

MATH 1230 Trigonometry section name section credit hours Credits Syllabus

Course Information

Meeting times and location: section meeting times section location

Catalog description: A study of plane trigonometry including the definitions of the fundamental trig functions using right angle triangle and unit circle approaches. Trig functions of any real number will be evaluated and the functions graphed along with their transformations. Trigonometric identities will be developed and demonstrated including multiple angle identities and identities developed from them. Inverse Trigonometric functions will be developed and used to solve trigonometric equations. Trigonometric applications will be solved using right angle trigonometry and the laws of sines and cosines. Trigonometric methods will be applied to complex numbers and the use of 2D vectors and vector dot products.

Prerequisites: MATH-1215(MATH-115) or appropriate placement

Terms offered: All Semesters

Section-specific Course Description:

Course Level Objectives

Upon successful completion of the course, the student will be able to 1. Students will be able to define and evaluate the trigonometric functions as functions of angle in both degree and radian measure using the definitions in terms of x, y, and r; as the ratio of sides of a right triangle; using the unit circle; using reference angles, commonly used (0 o, 30 o, 45 o, 60 o, 90o) angles and using a calculator. 2. Students will be able to solve right triangles. They will be able to draw a sketch in an applied problem when necessary. 3. Students will be able to solve non-right triangles using the law of sines and the law of cosines. 4. Students will be able to prove trigonometric identities and apply addition and subtraction, double-angle, half-angle and power reduction formulas. 5.

Students will be able to graph the six trigonometric functions, their transformations and their inverses. 6. Students will be able to use algebraic methods, including the use of identities and inverses, to solve trigonometric equations and demonstrate connections to graphical and numerical representations of the solutions. 7. Students will be able to add and subtract vectors in two dimensions. They will be able to use the dot product to project one vector onto another and to determine the angle between two vectors. They will be able to solve a variety of word problems using vectors. 8. Students will be able to work with polar coordinates; this includes graphing in polar coordinates and transforming an equation with polar coordinates into one with rectangular coordinates, and vice versa. 9. Students will be to work with the trigonometric form of complex numbers, including using De Moivre's formula.

Required Texts and/or Materials

BUNDLE: PRECALCULUS: MATHEMATICS FOR CALCULUS
W/WEBASSIGN ACCESS CARD
9781305701618
Stewart
Cengage
7
Ask your instructor.

https://sanjuancollege.verbacompare.com/comparison?

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at <u>San Juan College</u> Help Desk.

For tickets and password reset: San Juan College Help Desk

For Canvas support information: Canvas Support

Accessibility/Privacy Policies for all Technology Tools Used

Accessibility/Privacy Policies for all Technology Tools Used

Course Requirements

This master syllabus is for informational purposes only and individual course syllabi may differ. Faculty reserve the right to make changes to their individual syllabi on an as needed basis. Students will complete a series of weekly homework assignments. Instructors also use weekly blogs, short in-class writing prompts, online discussions and/or small regular quizzes to solidify class concepts. Students will complete between 3 - 4 exams and have a final assessment given on the last day of class.

COVID Safe Practices for Being on Campus

Masks / cloth face coverings must be worn while on campus in accordance with the New Mexico public health order. If you feel that you cannot wear a mask due to health complications, please contact Disabilities Services:

disabilityservices@sanjuancollege.edu or call (505) 566-3271. Hand sanitizer stations are at all building entrances, please "wash in, wash out"--clean your hands when you enter and before you leave. Classrooms and labs have been arranged to allow for social distancing; please respect your classmates and instructors by staying 6 feet away from everyone. You will be expected to disinfect your table or area prior to class and after class, cleaning products will be provided for this purpose. Check with your instructor for specific policies for their course. Please do not congregate in hallways or common areas, instead utilize our beautiful outside spaces and weather to visit with your friends and colleagues from a safe distance.

If you have been in contact with anyone who has tested positive for COVID-19, has symptoms, or is waiting on test results, contact your instructor and DO NOT come to class. If you have tested positive, have symptoms or are waiting on test results, contact your instructor and DO NOT come to class. Your health care provider or the assigned contact tracer will let you know when it is safe for you to be around others.

Student Support

Student Services and Support

The Student Support webpage provides information on counseling, tutoring, technical support, and many other support services available to San Juan College students.

Student Support

Academic Support

Academic Support webpage provides information on academic advising, the library, Testing Center, and the honors program.

Academic Support

Participation and Attendance Policy

It is expected that at a minimum you will work on assignments at least 4 days a week for 3 hours at a time. Plan on spending 9 hours or more working on the course and completing assignments each week if you are in a 16-week semester course. If you are in an 8 or 6-week course, plan on more than double that time per week.

Regular attendance is important for success in a math class. All instructors expect students to attend class, and to notify instructors if they will be absent. In some cases, arrangements for late work may be made. Some instructors may not give full credit for late work missed due to absence. Students are expected to actively participate in class.

Other Classroom Policies and Expectations

Other Classroom Policies and Expectations

Assignments: Due dates for all assignments are final!! assignments are posted and can be completed at any point before the due date. Medical emergencies must be documented to me and I will work with those who have a true, documented, medical emergency. Late work is strongly discouraged.

College Policies

The following information also applies to your work in this class.

1. Academic Accommodations—American with Disabilities Act (ADA)

If you believe you need academic accommodations due to physical or learning disabilities, you are encouraged to inform me as soon as possible. If you have special needs for campus emergency situations, please inform me immediately. You can also

contact the college's disability advisor in the Advising/Counseling Center at 566-3271. The advisor can work with you in verifying your disabilities and developing accommodation strategies.

2. The Family Educational Rights and Privacy Act (FERPA)

Your personal information and grade are confidential. Aside from routine reporting to the college required for this course, I will not share such information with anyone unless I have your permission.

3. Academic Honesty Rules

San Juan College expects all students to adhere to the Academic Honesty Rules as posted online: <u>Academic Honesty Rules</u>. These are the official guidelines for all classes at San Juan College

4. Student Conduct Statement

College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college. The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the Student Handbook for additional information.

Each instructor may have additional policies on classroom expectations. Please consult with them for specifics.

Canvas Participation and Expectations

Please check Canvas announcements daily M-F. This course may require assignments, discussions, activities and projects to be completed in Canvas. Grades and attendance information will be tracked in Canvas.

Instructor Response Time

Phone calls and emails will be returned within 24-48 hours Monday through Thursday. Emails or phone calls received Friday-Sunday will be returned the following Monday.

Graded assignments will be available within one week after the assignment is due.

Course Time Commitment

It is expected that at a minimum you will work on assignments at least 4 days a week for 3 hours at a time. Plan on spending 9 hours or more working on the course and completing assignments each week if you are in a 16-week semester course. If you are in an 8 or 6-week course, plan on more than double that time per week.

As college students, you should plan to invest a minimum or 2 hours of study outside the regular class time for each credit your to which you are enrolled.

Grading

Final grading for this course will be based on factors including but not limited to; regular homework assignments, quizzes, examinations, participation in activities and discussions, presentations, projects and a course Final Exams. The final grade will be computed as the weighted average as determined by the Instructor.

A typical grade distribution range for Trigonometry

Category	Weight
Quizzes	10 to 20%
Exams	20 to 40%
Homework	20 to 40%
Participation	10 to 20%
Final Exam	20 to 40%
0ther	5 to 20%

Key Dates to Remember

Full Academic Calendar

Course Schedule

Exact schedule with due dates will be determined by instructor. See Course Requirements for general information on assignment expectations.

Expect assignment to be due on a weekly basis.

Full Academic Calendar

College Policies

The following information also applies to your work in this class. If you have special needs for campus emergency situations, please inform me immediately.

1. Academic Accommodations - American with Disabilities Act (ADA)

If you believe you need academic accommodations due to physical or learning disabilities, you are encouraged to inform them as soon as possible. The coordinator can work with you in verifying your disabilities and developing accommodation strategies. Please go to <u>Disability Services Office</u>, click the button for "Request for Services" and complete all the steps.

You can also contact the college's disability coordinator in the Advising/Counseling Center at 566-3271 or disabilityservices@sanjuancollege.edu. More information is available on the website listed above.

2. The Family Educational Rights and Privacy Act (FERPA)

Your personal information and grade are confidential. Aside from routine reporting to the college required for this course, I will not share such information with anyone unless I have your permission.

3. Academic Honesty Rules

San Juan College expects all students to adhere to the <u>Academic Honesty Rules</u> as posted online. These are the official guidelines for all classes at San Juan College (July 2006).

4. Student Conduct Statement

College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college. The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the Student Handbook for additional information.

5. **Student Safety**

Keeping students safe is a priority, and part of that is ensuring that we have the ability to communicate emergency messages – whether for school closures due to weather or for more or urgent situations. Rave is San Juan College's emergency messaging system. Through your SJC student email, you will automatically receive email messages, however, it is also vital that you receive text messages. In order to receive the messages, you must register in a simple process with <u>Rave</u>. When

registering, please make sure that your mobile status is "confirmed."

The Department of Public Safety is available 24 hours per day. In an emergency, they can be accessed by calling 215-3091 or 566-3333.

In the event of an emergency, a Rave message will be sent, and depending on the situation, you will be instructed to do one of the following:

- Evacuate the building
- Shelter in place (Campus doors are locked, and operations continue as normal. During this situation, no one other than law enforcement is allowed in or out of the campus.)
- Lockdown (Campus doors are locked. All operations cease, and you should take cover in your immediate area. No one other than law enforcement is allowed in or out of the campus.

6. Non-Discrimination, Sexual Harassment, and Retaliation.

San Juan College does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, genetic, veteran's status, or on the basis of any other category protected under federal, state and local laws. If you have experienced sexual harassment, sexual assault, or any other form of protected class discrimination, we encourage you to make a report. If you report to a faculty member, she/he/they are obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator. These disclosures include but are not limited to reports of sexual assault, dating/domestic violence, and stalking. You may also make a confidential report to a SJC Counselor. Please refer to San Juan College's <u>Title IX</u> site for further details.

San Juan College's Title IX Coordinator is Stacey Allen, Assistant Director of Human Resources/Equity, Diversity, and Inclusion Officer. The office is located at the Educational Services Center Building, 2nd Floor, Human Resources, Room 4243 at (505) 566-3515 or allens@sanjuancollege.edu.

7. **Drop for Non-Attendance and/or Non-Participation**

Class Attendance and Participation Expectation:

<u>Face-to-Face</u> -- Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

On-line -- Students are expected to participate regularly and submit all course assignments, based on the course guide definition. A student who does not submit any assignments during a consecutive 10% of the course (1.5 weeks of a 15-week semester) without consulting the instructor, may be considered as having abandoned the course. Logging in does not meet the attendance standard.

<u>Competency-Based Education Classes</u> -- Students are expected to have regular and substantive interactions with their instructor and to actively work on course content. A student who has not submitted coursework, nor had substantive interactions with the instructor over a consecutive 10% of the term, without the instructor's prior approval, will be considered to have abandoned the competency progression. Last date of attendance will be recorded as the last date that coursework was submitted or that the student met with the instructor. For on-line learners, logging in does not meet the attendance standard.

8. Failure to Meet Class Participation Expectation:

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

9. **Grading Policies**

Incomplete: Incomplete Grade Assignment (<u>Incomplete Grades Information</u>)

The grade of I (Incomplete) is given for passing work that could not be completed during the semester because of circumstances beyond the student's control.

Ordinarily, the assignment of an I is given by the course instructor at the time final grades are due

In no case is an I grade to be used to avoid assignment of D or F grades for marginal or failing work or to require a student to enroll in the class the next semester because work was not completed on time. Circumstances warranting the issuance of an I grade must be beyond the student's control and must be documented on the appropriate form prior to approval.

I grades can be removed only during the subsequent 16 weeks from the end of term, or within the time limit set by the instructor. Removal of an I is accomplished by completing the work in a manner acceptable to the instructor. Re-enrollment in

the course under the repeat option does not remove the prior grade of I. Students should not re-enroll for the course. An I not made up within 16 weeks or within the time limit set by the instructor will change to an F grade thereafter and cannot be changed by work completion.

10. Grade Appeals

The policy for grade appeals is in the Academic Catalog.(Grade Appeal Policy)

Student Handbook

The Student Handbook provides information on Student support, student organizations, and San Juan College policies.

Student Handbook