package available at no cost to Oakland University students and can be downloaded to your own computer. The PrecisionTree add-in, used for probability trees, is available at no cost from the textbook website and can be downloaded to your own computer. PrecisionTree and JMP are also available on the computers in the student computer labs in Elliott Hall. When running into technical difficulties with their own computer, students have found the OU Helpdesk helpful. The link below will take you to their contact page.
http://ucmcms.oakland.edu/formbuilder/forms.aspx?formid=99863&sid=501&with-layout=1

Semester Grades:
The course will be graded out of 1,000 points total. There will be four components (Homework, Module Workbooks, Quizzes, and Final Exam) to the semester grade. All scores will be posted to Moodle. Semester grades are determined using the Course Total field in Moodle (percentage of points) using the table below.

Course Total	Semester Grade	Course Total	Semester Grade	Course Total	Semester Grade	Course Total	Semester Grade
99 - 100	4.0	83 - 84	3.2	74	2.4	66	1.6
97 - 98	3.9	81 - 82	3.1	73	2.3	65	1.5
95 - 96	3.8	80	3.0	72	2.2	64	1.4
93 - 94	3.7	79	2.9	71	2.1	63	1.3
91 - 92	3.6	78	2.8	70	2.0	62	1.2
89 - 90	3.5	77	2.7	69	1.9	61	1.1
87 - 88	3.4	76	2.6	68	1.8	60	1.0
85 - 86	3.3	75	2.5	67	1.7	0 - 59	0.0

Homework:
All 12 homework assignments and data files for the term have been posted to Moodle. The assignments are due at 8:00am on the dates shown on the assignment, the submission link in Moodle and the Module Schedule that appears on page 3 of this syllabus. In general, late homework is not accepted. Arrangements to submit Homework late must be made in advance and will be subject to a late penalty. Homework will be submitted via Moodle. You should upload one file containing your solution to the Homework. When using JMP to solve problems, you should only submit enough computer output to show that you completed the problem. Discussing the assignments and possible solution techniques with classmates is permitted. However, each student must submit their own solution to the assignment. In addition, the solution submitted to Moodle must represent work you completed by yourself. Each Homework assignment will be graded relative to the detailed solution posted on Moodle. Each HW is graded out of 30 points for a total of 360 points for homework that represents 36% of the semester grade

Module Workbooks:
This class meets in the lab and integrates computer based exercises. These exercises will be completed and then discussed during class. Module workbooks will be uploaded to Moodle at the end of class. Each module workbook is graded out of 10 points for a total of 120 points that represents 12% of the semester grade. In general, module workbooks will not be accepted for credit if the student did not attend class. Any arrangements to submit module workbooks when the student did not attend class are at the discretion of the instructor and must be made prior to the due date.

Quizzes:
Quizzes will be taken in class and will not be announced ahead of time. Each quiz is graded out of 30 points for a total of 240 points that represents 24% of the semester grade. Quizzes are graded relative to the detailed solutions posted on Moodle with partial credit awarded when appropriate. In general, students will not be able to makeup a missed quiz. Any arrangements to makeup a missed quiz are at the discretion of the instructor.

Final Exam:
The Final Exam will be taken in class on April 23, 2018. The Final Exam is graded out of 280 points that represents 28% of the semester grade. Any arrangements to take the Final Exam at an alternate date or time are at the discretion of the instructor and must be made prior to April 23, 2018.

Weather Policy:
Class will meet on the days scheduled unless the University is closed. In the event the University closes for a day, the syllabus will be revised and posted to Moodle.

Module Schedule:

DATE	Module	Textbook	Assignment Due
Jan 8	Probability	4-1, 4-2	
Jan 15	*MLK Holiday – No Class*		
Jan 22	Random Variables	4-3	Probability HW
Jan 29	Parametric Random Variables	5-1 -> 5-5	Random Variables HW
Feb 5	Describing Data	2-1 -> 2-4	Random Variable Models HW
Feb 12	Confidence Intervals	8-1 -> 8-3, 8-5, 8-6	Describing Data HW
Feb 19	*Winter Recess – No Class*		
Feb 26	Hypothesis Testing 1	9-1 -> 9-3	Confidence Intervals HW
March 5	Hypothesis Testing 2	9-1 -> 9-3, 9-6	Hypothesis Testing 1 HW
March 12	Two-sample Hypothesis Tests	9-4, 19-1, 19-2	Hypothesis Testing 2 HW
March 19	Analysis of Variance - ANOVA	19-1 -> 19-5	Two-sample Hypothesis Tests HW
March 26	Simple Regression	3-4, 10-1 -> 10-4	Analysis of Variance – ANOVA HW
April 2	Regression Modeling	11-1, 11-3, 11-7, 11-8, 11-9	Simple Regression HW
April 9	Multiple Regression	10-5, 10-6, 11-5	Regression Modeling HW
April 16	Review for Final Exam		Multiple Regression HW
April 23	Final Exam		

Revised: 12-15-17