**SYLLABUS**

**MANAGEMENT 2250-TSA**

**MANAGEMENT STATISTICS**

**FALL, 2011**

**MONDAY, WEDNESDAY & FRIDAY, 9:05 AM - 9:55 AM**

**TECHNOLOGY SQUARE 203**

**INSTRUCTOR:**

Dr. Stuart Milne

495 Technology Square (Management)

(404) 894-4930

stuart.milne@mgt.gatech.edu

Office Hours: M, W, F 1:00 PM - 2:00 PM; or By Appointment

**COURSE DESCRIPTION:**

This course will present the student with an overview of the general principles and applications of statistics relevant to management. A key function of management is to make decisions, and contemporary managers are confronted with ever increasing amounts of information as they attempt to do so effectively. An understanding of statistics is invaluable as they consider what information is relevant and how that information might best be used to achieve their goals. A grasp of statistics is also important as managers consider the validity and desirability of proposals others make to them from both inside and outside their organizations.

Knowing and understanding general principles and formulas, however, are not enough to make one an effective manager. He or she needs to be able to apply this knowledge to the specific situations encountered on a day-to-day basis. A major emphasis of this course will be to aid and encourage students to begin developing these skills through practical problem solving. While the knowledge and understanding of principles can be accomplished largely through the textbook and lectures, skill in applying these principles can only come through "hands-on" types of educational experiences. For this reason, it is very important that students be prepared to participate as fully as possible in classroom activities in order to gain maximum benefit from this course.

**COURSE TEXTBOOK:**

Bowerman, O’Connell, Orris, & Porter *Essentials of Business Statistics*, ***Any Edition***, Irwin: McGraw-Hill. Any edition really will do. We’ll talk more about this in class.

**CALCULATOR REQUIREMENT:**

**This is extremely important! You will need to bring a basic calculator to all class sessions and ESPECIALLY to exams.**

**TEACHING METHODS & CLASSROOM PROCEDURES:**

The teaching methods used in this course will include lecture, problem solving and application. I will expect you to come to class prepared to participate in the discussion of the problems presented each day.

**CLASS ATTENDANCE & QUIZZES:**

In consideration of the importance of the classroom experience to the goals of this course, attendance in class is expected. However, because I expect you to act as adults in this area, you will not be directly penalized for non-attendance. Please understand, however, that there is a strong positive correlation between attendance in class and good grades in this course. Unless you are already very proficient in statistics, you will not be able to do well, or even pass, this course if you do not attend class, or if you attend class but do participate fully in the problem solving that will occur during class. Also, on most class days we will have a quiz on the problems discussed and/or assigned the previous class period. While these quizzes are not “graded”, they will be recorded and count toward your final grade. Please note that quizzes will be accepted only on the day given and ONLY on the quiz sheet distributed that day in class.

Each student will be given 2 “free” days to miss a quiz and still get full credit. If you believe you have a valid excuse for missing more than 2 days, check with me and if I agree your excuse is valid, you will be given an excused absence for that day and it will not count against you. Note that I will generally require some documentation to support your excuse. Those students who are required to miss class for an official Georgia Tech sponsored function (e.g. athletic team members) will automatically be excused for those days with written documentation from the sponsoring office.

Please note that blank quiz sheets will not be credited.

**CLASS TIMES:**

Due to our location far from other campus building, I realize it is often difficult to get here on time. I will not start formal classroom procedures until 5 minutes past our scheduled starting time. During those five minutes, I will be in class to answer any questions, etc. After that, class will begin. If you come in after that PLEASE use the rear door and DON’T let it bang. Please be aware that if you come into class after a quiz has begun, you will NOT be able to get credit for that day. There will also be times when I will finish the lesson before the allotted class period has ended. This will most likely occur on a day after an exam when we have no quiz or assignment to go over. On any day when we finish early, I will stay in the classroom and be available for any questions, etc.

**HOMEWORK:**

On most class days I will give a homework assignment generally covering problems relevant to the instruction given that day. We will go over these assignments during the next class period. These assignments are for your benefit and I will not collect nor correct them, and they will not count toward your grade.

**EXAMS:**

Four exams will be given during the semester. Each exam will consist of some multiple-choice items and (mostly) problems to solve. These exams are not cumulative. With each exam you will be given a formula sheet. (I will explain that more as the first exam approaches.) There will also be a Final Exam which will be “semi-cumulative”. (I will also explain that more as the time approaches.) You will be able to drop one of the first four exams, BUT NOT THE FINAL!! Also please note, the final exam must be given during our assigned period. If you have a problem wherein you must leave Atlanta before then, you will need to get approval from either the undergrad office here at the College of Management or the Dean of Students for me to give you an “Incomplete” and allow you to take the final when you are back in town. Please understand, there are NO exceptions to this!! Please be advised also that I will not give the final exam before finals week under any circumstances.

If you have a crisis situation arise which interferes with you taking any exam at the scheduled time, please contact me AS SOON AS POSSIBLE!! If I do not hear from you before the next scheduled class time, you will not be able to make up the exam. Due to space limitations in the classrooms, you MUST take exams during the period you are registered for unless you clear it with me first!!! If you have scheduling problems with the final exam period assigned to your section, discuss this with me as the time approaches.

**GRADING:**

Grades will be determined according to the following:

Average of Exam #1 – Exam #4 dropping the lowest = 60%

Final Exam = 30%

Quizzes = 10%

**GRADES:**

Letter grades will be assigned as follows:

89.5 - 100 = A

79.5 - 89.4 = B

69.5 - 79.4 = C

59.5 - 69.4 = D

59.4 or Less = F

**NOTE!!**

If you are experiencing problems that you believe will make it difficult or impossible for you to fulfill the requirements of this course successfully (e.g. extended absence due to illness, family crisis, etc.), please see someone who can handle these issues and get you an emergency withdrawal from the class or work out whatever would be appropriate (e.g. the Dean of Students office). I CANNOT deal with these situations and can only give you what you earn in the class based on your grades. **Please understand this clearly!**

**EXTRA CREDIT:**

Complete the on-line class evaluation at the end of the semester and 0.5 points will be added to your final average.

**T-Square:**

NOTE: T-square is the means by which I communicate with you. You need to check it regularly since you are responsible for any messages, etc. that I post there! Also, copies of the syllabus and all lessons, assignments and quizzes will be posted on T-square. Also, please be sure your e-mail box is receiving e-mails and check those regularly as well.

**CLASSROOM PROTOCOL:**

In order to ensure a polite and productive classroom environment, please observe the following

1) Make every effort to be on time. If I notice a repeated late entry of an individual or individuals I will discuss the situation with them. Late arrivers are disruptive!

2) Please no “obvious” eating or drinking in class. (Nothing noisy!)

3) All cell phones and beepers OFF. If you are expecting an emergency call, please clear this with me at the beginning of class.

4) I MUST insist that there be no talking in class. This material requires the complete attention of both you and me when I am explaining and working through problems!

**EXAM PROCEDURES:**

In order to ensure academic honesty, a definite protocol must be followed on exam days.

1) No books, papers, etc. may be visible to any student.

2) If you have any special needs, please see me before the first exam to make any special arrangements that may be required.

3) Students must keep their eyes focused on their own papers, and not allow them to "wander".

**CLASS SCHEDULE (Subject to modification during the semester)**

**Day Date Topic**

**Week 1:**

M 8/22 Introduction to the Course

W 8/24 Introduction to Statistics and Data Collection: Class notes & Ch. 1

F 8/26 Introduction to Statistics and Data Collection: Class notes & Ch. 1

**Week 2:**

M 8/29 Descriptive Statistics: Ch. 2

W 8/31 Descriptive Statistics: Ch. 2

F 9/2 Descriptive Statistics: Ch. 2/ Basic Probability Part 1: Ch. 3

**Week 3:**

M 9/5 Labor Day – No Class!

W 9/7 Basic Probability Part 1: Ch. 3

F 9/9 Basic Probability Part 1: Ch. 3

**Week 4:**

M 9/12 Exam 1 - Chapters 1, 2, & 3

W 9/14 Basic Probability Part 2: Ch. 3

F 9/16 Basic Probability Part 2: Ch. 3

**Week 5:**

M 9/19 Basic Probability Part 2: Ch. 3

W 9/21 Discrete Probability Distributions: Ch. 4

F 9/23 Discrete Probability Distributions: Ch. 4

**Week 6:**

M 9/26 Discrete Probability Distributions: Ch. 4

W 9/28 Discrete Probability Distributions: Ch. 4

F 9/30 Discrete Probability Distributions: Ch. 4

**Week 7:**

M 10/3 Exam 2 - Chapters 3 & 4

W 10/5 Continuous Probability Distributions: Ch. 5

F 10/7 Continuous Probability Distributions: Ch. 5

**Week 8:**

M 10/10 Continuous Probability Distributions: Ch. 5

W 10/12 Continuous Probability Distributions: Ch. 5

F 10/14 Continuous Probability Distributions: Ch. 5

**CLASS SCHEDULE (Subject to modification during the semester):**

**Day Date Topic**

**Week9:**

M 10/17 Fall Break – No Class!

W 10/19 Sampling Distributions: Ch. 6

F 10/21 Sampling Distributions: Ch. 6

**Week 10:**

M 10/24 Confidence Intervals: Ch. 7

W 10/26 Confidence Intervals: Ch. 7

F 10/28 Confidence Intervals: Ch. 7

**Week 11:**

M 10/31 Exam 3 - Chapters 5, 6, & 7

W 11/2 Hypothesis Testing: Ch. 8

F 11/4 Hypothesis Testing: Ch. 8

**Week 12:**

M 11/7 Hypothesis Testing: Ch. 8

W 11/9 Hypothesis Testing: Ch. 8

F 11/11 Hypothesis Testing: Ch. 8

**Week 13:**

M 11/14 Comparing Population Means: Ch. 9

W 11/16 Comparing Population Means: Ch. 9

F 11/18 Comparing Population Means: Ch. 9

**Week 14:**

M 11/21 Exam 4 - Chapters 8 & 9

W 11/23 Comparing Proportions and Chi-Square Tests: Ch. 10

F 11/25 Thanksgiving Break – No Class!

**Week 15:**

M 11/29 Comparing Proportions and Chi-Square Tests: Ch. 10

W 11/30 Comparing Proportions and Chi-Square Tests: Ch. 10

F 12/2 Simple Linear Regression: Ch. 11

**Week 16:**

M 12/5 Simple Linear Regression: Ch. 11

W 12/7 Multiple Regression: Ch. 12

F 12/9 Last Day of Class - Review

W 12/14 8:00 AM – 10:50 AM Final Exam

**MGT 2250 –TSA**

**Fall Semester, 2011**

**Acknowledgement of the Syllabus**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Print your name above)

acknowledge that I have received a syllabus for MGT 2250-TSA for Fall Semester, 2011 and have read and understand the policies and procedures set forth in it.

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(Your signature) (Today's date)

Are you a member of an athletic team that will cause you to be absent for official school events this semester? \_\_\_\_\_\_\_ Yes \_\_\_\_\_\_\_ No

If Yes, which team? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_