HCCS- Southeast Campus- FALL 2015 SS

MATH 1324- Finite Mathematics- CRN# 72430

Online Class Using Eagle Online 2 and MYMATHLAB Textbook: Mathematics with Applications; 10th ed.; Lial, Margaret L ISBN-13: 9780321334336

A. Instructor:

Ha Nguyen, PhD.

Email: Use QuickMail in Eagle Online ; hason.nguyen@hccs.edu (if Eagle Online is down) Phone: 832-620-7209 (text) Office location and hours: TBA

B. Course Web Site: Eagle Online 2: <u>www.eo2.hccs.edu</u> .

This site will have course handouts available for downloading. It will be updated with other information as the semester in progress. You are expected to log in at least twice a week to get updated information.

How to log in to Eagle Online 2 (EO2)?

Your Eagle Online 2 username/password is the same as your Eagle ID, which is the User ID or W number that you were issued upon admission and the password you created for your HCC Email (issued upon enrollment through the Student System). Your Eagle ID is also used for logging into campus computers, AskOnline tutoring, printing on campus, etc.

If you do know your W number, you can look it up from the Student System Sign In page (see "Forgot My User ID"). For more information on your User ID or your HCC Email password see the Eagle ID web page.

http://www.hccs.edu/district/students/student-e-maileagle-id/

Eagle Online 2 Support

For Eagle Online documentation, tutorials (including movies), phone and chat support, go to the HCC Eagle Online support website. Phone support: 713-718-2000, options 4, 2, 3 (available 24 x 7)

http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8513 Browser Issues Use the latest version of Firefox or Google Chrome. EO 2: https://eo2.hccs.edu/login/index.php

C. Course Description

MATH 1324: Finite Mathematics with Applications. A survey of finite mathematics and its application to problems of business and the natural and social sciences. Topics include set theory, probability, an introduction to matrices, linear programming, and an introduction to statistics.

D. Prerequisites

A grade of \overline{C} or better in Math 1314 or the equivalent.

E. Learning outcomes

Students will:

1.1 Be able to graph systems of linear equations in two variables.

- 1.2 Be able to solve systems of linear equations using Gauss-Jordan elimination.
- 1.3 Know how to add, subtract, and multiply matrices.
- 1.4 Be able to find the inverse of a square matrix.
- 1.5 Be able to graph systems of linear inequalities in two variables.
- 2.1 Know the graphical method for solving a linear programming problem.
- 2.2 Know the simplex method for solving standard maximization and standard minimization problems.
- 3.1 Be able to perform the basic set operations.
- 3.2 Be able to use the multiplication principle of counting.
- 3.3 Understand permutations and combinations.
- 3.4 Be able to use the basic counting techniques.
- 4.1 Understand conditional probability.
- 4.2 Be able to use Bayes' Formula.
- 4.3 Be able to find expected values.
- 4.4 Be able to find the standard deviation of a set of values.
- 4.5 Be able to find the binomial distribution and the normal distribution of a set of data.
- **F.** Course Outline: Instructors may find it preferable to cover the course topics in the order listed below. However, the instructor may choose to organize topics in any order, but all material must be covered.

APPROXIMATE TIME TEXT REFERENCE

UNIT I Review (3 hours)

Introduction to the course

- 2.1 Graphs
- 2.2 Equations of Lines
- 2.4 Linear Inequalities

UNIT II Systems of Linear Equations (8 hours)

- 6.1 Systems of Linear Equations
- 6.2 The Gauss-Jordan Method
- 6.3 Basic Matrix Operations
- 6.4 Matrix Products and Inverses
- 6.5 Applications of Matrices (Omit Code Theory and Routing)

Exam 1 Covers chapter 2 and 6

UNIT III Linear Programming (9 hours)

- 7.1 Graphing Linear Inequalities in Two Variables
- 7.2 Linear Programming: The Graphical Method
- 7.3 Applications of Linear Programming
- 7.4 The Simplex Method: Maximization
- 7.5 Maximization Applications
- 7.6 The Simplex Method: Duality and Minimization

UNIT IV Sets and Probability (8.5 hours)

8.1 Sets

- 8.2 Applications of Venn Diagrams8.3 Introduction to Probability8.4 Basic Concepts of Probability
- 8.5 Conditional Probability and Independent Events

Exam 2 Covers chapter 7 and 8.1-8.5

UNIT V Counting, Probability Distributions, and Further Topics in Probability (7.5 hours)

9.1 Probability Distributions and Expected Value
9.2 The Multiplication Principle, Permutations, and Combinations
9.3 Applications of Counting
9.4 Binomial Probability
Exam 3 Covers chapters 9, 10.1, 10.2

UNIT VI Introduction to Statistics (6 hours)

10.1 Frequency Distributions and Measures of Central Tendency

10.2 Measures of Variance

10.3 Normal Distributions

10.4 Normal Approximation to the Binomial Distribution

Final Exam is comprehensive

G. Exams-Homework-Grading policy

4 exams will be given, 3 semester exams and the final exam will be given at the end of the semester. These exams will only be accessible for three day period (Friday to Sunday) and they will be timed. The Final exam will be scheduled in the final exam period.

You will **NOT** have time to look up every answer, therefore, you should study the same as you would for an in class exam with limited use of references and limited time available. These exams will consist of questions from the homework, questions from quizzes, questions from practice tests.

MyMathLab Homework

Homework will be completed using MyMathLab. An access code may be purchased in the bookstore or online at www.coursecompass.com. After accessing the course, a class code will be needed.

courseID : nguyen57637

Grading policy:

Exam 1 20% Exam 2 20% Exam 3 20% Homework-Quizzes 20% Final Exam 20%.

Grading formula:

Final average = 3 Exam*.60 + Homework*.20 + Final Exam*.20

Grading Scale 90 - 100 = A ; 80 - 89 = B ; 70 - 79 = C; 60 - 69 = D; Below 60 = F

• No makeup for missed exams.

H. DISTANCE EDUCATION ADVISING AND COUNSELING SERVICES

Much DE student information can be found on the DE Student Services website: de.hccs.edu. Advising or counseling can be accomplished through our online request form AskDECounseling. Counselors and Student Services Associates (SSA) can assist students with admissions, registration, entrance testing requirements, degree planning, transfer issues, and career counseling. Inperson, confidential sessions, can also be scheduled to provide brief counseling and community referrals to address personal concerns impacting academic success.

I. STUDENTS WITH DISABILITIES

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc) who needs to arrange reasonable accommodations must contact the appropriate HCC Disability Support Service (DSS) Counselor at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office. Students who are requesting special testing accommodations must first contact the appropriate (most convenient) DSS office for assistance: **Disability Support Services Offices:** System: 713.718.5165 Central: 713.718.6164 also for Deaf and Hard of Hearing Services and Students Outside of the HCC District service areas. Northwest: 713.718.5422 Northeast: 713.718.8420 Southeast: 713.718.7218 Southwest: 713.718.7909 After student accommodation letters have been approved by the DSS office and

submitted to DE Counseling for processing, students will receive an email confirmation informing them of the Instructional Support Specialist (ISS) assigned to their professor.

J. NOTICE FOR STUDENTS OUTSIDE OF HCC SERVICE AREA

Students who live or work outside the HCC service area and cannot take paper exams at one of our HCC testing locations MUST make arrangements for a proctor.

Please see the DE Student Services Additional Resources webpage for more information.

K. VIRTUAL CLASSROOM CONDUCT

As with on-campus classes, all students in HCC Distance Education courses are required to follow all HCC Policies & Procedures, the Student Code of Conduct, the Student Handbook, and relevant sections of the Texas Education Code when interacting and communicating in a virtual classroom with faculty and fellow students. Students who violate these policies and guidelines will be subject to disciplinary action that could include denial of access to course-related email, discussion groups, and chat rooms or being removed from the class.

L. SEXUAL HARRASSMENT

It is a violation of HCC policy for an employee, agent, or student of the College to engage in sexual harassment as defined in the Equal Employment Opportunity Commission (EEOC) guidelines. Any student who has a complaint concerning this policy has the opportunity to seek resolution of such a complaint in accordance with procedures set forth in the Student Handbook. Report any complaints immediately to College Administration or call the Institutional Equity & Compliance Office

M. Academic Honesty

A student who is academically dishonest is, by definition, not showing that the coursework has been learned, and that student is claiming an advantage not available to other students. The instructor is responsible for measuring each student's individual achievements and also for ensuring that all students compete on a level playing field. Thus, in our system, the instructor has teaching, grading, and enforcement roles. You are expected to be familiar with the University's Policy on Academic Honesty, found in the catalog. What that means is: If you are charged with an offense, pleading ignorance of the rules will not help you. Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty. "Scholastic dishonesty": includes, but is not limited to, cheating on a test, plagiarism, and collusion. Cheating on a test includes:

- Copying from another students' test paper;
- Using materials not authorized by the person giving the test;
- Collaborating with another student during a test without authorization;

• Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of a test not yet administered;

• Bribing another person to obtain a test that is to be administered.

N. Class Attendance

As stated in the HCC Catalog, all students are expected to attend classes regularly. Students in DE courses must log into their Eagle Online class (Moodle) at **least two times per week**

or they will be counted as absent. Just like an on-campus class, your regular participation is required. Although it is the responsibility of the student to withdraw officially from a course, the professor also has the authority to block a student from accessing Eagle Online, and/or to withdraw a student for excessive absences or failure to participate regularly. <u>DE students who do not log into their Eagle Online class before the Official Day of Record or they will be automatically dropped for non-attendance. Completing the DE online orientation does not count as attendance. You are required to log in to Eagle Online at least twice a week to check out class materials, updated assignment due dates, or any class announcement.</u>

O. HCC Course Withdrawal Policy

If you feel that you cannot complete this course, you will need to withdraw from the course prior to the final date of withdrawal. Before, you withdraw from your course; please take the time to meet with the instructor to discuss why you feel it is necessary to do so. The instructor may be able to provide you with suggestions that would enable you to complete the course. Your success is very important. Beginning in fall 2007, the Texas Legislature passed a law limiting first time entering freshmen to no more than **SIX** total course withdrawals **throughout** their educational career in obtaining a certificate and/or degree.

If you plan on withdrawing from your class, you **MUST** contact a HCC counselor or your professor prior to withdrawing (dropping) the class for approval and this must be done **PRIOR** to the withdrawal deadline to receive a "W" on your transcript. **Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. *Remember to allow a 24-hour response time when communicating via email and/or telephone with a professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.* If you do not withdraw before the deadline, you will receive the grade that you are making in the class as your final grade.

Repeat Course Fee The State of Texas encourages students to complete college without having to repeat failed classes. To increase student success, students who repeat the same course more than twice, are required to pay extra tuition. The purpose of this extra tuition fee is to encourage students to pass their courses and to graduate. Effective fall 2006, HCC will charge a higher tuition rate to students registering the third or subsequent time for a course. If you are considering course withdrawal because you are not earning passing grades, confer with your instructor/counselor as early as possible about your study habits, reading and writing homework, test taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

Student Course Reinstatement Policy:

Students have a responsibility to arrange payment for their classes when they register, either through cash, credit card, financial aid, or the installment plan. Faculty members have a responsibility to check their class rolls regularly, especially during the early weeks of a term, and reconcile the official class roll to ensure that no one is attending class whose name does not appear on it. Students who are dropped from their courses for nonpayment of tuition and fees who request reinstatement after the official date of record (OE Date) can be reinstated by making payment in full and paying an additional \\$75 per course reinstatement fee. A student requesting reinstatement should present the registrar with a completed **Enrollment Authorization Form** with the signature of the instructor, department chair, or dean who should verify that the student has been attending class regularly.

Students who are reinstated are responsible for all course policies and procedures, including attendance requirements.

P. Resources:

- Free tutoring is available in TAC (Tutor Assistance Center) Room 203, Felix Morales building, 6815 Rustic St. Houston TX, 77087
- Additional help is also available through

Students can get free assistance, 24 hours a day, 7 days a week, in Math, English and other subjects, at **www.hccs.askonline.net**. Typically, posted questions are answered by an HCC tutor or faculty within 24 hours (usually under 6 hours). There are also several online math resources that you can find with an internet search. You may also find information on the Learning Web site accessible through your specific HCCS campus website.

Q. Some Additional Thoughts and Suggestions

- I strongly recommend that you do all of the MyMathLab homework on paper, and then enter your answers into the website. Keep a notebook with all of your homework notes in it. It is extremely important especially for online class.
- Studying is all about efficiency; using your time optimally in order to learn the material as completely as possible. To do this, you will need to know and what you don't know. Once you understand which parts of the material you do know and don't know, you will need to focus on what you don't know until you eventually know it. This means spending a lot of time with material that you don't know which can feel uncomfortable. This is the secret to studying mathematics: becoming more comfortable with being uncomfortable. We need to spend time on topics we don't yet understand in order to understand them.
- Technology can be an extremely useful tool. It can help you to gain an intuition for the material, it can help you to check your work, and it can make the material more fun.

R. Important dates

Sept 21, 2015 (Mon): Classes begin.(2nd Start) Test 1(Fri-Sun): Oct 9-Oct 11 Test 2 (Fri-Sun): Oct 30-Nov 1. Test 3 (Fri-Sun): Nov 20-Nov 22 Test 4 (Fir-Sun): Dec 4-Dec 6 Nov 9, 2015 (MON): Last day to withdraw with "W". Dec 7-14, 2015: Final exam.

NOTE: THIS SYLLABUS IS SUBJECT TO CHANGE AS NEEDED TO MEET THE OBJECTIVES OF THE COURSE OR TO AID IN COURSE ADMINISTRATION AT THE DISCRETION OF INSTRUCTOR. IT IS NOT ANTICIPATED THAT THERE WILL BE ANY SUBSTANTIVE CHANGES.

Let's have a wonderful semester!!!