Instructional Services · Mathematics · Mathematics

Plane Trigonometry-21064

MATH-1316

DL1 2023 Section 912 3 Credits 09/05/2023 to 12/17/2023 Modified 08/24/2023

Our Vision

Houston Community College shapes the future for all students with innovative, affordable, timely, responsive, and continuously improving educational programs and services. Partnered with the communities we serve, we take a defining role in regional economic, workforce, and social development.

https://www.hccs.edu/about-hcc/ (https://www.hccs.edu/about-hcc/)

Course Meetings

Course Modality

Safe, face-to-face course with scheduled dates and time

Meeting Days

Monday/Wednesday

Meeting Times

12:25 - 1:55 pm

Meeting Location

HCC Room 252

Welcome and Instructor Information

Dear students,

Welcome to Math 1316- Plane Trigonometry! In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. The key to succeed in this course is to come to every class, take notes, go over each PowerPoint posted in Canvas, finish online assignments on time, and ask questions during the class if you have any.

Professor: Hung Lau

Email: hung.lau@hccs.edu
Office: HCC Building Room 253
Phone: (713)847-4809

What's Exciting About This Course

Modern trigonometry is the gateway to higher mathematics and foundational for modern science and engineering. The identities, such as Pythagorean Identities, Reciprocal Identities, and co-function Identities will be very useful when you are taking Calculus I in college.

My Personal Welcome

Welcome to Math 1316-Plane Trigonometry! I will present the information in the most exciting way I know, so that you can grasp the concepts and apply them now and hopefully throughout your life.

Preferred Method of Contact

Please use HCC Email or canvas Inbox to communicate. I will respond to emails or messages within 24 hours Monday through Friday; I will reply weekend message on Monday mornings.

Course Overview

Course Description

MATH 1316 - Plane Trigonometry Credits: 3 (3 lecture). This course is intended for students whose curriculum requires trigonometry as a prerequisite for higher mathematics courses or as a first course in trigonometry or as a review course. Topics include solutions of triangles, Euler identity, graphing of trigonometric and inverse trigonometric functions, identities, trigonometric equations and an introduction to vector analysis. Core Curriculum Course.

Prerequisites

Math 1314; must be placed into college-level mathematics. A grade of C or better in Math 1314 or its equivalent. (Plane Geometry is recommended).

Department Website

https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/mathematics/

Core Curriculum Objectives (CCOs)

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.

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

Student Learning Outcomes and Objectives

Program Student Learning Outcomes (PSLOs)

Students in the Mathematics Program will:

1. Engage in problem solving strategies, such as organizing information, drawing diagrams and modeling.
2. Use symbolic representations to solve problems. This includes manipulating formulas, solving equations, and graphing lines.
3. Build the foundational mathematical skills that will enable a student to successfully complete a college level mathematics course.

Course Student Learning Outcomes (CSLOs)

Upon completion of MATH 1316, the student will be able to:

1. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.

2. Graph trigonometric functions and their transformations.
3. Prove trigonometric identities.
4. Solve trigonometric equations.
5. Solve right and oblique triangles.
6. Use the concepts of trigonometry to solve applications.

Learning Objectives

Upon completion of MATH 1316, the student will be able to:

1. Recognize the graphs of the six basic trigonometric functions.
2. Know the amplitude, period, and phase shift for sine and cosine functions.
3. Sketch functions exhibiting the above properties.
4. Solve problems dealing with vectors.
5. Recognize polar graphs.
6. Solve right triangles.
7. Convert degrees to radians and vice-versa.
8. Solve problems dealing with the application of radian measures.
9. Solve problems relating to linear and angular velocities.
10. Recognize identities including sum and difference angle formula, double angle formula, and half angle formulas.
11. Prove trigonometric identities using the formulas given above.
12. Solve trigonometric equations and inverse trigonometric equations.
13. Solve triangles using the sine and cosine laws.
14. Find areas of triangles.
15. Recognize the six basic trigonometric functions and understand the relationships between them.
16. Evaluate the trigonometric functions of special angles.
17. Find reference or related angles and coterminal angles.
18. Use a calculator or a table (not on exams) to find trigonometric function values of any angle.
19. Rewrite a complex number in polar form.
20. Use DeMoivre's Theorem to simplify a complex number raised to a whole number exponent.
21. Find the nth root of a complex number.

Departmental Practices and Procedures

The Mathematics Department has specific expectations for calculators, proctored exams and grading policies. Refer to the Course Requirements and Devices sections below.

Last Day to Withdraw

Students must withdraw by the withdrawal deadline in order to receive a "W" on a transcript. Final withdrawal deadlines vary each semester and/or depending on class length, please visit the online Academic Calendar, any HCC Registration Office, or any HCC advisor to determine class withdrawal deadlines.

Be certain you understand HCC policies about dropping a course and consult with a counselor/advisor to determine if withdrawing is in your best interest. It is your responsibility to withdraw officially from a class and prevent an "F" from appearing on your transcript. Senate Bill 1231 and limits the number of W's a student can have to 6 classes over the course of their entire academic career. This policy is effective for students entering higher education for the first time in fall 2007 and subsequent terms. Withdrawals accumulated at any other Texas public higher education institution count toward the 6 course total. Withdrawals for certain circumstances beyond the students control may not be counted toward the 6-drop limit.

In addition, withdrawing from a course may impact your financial aid award or eligibility. Contact the Financial Aid Office or website to learn more about the impact of withdrawing on financial aid.

Withdrawal Dates

- Fall 2023 1st 8-WK: Sept. 25
- Fall 2023 Reg 16 WK: Oct. 27
- Fall 2023 2nd Start: Nov. 6
- Fall 2023 2nd 8-WK: Nov. 17

Instructional Materials and Resources

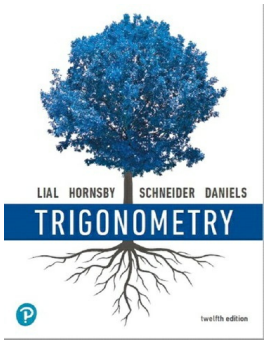
Instructional Materials

The HCC Online Bookstore (https://hccs.bncollege.com/shop/hccs-central/page/find-textbooks) provides searchable information on textbooks for all courses. Check with your instructor before purchasing textbooks because the book might be included in your course fees.

The textbook listed below is required for this course.
Trigonometry, 12th edition;
Print ISBN: 9780135924136, 0135924138
e-text ISBN: 9780135924792, 0135924790
By Margaret L. Lial, John Hornsby, David I. Schneider, Callie J. Daniel.

You may either use a hard copy of the book or the e-book through MyMathLab.

Math 1316



Temporary Free Access to E-Book

For temporary free access to MyMathLab and the online eBook, go to canvas and click 'MyLab and Mastering' in the Dashboard.

Other Instructional Resources

Courseware

MyMathLab and the online eBook will be used for homework and quizzes.

Course Requirements

Assignments, Exams, and Activities

Type	Weight	Topic	Notes
Homework	30		There will be an assignment on MyMathLab for every topic .
Unit Exams	40		There will be three unit exams for the semester. The lowest one will be dropped.
In-Class Activities,Note-taking	10		Students are required to take notes and answer questions in the class.
Final Exam	10		It will be a comprehensive HCC Final Exam covering every chapter.
Extra Credit	5		Finish survey and writing journals on time.

Grading Formula

Grade	Range	Notes
A	90 and above	
B	80-89	
C	70-79	
D	60-69	
F	0-59	

Instructor's Practices and Procedures

Incomplete Policy

In order to receive a grade of Incomplete ("I"), a student must have completed at least 85% of the work in the course. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

Missed Assignments/Make-Up Policy

There is **no make-up exam** in this class. If you miss one exam, it will be replaced with the final exam score. If you miss the second exam, it will be zero. Set your own personal calendars and electronic devices in advance to remind you of those dates. You will take the exam at campus. The exams will be on paper or on Canvas. The loss of power, computer functionality or internet connection will NOT constitute an excuse for missing or not completing an exam. Technical access and compliance are strictly the student's responsibility. Remember: this is a distance education course. It is your responsibility to keep up with the course pace, instructions, policies, due dates, and timetable in general, including the assignment deadlines and exam dates. Do NOT procrastinate. Doing so will NOT pay off. You will run out of time. Keep up with the course calendar on Syllabus and Canvas.

Academic Integrity

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 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 College's Policy on Academic Honesty, found in the student handbook. 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;
*Not following the instructions on Lockdown Browser + Webcam.
All forms of academic dishonesty including, but not limited to cheating, plagiarism, and collusion are serious offenses. Possible consequences for academic dishonesty include a grade a 0 or F in the particular assignment, failure in the course, and/or recommendations for probation or dismissal from the institution.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

https://www.hccs.edu/studentprocedures (https://www.hccs.edu/studentprocedures)

Attendance Procedures

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.

The last day to withdraw for this course is Oct. 27, 2023.

Student Conduct

Student Expectations During the class:
Students will make sure they sit in a well lit area, without any inappropriate items behind them.
Students will keep themselves muted until the instructor asks them to unmute.
Students will only share their screen with instructor permission.
Students will use any chat features appropriately; to ask questions and make appropriate comments about what is being discussed.
Students will not record any video conferencing sessions.
Students will continue to abide by HCC policies and the Student Handbook.

Please note: Instructors will remove a student from a conference session if the above expectations are violated, inform administration to report any inappropriate behavior. Students should not engage in disruptive activities while in the classroom. Any conduct that is deemed to distract the academic atmosphere, such as cell phone use or consistently talking during instructional delivery, will not be tolerated.

Instructor's Course-Specific Information

The Math Department is requiring the remote proctoring of all major examinations (including the Final Exam) to ensure the integrity of the assessment process and to prevent acts of academic dishonesty. In this course, in addition to a reliable internet connection, you will be required to have hardware that meets the following minimal requirements:
1. A functioning webcam and microphone, and
2. A computer with operating system that is capable of running the Respondus LockDown Browser + Webcam.
Note: An exams in this course might be required Lockdown Browser + Webcam. You will have to download the Lockdown Browser + Webcam in order to be able to take any online exams or quizzes.

Devices

The use of electronic devices by students in the classroom is up to the discretion of the instructor. Any use of such devices for the purposes other than student learning is strictly prohibited unless authorized as an appropriate ADA accommodation from the ADA Counselor. The use of a calculator during any exam, including the final exam, is prohibited.

Faculty Statement about Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments

- Participating in class activities
- There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Faculty-Specific Information Regarding Canvas

This course section will use Canvas (https://eagleonline.hccs.edu (https://eagleonline.hccs.edu)) to supplement in-class assignments, exams, and activities.

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

Social Justice Statement

Houston Community College is committed to furthering the cause of social justice in our community and beyond. HCC does not discriminate on the basis of race, color, religion, sex, gender identity and expression, national origin, age, disability, sexual orientation, or veteran status. I fully support that commitment and, as such, will work to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. In this course, we share in the creation and maintenance of a positive and safe learning environment. Part of this process includes acknowledging and embracing the differences among us in order to establish and reinforce that each one of us matters. I appreciate your suggestions about how to best maintain this environment of respect. If you experience any type of discrimination, please contact me and/or the Office of Institutional Equity at 713-718-8271.

🏛 HCC Policies and Information

HCC Grading System

HCC uses the following standard grading system:

Grade	Grade Interpretation	Grade Points
A	Excellent (90-100)	4
B	Good (80-89)	3
C	Fair (70-79)	2
D	Passing (60-69), except in developmental courses.	1
F	Failing (59 and below)	0
FX	Failing due to non-attendance	0
W	Withdrawn	0
I	Incomplete	0
AUD	Audit	0

Grade	Grade Interpretation	Grade Points
IP	In Progress. Given only in certain developmental courses. A student must re-enroll to receive credit.	0
COM	Completed. Given in non-credit and continuing education courses.	0

Link to Policies in Catalog and Student Handbook

Here's the link to the HCC Catalog and Student Handbook: https://catalog.hccs.edu/ (https://catalog.hccs.edu/)

In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- Career Planning and Job Search
- Childcare
- Ability Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

Link to HCC Academic Integrity Statement

https://www.hccs.edu/student-conduct (https://www.hccs.edu/student-conduct) (scroll down to subsections)

Campus Carry Link

Here's the link to the HCC information about Campus Carry:

https://www.hccs.edu/campuscarry (https://www.hccs.edu/campuscarry)

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID (https://www.hccs.edu/email) and activate it now. You may also use Canvas Inbox to communicate.

Office of Institutional Equity

Use the following link to access the HCC Office of Institutional Equity, Inclusion, and Engagement: https://www.hccs.edu/eeo (https://www.hccs.edu/eeo)

Ability Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to https://www.hccs.edu/accommodations (https://www.hccs.edu/accommodations)

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271
Houston, TX 77266-7517 or Institutional.Equity@hccs.edu (mailto:Institutional.Equity@hccs.edu)

https://www.hccs.edu/titleix (https://www.hccs.edu/titleix)

Mandatory Reporters

Under Texas Education Code 51.252 (formerly known as Senate Bill 212), HCC Instructors are mandatory reporters of sexual harassment, dating violence (domestic violence), sexual assault, and stalking. All instructors are required by law to report to the College's Title IX coordinator or Deputy Title IX coordinator all reports disclosed to them relating to sexual harassment, dating violence (domestic violence), sexual assault, and stalking alleged to have been committed by or against a person who was a student enrolled at or an employee of the institution at the time of the incident. Instructors are required by law to include all the information they know about the incident, including the name of the student(s), in the report to the College's Title IX coordinator or deputy Title IX coordinator.

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/ (https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/)

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments

- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Canvas Learning Management System

Canvas is HCC's Learning Management System (LMS), and can be accessed at the following URL:

https://eagleonline.hccs.edu (https://eagleonline.hccs.edu)

HCCS Open Lab locations may be used to access the Internet and Canvas. **For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.**

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

HCC Online Information and Policies

Here is the link to information about HCC Online classes, which includes access to the required Online Information Class Preview for all fully online classes: https://www.hccs.edu/online/ (https://www.hccs.edu/online/)

Scoring Rubrics, Sample Assignments, etc.

Look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. https://eagleonline.hccs.edu/ (https://eagleonline.hccs.edu/)

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students during office hours, and before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook (https://www.hccs.edu/studenthandbook)

EGLS3

The EGLS^3 (Evaluation for Greater Learning Student Survey System (https://www.hccs.edu/egls3)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS^3 surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

https://www.hccs.edu/egls3 (https://www.hccs.edu/egls3)

Housing and Food Assistance for Students

If you are experiencing any hardship related to food, shelter, mental health, or other basic needs areas, please visit the Basic Needs page for resources (https://www.hccs.edu/cares (https://www.hccs.edu/cares)). You have the option to take the Basic Needs Questionnaire and ask to be contacted by a counselor for additional assistance or support (https://www.hccs.edu/basicneeds (https://www.hccs.edu/basicneeds)). Furthermore, please notify the professor if you are comfortable doing so.

Student Resources

Tutoring

HCC provides free and convenient academic support, in a large variety of subjects, to HCC students in both an online environment and in-person on campus. Tutoring is provided by HCC personnel in order to ensure that it is appropriate. Visit the HCC Tutoring Services website for more information at https://hccs.edu/tutoring (https://hccs.edu/tutoring).

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at https://library.hccs.edu (https://library.hccs.edu/).

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at https://www.hccs.edu/supplemental-instruction (https://www.hccs.edu/supplemental-instruction)

Resources for Students:

https://www.hccs.edu/covid19students (https://www.hccs.edu/covid19students)

Basic Needs Resources:

https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/ (https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/)

Student Basic Needs Application:

https://www.hccs.edu/basicneeds (https://www.hccs.edu/basicneeds)

COVID-19

Here's the link to the HCC information about COVID-19:

https://www.hccs.edu/covid-19 (https://www.hccs.edu/covid-19)

Sensitive or Mature Course Content

In this college-level course, we may occasionally discuss sensitive or mature content. All members of the classroom environment, from your instructor to your fellow students, are expected to handle potentially controversial subjects with respect and consideration for one another's varied experiences and values.

Instructional Modalities

In-Person (P)

Safe, face-to-face course with scheduled dates and times

Online on a Schedule (WS)

Fully online course with virtual meetings at scheduled dates and times

Online Anytime (WW)

Traditional online course without scheduled meetings

Hybrid (H)

Course that meets safely 50% face-to-face and 50% virtually

Hybrid Lab (HL)

Lab class that meets safely 50% face-to-face and 50% virtually

Copyright Statement

In order to uphold the integrity of the academic environment and protect and foster a cohesive learning environment for all, HCC prohibits the unauthorized use of course materials. Materials shared in this course are based on my professional knowledge and experience as an instructor and are presented in an educational context for the students in the course. Authorized use of course materials is limited to personal study or educational uses. Material should not be shared, distributed, or sold outside the course without permission. Students are also explicitly forbidden in all circumstances from plagiarizing or appropriating course materials. This includes but is not limited to publicly posting quizzes, essays, or other materials. This prohibition extends not only during this course, but after. Sharing of the materials in any context will be a violation of the HCC Student Code of Conduct and may subject the student to discipline, as well as any applicable civil or criminal liability. Consequences for unauthorized sharing, plagiarizing, or other methods of academic dishonesty may range from a 0 on the specified assignment and/or up to expulsion from Houston Community College. Questions about this policy may be directed to me, your instructor, or to the Manager of Student Conduct and Academic Integrity.

Unauthorized Disclosure

"Unauthorized disclosure" occurs when any student provides instructional materials and/or assessments to other students in violation of a clear prohibition by the instructor. Examples include: posting assessment items to online sites such as Chegg or CourseHero; asking exam questions in forums like Reddit or Yahoo Answers; discussions of confidential question using Wechat or GroupMe, etc.

📅 Course Calendar

Math 1316 Plane Trigonometry
COURSE CALENDAR

Week	Unit/Topics
Sep 4 - Sep 8	Syllabus and MyMathLab Registration Review of trig ratios 1.1 Angels and Measurement 1.3 Trigonometric Functions
Sep 11 - Sep 15	1.4 Using the Definitions of the Trigonometric Functions 2.1Trigonometric Functions of Acute Angles 2.2 Trigonometric Functions of Non-Acute Angles
Sep 18 - Sep 22	2.3 Approximations of Trigonometric Functions Values 2.4 Solution and Applications of Right Triangles 2.5 Further Applications of Right Triangles

Sep. 25 - Sep 29	Review of Unit Exam Unit Exam 1 Covering Chapter 1 and Chapter 2 3.1 Radian Measure
Oct 2 - Oct 6	3.2 Applications of Radian Measure 3.3 The Unit Circle and Circular Functions 3.4 Linear and Angular Speed
Oct 9 - Oct 13	4.1 Graphs of the Sine and Cosine Functions 4.2 Translations of the Graphs of the Sine and Cosine Functions 4.3 Graphs of the Tangent and Cotangent Functions
Oct 16 - Oct 20	4.4 Graphs of the Secant and Cosecant Functions 5.1 Fundamental Identities 5.2 Verifying Trigonometric Identities
Oct 23 - Oct 27	Unit Exam 2 Covering Chapter 3 and Chapter 4 5.3 Sum and Difference Identities for Cosine 5.4 Sum and Difference Identities for Sine and Tangent
Oct 30 -Nov 3	5.5 Double-Angle Identities 5.6 Half-Angle Identities
Nov 6 -Nov 10	6.1 Inverse Circular Functions 6.2 Trigonometric Equations I
Nov 13 -Nov 17	6.3 Trigonometric Equations II 6.4 Equations Involving Inverse Trigonometric Functions Unit Exam 3 Covering Chapter 5 and Chapter 6
Nov 20 -Nov 14	THANKSGIVING BREAK
Nov 27 - Dec 1	7.1 Oblique Triangles and the Law of Sines 7.2 The Ambiguous Case of the Law of Sines 7.3 The Law of Cosines
Dec 4 - Dec 8	HCC Math Days
Dec 11 - Dec 15	HCC Final Exam

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Additional Information

Departmental/Program Information

Program Information for Majors: https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/mathematics/

HCC Math Student Organization: Mu Alpha Theta: Application: https://www.hccs.edu/resources-for/current-students/stem--science-technology-engineering--mathematics/stem-clubs/mu-alpha-theta-application/

Process for Expressing Concerns about the Course

If you have concerns about any aspect of this course, please reach out to your instructor for assistance first. If your instructor is not able to assist you, then you may wish to contact the Department Chair.

Mathematics Courses

Chair of Math	Mahmoud Basharat	SW Campus	713-718-2438	Stafford Scarcella, N108
- Admin. Assistant	Tiffany Pham	SW Campus	713-718-7770	Stafford Scarcella, N108
- Admin. Assistant	Christopher Cochran	SW Campus	713-718-2477	Stafford Scarcella, N108
Math Assoc. Chair	Jaime Hernandez	CE Campus	713-718-7772	San Jacinto Building, Rm 369
Math Assoc. Chair	Solomon Osifodunrin	NW Campus	713-718-2458	Katy Campus Building, Rm 306.24
Math Assoc. Chair	Hien Nguyen	NE Campus	713-718-2440	Northline, Rm 324

Developmental Mathematics Courses

Chair of Dev. Math	Dorothy A. Muhammad	SE Campus	713-718-5846	Felix Morales Building, Rm 124
- Admin. Assistant	Carmen Vasquez	SE Campus	713-718-7056	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	SE Campus	713-718-2434	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Adnan Ulhaque	SW Campus	713-718-5463	Stafford Scarcella, N108