Mathematics Northline Campus
Math 1324: Finite Mathematics with Applications
CRN 10970 – Summer
Mini/2017 Distance Education
3 hour lecture course / 48 hours per semester/ 3 weeks
Textbook: Mathematics with Applications; 11th ed.; Lial, Margaret L

Instructor: Emmanuel Usen
Instructor Contact Information: emmanuel.usen@hccs.edu Office Phone Number – 713-718-8062

Office location and hours: Northline Campus Office Hours: Only through email and on the phone.

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.

Prerequisites
A grade of C or better in Math 1314 or the equivalent.

Course Goal
This course is intended for students majoring in liberal arts and secondary education.

Course Student Learning Outcomes (SLO):
1. Solve business / financial problems by the use of systems of equations, systems of inequalities, and matrices.
2. Formulate and solve linear programming problems by graphing and the Simplex Method.
3. Analyze information and make conclusions based on set data.
4. Comprehend, analyze, and synthesize statistical data in order to make predictions.

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.

**Core Objectives**

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

Students enrolled in this core curriculum course will complete a research project or case study designed to cultivate the following core objectives:

**Critical Thinking Skills:** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

**Communication Skills:** to include effective development, interpretation and expression of ideas through written, oral and visual communication.

**Empirical and Quantitative Skills:** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

**Instructional Methods**

This is an online class. While you will be logging into Eagle Online for notes, announcements and other important information on a weekly basis, most of the instruction will come from a homework management system called Mymathlab, which must be purchased for this class. The Mymathlab Course ID for this class is usen90314

**Student Assignments**

Homework assignments will be submitted online through Mymathlab. Four major exams done at home and the final exam will be proctored and taken in class or an hccs testing center in Houston or for students who do not reside in the Houston area, a DE approved testing center where the student resides.

**Assessments**

\[
\text{Final Average} = \frac{[3 \text{ Exams (300)} + \text{Homework (100)} + \text{Final Exam (200)}]}{6}
\]

*The lowest of the four major exams will be dropped.*

<table>
<thead>
<tr>
<th>Exams</th>
<th>Sections covered on the Exam</th>
<th>Exam Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>Sections 2.1, 2.2, 3.4, 3.7, 4.1, 4.3 and 4.4</td>
<td>5/19 Online</td>
</tr>
<tr>
<td>Exam 2</td>
<td>Sections 6.1 – 6.4, 7.1 – 7.3</td>
<td>5/23 Online</td>
</tr>
<tr>
<td>Exam 3</td>
<td>Sections 7.4, 7.5, 8.1, 8.3, 8.4 and 8.5</td>
<td>5/28 Online</td>
</tr>
<tr>
<td>Exam 4</td>
<td>Sections 9.1 – 9.4, 5.2-5.4</td>
<td>6/1 Online</td>
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</table>
Final Exam | Comprehensive. All sections covered in the course. | Final Exam must be taken on campus at the testing center. 6/2 – 6/3

HCC Policy Statement - ADA

Students with disabilities

Houston Community College is dedicated to providing an inclusive learning environment by removing barriers and opening access for qualified students with documented disabilities in compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act. Ability Services is the designated office responsible for approving and coordinating reasonable accommodations and services in order to assist students with disabilities in reaching their full academic potential. In order to receive reasonable accommodations or evacuation assistance in an emergency, the student must be registered with Ability Services.

If you have a documented disability (e.g. learning, hearing, vision, physical, mental health, or a chronic health condition), that may require accommodations, please contact the appropriate Ability Services Office below. Please note that classroom accommodations cannot be provided prior to your Instructor’s receipt of an accommodation letter and accommodations are not retroactive. Accommodations can be requested at any time during the semester, however if an accommodation letter is provided to the Instructor after the first day of class, sufficient time (1 week) must be allotted for the Instructor to implement the accommodations.

Ability Services Contact Information

<table>
<thead>
<tr>
<th>Location</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central College</td>
<td>713-718-6164</td>
</tr>
<tr>
<td>Coleman College</td>
<td>713-718-7376</td>
</tr>
<tr>
<td>Northeast College</td>
<td>713-718-8322</td>
</tr>
<tr>
<td>Northwest College</td>
<td>713-718-5422 713-718-5408</td>
</tr>
<tr>
<td>Southeast College</td>
<td>713-718-7144</td>
</tr>
<tr>
<td>Southwest College</td>
<td>713-718-5910</td>
</tr>
<tr>
<td>Adaptive Equipment/Assistive Technology</td>
<td>713-718-6629 713-718-5604</td>
</tr>
<tr>
<td>Interpreting and CART services</td>
<td>713-718-6333</td>
</tr>
</tbody>
</table>

HCC Policy Statement: Title IX

HCC is committed to provide a learning and working environment that is free from discrimination on the basis of sex which includes all forms of sexual misconduct. Title IX of the Education Amendments of 1972 requires that when a complaint is filed, a prompt and thorough investigation is initiated. Complaints may be filed with the HCC Title IX Coordinator available at 713 718-8271 or email at oie@hccs.edu.

HCC Policy Statement: 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;
- Bribery another person to obtain a test that is to be administered.
Plagiarism means the appropriation of another’s work and the unacknowledged incorporation of that work in one’s own written work offered for credit.

Collusion mean the unauthorized collaboration with another person in preparing written work offered for credit. Possible punishments for academic dishonesty may include a grade of 0 or F in the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the College System. (See the Student Handbook)

**HCC Policy Statements**

*Class Attendance* - *It is important that you come to class!* Attending class regularly is the best way to succeed in this class. Research has shown that the single most important factor in student success is attendance. Simply put, going to class greatly increases your ability to succeed. You are expected to be on time at the beginning of each class period. For complete information regarding Houston Community College’s policies on attendance, please refer to the Student Handbook. You are responsible for materials covered during your absences. Class attendance is checked daily. Although it is your responsibility to drop a course for nonattendance, the instructor has the authority to drop you for excessive absences.

If you are not attending class, you are not learning the information. As the information that is discussed in class is important for your career, *students may be dropped from a course after accumulating absences in excess of six (6) hours of instruction*. The six hours of class time would include any total classes missed or for excessive tardiness or leaving class early.
You may decide NOT to come to class for whatever reason. As an adult making the decision not to attend, you do not have to notify the instructor prior to missing a class. However, if this happens too many times, you may suddenly find that you have “lost” the class.

Poor attendance records tend to correlate with poor grades. If you miss any class, including the first week, you are responsible for all material missed. It is a good idea to find a friend or a buddy in class who would be willing to share class notes or discussion or be able to hand in your work if you unavoidably miss a class.

**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.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor may “alert” you and HCC counselors that you might fail a class because of excessive absences and/or poor academic performance. It is your responsibility to visit with your professor or a counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

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. **The last day to withdraw 05/26/2017 by 4:00p.m.**

**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.

**Classroom Behavior**

Everyone will be expected to conduct themselves with courtesy and respect in this course.

**Use of Camera and/or Recording Devices**

As a student active in the learning community of this course, it is your responsibility to be respectful of the learning atmosphere in your classroom. To show respect of your fellow students and instructor, you will turn off your phone and other electronic devices, and will not use these devices in the classroom unless you receive permission from the instructor.

Use of recording devices, including camera phones and tape recorders, is prohibited in classrooms, laboratories, faculty offices, and other locations where instruction, tutoring, or testing occurs. Students with disabilities who need to use a recording device as a reasonable accommodation should contact the Office for Students with Disabilities for information regarding reasonable accommodations.

**Instructor Requirements**

Students are expected to submit homework online thru Mymathlab by the designated due dates and take all exams during the scheduled testing dates.

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

**Calculator Policy**
Scientific calculators and graphing calculators are allowed during the exams.

**Personal Communication Device Policy:**
All personal communication devices (any device with communication capabilities including but not limited to cell phones, blackberries, pagers, cameras, palmtop computers, lap tops, PDA’s, radios, headsets, portable fax machines, recorders, organizers, databanks, and electronic dictionaries or translators) must be muted or turned off during class. Such activity during class time is deemed to be disruptive to the academic process. Personal communication devices are to not be on the student desk during examinations. Usage of such devices during exams is expressly prohibited during examinations and will be considered cheating (see academic honesty section above).

**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.

**Resources:**
Free tutoring is available in the Learning Emporium at the Central Campus is available to all HCC students for tutoring in Mathematics, among other subjects. You may visit them in SJAC 384 or contact them at 713-714-6356 Additional help is also available through Student Support Services. 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.

**EGLS3 -- Evaluation for Greater Learning Student Survey System**
At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term. Visit www.hccs.edu/EGLS3 for more information.

**Administration contact information**

### College - Level Math Courses

<table>
<thead>
<tr>
<th>Chair of Math</th>
<th>Jaime Hernandez</th>
<th>SW Campus</th>
<th>713-718-7772</th>
<th>Stafford, Scarcella, N108</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Secretary</td>
<td></td>
<td>SW Campus</td>
<td>713-718-7770</td>
<td>Stafford, Scarcella, N108</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Clen Vance</td>
<td>CE Campus</td>
<td>713-718-6644</td>
<td>San Jacinto Building, Rm 369</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Ernest Lowery</td>
<td>NW Campus</td>
<td>713-718-5512</td>
<td>Katy Campus Building, Rm 112</td>
</tr>
<tr>
<td>Math Assoc. Chair</td>
<td>Mahmoud Basharat</td>
<td>NE Campus</td>
<td>713-718-2438</td>
<td>Codwell Hall Rm 105</td>
</tr>
</tbody>
</table>

| Chair of Dev. Math     | Susan Fife      | SE Campus | 713-718-7241 | Felix Morales Building, Rm 124 |
| - Secretary            | Carmen Vasquez  | SE Campus | 713-718-7056 | Felix Morales Building, Rm 124 |
For issues related to your class, please first contact your instructor.
If you need to contact departmental administration, then contact the appropriate Associate Chair.
If further administrative contact is necessary, then contact the appropriate Department Chair.

To register for MATH 1324 CRN 10970 Summer Mini 2017:
2. Under Register, select Student.
3. Confirm you have the information needed, then select OK! Register now.
4. Enter your instructor’s course ID: usen90314, and Continue.
5. Enter your existing Pearson account username and password to Sign In.
   You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.
   If you don’t have an account, select Create and complete the required fields.
6. Select an access option.
   Enter the access code that came with your textbook or was purchased separately from the bookstore.
   Buy access using a credit card or PayPal account.
   If available, get temporary access by selecting the link near the bottom of the page.
7. From the You're Done! page, select Go To My Courses.
8. On the My Courses page, select the course name MATH 1324 CRN 10970 Summer Mini 2017 to start your work.

To sign in later:
2. Select Sign In.
3. Enter your Pearson account username and password, and Sign In.
4. Select the course name MATH 1324 CRN 10970 Summer Mini 2017 to start your work.
   To upgrade temporary access to full access:
2. Select Sign In.
3. Enter your Pearson account username and password, and Sign In.
   Enter an access code or buy access with a credit card or PayPal account.