Math 1324.001
Dr. Mufid Abudiab
MTWR 4-5.55 PM CCH 206
CI 307
Summer I 2011
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Business Mathematics

Course Description
This is a non-traditional math course with applications in business. It involves group projects, oral presentations, and written reports, using Excel to solve math problems, and the use of Power Point and the equation editor in Word. In this class, we develop the fundamentals of probability and simulation using technology. This includes Basic Probability, Summation Notation, Expected Value, Conditional Probability, Baye’s Theorem, Compound Interest, Probability Distribution, Random Sampling, and Simulation.

Learning Objectives
After completion the course, students should be able to
1. Understand and use Basic Probabilities: Definitions and Properties
2. Use Word Processing Mathematics: Symbols, Equation Editor
4. Understand and use Expected Value: Random Variables, and Expectation.
7. Understand and use Bayes’ Theorem: Partitions, and Main Theorem.
8. Use Compound Interest: Discrete Compounding, Continuous Compounding, Logarithms, and Value of Money.
9. Use Histograms: Summarizing and Grouping data.
11. Understand and use Random Sampling: Random Samples, and Approximating.
13. The learner will strengthen his or her general academic skills (critical thinking, writing, verbal explanation, working collaboratively, assuming responsibility, and use of technology).
14. The learner will develop a broad base of business mathematics knowledge: Concepts, Basic skills, mathematical senses (quantitative, geometric, symbolic), and thinking process (problem solving, predicting, and generalizing).

Major Course Requirements
Successful completion of College Algebra (Math1314) or suitable placements are pre-requisites for this course. The following assessments will be given during the semester: two examinations (20% each), final exam (30%), two team projects (10% each), and several team homework (10%). Each team will give both preliminary and final reports on the projects (Loan Work Outs and Stock Option Pricing). Final reports will be presented in both written and oral forms and should include a word file, and Excel file, and a PPT file. All formats will be announced in class and posted on class webpage.
Required or Recommended Readings
The E-text “Mathematics for Business Decisions Part 1: Probability and Simulation”, Release 1.0, 2003, by Thompson and Lamoureux, Mathematical Association of America can be accessed through the university main server (sci.tamucc.edu/~math1324). The ID and password will provided to students on the first day of class. Each team needs to have a flash drive for projects and homework. Students need to consult the class web page: http://falcon.tamucc.edu/~mabudia/Summer2012/math1324/index.htm regularly.

Course Policies
- Course grade will be based upon the percentage of the total possible points that a student earns and the following grading scale: A: >90% of total points, B: >80% of total points, C: >70% of total points, D: >60% of total points.
- The class web page will include a list of topics that will be studied during each class meeting. The e-text contains exercises which should be worked out while studying the material.
- Attendance is mandatory. Attendance will be checked each class period.
- I am available during regular office hours or through special arrangement.
- Each student is expected to take notes during lectures, and keep a record of his/her assignments, tests and over all grades.
- Last day of class is July 6th, 2012
- This class takes place during hurricane season. Keep in mind the following as found on the university’s website:
  o Listen to radio/TV for announcements of when to return to campus, or contact the University via the Public Information Hotline, (361) 825-0000.
  o Note: Radio Station KEYS (AM 1440) KZFM (95.5), KNCN (101.3), are the Emergency Alert Systems (EAS) stations for the Corpus Christi area, NOAA Weather Radio (Corpus Christi 162.44 MHZ).
  o Students that are calling from out of the Corpus Christi area can call the Public Information Hotline at: 1-361-825-0000 or Toll Free 1-888-234-4887.

Academic Integrity/Plagiarism.
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in failing the course.

Dropping a Class
I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. (June 22nd, 2012) is the last day to drop a class with an automatic grade of “W” this term.

Preferred methods of scholarly citations
Classroom/professional behavior
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

**Grade Appeals**
As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.

**Disabilities Accommodations**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call or visit Disability Services at (361) 825-5816 in Driftwood 101. If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

## VII. Tentative course schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Material</th>
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<tbody>
<tr>
<td>June 4th</td>
<td>Introduction to the course and project 1, Basic Probabilities, Word Processing Mathematics, and Summation Notation, Expected Value</td>
</tr>
<tr>
<td>June 11th</td>
<td>Preliminary Report, Database Functions &amp; Filtering, Conditional Probability, and Bayes’ Theorem I</td>
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<tr>
<td>18th</td>
<td>Bayes’ Theorem II, Exam 1, Final Presentation of Project 1, Introduction of Project 2, and Compound Interest</td>
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<tr>
<td>25th</td>
<td>Histograms, Probability Distributions, and Random Sampling</td>
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<tr>
<td>July 2nd</td>
<td>Simulation, Exam 2, Final Presentation of Project 2, and Final Exam</td>
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