

BUAN 4350/OPRE 4350 .501 Spreadsheet Modeling and Analytics - Syllabus

Term	SPRING 2026
Section 501	Wednesdays 7:00 pm - 9:45 pm
Location	JSOM 2.103
Instructor	Dr. Kannan Ramanathan
Office	Jindal School of Management, 3.622
Virtual Office Hours	Monday 2:30 pm to 3:30 pm
Email	kxr087000@utdallas.edu
TA	FNU Anubhav
<i>Email Address</i>	dal298089@utdallas.edu
<i>Online Office Hours</i>	Wednesday 7:00 pm - 8:00 pm
	Friday 2:00 pm - 3:00 pm
TA	Dan Bao
<i>Email Address</i>	dx240020@utdallas.edu
<i>Online Office Hours</i>	Monday 2:00 pm - 3:00 pm
	Thursday 7:00 pm - 8:00 pm

We are also available when you need us - but please schedule.

All office hours will be via MS Teams.

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 (Microsoft 365) is used to build models. The course covers concepts in effective spreadsheet design and use, and students acquire knowledge about specific decision-making techniques for business, such as sensitivity analysis and pivot tables. Students learn how to set up relationships between variables in a model. This course emphasizes leveraging AI to enhance modeling and programming in Excel.

In addition to academics, the course also emphasizes professional conduct and corporate presence: regular attendance, punctuality, and good communication.

Students Learning Objectives/Outcomes

At the conclusion of this course, the student should:

- Be able to identify the conceptual structure of a decision or planning problem
- Understand the logic associated with the components and process of model development
- Be able to build models to analyze data effectively
- Appreciate the power and limitations of MS Excel in modeling
- Appreciate the potential of management science in addressing management issues

Textbook

Introduction to Spreadsheet Modeling and Analytics

by Kannan Ramanathan, Twenty-first Edition

- Available on reserve (for free) in the library
- Available on www.amazon.com (for purchase) at <https://shorturl.at/eeTUh>
- **Do NOT use a PDF or scanned copy of the textbook - this is illegal**
- **DO NOT use an older edition**

Links to eLearning resources

- [Getting Started with eLearning](#)
- [Student eLearning Tutorials](#)
- [eLearning Support Center](#)

Links for Proctored Exams

- [UTD Testing Center](#)
- [Distance Learning Proctored Exams](#)

Other useful links

- For students with disabilities [link to accommodations](#)
- Academic Support Resources [academic support resources](#)
- University's policies [syllabus policies](#)
- University's policy on AI [Generative AI use in academic work](#)

AI Policy for this course

Use of AI is encouraged.

Professional Conduct, Bonus Points, Penalty Points

This course emphasizes not only academic performance but also professional conduct. This means:

- Attendance is mandatory. Note:
 - Attendance will be taken at some point during the class
 - You are expected to stay for the whole class
 - **There is a penalty of 1% point** if you miss class or come even **a minute late**
 - If you have a specific reason for coming late, let me know AHEAD of time
 - Bring a printed tent card; Handwritten tent-cards are not acceptable
 - Tent card **MUST** be printed using the template provided on eLearning
 - I will provide your tent card on the first day of class
 - If you do not come to the first class, or did not get one in the first class, or lose your tent card, print one using the template provided on eLearning
 - There is a **penalty of 1% point** each time you do not have a printed tent card
- Do NOT use your phone during class (whatever the reason)
 - There is a **penalty of 2% point** for each such use
- If you schedule an appointment with the TA do not miss it or be late
 - There is a **penalty of 1% point** if you are late or fail to attend the meeting, without a day's prior notice

- You can schedule and re-schedule your quiz as many times as you want within the specified window
- But: there is a **penalty of 10% points** if your quiz/exam needs to be re-scheduled outside that window
- After the final grades are uploaded, DO NOT contact the TA or the Professor for changes to your grade without a valid reason
- Emails asking for grade changes will be ignored
- For any meeting with the Professor or the TA, you MUST schedule an appointment
- If there is a valid reason, you will be asked to re-take your final - until which time you will get an INCOMPLETE grade

Bonus Marks / Penalty Points

- You have opportunities to earn bonus marks (e.g., by answering questions in class)
- These bonus marks are awarded at the discretion of the instructor
- A mark is what you get for answering a question correctly in your exams; a point is a percentage point. Bonus marks or penalty percentage points will be added to (or deducted from) your course grades. Marks will be converted to percentage points at the rate of five marks = one percentage point.
- There is no limit either on the penalty points or on the bonus marks awarded at Professor's discretion
- If you get a bonus mark in class, to claim it you MUST:
 - o Email both TAs and Professor
 - o Use as subject for your email "Bonus mark 4350.501 Your First Name + Last Name"
 - o Email by midnight of same day as class
 - o Indicate how many marks you got - e.g., 2 marks
 - o You do not need to indicate why you got the bonus marks
 - o If you get three marks send a single email - Do not email three times for one mark each time
- You will not get any marks if you do not follow **all** the instructions above exactly

Communication

1. You MUST communicate via your UTD email account only
2. Please do not communicate with me on MS Teams or through eLearning
3. Do not use a personal email account (e.g., Gmail, Yahoo, or other), it will not be answered
4. When sending an email, make sure to include the course number, section, and time. For example, BUAN 4350.501, Wednesdays 7:00 PM
5. Do not email the TA and the Professor separately on the same subject
6. Contact the TA first, and if your question is not resolved, then email me
7. Student emails will be answered within 3 working days under normal circumstances

Grading is based on:

	Quizzes	Dates	Time (Minutes)	Cumulative scope of quiz	% of grade	
You are allowed to (and expected to) use Excel for each quiz						
Q1	From	Thu Feb 12, 2026	60	50 MCQ	16%	Level of difficulty will
	To	Fri Feb 13,		Chapters 1 to 10		

		2026				be higher for each quiz.
Q2	From	Thu Mar 12, 2026	120	45 MCQ	22%	
	To	Sat Mar 14, 2026		Chapters 1 to 18		
Q3	From	Tue May 05, 2026		40 MCQ		
	To	Fri May 08, 2026	150	Chapters 1-19, 21-24	27%	
Three quizzes = 65%. Homework (HW) = 20%, Practice problems = 15%. Total = 100%						
15% for practice problems based on how many practice questions were answered correctly						

Testing Center

- **Students MUST take the quiz in person at the UTD Testing Center**
- **You MUST have an advance reservation for the UTD Testing Center (it is advisable to make reservations for all three quizzes as soon as possible)**
- **There is NO option to take it via HonorLock or other alternatives**

Quizzes 1, 2, and 3 MUST be taken at the UTD Testing Center whenever you can make a reservation on any of the days specified. Note that the UTD Testing Center is not open 24/7. There is no option to take the quiz remotely or virtually. **If you need to have a make-up quiz (on a date other than those mentioned in the syllabus) for any reason (other than a medical reason documented by a doctor in Texas), there will be a deduction of 10% points. The make-up quiz may be different (in both format and grading criteria) from the scheduled quiz.**

Exams are closed book exams. You are allowed - and expected - to use Excel.

Homework

There are four homework (HW) assignments. Each is worth 5% of your grade.

	Topic	Available on	Complete by	# of Questions	Time
HW1	FINANCE	Wed Feb 18, 26	Sun Mar 08, 26	30	No time limit. You are free to discuss with anyone. BUT only one submission is allowed. On eLearning, you MUST hit SUBMIT.
HW2	STATISTICS	Wed Feb 25, 26	Sun Mar 08, 26	20	
HW3	DATA TABLE	Wed Mar 04, 26	Sun Mar 29, 26	20	
HW5	PIVOT TABLE	Wed Apr 01, 26	Sun Apr 19, 26	30	

Note: HW4 is not included for the undergraduate course.

PLEASE NOTE:

- YOU **MUST** SUBMIT HOMEWORK ASSIGNMENTS BEFORE THE DEADLINE
 - (SUBMIT MEANS YOU **MUST** HIT THE SUBMIT BUTTON ON ELEARNING.
 - ANSWERING QUESTIONS, BUT NOT SUBMITTING YOUR ANSWERS IS NOT ENOUGH)
- ONLY ONE SUBMISSION IS ALLOWED

- DO NOT SUBMIT ACCIDENTALLY - HOMEWORK WILL **NOT** BE REOPENED
- DO NOT WAIT TILL THE LAST MINUTE TO SUBMIT
- DEADLINES WILL **NOT** BE EXTENDED (even if you have technical problems)
- IF YOU WISH TO REVIEW YOUR QUIZ/HOMEWORK, YOU MUST SCHEDULE A TIME WITH ONE OF OUR TEACHING ASSISTANTS WITHIN ONE WEEK FROM THE CLOSING DATE FOR THE QUIZ/HOMEWORK.

Grading Criteria

Grading criteria may vary from those for other courses or even this same course in other semesters.

Grades will be based on the following point ranges:

Points	Letter Grade
60	F
63	D-
66	D
69	D+
73	C-
76	C

Points	Letter Grade
79	C+
83	B-
86	B
89	B+
93	A-
97	A
Else	A+

Academic Calendar

Wed, Jan 21, 2026	Chapter 1	GETTING STARTED WITH EXCEL
	2	THE COMMAND SYSTEM
	3	THE FILE SYSTEM
	4	POPULATING A WORKSHEET WITH DATA
	5	ABSOLUTE AND RELATIVE REFERENCING
Wed, Jan 28, 2026	Chapter 5	ABSOLUTE AND RELATIVE REFERENCING
	6	VALIDATING DATA
	7	RANGE NAMES
	8	PROTECTING AND BACKING UP DATA
	9	FORMATTING
Wed, Feb 04, 2026	Chapter 9	FORMATTING
	10	FUNCTIONS
	11	DATE AND TIME FUNCTIONS
	12	REFERENCE FUNCTIONS
	13	LOGICAL FUNCTIONS
Wed, Feb 11, 2026	Chapters 13	LOGICAL FUNCTIONS
	14	MATHEMATICAL FUNCTIONS
	15	STRING FUNCTIONS
	16	FINANCE FUNCTIONS
	QUIZ 1 (Q1)	Thu Feb 12, 2026 - Fri Feb 13, 2026
Wed, Feb 18, 2026	Chapter 16	FINANCE FUNCTIONS
Wed, Feb 25, 2026	Chapter 16	FINANCE FUNCTIONS
	17	ARRAYS
	18	STATISTICAL FUNCTIONS
Wed, Mar 04, 2026	Chapter 19	SPREADSHEET MODELING & WHAT IF ANALYSES
	QUIZ 2 (Q2)	Thu Mar 12, 2026 - Sat Mar 14, 2026
	Spring Break	Mon Mar 16, 2026 - Fri Mar 20, 2026

Wed, Mar 25, 2026	Chapter 19	SPREADSHEET MODELING & WHAT IF ANALYSES
NOTE: CHAPTER 20 ON OPTIMIZATION IS NOT INCLUDED FOR THIS COURSE		
Wed, Apr 01, 2026	Chapter 21	ANALYZING DATA
	22	PIVOT TABLES
Wed, Apr 08, 2026	Chapter 23	DATA VISUALIZATION
	24	VISUAL BASIC FOR APPLICATIONS
Wed, Apr 15, 2026	Chapter 24	VISUAL BASIC FOR APPLICATIONS
Wed, Apr 22, 2026	Chapter 24	VISUAL BASIC FOR APPLICATIONS WITH AI
Wed, Apr 29, 2026	Chapter 24	VISUAL BASIC FOR APPLICATIONS WITH AI
QUIZ 3 (Q3)		Tue May 05, 2026 - Fri May 08, 2026