Prerequisite: Placement into the course via ACT score and MPE exam, or DMA 096C with a grade of C or better.

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

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

Text: No text is required. Course notes will be provided in pdf format at http://people.wku.edu/david.neal/183/

Calculator: The TI-83+ or 84+ is required. Virtually all calculations will be done with the built-in TI-83/84 functions. On most days we will have in-class worksheets, so please bring your calculator to class.

Course Description: MATH 183 is an introduction to the theory and application of statistics. Topics include descriptive statistics; normal and t-distributions; confidence intervals for means and proportions; hypothesis tests for means and proportions; contingency tables; chi-square tests; correlation; regression.

MATH 183 counts toward the major in Middle Grades Mathematics but it does not count as credit toward the general mathematics major or minor. MATH 183 does satisfy the General Education Math requirement in Category D-II and the Colonnade Quantitative Reasoning requirement. It is recommended for science and nursing students who need non-calculus based statistics.

Learning Outcomes

Quantitative Reasoning courses teach students to interpret, illustrate, and communicate mathematical and/or statistical ideas. Students will learn to model and solve problems.

In general, 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 modeling and/or statistical analysis.

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

Registration in this course obligates you to be regular and punctual in class attendance. Therefore, every student is expected to attend every class. If you miss a class, then you must provide a legitimate, documented, written excuse upon returning to class in order for the absence to be excused. If you accrue three unexcused absences, then you will receive an F in this course if you do not withdraw on your own.

Please be aware that a note stating that you visited Student Health Services does not guarantee an excused absence unless a physician specifically states that you had a serious condition that prevented you from attending class such as a heart attack, stroke, burst appendix, broken femur, seizure, coma, influenza, childbirth, etc.

Extracurricular activities are not considered excused absences. Such activities should not be scheduled nor participated in during class time. If you have such an activity, then you should re-schedule it, cancel it, or skip it. If you consider such an activity to be more important than attending this class, then you should withdraw from this class.

Tests

There will be five tests. Each test will be based on class lectures and distributed study sheets. A practice test with solutions will be provided about a week in advance of each test. The tests will be closed-book but I may provide a formula sheet. A certain portion of some tests may be so that no calculators are allowed.

Tentative Test Dates

Test 1: Mon Sep 15    Test 2: Wed Oct 8    Test 3: Wed Oct 29

Test 4: Mon Nov 17    Test 5: Mon Dec 8, 1:00 to 2:00

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, such as those described in the attendance policy, then I may consider giving you a make-up exam once you leave the hospital.
Grading Policy

First and foremost, it is each student’s individual responsibility to learn the material that is presented. I will clearly explain to you what it is I want you to learn; we will do worksheets in class that are identical to the test problems. I will give you similar practice worksheets with solutions posted; I will give you practice tests with solutions posted. Therefore, I expect you to learn the material that is presented. In order to receive a passing grade in this class, you must clearly demonstrate that you have learned the material.

The five tests each will be weighted as one-fifth of your grade, and final grades will be determined as follows:

A: Excellent Work   B: Good Work   C: Acceptable Work   F: Unacceptable

“Excellent” means that all of your work is excellent, not just some of your work or most of your work. You can demonstrate excellence by maintaining at least a 95% average throughout the course, by never doing poorly on an exam, and by attending each class. You should be aware that 90% is not necessarily excellent. For example, you may score 100% and 80% on two exams, which would give you a 90% average. However these scores show that you were excellent on part the material, but only satisfactory on the rest of the material, which does not warrant an A.

Similarly, “good work” would be demonstrated with at least an 87.5% average and never doing poorly on an exam, and “acceptable work” would be demonstrated with at least an 80% average and not doing poorly on more than one exam. In each case, “doing poorly” would be scoring below 70%.

In addition, there will be no dropped tests, no do-overs, no extra credit, and no bonus points for going to “swipeable events.” You must earn your grade by learning the material and by doing well on your exams.

Any curves or adjustments to this grading policy will be reserved for students who have zero unexcused absences.

Withdrawal Date

October 15, 2014 is the last day to withdraw from the course with a grade of W or to change enrollment from credit to audit. But you may withdraw from the class any time you like before this date.

Mathematics Tutor Lab

For free extra help in the class, tutors are 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.

Special Accommodations

In compliance with university policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact Student Disability Services in Downing University Center, A-200. The phone number is 270-745-5004.