



COURSE SYLLABUS

Course: **WCOB 1033 Data Analysis and Interpretation**

Prerequisite: MATH 2053 with a grade of “C” or better and WCOB 1120

Course Description:

This is an introductory level course covering topics involving descriptive statistics, estimation of population characteristics, research design and hypothesis testing, as well as measuring and predicting relationships. The course should enable students to develop an understanding of the application and interpretation of basic data analysis techniques with an emphasis on statistical applications.

Value of this Course:

The broad objective of this course is to help you develop as critical thinkers and systematic problem solvers. The main job of managers is to make decisions, and to do this effectively you need critical thinking skills. In practical terms, this means that you need to learn to solve real-world problems by accurately framing them in terms of independent and dependent variables, formulating hypotheses about those variables, using statistics to test hypotheses, and interpreting the results. In short, I hope to instill in you an appreciation for the role of data in managerial problem solving by knowing both how to display and analyze it (i.e., statistics) and how to produce it (i.e., research design). The only way to learn critical thinking skills is by practicing them, so we will use a hands-on approach using Excel and a focus on applied business problems.

Specific Course Objectives:

1. Use scenarios and situations to solve problems with statistical tools, and make correct decisions regarding which tools are needed for given scenarios.
2. Use Excel and other specified computing tools to supplement and aid in the analysis of different types of data.
3. Given the results from computation, accurately interpret those results and make an appropriate business decision.
4. Make a correct determination of what type of data is needed to address a specified scenario or problem, and the method by which it will be collected.

Textbook:

Doane and Seward: Applied Statistics in Business & Economics (3rd Edition)

Software:

Microsoft EXCEL for WINDOWS Data Analysis Plus (Excel add-in).

Course Management Software:

I will use Blackboard for this course to disseminate information and assign homework. You will also be submitting your homework assignments through Blackboard (<http://learn.uark.edu/>). If I send email, I will use the UARK account you were assigned by the University.

Class Procedures:

In class we will use a combination of lecture, group exercises, and discussions. However, mastering data analysis is really a matter of using it and practicing. Most people (at least me) can't really learn this kind of material without digging in and just doing it. Thus I will often give you problems to solve in groups during class time. This gives you the opportunity to learn from each other, discover things, and get feedback on your work. Also, it's usually more fun.

Guidelines for Testing Accommodations for Students With Disabilities:

It is the Walton College policy that students must request testing accommodations from their instructor in addition to requesting accommodations from the ADA Center. Please meet with me individually and we will work within the university and college guidelines.

Attendance Policy:

This is the type of course that, for most people, if you don't keep up with it you can get hopelessly lost.

Inclement Weather Policy:

The University's Inclement Weather Policy can be found at <http://emergency.uark.edu/13520.php>. The phone number is 479-575-7000. I realize that some of you have a more difficult commute to the campus than do others. I leave it to your personal judgment to determine whether to attend class during inclement weather.

Academic Honesty:

"Academic dishonesty involves acts that may subvert or compromise the integrity of the educational or research process at the University of Arkansas, when such acts have been performed by a UA student. Academic dishonesty includes, but is not limited to, any act by which a student gains or attempts to gain an academic advantage for him/herself or another by misrepresenting his/her or another's work or by interfering with the independent completion, submission, or evaluation of academic work."

"As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail." (2011-12 University of Arkansas Undergraduate Catalog)

As a University of Arkansas student, you are required to be familiar with and abide by the University's Academic Integrity Policy which may be found at <http://catalogofstudies.uark.edu/2882.php>. If you have questions about how these policies apply to this course or an assignment, then please see me.

Grading:

	Points
Homework	100
Class quizzes/Attendance	100
Supplemental Instruction	50
Exam 1	100
Exam 2	100
Exam 3	100
Exam 4	100
Final (Comprehensive and Departmental)	350
Total	1,000

Final course grades will be based on the following scale:

- A = 900 points
- B = 800 points
- C = 700 points
- D = 600 points
- F < 600 points

Homework assignments:

A total of 100 points is allocated for completing (and turning in) homework assignments. You will have approximately 20 homework assignments worth 5 points each. Homework is an important part of the learning process; you simply cannot master this material by reading and coming to class. You need to actively work with the material and practice solving problems. You will receive 100 points if you turn in all the homework assignments and a prorated amount if you turn in fewer than all of them. For example, if you turn in half the assignments you will get 50 total points for homework. Homework will be assigned most class days and is due 10 minutes before the beginning of class on the day that it is due. All homework assignments will be posted on Blackboard and you will submit your assignments electronically using Blackboard. If you are late submitting a homework assignment it will not be accepted on Blackboard. If we have fewer than 20 homework assignments, you will receive points equivalent to the percentage of homework assignments that you submitted.

Quizzes: We will have quizzes that are worth a total of 100 points.

There will be no make-ups for missed quizzes. If you are sick for one or two it will not have a huge impact on your overall grade. But overall, if you miss a lot of quizzes (or do poorly on them) it will have a significant impact on your course grade. So it is important that you attend class and be prepared. Quizzes will be based on material assigned for that day, and will occur randomly throughout the semester.

Supplemental Instruction (SI):

You will receive 5 points for attending and actively participating in each SI session, up to a maximum of 50 points. Information on times and signing up for sessions will be available during the first week of class.

Exams:

Bring number 2 pencils and a “100 AS” Scantron to exams. You will have 4 exams in class plus a final exam. It is extremely important that you take all exams. NO MAKE-UP EXAMS will be given without a properly documented medical or business excuses arranged with the instructor (at least 1 day in advance). This holds for all students including those missing exams due to university sanctioned events. You will need a calculator for exams and cannot use your phone as a calculator.