Texas A&M University - Corpus Christi
Department of Mathematics and Statistics
Math 1324-004 Business Mathematics
Fall 2011

Course Information
Meeting Time and Place: Monday 7:00 – 9:30 PM CCH 206
Instructor: Coulibaly Nene
E-MAIL: Nene.Coulibaly@tamucc.edu
Web Page Address: (under construction)
Office Address: CI 354
Office phone: 361-825-2219
Office hours: MTWR 4:20 PM – 5:20 PM

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.

PREREQUISITE: Successful completion of College Algebra (Math 1314) or suitable placement.

Text and other supplies required
E-files are available online www.sci.tamucc.edu/~math1324
USB Flash Drive (at least 256 MB) or similar device.

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).
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).
Instructional Methods and Activities

Class meetings will be used for presentation of the projects, discussion of the tools for their solutions, student activities, team reports, and instructor comments on the solutions.

You will use the electronic text and its associated computer links to study the needed material. This can be done on any computer that is equipped with Windows 98 or later, Office 2000 or later, a CD drive, and an internet connection.

Class work and Homework will be given on the regular basis and should be completed for the grade. Due dates of the Homework will be posted on Blackboard and announced in class. Students will be given opportunity to ask questions about the homework at the beginning of each class.

Other Assignments: Extra credit assignments, class work, & projects will be given periodically throughout the semester.

Tests: Students will test mastery of skills through two tests and Final Exam. All tests must be completed in class.

Final Exam is comprehensive.

Student Responsibilities

You will be expected to attend class on a regular basis. You will find it very hard to survive in this class if you do not attend class regularly. I expect each student to take notes during the lectures, to keep a record of his/her assignments, tests and grades. We will be having daily in-class activities, so plan on being there. I think that it is very helpful to come to class prepared, that is having read the material in the book before it is covered. You are also expected to do all of the homework problems assigned to you. You cannot learn mathematics without doing the problems.

GRADING

The following assessments will be given during the semester: two examinations (20% each), comprehensive final exam (20%), two team projects (10% each), and several Homework/Quizzes (20%). 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/or posted on Blackboard.

In summary:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage of Grade</th>
<th>Final Grade Range</th>
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</thead>
<tbody>
<tr>
<td>2 Exams</td>
<td>40%</td>
<td>90% - 100% = A</td>
</tr>
<tr>
<td>2 Team Projects</td>
<td>20%</td>
<td>80% - 89% = B</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
<td>70% - 79% = C</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
<td>60% - 69% = D</td>
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<td>Below 60% = F</td>
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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. (November 4th 2011) 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 Rule13.02.99.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. 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.

Study Hints: If you are having trouble with the material and are unable to see me during my office hours, you may get tutoring at the CASA on the second floor of the library. They have computers, skilled tutors and good places to work on assignments and answer questions. Whatever you choose to do, it is important not to fall behind in the material.

Computer activities that are not related to class are not allowed during the class.

Good luck and let's have a great semester!
TENTATIVE SCHEDULE FOR MATH-1324-004

Aug. 29- Introduction to the Course and Project 1
      Basic probability I
Sept. 5- *****NO CLASS: Labor Day Holiday*****
12- Basic probability II
      Word Processing Mathematics
19- Summation Notation
      Expected Value
26- Data Functions & Filtering I
      Data Functions & Filtering II
Oct. 3- Conditional Probability
      Bayes’ Theorem I
      Bayes’ Theorem II
      Final Presentation of Project 1
10- Bayes’ Theorem I
      Midterm Exam 1
      Intro of Project 2 and Compound Interest I
14- Compound Interest II
      Histograms
31- Probability Distribution I
      Probability Distribution II
Nov. 4- ***** LAST DAY TO WITHDRAW*****
    7- Probability Distribution III
      Probability Distribution IV
14- Random Sampling I
      Random Sampling II
21- Simulation I
      Simulation II
      Homework # 7 Due
24- *****NO CLASS: Thanksgiving Holidays*****
25- *****NO CLASS: Thanksgiving Holidays*****
28- Final Presentation of Project 2
    Midterm Exam 2
Dec. 5- General Review
      Monday, December 12th: FINAL EXAM @ 7:15 PM – 9:45 PM