

**Prerequisite** MATH 116 with a C or better; or placement into the course via ACT score and MPE exam.

**Professor** Dr. David K. Neal COHH 4108 745-6213 david.neal@wku.edu

**Office Hrs** MW 10:40 – 11:20; TR 11:45 – 12:35; or by appointment.

**Text** No text is required, so don't buy one or pay for any online access material. Notes, practice problems, review sheets, and sample tests will be provided in pdf format at <http://people.wku.edu/david.neal/117/>

**Calculator** A scientific calculator with the standard trig functions will be needed.

**Course Description** MATH 117 is an introduction to the theory and application of trigonometry. Topics include unit circle and right triangle trig, trigonometric functions and graphs, formulas for sum and difference of angles, laws of sines and cosines, angular velocity and orbital motion, vectors, and other various applications.

MATH 117 counts toward the major in Middle Grades Mathematics but it does not count as credit toward the general mathematics major or minor. MATH 117 satisfies the QR Colonnade Math requirement.

### **Attendance Policy**

WKU policy states that "Registration in this course obligates you to be regular and punctual in class attendance." Therefore, attendance is required and students are expected to attend class.

### **Grading Scale**

A: Final Average  $\geq 93\%$

B:  $85\% \leq \text{Final Average} < 93\%$

C:  $75\% \leq \text{Final Average} < 85\%$

D:  $70\% \leq \text{Final Average} < 75\%$

There may be a slight curve for students with 0 absences. Students with absences should not expect any curve or extra consideration.

### **Tests**

There will be five tests. Each test will count as 20% of your grade. Test scores may include separate problems that are given as in-class quizzes.

Details of each test will be provided via sample tests and study guides. The tests will be closed-book with no formula sheets allowed, although occasionally some formulas may be provided on the test. A certain portion of each test will be so that no calculators are allowed. The tests are to be taken in class.

## **Tentative Test Dates**

**Test 1:** Wed Sep 13    **Test 2:** Wed Oct 4    **Test 3:** Wed Oct 25  
**Test 4:** Mon Nov 13    **Final:** Mon Dec 4, 1:00 – 2:30

On test days, the classroom is a testing zone. Do not bring any open notes into the classroom. If you do so, then you will be asked to leave and you will not be given a test. Do not at any time look at or use your cell phone in the classroom. If you do so, then you will be asked to leave and your test will not be graded.

## **Make-Up Policy**

Western Kentucky University has reserved MWF from 12:40 to 1:35 as the time that I am allowed to conduct this class. Therefore this class is an official university-sponsored event. For students registered in this class, this class takes priority over all other events scheduled at the same time. Therefore, students are expected to take all tests *in class* when they are scheduled. I will not accommodate requests to re-schedule exams for students who wish to miss class to go do other activities. But if you must miss an exam due to a *serious, documented* medical cause or tragedy, then I may be able to give you a make-up exam once you leave the hospital.

## **Learning Outcomes**

Quantitative Reasoning courses teach students to interpret, illustrate, and communicate mathematical and/or statistical ideas. Students will learn to model and solve such problems. In general, successful students will demonstrate the ability to:

1. Interpret information presented in mathematical and/or statistical forms.
2. Illustrate and communicate mathematical and/or statistical information symbolically, visually and/or numerically.
3. Determine when computations are needed and execute the appropriate computations.
4. Apply an appropriate model to the problem to be solved.
5. Make inferences, evaluate assumptions, and assess limitations in estimation modelling and/or statistical analysis.

Specifically, successful students in this section will demonstrate proficiency in the ability to correctly work problems and properly explain and/or interpret results in each of the various trigonometric topics that are included in the course.

## **Withdrawal Date**

October 11, 2017 is the last day to withdraw from the course with a grade of W or to change enrollment from credit to audit.

## **Mathematics Tutor Lab**

For extra help in the class, tutors may be available in the Math Lab in COHH and in the Student Learning Center. Please check at these facilities for the specific times and availability of tutors.

## **Title IX Misconduct/Assault Statement**

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at <https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf>

and WKU's Discrimination and Harassment Policy (#0.2040) at [https://wku.edu/policies/hr\\_policies/2040\\_discrimination\\_harassment\\_policy.pdf](https://wku.edu/policies/hr_policies/2040_discrimination_harassment_policy.pdf).

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121.

Please note that while you may report an incident of sex/gender based discrimination, harassment and/or sexual misconduct to a faculty member, WKU faculty are "Responsible Employees" of the University and **MUST** report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

## **ADA Accommodation Statement**

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at [sarc.connect@wku.edu](mailto:sarc.connect@wku.edu). Please do not request accommodations directly from the professor or instructor without a faculty notification letter (FNL) from The Student Accessibility Resource Center.