

OPRE 3360.001- Managerial Methods in Decision Making Under Uncertainty

Fall 2014, Friday: 4:00 p.m. – 6:45 p.m., Room: JSOM 12.218

Instructor: Ilhan Emre Ertan

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Office Hours: Friday: 3:00 p.m. - 4:00p.m. & by appt.

Course Pre-requisites and Restrictions:

MATH 1326 (Pre-req.), OPRE 3360 and STAT 3360 cannot both be used to fulfill degree requirements.

Course Description:

Introduces the concepts of probability and statistics to managerial decision making. Concepts will be developed in lecture and exercises using software packages. Topics include: summarizing and presenting data, probability theory, sampling, estimation, confidence intervals, hypothesis testing, regression, and ANOVA. Emphasis will be given to modeling and solving business problems in Finance, Marketing, Accounting, and Operations Management.

Required Textbook:

Modern Business Statistics with Microsoft® Office Excel® (5th Edition) by Anderson, Sweeney and Williams – with Cengage Aplia online learning resource:

Choose one of the following two options:

- Option 1: Aplia and ebook - ISBN: 9781305255128
- Option 2: Aplia, ebook and 3-ring loose leaf textbook – ISBN: 9781305029125

APLIA COURSE KEY: **UH2P-LQQF-YS5G**

Registration instructions included with this syllabus (Page 4).

Required Devices:

- An Apple or PC laptop or any computer access (available at computer labs in JSOM). You will be required to have and use this device during course preparation and for working on the Aplia assignments.
- A calculator is required for this course. Any calculator of your choice is suitable so long as it has the following minimum capabilities: basic 4-operations, square root, exponent, and display 4 or more decimal places. You are required to bring this calculator to each exam and know how to use it. It is also recommended that you bring extra calculator batteries to exams – extra calculators won't be provided. And SMART PHONES will **NOT** be allowed for any use.

Grading Policy:

| | |
|---------------------|--------------------|
| <i>Assignments</i> | <i>25%</i> |
| <i>Exam 1</i> | <i>25%</i> |
| <i>Exam 2</i> | <i>25%</i> |
| <i>Exam 3</i> | <i>25%</i> |
| <i>TOTAL</i> | <i>100%</i> |

Class Participation:

Class participation will play an important role in your learning. It is crucial that you attend all classes and actively participate in the discussion and activities. The reading assignments will help you to better understand the material. It is expected that you **COMPLETE** assigned readings prior to coming to class. All material discussed during class can be in exams.

Assignments:

There will be 11 required assignments posted on e-learning one week before they are due. *Each assignment has a certain deadline and need to be completed on Aplia.* After the deadline the questions can NOT be accessible so **NO LATE** homework can be accepted!

You may work together on the assignments, but each student has to submit individual answers on Aplia. Please keep in mind that you will not be allowed to collaborate on exam questions, experience has shown that those students who understand and work on assignments carefully get high scores from exams.

Exams:

All three exams will be in-class and closed-book/closed note. Exams are *not cumulative*. If you are unable to attend the day of the exams, an official written explanation and arrangements must be made by the second week of class. **NO MAKE-UP EXAMS WILL BE SCHEDULED.**

A hand-written, single-sided formula sheet not larger than 8.5"x11" (letter size) will be allowed for use during EACH exam. You are allowed to include any information on the formula sheet you feel will be of assistance in your completion of the exam. The formula sheet must have your name written on it and be turned in with your exam.

Guidelines for Letter Grades:

The grade will be assigned based on the two methods:
First one will be based on the following scale.

| Grade | A+ | A | A- | B+ | B | B- | C+ | C | C- | D+ | D | F |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Cutoff Percentage | 95% | 90% | 87% | 83% | 80% | 77% | 73% | 70% | 67% | 63% | 60% | <60% |

The second grade will be based on a curve (a statistical method)
Your final letter grade will be the higher of the two grades.

E-Learning:

Your course e-Learning site will be used as the main communication portal throughout the semester. E-Learning email is also the appropriate avenue for sending email to your professor. There will be a class handout posted for each lecture summarizing the main points of the topics covered as well as link to Aplia. All grades will be posted as soon as grading has been completed. A copy of the course syllabus will be available at all times, and you will be notified of any changes made during the semester.

Laptops & Cell phones:

You can **NOT use your cell phones or any other communication devices** during the lectures.

Assignments & Academic Calendar:

The following is a **tentative schedule** which will be followed as closely as possible. However, should changes become necessary, they will be announced in class.

Due dates for readings and assignments can be found in the Aplia online learning resource.

| Week | Date | Topics/Exams | Readings | Due |
|------|--------|--|------------|----------|
| 1 | 29-Aug | Syllabus Review and Chapter 1: Data and Statistics | Chapter 1 | |
| 2 | 5-Sep | Chapter 2: Descriptive Statistics: Tabular and Graphics Displays | Chapter 2 | HW1 Due |
| 3 | 12-Sep | Chapter 3: Descriptive Statistics: Numerical Measures | Chapter 3 | HW2 Due |
| 4 | 19-Sep | Chapter 4: Introduction to Probability | Chapter 4 | HW3 Due |
| 5 | 26-Sep | EXAM 1: Chapters 1, 2, 3, and 4 | | HW4 Due |
| 6 | 3-Oct | Chapter 5: Discrete Probability Distributions | Chapter 5 | |
| 7 | 10-Oct | Chapter 6: Continuous Probability Distributions | Chapter 6 | HW5 Due |
| 8 | 17-Oct | Chapter 7: Sampling and Sampling Distributions | Chapter 7 | HW6 Due |
| 9 | 24-Oct | Chapter 8 – Interval Estimation | Chapter 8 | HW7 Due |
| 10 | 31-Oct | EXAM 2: Chapters 5, 6, 7, and 8 | | HW8 Due |
| 11 | 7-Nov | Chapter 9: Hypothesis Testing | Chapter 9 | |
| 12 | 14-Nov | Chapter 13: Experimental Design and Analysis of Variance | Chapter 13 | HW9 Due |
| 13 | 21-Nov | Chapter 14: Simple Linear Regression | Chapter 14 | HW13 Due |
| 14 | 28-Nov | Fall Break – No Class | | |
| 15 | 5-Dec | EXAM 3: Chapters 9, 13, and 14 | | HW14 Due |

How to access your Aplia course

F14 OPRE3360.001

Instructor: Ilhan Emre Ertan

Start Date: 08/25/2014

What is Aplia?

In just 10 years, more than one billion answers have been submitted through Aplia, the premier online assignment solution. Millions of students use Aplia to better prepare for class and for their exams. Join them today!

Registration

1. Go to elearning and find your OPRE3360 course
2. Click on F14 OPRE3360.001 Statistics link
3. In the "Content Homepage" page, click on the "Aplia" link
4. Follow the prompts to register for your Aplia course.
5. And the course key is: **UH2P-LQQF-YS5G**

Payment

After registering for your course, you will need to pay for access using one of the options below:

Online: You can pay online using a credit or debit card, or PayPal.

Bookstore: You may be able to purchase access to Aplia at your bookstore. Check with the bookstore to find out what they offer for your course.

Free Trial: You can access Aplia until 11:59 PM on 09/14/2014 during your free trial. After the free trial ends you will be required to pay for access.

Please note: At the end of the free trial period, your course access will be suspended until your payment has been made. All your scores and course activity will be saved and will be available to you after you pay for access.

If you already registered an access code or bought Aplia online, the course key to register for this course is: **UH2P-LQQF-YS5G**

Special Assistance:

For help with test anxiety or time management, the following resources are available: your academic advisor, the Learning Resource Center (MC2.402), the Counseling Center (SU1.608), the New Student Programs Office (SU1.610), your instructor.

Accessibility Accommodations

It is the policy and practice of The University of Texas at Dallas to make reasonable accommodations for students with properly documented disabilities. However, written notification from the Office of Student AccessAbility (OSA) is required. If you are eligible to receive an accommodation and would like to request it for this course, please discuss it with me and allow one week advance notice. Students who have questions about receiving accommodations, or those who have, or think they may have, a disability (mobility, sensory, health, psychological, learning, etc.) are invited to contact the Office of Student AccessAbility for a confidential discussion. OSA is located in the Student Services Building, suite 3.200. They can be reached by phone at (972) 883-2098, or by email at studentaccess@utdallas.edu.

Academic Integrity

The faculty and administration of the School of Management expect from our students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work. We want to establish a reputation for the honorable behavior of our graduates, which extends throughout their careers. Both your individual reputation and the school's reputation matter to your success. The Judicial Affairs website lists examples of academic dishonesty. Dishonesty includes, but is not limited to cheating, plagiarism, collusion, facilitating academic dishonesty, fabrication, failure to contribute to a collaborative project and sabotage. Some of the ways students may engage in academic dishonesty are:

- Coughing and/or using visual or auditory signals in a test;
- Concealing notes on hands, caps, shoes, in pockets or the back of beverage bottle labels;
- Writing in blue books prior to an examination;
- Writing information on blackboards, desks, or keeping notes on the floor;
- Obtaining copies of an exam in advance;
- Passing information from an earlier class to a later class;
- Leaving information in the bathroom;
- Exchanging exams so that neighbors have identical test forms;
- Having a substitute take a test and providing falsified identification for the substitute;
- Fabricating data for lab assignments;
- Changing a graded paper and requesting that it be regraded;
- Failing to turn in a test or assignment and later suggesting the faculty member lost the item;
- Stealing another student's graded test and affixing one's own name on it;
- Recording two answers, one on the test form, one on the answer sheet;
- Marking an answer sheet to enable another to see the answer;
- Encircling two adjacent answers and claiming to have had the correct answer;
- Stealing an exam for someone in another section or for placement in a test file;
- Using an electronic device to store test information, or to send or receive answers for a test;
- Destroying or removing library materials to gain an academic advantage;
- Consulting assignment solutions posted on websites of previous course offerings;
- Transferring a computer file from one person's account to another;
- Transmitting posted answers for an exam to a student in a testing area via electronic device;
- Downloading text from the Internet or other sources without proper attribution;
- Citing to false references or findings in research or other academic exercises;
- Unauthorized collaborating with another person in preparing academic exercises.
- Submitting a substantial portion of the same academic work more than once without written authorization from the instructor.

<http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-Basicexamples.html>

Plagiarism

Plagiarism on written assignments, especially from the web, from portions of papers for other classes, and from any other source is unacceptable. On written assignments, this course will use the resources of turnitin.com, which searches the web for plagiarized content and is over 90% effective.

Conduct During Course Exams

During tests and quizzes, students in this section are not allowed to have with them any food, drinks, scratch paper, course materials, textbooks, notes, invisible ink pens, or electronic devices, including iPads, iPhones, iPods, MP3 players, earphones, radios, smart phones, cameras, calculators, multi-function timepieces, or computers. When possible, students should sit in alternating seats, face forward at all times, and remove any clothing which might conceal eye movements, reflect images of another's work, or hide course material for copying. Exam proctors will monitor any communication or signaling between students by talking, whispering, or making sounds, or by using your hands, feet, other body movements, the test paper itself or your writing implement.

Academic Dishonesty

Students in this course suspected of academic dishonesty are subject to disciplinary proceedings, and if found responsible, the following minimum sanctions will be applied:

- **Homework – Zero for the Assignment**
- **Exams – Zero for the Exam and a one letter grade reduction of the final course grade**

These sanctions will be administered only after a student has been found officially responsible for academic dishonesty, either through waiving their right for a disciplinary hearing, or being declared responsible after a hearing administered by Judicial Affairs and the Dean of Student's Office.

In the event that the student receives a failing grade for the course for academic dishonesty, the student is not allowed to withdraw as a way of preventing the grade from being entered on their record. Where a student receives an F in a course and chooses to take the course over to improve their grade, the original grade of F remains on their transcript, but does not count towards calculation of their GPA.

The School of Management also reserves the right to review a student's disciplinary record, on file with the Dean of Students, as one of the criteria for determining a student's eligibility for a scholarship.

Judicial Affairs Procedures

Under authority delegated by the Dean of Students, a faculty member who has reason to suspect that a student has engaged in academic dishonesty may conduct a conference with the student in compliance with the following procedures:

- (i) the student will be informed that he/she is believed to have committed an act or acts of academic dishonesty in violation of University rules;
- (ii) the student will be presented with any information in the knowledge or possession of the instructor which tends to support the allegation(s) of academic dishonesty;
- (iii) the student will be given an opportunity to present information on his/her behalf;
- (iv) after meeting with the student, the faculty member may choose not to refer the allegation if he/she determines that the allegations are not supported by the evidence; or
- (v) after meeting with the student, the faculty member may refer the allegations to the dean of students along with a referral form and all supporting documentation of the alleged violation. Under separate cover, the faculty member should forward the appropriate grade to be assessed if a student is found to be responsible for academic dishonesty;
- (vi) the faculty member may consult with the dean of students in determining the recommended grade;
- (vii) the faculty member must not impose any independent sanctions upon the student in lieu of a referral to Judicial Affairs;
- (viii) the faculty member may not impose a sanction of suspension or expulsion, but may make this recommendation in the referral documentation

If the faculty member chooses not to meet with the student and instead forwards the appropriate documentation directly to the dean of students, they should attempt to inform the student of the allegation and notify the student that the information has been forwarded to the Office of Dean of Students for investigation.

The student, pending a hearing, remains responsible for all academic exercises and syllabus requirements. The student may remain in class if the student's presence in the class does not interfere with the professor's ability to teach the class or the ability of other class members to learn. (See Section 49.07, page V-49-4 for information regarding the removal of a student from class).

Upon receipt of the referral form, class syllabus, and the supporting material/documentation from the faculty member, the dean shall proceed under the guidelines in the Handbook of Operating Procedures, Chapter 49, Subchapter C. If the respondent disputes the facts upon which the allegations are based, a fair and impartial disciplinary committee comprised of UTD faculty and students, shall hold a hearing and determine the responsibility of the student. If they find the student in violation of the code of conduct, the dean will then affirm the minimum sanction as provided in the syllabus, and share this information with the student. The dean will review the student's prior disciplinary record and assess additional sanctions where appropriate to the circumstances. The dean will inform the student and the faculty member of their decision.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Instructor so please follow eLearning and in-class announcements carefully .