

SYLLABUS

DATE OF LAST REVIEW:	12/2019
CIP CODE:	24.0101
SEMESTER:	Departmental Syllabus
COURSE TITLE:	Trigonometry
COURSE NUMBER:	MATH0112
CREDIT HOURS:	3
INSTRUCTOR:	Departmental Syllabus
OFFICE LOCATION:	Departmental Syllabus
OFFICE HOURS:	Departmental Syllabus
TELEPHONE:	Departmental Syllabus
EMAIL:	Departmental Syllabus <i>KCKCC-issued email accounts are the official means for electronically communicating with our students.</i>
PREREQUISITES:	Students need to meet the correct placement measures for this course or have completed MATH0105/106 College Algebra (w/wo review) with a grade of “C” or better.

KRSN Course MAT 1030

This course is approved by the Kansas Board of Regents for System Wide Transfer (SWT) among all Kansas public postsecondary institutions offering an equivalent course. The learning outcomes and competencies detailed in this course outline or syllabus meet or exceed the learning outcomes and competencies specified by the Kansas Core Outcomes Groups project for this course as approved by the Kansas Board of Regents. A list of courses available at each institution is located at

https://kansasregents.org/academic_affairs/transfer-articulation.

REQUIRED TEXT AND MATERIALS: Please check with the KCKCC bookstore, <http://www.kckccbookstore.com/>, for the required text(s) and other required material for your particular class.

COURSE DESCRIPTION: Trigonometry includes trigonometric and inverse trigonometric functions, radian and degree measure, graphing, identities, and applications to physical problems.

Students will be expected to use appropriate technology as one tool to achieve competency in Trigonometry.

METHOD OF INSTRUCTION: A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

EXPECTED LEARNER OUTCOMES:

Upon completion of the above listed course, students will be able to do the following:

- A. Define the trigonometric functions using both a right triangle and the unit circle.
- B. Define and interpret radian measurement. Recognize and apply circular functions as real-valued functions.
- C. Solve for unknown sides/angles within right triangles and know trigonometric function values for special angles (multiples of $\pi/6$ and $\pi/4$).
- D. Analyze the graphs of the six basic trigonometric functions and their arithmetic combinations using the concepts of period, phase shift, amplitude, and displacement.
- E. Derive/verify trigonometric identities, including but not limited to double angle, half angle, angle sum, and angle difference identities.
- F. Define, graph, and apply inverse trigonometric functions.
- G. Solve equations involving trigonometric functions.
- H. Find solutions of oblique triangles using the Law of Cosines or Law of Sines.
- I. Solve applied problems including but not limited to vectors.
- J. Derive the trigonometric form of complex numbers and perform calculations with them including products and quotients.
- K. Translate between rectangular and polar coordinates and graph within the polar coordinate system.

ASSESSMENT OF LEARNER OUTCOMES:

Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

SPECIAL NOTES:

Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student's progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

STATEMENTS ON NON-DISCRIMINATION, HARASSMENT AND VIOLENCE, AND EDUCATIONAL EQUALITY

Non-Discrimination Policy Statement

Kansas City Kansas Community College is committed to promoting and sustaining a campus community which identifies and values the individuality of every community member and is dedicated to maintaining a positive environment where diversity is encouraged and fostered

throughout the college. KCKCC strongly believes that diversity generates a positive image and awareness and community strength that encourages active involvement and helps enhance organizational effectiveness and culture. KCKCC prohibits discrimination on the basis of race, religion, color, sex (including pregnancy, gender identity, and sexual orientation), parental status, national origin, age, disability, family medical history or genetic information, political affiliation, military service, or other non-merit based factors. All college actions and policies comply with all state, federal and local laws and regulations.

Harassment and Violence Statement

Kansas City Kansas Community College is committed to providing a non-discriminatory and harassment-free educational, living and working environment for all members of the campus community, including students, faculty, administrators, staff, trustees or visitors. This policy prohibits all forms of sexual or gender-based harassment and sexual assault.

Title IX, regulated by the Office of Civil Rights, prohibits discrimination on the basis of sex in federally funded education programs and activities. All schools who receive any federal financial assistance must comply with Title IX.

Deputy Title IX Coordinator: Sean Burkett, Employee Relations Manager, sburkett@kckcc.edu or 913-288-7269, 7250 State Avenue, Kansas City, Kansas 66112.

Educational Equality Statement

Kansas City Kansas Community College is committed to a policy of educational equity. Accordingly, the College admits students, grants financial aid and scholarships, and conducts all educational programs, activities, and employment without regard to race, color, creed, religion, sex, national origin, age, sexual orientation, marital status, ancestry, veteran status, or disabilities.

Any person having inquiries concerning College compliance with regulations Implementing Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, or the American with Disabilities Act of 1990, is directed to contact Human Resources, Kansas City Kansas Community College, 7250 State Avenue, Kansas City, Kansas 66112, Telephone (913) 288-7646.

Any person needing access to academic programs or college activities due to a documented disability is directed to contact the Student Accessibility and Support Services, 913-288-7664 for accommodations.

More information on these statements and additional resources are available through the links below.

<http://www.kckcc.edu/footer/statements>

<http://www.kckcc.edu/services/reporting/titleix>

<http://www.hhs.gov/ocr/office/file>