MATHEMATICS IN MANAGEMENT SCIENCE

MATH 1012, Spring Semester of 2016

Monday, Wednesday, and Friday in Room 277 of 60 W Charlton at 10:10-11:05 a.m.

Instructor: Prof. Roger Chalkley

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Office Hrs: Monday, Wednesday, and Friday at 1:30–2:30 P.M.

Text: For All Practical Purposes, 9th Ed., COMAP (Freeman): Ch. 1–4, 16, 17

COMPANION WEB SITE: bcs.whfreeman.com/fapp9e/

Course Objectives:

- 1. For you to experience first-hand that many important topics in modern mathematics are very different from the traditional mathematics studied in High School, and those topics have vast applications in the modern working world of business, education, government, and even in national defense.
- 2. For you to learn to solve problems (both abstract and practical) using the techniques introduced in class. This will involve a number of important skills: to be able to read about, understand, and learn complicated procedures and algorithms; to be able to apply these procedures to different and sometimes new situations; to work carefully and accurately.
- 3. For you to learn to communicate mathematically. You should be able to write and speak about the mathematics you learn in a clear and precise way. In particular, you will need to know the exact meaning of all new terms that you meet and be able to use them in a logical and grammatically correct fashion.

EXPECTATIONS:

- 1. You are expected to attend lectures regularly. You are expected to arrive on time and stay the entire period. You should come prepared. This means you should have read the relevant sections of the text before class and be prepared to discuss the material.
- 2. You are responsible for everything that happens in class. This includes any material covered as well as any announcements made like changes in homework assignments or test schedules. If you miss a class, it is your responsibility to check with someone else in the class to find out what you missed.

CALCULATORS: You will want a calculator for this class, but any inexpensive calculator will do. However, the calculator on your cell phone will not work, since you will not be allowed to have them out during exams. Bring your calculator to each lecture.

BLACKBOARD: Keep an eye on Blackboard. It will be used to post announcements, assignments, solutions, and scores.

HOMEWORK: Mathematics is similar to learning to ride a bicycle or learning any other athletic skill—you cannot learn how by watching someone else. It is important that you learn by doing. Although you will see many problems and examples worked in lectures, it is imperative that you do the suggested problems. Answers to the odd numbered problems are in the back of the text. Working with another student, or in a small group (3 or 4) can be very helpful. Work on these problems each day after we cover the relevant material. The *suggested problems* are for practice only and are not to be turned in.

In addition to the suggested problems, there will be separate homework assignments. These may be either online or written. Written assignments are to be completed carefully and neatly. Your solutions should be stapled and include your name (printed) and the assignment number in the top right corner. I will drop the lowest of the homework assignments before calculating an average.

EXAMS: There will be three midterms and a final. The tentatively exam schedule is as follows.

Midterm 1: Friday, February 5 Chapters 1, 2
Midterm 2: Friday, March 11 Chapters 3, 4
Midterm 3: Friday, April 15 Chapters 16, 17
Final Exam: Wednesday, April 27, 12:00–2:00 P.M. Comprehensive

REGRADING: If you believe something was graded incorrectly, attach a written note to the exam/assignment explaining where the error(s) occurred and what each error was and return it within one week of when it was handed back to the class.

GRADES: Homework will be worth 20% of the grade, each midterm will be worth 20%, and the Final will be worth 20%. In addition, an alternate weighted total obtained by replacing the lowest midterm with the final will also be calculated and the higher of these two weighted totals will be used for the course composite score. This composite score will be curved at the end of the term to determine a course grade, which will be no harder than: 90% - A, 80% - B, 70% - C, 60% - D.

MISSED TESTS/ASSIGNMENTS: If you miss an assignment or exam, it is entirely at my discretion whether this is to be handled in any way other than giving it a zero. What constitutes a "legitimate" excuse is determined solely by me. In general, failure to contact me at the earliest possible opportunity is cause for rejecting any excuse, no matter how reasonable. You will be expected to supply evidence that supports your excuse. Even for a legitimate excuse reported in a timely manner, you should not expect to be allowed to make up the missed work. Even for those excuses I deem legitimate, the only remedies may be to weight the final more heavily (for a missed test) or give an incomplete (for a missed final).

WITHDRAWALS: Friday, March 18, is the last day to withdraw from the class. If you withdraw, I will be required to affirm whether or not you minimally participated in the class. Although I will do my best to answer accurately, in the absence of any evidence to the contrary, I will affirm that you did not minimally participate. Ways for you to provide clear evidence of your participation in the class would include completing any assignment or taking a test.

GENERAL EDUCATION: This course was designed following the guidelines of the University of Cincinnati General Education Program. It satisfies, or partially satisfies, the **Quantitative Reasoning** distribution requirement. Moreover, of the five Baccalaureate Competencies, this course focuses on **Critical Thinking**, **Effective Communication**, and **Information Literacy**.

ACADEMIC Integrity: The University Rules, including the Code of Conduct, and other documented policies of the department, college, and university related to academic integrity, will be enforced. Any violation of these regulations, including acts of plagiarism or cheating, will be dealt with on an individual basis according to the severity of the misconduct.

MASS CENTER: Help may be available at the Mathematics and Science Support Center. For location, hours, and various tutoring options, consult the MASS Center website:

www.uc.edu/aess/lac/masscenter.html

CHANGES IN THE SYLLABUS: This syllabus is subject to change. If any changes occur, they will be announced in lecture and on blackboard.