

COURSE SYLLABUS

MATH 1332; CRN # 48984; Mathematics for Liberal Arts

Spring 2015-3 hour lecture course /16 Weeks–DE

January-20 to May-17

INSTRUCTOR: Mandri Obeyesekere
MyMathlab Course ID: Obeyesekere99015
CONTACT INFORMATION: Mandri.obeyesekere@hccs.edu

Required Material.

Access to MyMathLab and Text book.

Instructor Contact Information: By email-**Use QuickMail given in Eagle on Line 2**

DE STUDENT SERVICES

The Distance Education Student Handbook contains policies and procedures unique to the DE student. It is the student's responsibility to be familiar with the handbook's contents and part of the mandatory orientation. The handbook contains valuable information, answers, and resources, such as DE contacts, policies and procedures (how to drop, attendance requirements, etc.), student services (ADA, financial aid, degree planning, etc.), course information, testing procedures, technical support, and academic calendars. Refer to the DE Student Handbook by visiting this link: <http://de.hccs.edu/de/de-student-handbook>

Course Description

MATH 1332: Mathematics for Liberal Arts is a course designed for liberal arts, non-mathematics, non-science, and non-business majors. The course provides students with an appreciation of the history, art, and beauty of mathematics in the world around us.

Prerequisites

A grade of C or better in Math 0312 or a grade of C or better in Math 0409 or the equivalent.

Course Goal

The intent of this course is to provide the student certain manipulative skills with limits insofar as they apply to concrete but elementary problems in the social and natural sciences. Mathematical rigor will be kept to a minimum.

Course Student Learning Outcomes (SLO):

1. Analyze information using Sets, Venn Diagrams, Counting Methods, Probabilities and Statistics to make conclusions based on data.
2. Incorporate the mathematics of finance to be consumer-wise.
3. Utilize geometric and trigonometric formulas to solve problems.
4. Apply basic algebraic concepts to linear, quadratic, exponential and logarithmic functions

Course Objectives: Upon completion of this course, a student will be able to:

1. Use Venn diagrams to solve application problems.
2. Identify sets and subsets and perform set operations.
3. Be familiar with the basic concepts of probability.
4. Find the probability of an event.
5. Use tree diagrams to find possible outcomes and use combinations and permutations.
6. Solve application problems involving probability.
7. Be familiar with the fundamentals of statistics.
8. Assess a statistical study.
9. Find the mean, median, and mode of given sets of raw data.
10. Interpret statistical tables and graphs.
11. Identify normal and skewed distribution curves.
12. Determine variance and standard deviation from a given sample.
13. Find the margin of error associated with a given sample.
14. Convert fractions and decimals to percents.
15. Convert percents to decimals and fractions.
16. Find simple and compound interest.
17. Find the future value of a given annuity.
18. Find the monthly payment and the total interest for a given simple interest amortized loan.
19. Identify points, lines, planes; read and measure angles.
20. Identify types of triangles and use the Pythagorean Theorem.
21. Find perimeter and area of polygons and circles.
22. Use right triangle trigonometry.
23. Apply linear and quadratic functions.
24. Apply exponential and logarithmic functions.

Attendance Policy

A student has to Login on Eagle on Line 2.0 **everyday ; Work on homework on MyMathLab, read and respond to email using ONLY Quick Mail accessed from Eagle online 2** . Would be counted as absent, if not.

Read the instructions about Quick Mail provided on Eagle on Line 2.

Testing policy:

There will be 3 major Tests (online, on MyMathLab) and a Final Departmental Exam (Proctored-onsite-HCC). Results of each Test will be visible after the Test is closed for the class. If you perform below your expectations or fail any test, please set-up a conference with the instructor as soon as possible.

Make-up policy- strictly followed:

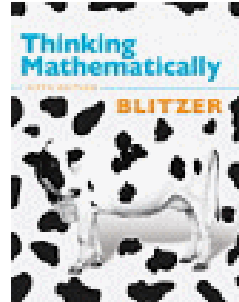
There are no make-ups for the Tests or the Final Exam.

(The dates are given here and make sure your computer works well and you have access to a computer even if you are travelling.)

Instructional Materials

Textbook:

Thinking Mathematically, by Robert
Blitzer, 5th Edition
ISBN-13: 978-0-321-64585-2



If you purchase a new book, the access code for MyMathLab will be included. If you purchase a used book, you will have to buy the Access code separately.

If you only buy the access code to MyMathLab, you will have access to the online text book also. This option is cheaper than buying the new text book.

The following sections will be covered in this course:

**APPROXIMATE TIME
REFERENCE**

(7 Hours) Unit 1: Set Theory

- 2.1 Basic Set Concepts
- 2.2 Venn Diagrams and Subsets
- 2.3 Venn Diagrams
- 2.4 Set Operations and Venn Diagrams with Three Sets

(7 Hours) Unit 2: Counting Methods and Probability Theory

- 11.1 The Fundamental Counting Principle
- 11.2 Permutations
- 11.3 Combinations
- 11.4 Fundamentals of Probability

(7 Hours) Unit 3: Statistics

- 12.1 Sampling, Frequency Distributions, and Graphs
- 12.2 Measures of Central Tendency

- 12.3 Measures of Dispersions
- 12.4 The Normal Distribution

(8 Hours) Unit 4: Consumer Mathematics and Financial Management

- 8.1 Percent
- 8.2 Simple Interest
- 8.3 Compound Interest
- 8.4 Installment Buying
- 8.5 The Cost of Home Ownership

(8 Hours) Unit 5: Geometry

- 10.1 Points, Lines, Planes, and Angles
- 10.2 Triangles
- 10.3 Polygons, Quadrilaterals, and Perimeter
- 10.4 Area and Circumference
- 10.6 Right Triangle Trigonometry

(8 Hours) Unit 6: Functions

- 7.1 Graphing and Functions
- 7.2 Linear Functions and Their Graphs
- 7.3 Quadratic Functions and Their Graphs
- 7.4 Exponential Functions 414

Homework policy:

All homework must be completed online using MYMATHLAB. To register for MyMathLab and to access the homework, go to www.coursecompass.com. The **courseID** for the homework is **obeyesekere99015 (available from Jan 18th)** and the school zip code is **77477**. Average of all the homework sections will be taken as the homework grade on the due date. The MyMathLab homework grade will be the equivalent of one test grade.

Final Exam:

****New Policy : You have to make a reservation for taking the Final exam.**

You will not be able to take the final if you do not register and that will be counted as failing the course- a course grade of F.

Reservation form link: Will be posted few days before the Final Exam- Watch for an email from me.

Place HCC Administration building (3100 Main street) ; note: This is not the Central Campus

Final Exam days:

May 8th-9th (Friday or Saturday)

Times: Friday - 10am - 9pm - last admit time - 7pm

Saturdays - 10am - 4pm - last admit time - 2pm

No Sunday testing

The Final exam is **onsite and will be proctored**. The final examination is departmental and consists of 33 multiple-choice problems. The problems cover all the material required in the course. **If you score lower than 60% on the final exam, you are automatically given a course grade of F, as noted under the grading policy.**

Grading policy:

A grade of “F” is given if the Final Average is below 60 or the Final Exam grade is below 60. If your final exam grade is above 60%, then your course grade will be based on the Average of all tests and homework and the final exam.

If the final exam is 60 or above, then the final course grade would be calculated as follows:

Final course grade will be the average of highest 2 Major Tests (will drop the lowest test grade out of the three tests), Homework, and Final Exam as shown in the following formula.

$(\text{Best Two Tests} + \text{H.W} + \text{Final})/4 = \text{Final Average}$

Your final course grade is based on the following standard HCC scale.

FINAL AVERAGE	FINAL COURSE GRADE
$90 \leq \text{Average} \leq 100\%$	A
$80 \leq \text{Average} < 90\%$	B
$70 \leq \text{Average} < 80\%$	C
$60 \leq \text{Average} < 70\%$	D
Average < 60% or Final Exam Grade < 60	F

A grade of “IP” (In Progress) will not be given. If your final grade is a “D”, then you may be eligible to take the bridge course MATH 0112 instead of repeating the class. To determine eligibility, please contact the math department.

FINAL GRADE OF FX

Students who stop attending class and do not withdraw themselves prior to the withdrawal deadline may either be dropped by their professor for excessive absences, or be assigned the final grade of “FX” at the end of the semester. Students who stop attending classes, miss exams, will receive a grade of “FX”, compared to an earned grade of “F” which is due to poor performance. Logging into a DE course without active participation is seen as non-attending.

Please note that HCC will not disperse financial aid funding for students who have never attended class. Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of “FX” is treated exactly the same as a grade of “F” in terms of GPA, probation, suspension, and satisfactory academic progress.

Information about tests

(Tentative Dates- Will inform if the dates change)

Test (on MML)	Available Dates	Units-sections in the book	Review (MML)
Test 1	Feb20 - Feb 22 (Fri-Mon) – 3 days	Units 1,2 2.1-2.4 11.1-11.4	Quiz 1
Test 2	Mar 27 - Mar 29 (Fri-Mon) – 3 days	Units 3,4 12.1-12.4 8.1-8.5	Quiz 2
Test 3	May 01 - May 04 (Fri-Tue)- 4 days	Units 5,6 10.1-10.4, 10.6, 7.1-7.4	Quiz 3

Final Exam will be Onsite;

Dates: Fri May 8th or Sat May 9th ,

Please reserve, as mentioned above, to take the Final Exam, when you receive the link.

Important: Quizzes on MyMathlab are not for a grade. Quizzes are for you to use as a review for the relevant test.

All relevant Homework and Quizzes will be closed the day before the Test opens.

Quizzes and homework will have unlimited attempts, but the tests are only for ONE attempt.

Remember, all Quizzes, Homework, and Tests are on MyMathLab.

Best advice: Must read your text book; do examples and problems in the text book. If you need to see more instructions, use instructional material on MyMathLab (MML), use as you need. Work everyday.

Before each test do homework as you study through the sections, and the relevant quizzes as many times as you like till you make a perfect score!

HCC Policy Statement - ADA

Services to 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 Disability Services Office at his or her respective college at the beginning of each semester. Faculty members are authorized to provide only the accommodations requested by the Disability Support Services Office. Persons needing accommodations due to a documented disability should contact the ADA counselor for their college as soon as possible. For questions, please contact Donna Price at 713.718.5165. To visit the ADA Web site, please visit www.hccs.edu then click Future students, scroll down the page and click on the words Disability Information.

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 oe@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;
- Bribing 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 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. Please check the student calendar to find the last day to withdraw.**

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.

Use of Camera and/or Recording Devices

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

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:

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.