

Math 175 Syllabus

Contact Information	Course Description	Prerequisite	Course Objective
Textbook and Materials	Tentative Instructional Plan	Instructional Policies	Grading Policy

Contact Information

Mr. Ken Kasin
313-845-6497
kkasin@hfcc.edu
kkasin@henryford.ucompass.com
Office: L-238 in the Liberal Arts Building
I will hold office hours:

Monday 10:30-12:30
Tuesday 9:00-11:00 and 3:00-3:30
Wednesday 9:00-12:00
Thursday 9:00-11:00 and 3:00-3:30

If these times are not convenient for you contact me to arrange another time.
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Course Description

Topics covered include algebraic, graphical and numerical representations of functions, including composition and inverses of functions. The primary focus is the study of rational functions, exponential and logarithmic functions and trigonometric functions of real numbers and angles. Also included are analytic trigonometry, solutions of triangles, polar coordinates, and vectors. Techniques of problem solving and applications are included throughout the course requiring the frequent usage of graphing calculators.
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Prerequisite

A "C" grade, or better in Math 115, or a satisfactory score on the placement test.
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Upon successful completion of this course students should be able to:

<p>Course Objectives</p>	<p>1) Graph rational functions by hand after algebraically or numerically finding their asymptotes or holes, if any and verify results using a graphing utility. 2) Determine if a function has an inverse function and, if possible, find it. 3) Define and graph the basic exponential and logarithmic functions and their transformations by hand. 4) Solve exponential and logarithmic equations algebraically and/or graphically using the logarithmic laws where appropriate. 5) Find the exact values of the trigonometric functions using the unit circle, point in the plane, and the right triangle definitions of the trigonometric functions. 6) Use the basic trigonometric identities to prove other identities and to find exact values of the other trigonometric functions given the exact value of one function. 7) Graph basic trigonometric functions and transformations of the sine and cosine function by hand. 8) Solve trigonometric equations both algebraically and graphically. 9) Solve right and oblique triangles. 10) Evaluate inverse sine, inverse cosine, and inverse tangent function values exactly when possible and, if not possible, approximate using a graphing utility. 11) Solve applications involving exponential, logarithmic, and trigonometric functions algebraically or by using a graphing utility.* *=fulfills HFCC General Education Outcome for critical thinking and problem solving. [TOP]</p>
<p>Textbook and Materials</p>	<p>1. Precalculus: Graphs and Models, 4th edition with Graphing Calculator Manual plus MyMathLab Student Access Kit, by Bittenger, Beecher, Ellenbogen and Penna. Digital Video Tutor is bundled with the textbook. 2. A graphing utility is required. You may use any graphing calculator with compatible capabilities but the HFCC Math Division supports the TI-83 or 84 graphing calculator. If you plan on taking Math 180 at HFCC buy the TI-83 or 84 and learn to use it. E-mail me with any concerns you have. [TOP]</p>
<p>Tentative Instructional Plan</p>	<p>See the course schedule by clicking the Calendar button at left. [TOP]</p>
	<p>Experience tells me that only students who work 12-15 hours weekly, or more on this class will succeed. I will monitor your attendance and progress in two ways. First, Ucompass and MyMathLab provide information about your activities on these sites. Second, I ask you to turn in certain assignments by deadlines. Dropping: The college allows students to drop without instructor permission through the tenth week and receive a DR grade. Students in this section may also receive a DR grade by requesting one in writing to me <i>prior</i> to the final exam. A student who takes the final exam will not receive a DR grade. Academic Dishonesty: College Board of Trustees Policy #8500</p>

Instructional Policies

" . . . It shall be the policy of the College that the determination of the fact of academic dishonesty by a student shall be a matter of individual judgement by the instructor. The instructor may administer a penalty up to, and including, failure in a particular course . . ."

Mathematics Division Policy on Cut-Off for Student Drop -Downs

"Registered students may only drop-down (move-up) to another math class within the first three weeks of the Fall and Winter semesters. In the Spring and/or Summer semesters, students have only two weeks to drop-down (move-up) to another class. In order to [change], a student must:

1. Obtain the written permission of his/her current instructor stating that the student was misplaced,
2. See the Mathematics division Director for assistance in finding open sections, and
3. Obtain the written permission of the instructor in the new . . . course.
4. The student must then officially file an Add-Drop form at the Registration office."

Discipline: Any activity that interferes with another student's learning is a disruption and will not be tolerated. This includes not using inflammatory, or insulting language. Students are expected to conduct themselves with polite demeanor towards fellow students and the instructor. Violation of this policy will be handled according to appropriate campus discipline policies. In extreme circumstances students can be removed from the course without refund of tuition.

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I will base your grade on the following assessments.

1. **Exams on Campus** (300 points): You will have three 100 point exams. No make up exams are allowed. Generally a missed exam will result in a score of 0 points. In the case of a documented emergency the final exam score (scaled to 100 points) will also count as the missing test score. Approximate times for these exams are given in the Calendar. For each midterm exam students will have a one week time frame in which to take the exam. You must have completed all the online quizzes in order to take the exam.

2. **Quizzes** (75 points): You will have 15 online quizzes to take. Quizzes usually cover material in one or two sections. Each quiz may be taken twice and the higher score will count. These quizzes must be taken before you take your exam.

3. **Participation** (50 points): Each lesson lists ways to participate. Answering the e-mail homework question is worth 2 points. Answering a question I post in the discussion board is worth 2 points. Posting a question about the homework is worth 1 point (up to 2 points per lesson). Answering a question another student posts is worth 2 points (up to 4 points per lesson). You may earn a maximum of 8 points per section for most sections. (Some sections are combined with others so there may be a maximum of 8 for two or three sections; these are clearly indicated in the assignment pages) **IN THE COURSE OF THE SEMESTER THERE WILL BE APPROXIMATELY 140 POSSIBLE POINTS FOR PARTICIPATION. YOU MUST EARN A MINIMUM OF 30 PARTICIPATION POINTS IN THE COURSE OF THE SEMESTER. FAILURE TO EARN 30 POINTS WILL CAUSE YOUR GRADE TO BE REDUCED BY 1 LETTER GRADE. 50 PARTICIPATION POINTS ARE INCLUDED IN YOUR GRADE BUT YOU MAY EARN AN ADDITIONAL 30 POINTS IN EXTRA CREDIT THROUGH PARTICIPATION. THE MAXIMUM NUMBER OF PARTICIPATION POINTS THAT CAN COUNT TOWARD YOUR GRADE IS 80.** After the test on a given lesson you may not earn participation points from that lesson.

Grading Policy

4. Written Homework Submissions and Online Homework and (60 points): Each time you take one of the three midterm exams, you will submit written solutions to all the homework problems assigned for the lessons on which the exam is based. Each submission is worth 10 points. Your written homework problems will include all exercise sets from the text book as well as any supplementary problems assigned by the instructor. ***All work must be shown in order to receive credit for the assignment. Answers merely copied from the book will not be credited.*** These homework sets should be well organized and easy for a reader to peruse and evaluate. To facilitate good organization, homework should be done on loose-leaf paper and placed in a light cardboard folder with pockets. A new assignment should begin at the top of a page with the page number clearly denoted. You will leave your homework at the exam site, and it will be returned to you along with your exam. In the course of the semester there will be a total of 30 points in written homework exercises.

In each of the three exam periods you will be asked to do online homework exercises for each section included on the exam. The purpose of these exercises is to acquaint you with the assistance that is available in the tutorial exercises. Use the "help me solve this" option to see the steps necessary to solve the exercise you are working on. All online homework exercises for exam 1 are worth a total of 10 points, all online homework exercises for exam 2 are worth a total of 10 points, and all online homework exercises for exam 3 are worth a total of 10 points. In the course of the semester there will be a total of 30 points in online homework exercises

4. Final Exam on Campus (150 points): You will have a cumulative final exam determined by the college's final exam schedule. Please note that the final must be taken on Tuesday, Wednesday, Thursday or Friday of finals week and that no Saturday times are available for the final.

Your grade will then be determined by comparing the points you have earned to the following table.

Total Points	Grade
571 or more	A
508-570	B
444-507	C
381-443	D
380, or less	E

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Last revised by
Ken Kasin Fall 2010