

				<b>Course Title</b>		<b>Spreadsheet Modeling &amp; Analytics</b>				
				<b>Course</b>		<b>OPRE 6332</b>				
				<b>Term</b>		<b>Summer</b>	<b>2015</b>			
						<b>Section</b>	<b>Day</b>	<b>Time</b>		<b>Location</b>
						5U2	WED	6.00 PM - 10.00 PM		12.206
						5U1	THU	6.00 PM - 10.00 PM		12.202
<b><u>Professor's Contact Information</u></b>										
<b>Professor</b>					<b>Kannan Ramanathan</b>					
<b>Office Phone</b>					<b>(972) 883-5953</b>					
<b>Office Location</b>					<b>JSOM 3.622</b>					
<b>Email Address</b>					<b>Kannan.Ramanathan@UTDallas.Edu</b>					
<b>Office Hours</b>					<b>Mon 5:30 PM - 6:30 PM (appointments preferred)</b>					
<b><u>Teaching Assistant for Section 5U1</u></b>										
				<b>Name</b>	<b>Xi Shan</b>					
<b>Office Location</b>					<b>JSOM 13.321</b>					
				<b>Email Address</b>	<b>xxs130630@utdallas.edu</b>					
				<b>Office Hours</b>	<b>Fri 6 pm-7 pm</b>					
<b><u>Teaching Assistant for Section 5U2</u></b>										
<b>Name</b>					<b>Chungseung Lee</b>					
<b>Office Location</b>					<b>JSOM 14.209</b>					
<b>Email Address</b>					<b>cxl143430@utdallas.edu</b>					
<b>Office Hours</b>					<b>Tue 7 pm-9 pm</b>					

**Course Description**

This course introduces the basic concepts of model building and encourages students to take an analytical view of business decision making. Microsoft Excel (Version 2013, Windows Environment) is used to build models. The course covers concepts of effective spreadsheet design and use, and students acquire knowledge about specific decision making techniques for business such as optimization. Students build spreadsheet models to identify choices, formalize trade-offs, specify constraints, perform sensitivity analyses, and analyze the impact of uncertainty. Applications in supply chain management, transportation, marketing and finance are examined. **Note: This is a fun, but demanding, course. Each week, you should be able to commit a lot of time to prepare for each class, and to complete homework assignments which are a significant part of your grade.**

**Learning Objectives**

At the conclusion of this course, the student should:

1. demonstrate expertise in using Excel
2. be able to identify the conceptual structure of a decision or planning problem
3. understand the logic associated with the components and process of model development
4. assess the significance and limitations of model outputs for managerial insights and action
5. appreciate the power and limitations of MS Excel in modeling
6. appreciate the potential of management science in addressing management issues
7. effectively communicate the analytical process, results, implications

**Required Text**

Introduction to Spreadsheet Modeling and Analytics  
by Kannan Ramanathan - **Use Third Edition Only**

**Also Required:**

**Excel 2013 ONLY (Windows platform preferred)**

**You can use a Mac; but note that I am not familiar with Mac**

**Do not come to class without a laptop**

**Note: make sure you have Excel 2013 and no other version**

**Please DO NOT SIGN UP FOR THIS COURSE if you do not have Excel 2013**

**Flashdrive - with at least 0.5 GB**

**Bring your flashdrive to every class**

**Assignments & Academic Calendar**

The following is a tentative schedule, which I will try to follow as closely as possible. Should any changes become necessary, I will announce it in class.

**FOR EACH QUIZ AT THE TESTING CENTER, YOU NEED TO RESERVE YOUR SEAT**

1	Wed	May-27	6.00 PM	Chapters 1 through 8				
	Thu	May-28	6.00 PM					
2	Wed	Jun-03	6.00 PM	Quiz I	Chapters: 1 - 8	At Testing Center from 6:00 pm to 6:30 pm		
	Thu	Jun-04	6.00 PM	Class will start at 6:45 pm		Chapters 9 through 17		
3	Wed	Jun-10	6.00 PM	Quiz II	Chapters: 9 - 17	At Testing Center from 6:00 pm to 6:30 pm		
	Thu	Jun-11	6.00 PM	Review of last quiz				
				Class will start at 6:45 pm		Chapter 18		

4	Wed	Jun-17	6.00 PM	Quiz III	Chapter 18	At Testing Center from 6:00 pm to 6:45 pm
	Thu	Jun-18	6.00 PM	Review of last quiz		
				Chapters 19 - Introduction to Spreadsheet Modeling		
				Chapters 19 - What-If Analyses, Goal Seek, One-Way, Two-Way Data Tables		
5	Wed	Jun-24	6.00 PM	No quiz today - Class starts at 6pm		
	Thu	Jun-25	6.00 PM	Review of last quiz		
					Chapters 20 - Introduction to Spreadsheet Modeling	
					Introduction to Optimization	
					Introduction to Optimization - Graphical Approach	
6	Wed	Jul-01	6.00 PM	Quiz IV	Chapters 19 - 20	At Testing Center from 6:00 pm to 7:00 pm
	Thu	Jul-02	6.00 PM	Class will start at 7:15 pm		
				Linear Programming		
				(the following topics may be dropped if we do not have time)		
				Array Functions		
				Index and Match Function		
				Offset Function		
				Dynamic Range names		
7	Wed	Jul-08	6.00 PM	No quiz today - Class starts at 6pm		
	Thu	Jul-09	6.00 PM	Review of last quiz		
					Chapters 21-22	
					Analyzing DataSets	
					Filters and Queries	
					Pivot Tables	
					Calculated Fields in Pivot Tables	
8	Wed	Jul-15	6.00 PM	Quiz V	Chapters 21-22	At Testing Center from 6:00 pm to 7:00 pm
	Thu	Jul-16	6.00 PM	Introduction to Macros		
9	Wed	Jul-22	6.00 PM	No quiz today - Class starts at 6pm		
	Thu	Jul-23	6.00 PM	Review of last quiz		
				Introduction to Macros (cont'd)		
10	Wed	Jul-29	6.00 PM	Introduction to Macros (cont'd)		
	Thu	Jul-30	6.00 PM			
11	Wed	Aug-05	6.00 PM	Quiz VI	Quiz VI 5 pm-9:30 pm on 5th/6th August at Testing Center	
	Thu	Aug-06	6.00 PM	Quiz VI	Quiz VI is 2 hours - comprehensive - all material covered so far	
					No class today	

The course focuses on learning-by-doing. It involves a combination of lectures and extensive class discussions and student presentations, of materials from the textbook. My intent is to help you think through the issues in a given context, and to help you articulate your arguments in class discussions clearly and concisely. Students are expected to read the assigned material before coming to class, and to attend all classes. The course grades will be based on the weights shown below:

		Attendance/homework assignments/presentation/class participation						10%
		Quiz I	Chapters 1 - 8					
		Quiz II	Chapters 9 - 17					

		Quiz III	Chapter 18		Quiz I through V: 15% each				
		Quiz IV	Chapters 19 - 20		I will take the best four for each student				
		Quiz V	Chapters 21 - 22		Quiz VI: 30%				
		Quiz VI	Comprehensive						
		Penalty for missing class (each instance)							-2%
		If you come after attendance is taken, you are counted as being absent							
		No penalty if you have a valid, documented reason							
		Penalty for not being ready to present homework (each instance)							-3%
		Penalty for cell Phone or internet use during class (each instance)							-5%
		<u>Class Attendance, Participation, Professional Conduct</u>							
		Points for class participation will be based on your punctuality, regular attendance, quality and extent of discussion (and during guest lectures. Class participation requires your studying class materials before the class. I will also expect you to maintain professional conduct and decorum inside the class room. <b>USE OF CELL PHONES, TEXTING, EMAILING AND SURFING THE INTERNET ARE STRICTLY FORBIDDEN DURING CLASS HOURS - A VIOLATION CARRIES A PENALTY OF FROM YOUR FINAL GRADE.</b>							
		<u>Please Note:</u>							
		Grades will NOT be curved.							
		There are no make up quizzes.							
		You need to attend the section for which you are registered.							
		I cannot reschedule any exam to a different date - please do not ask.							
		If you miss your exam for a valid and documented reason (sick, accident etc.) I will take the average of your grades from other tests or exams for this course							

	<b>Grades will be based on the following point ranges which may differ from other courses:</b>								
	<b>Point Range</b>	<b>Grade</b>			<b>Point Range</b>	<b>Grade</b>			
	<b>93 - 100</b>	<b>A</b>			<b>86 - 89</b>	<b>B+</b>		<b>75 - 79</b>	<b>C+</b>
	<b>90 - 92</b>	<b>A-</b>			<b>83 - 85</b>	<b>B</b>		<b>70 - 74</b>	<b>C</b>
					<b>80 - 82</b>	<b>B-</b>		<b>0 - 69</b>	<b>F</b>

<b><u>Student Conduct and Discipline</u></b>												
<p>The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD publication, A to Z Guide, which is provided to all registered students each academic year.</p>												
<p>The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the Rules and Regulations, Board of Regents, The University of Texas System Part 1, Chapter VI, Section 3, and in Title V, Rules on Student Services and Activities of the university's Handbook of Operating Procedures. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391).</p>												
<p>A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.</p>												
<b><u>Academic Integrity</u></b>												
<p>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 scholarly 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.</p>												
<p>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. See <a href="http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-Basicexamples.html">http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-Basicexamples.html</a> for details.</p>												
<p>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 may use the resources of turnitin.com, which searches the web for plagiarized content and is over 90% effective.</p>												

During tests and quizzes, students in this section are not allowed to have with them any food or drinks, scratch paper, course materials, textbooks, notes, invisible ink pens, or electronic devices, including iPads, iPhones, iPods, MP3 Players, earphone 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 using your hands, feet, other body movements, the test paper itself or your writing implement.

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

1. Homework – Zero for the Assignment
2. Case Write-ups – Zero for the Assignment
3. Quizzes – Zero for the Quiz
4. Presentations – Zero for the Assignment
5. Group Work – Zero for the Assignment for all group members
6. Tests – F for the course

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 Student Affairs as one of the criteria for determining a student's eligibility for a scholarship.

#### Email Use

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual correspondence and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

---

### Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class on the day you are enrolled.

---

### Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's Handbook of Operating Procedures.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibilities, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations.

If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student must submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the dean will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

---

### Incomplete Grades

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first class of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of F.

---

### 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.

---



**Disability Services**

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union.

		The contact information for the Office of Disability Services is:
		The University of Texas at Dallas, SU 22
		PO Box 830688
		Richardson, Texas 75083-0688
		(972) 883-2098 (voice or TTY)

Essentially, the law requires that colleges and universities make those reasonable adjustments necessary to eliminate discrimination on the basis of disability. For example, it may be necessary to remove classroom prohibitions against tape recorders or animals (in the case of dog guides) for students who are blind. Occasionally an assignment requirement may be substituted (for example, a research paper versus an oral presentation for a student who is hearing impaired). Classes enrolling students with mobility impairments may have to be rescheduled in accessible facilities. The college or university may need to provide special services such as registration, note-taking, or mobility assistance.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

**Religious Holy Days**

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEU 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

**Off-Campus Instruction and Course Activities**

Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at [http://www.utdallas.edu/BusinessAffairs/Travel\\_Risk\\_Activities.htm](http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm). Additional information is available from the office of the school dean.

[illegible]

[illegible]




Class,  
ct  
3,  
F 5%


:

t it line
tem, ing aff
obey
civil
stic ers.
tage.
b for

se
es,
f
r by
the
ther
I
nd
unt
nts,
in
las
nt.



are to
nce
ok of
ity, it rator,
the may y
; will
are
ly if lay

.
be olled d to
urs.
ce of kas
' in a who o nent.
ay]
he :C
res
f the