

# Course Syllabus

[Jump to Today](#)



## MEM 407

### Decision Tools for Managers

#### Fall 2018

**Instructor:** Dr. Jill Wilson ♦ [jill.wilson@northwestern.edu](mailto:jill.wilson@northwestern.edu) ♦ 847-467-1551

**Course Meetings:** Tuesdays, 6:30-9:30, Garage Krebs

**Text:** No textbook is required for this course. One of the following is recommended.

***Quantitative Analysis for Management, Render, Stair & Hanna, 11<sup>th</sup> ed.***

***Spreadsheet Modeling and Decision Analysis, Ragsdale, 6<sup>th</sup> ed.***

Notes: (1) The first book is also available for Kindle and Nook Study. (2) Both books are available electronically at [www.coursesmart.com](http://www.coursesmart.com) (<http://www.coursesmart.com>). (3) Both books are on reserve with Northwestern libraries.

**You will also need to bring a laptop to class.** You will need to be running Excel and a relatively recent operating system. I do not expect to require additional software, but if that changes I will make sure that software is either freely available or as cheap as I can find.

#### General Course Format:

This course will be taught as a hybrid online course. That is, you will view lecture materials and work through some problems on your own online. Every other week we will have an in-person problem session which will give you the opportunity to ask questions about the material and to work through additional, harder problems in teams. The course is divided into five learning units. Each online learning unit will include

- Instructional video segments presenting new materials and analysis techniques
- Slides (both original and annotated) that are used in the instructional segments
- Thought exercises that you will be asked to complete throughout the unit
- Practice problems and accompanying solutions that you can use to test and increase your understanding of the material
- A homework assignment that you must complete and submit after the problem session.

The schedule for an individual unit is as follows:

Week 1: View lecture material, complete readings, and do practice problems online

Week 2: Ask questions in problem session and work in teams on challenging problems

Week 3: Submit Unit homework

Week 4: Complete Unit quiz

Note that because of the course schedule, the units will overlap. As you are finishing homework and taking a quiz over one unit, you will begin to learn the material from the next unit.

It is imperative that you come to class prepared to continue with the course material. Although you are free to use the course materials in whatever way works best for you, you are responsible for knowing the concepts and models taught in the lecture segments. I do not expect you to have complete mastery of the concepts in a given unit before the corresponding problem session. However, I do expect that you will have made an earnest effort to learn the material beforehand so that class time can be used productively. Coming to class unprepared **will** result in a deduction on your class participation grade.

### **Getting Help**

Part of each problem session will be dedicated to answering your questions about the Unit material you have just completed and to resolving any confusion that you have. However you do not have to wait until the problem session to ask questions! You can always ask questions by email. The instructor will also be available for live online help sessions. Details about these sessions will be announced early in the course.

Online Office Hours will generally be held through Blue Jeans on the Wednesday nights that we don't meet, from 6:30-7:30. Students must indicate intention to attend by 3:00 that day, otherwise online office hours will be cancelled. Office hours are intended to help you clarify lingering confusion, not to answer questions needed to understand the questions or to begin the homework. You should plan to have completed a substantial part of the homework before online office hours so that you can use the time to get "unstuck".

We will also make use of Piazza for posting questions and getting help. Piazza allows you to answer each others' questions, as well as to view answers to questions asked by other students. This may lead to you finding answers to your questions more quickly than simply through email. Of course, you can still email me for help if you need to.

Note that homework questions must be submitted via email, Piazza, or online office hours no later than 24 hours before the posted due date in order to be answered.

### **Course Calendar:**

Meeting 0 (Sept 26): Brief, online class meeting, 6:00-6:45

Unit 1 Material: Due Oct 2

Meeting 1 (Oct 2): Problem Session 1 (Unit 1 Q&A; Unit 1 Team Exercises)

Homework 1: Due Oct 10

Unit 2 Material: Due Oct 16

Meeting 2 (Oct 16): Problem Session 2 (Unit 1 Quiz; Unit 2 Q&A; Unit 2 Team Exercises)

Homework 2: Due Oct 24

Unit 3 Material: Due Oct 30

Meeting 3 (Oct 30): Problem Session 3 (Unit 2 Quiz; Unit 3 Q&A; Unit 3 Team Exercises)

Homework 3: Due Nov 7

Unit 4 Material: Due Nov 13

Meeting 4 (Nov 13): Problem Session 4 (Unit 3 Quiz; Unit 4 Q&A; Unit 4 Team Exercises)

Homework 4: Due Nov 21

Unit 5 Material: Due Dec 4

Meeting 5 (Dec 4): Problem Session 5 (Unit 4 Quiz; Unit 5 Q&A; Unit 5 Team Exercises)

Homework 5 (Group): Due Dec 11

*\*\*Although we are not scheduled to meet on Oct 9, Oct 23, Nov 20, and Nov 27, these dates are reserved as makeup dates in case of inclement weather.*

**Grading** Course grades will be based on the following:

Quizzes (4): 40%

Individual Homework (4): 40%

Group Homework (1): 10%

Attendance and Participation: 10%

**Quizzes** will take the place of a final exam. Note that each problem session, except the first, will begin with a quiz over the previous unit. Makeup quizzes will only be given under the most extreme of circumstances—not to include travel—so it is important that you attend class on the scheduled dates. Unless otherwise noted, quizzes will be closed-book and closed-notes.

**Homework** will not be accepted late unless by prior arrangement, and even then only in extreme circumstances. Assignments will be posted in Canvas and should be submitted electronically. Instructions for submitting electronic assignments accompany each assignment in Canvas. Students are responsible for abiding by these guidelines; failure to do so may result in work being overlooked or disregarded. Students are also responsible for ensuring that homework is submitted by the due date and time. Computer problems are not a legitimate excuse for late submission, so students are encouraged not to wait until the last minute to submit assignments. You may have **one** free, no-questions-asked homework extension until noon the

following day; this extension must be requested in writing *before homework is due*. Otherwise, homework will not be accepted late under **any** circumstances.

Each student must submit his or her own solutions. You may discuss the problems with other students—in fact, you are encouraged to do so—but the solution you create must be your own. For example, you should not sit together and discuss your solutions as you are writing them down or completing them, and you should not copy another student's work. Homework submissions that are similar or identical risk being disregarded entirely, or submitted as a violation of academic integrity. **You should not obtain any course materials from students who have taken IEMS/MEM 407 in prior quarters. This will be considered a violation of academic integrity.**

Homework should be legible and organized. If it can't be read, it can't be graded. It is your responsibility to compare your work with the posted solutions and understand any discrepancies. You must show your work to receive credit.

Homework questions must be submitted via email, Canvas discussion board, or online office hours no later than 24 hours before the posted due date in order to be answered.

Your final homework assignment will be a group assignment; it will be due during finals week. You will complete this assignment with your course group (see below).

**Attendance and Participation** points will be based on attendance, preparation, and collaboration. **Because the course only meets in person a few times, you are expected to attend every class session.** If you are unable to attend each scheduled class session, you should withdraw from the course. Failure to attend any class session will result in an automatic loss of participation points for that class period.

**You are also expected to attend class prepared.** The course materials are provided for you to use in whatever way you learn best. However, you must have made a good faith effort to understand the concepts and techniques included in a Learning Unit before attending class. You will be randomly placed in groups in which you will work for the duration of the course. At the start of each in-person Q&A session, you will work with your groups to help articulate and answer looming questions. We will then do report-outs to the entire class about the conversations you had and concepts that are still unclear. You are expected to come to class prepared with your own *written* questions, as well as prepared to answer questions that others have. Failure to prepare will result in a loss of all participation points for that class period. **Preparation is not optional.** Don't assume that because we do not meet every week that this class is unimportant and that the workload can be postponed until later.

Other behaviors that will result in a loss of participation points include but are not limited to:

- Failure to engage in class discussions and exercises (for example, sleeping, texting, internet surfing, emailing or having extensive side conversations)
- Failure to actively and productively participate in team discussions and exercises. This includes refusal to work with others, failure to explain your thinking to weaker students, failure to help other students

understand course concepts, or refusing to do the exercises at all.

- Leaving class before the instructor has dismissed you.

Learning happens best—and is the most fun—when it is collaborative, thus class participation is highly valued. Participation is about more than simply being present or answering every question. Good participation means fostering the learning of everyone in the course.

**Email:** Every effort will be made to respond to questions within one business day. Please use “IEMS 407” in the subject line. The more specific your question, the more helpful the answer can be. Questions like “How do I do problem xyz?” are difficult to address. If you have questions about a homework problem, then discuss how you are approaching the problem or what you are thinking about. If you have no idea how to begin a problem, discuss how it is similar to or different from other problems done in class and what aspects of the problem are giving you the most difficulty. This will help me get to the heart of your struggle.


**Re-grades:** Your assignments will be graded by a course grader. If you feel that an error has been made in grading one of your assignments you may request a re-grade. You must submit the original graded assignment, along with a written statement outlining the potential error, **within one week** of the assignment being returned (and this time limit will be strictly adhered to). Understand that such assignments are subject to a re-grade in their entirety, so a re-grade may result in a lower score than the original. Be sure of the error before asking for a re-grade.














**Students with Disabilities:** Any student with a documented disability needing accommodations is requested to speak directly to the Office of Services for Students with Disabilities (SSD; 847-467-5530) and to the instructor as early as possible in the quarter (preferably within the first two weeks of class). All discussions will remain confidential.






**Academic Integrity:** Any violation of the Academic Integrity Policy will be reported immediately.

**Classroom Wireless Policy:** Because of our emphasis on discussion and collaborative learning, this class will often utilize a “no wireless” policy. When class activities require the use of software, I will ask you to use your laptops. When we are not using software, I will ask you to darken all screens.

## Course Summary:

Date	Details	
Wed Jan 10, 2018	 <a href="https://canvas.northwestern.edu/calendar?event_id=247284&amp;include_contexts=course_80811">BlueJeans Meeting: Online Orientation Session</a> <a href="https://canvas.northwestern.edu/calendar?event_id=247284&amp;include_contexts=course_80811">https://canvas.northwestern.edu/calendar?event_id=247284&amp;include_contexts=course_80811</a>	6:30pm to 7:30pm

Date	Details	
Wed Jan 24, 2018	 <a href="https://canvas.northwestern.edu/calendar?event_id=247283&amp;include_contexts=course_80811">BlueJeans Meeting: Online Office Hours: Homework 1</a> <a href="https://canvas.northwestern.edu/calendar?event_id=247283&amp;include_contexts=course_80811">(<a href="https://canvas.northwestern.edu/calendar?event_id=247283&amp;include_contexts=course_80811">https://canvas.northwestern.edu/calendar?event_id=247283&amp;include_contexts=course_80811</a>)</a>	6:30pm to 7:30pm
Wed Jan 31, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/483000">Quiz: Learning Unit 1</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/483000">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/483000">https://canvas.northwestern.edu/courses/80811/assignments/483000</a>)</a>	due by 7:30pm
Wed Feb 7, 2018	 <a href="https://canvas.northwestern.edu/calendar?event_id=247282&amp;include_contexts=course_80811">BlueJeans Meeting: Online Office Hours: Homework 2</a> <a href="https://canvas.northwestern.edu/calendar?event_id=247282&amp;include_contexts=course_80811">(<a href="https://canvas.northwestern.edu/calendar?event_id=247282&amp;include_contexts=course_80811">https://canvas.northwestern.edu/calendar?event_id=247282&amp;include_contexts=course_80811</a>)</a>	6:30pm to 7:30pm
Wed Feb 14, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/483001">Quiz: Learning Unit 2</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/483001">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/483001">https://canvas.northwestern.edu/courses/80811/assignments/483001</a>)</a>	due by 7:30pm
Sun Feb 18, 2018	 <a href="https://canvas.northwestern.edu/calendar?event_id=247281&amp;include_contexts=course_80811">BlueJeans Meeting: Online Office Hours: Homework 3 (session 1)</a> <a href="https://canvas.northwestern.edu/calendar?event_id=247281&amp;include_contexts=course_80811">(<a href="https://canvas.northwestern.edu/calendar?event_id=247281&amp;include_contexts=course_80811">https://canvas.northwestern.edu/calendar?event_id=247281&amp;include_contexts=course_80811</a>)</a>	2pm to 3pm
Mon Feb 19, 2018	 <a href="https://canvas.northwestern.edu/calendar?event_id=247280&amp;include_contexts=course_80811">BlueJeans Meeting: Online Office Hours: Homework 3 (session 2)</a> <a href="https://canvas.northwestern.edu/calendar?event_id=247280&amp;include_contexts=course_80811">(<a href="https://canvas.northwestern.edu/calendar?event_id=247280&amp;include_contexts=course_80811">https://canvas.northwestern.edu/calendar?event_id=247280&amp;include_contexts=course_80811</a>)</a>	8:30pm to 9:30pm
Wed Feb 28, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/483002">Quiz: Learning Unit 3</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/483002">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/483002">https://canvas.northwestern.edu/courses/80811/assignments/483002</a>)</a>	due by 7:30pm
Wed Mar 7, 2018	 <a href="https://canvas.northwestern.edu/calendar?event_id=247279&amp;include_contexts=course_80811">BlueJeans Meeting: Online Office Hours: Homework 4</a> <a href="https://canvas.northwestern.edu/calendar?event_id=247279&amp;include_contexts=course_80811">(<a href="https://canvas.northwestern.edu/calendar?event_id=247279&amp;include_contexts=course_80811">https://canvas.northwestern.edu/calendar?event_id=247279&amp;include_contexts=course_80811</a>)</a>	6:30pm to 7:30pm
Wed Mar 14, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/483003">Quiz: Learning Unit 4</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/483003">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/483003">https://canvas.northwestern.edu/courses/80811/assignments/483003</a>)</a>	due by 7:30pm
Wed Mar 21, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482993">Group Feedback</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/482993">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/482993">https://canvas.northwestern.edu/courses/80811/assignments/482993</a>)</a>	due by 11:59pm
Wed Oct 10, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482994">Homework 1</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/482994">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/482994">https://canvas.northwestern.edu/courses/80811/assignments/482994</a>)</a>	due by 11:59pm
Wed Oct 24, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482995">Homework 2</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/482995">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/482995">https://canvas.northwestern.edu/courses/80811/assignments/482995</a>)</a>	due by 11:59pm
Wed Nov 7, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482996">Homework 3</a> <a href="https://canvas.northwestern.edu/courses/80811/assignments/482996">(<a href="https://canvas.northwestern.edu/courses/80811/assignments/482996">https://canvas.northwestern.edu/courses/80811/assignments/482996</a>)</a>	due by 11:59pm

Date	Details
Wed Nov 21, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482997">Homework 4</a> ( <a href="https://canvas.northwestern.edu/courses/80811/assignments/482997">https://canvas.northwestern.edu/courses/80811/assignments/482997</a> ) due by 11:59pm
Tue Dec 11, 2018	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482998">Homework 5 (Group)</a> ( <a href="https://canvas.northwestern.edu/courses/80811/assignments/482998">https://canvas.northwestern.edu/courses/80811/assignments/482998</a> ) due by 11:59pm
	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482992">Academic Integrity Understanding</a> ( <a href="https://canvas.northwestern.edu/courses/80811/assignments/482992">https://canvas.northwestern.edu/courses/80811/assignments/482992</a> )
	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/482999">HW Extension Used?</a> ( <a href="https://canvas.northwestern.edu/courses/80811/assignments/482999">https://canvas.northwestern.edu/courses/80811/assignments/482999</a> )
	 <a href="https://canvas.northwestern.edu/courses/80811/assignments/483004">Roll Call Attendance</a> ( <a href="https://canvas.northwestern.edu/courses/80811/assignments/483004">https://canvas.northwestern.edu/courses/80811/assignments/483004</a> )