MIT Sloan School of Management

15.276 Communicating with Data

Spring 2018

Tuesday & Thursday, 11:30-1:00, E62-221

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Canvas website: https://mit.instructure.com/courses/128 [Note: We are using Canvas, not Stellar.]

Course Overview

This course will equip you with the strategies, tactics, and tools to use quantitative information to inform and persuade others. In an era where everyone has access to information, effective communication skills set you apart in the workplace. This class focuses on how to effectively communicate quantitative information in a business context to help you drive people and organizations to make better decisions. 15.276 develops these skills with a heavy focus on the cycle of learning, practicing, and reflecting on that practice. You can expect to receive personalized feedback from the teaching team and your classmates.

Course Objectives

By the end of the semester, you will be able to use data to inform and persuade others. Specifically, you can expect to be able to:

- Develop communications strategically with audience in mind
- Design data visualizations that incorporate best practices to explain findings clearly and honestly
- Present data verbally with increased comfort and clarity
- Use direct structure effectively
- Incorporate the tools of effective, ethical persuasion into communications

Course Expectations

You can expect detailed feedback from your instructor, TA, and classmates. Because most of your learning in this class will come from practice and interaction, we expect you to:

- Attend every class session
- Actively participate
- Provide respectful, thoughtful, and concrete feedback to peers
- Risk discomfort in order to try new skills

Our goal is to help you develop life-long skills in this class. Your well-being is an important factor in developing those skills. To state the obvious, life is about choosing how to spend your time. Life at MIT makes those choices even more challenging. We’re not personally offended if you choose to prioritize other things above this class. It
will impact your grade, but there are many times when it’s appropriate for the demands of life to outweigh the demands of a class . . . no matter how unbelievably useful and important that class is.

That said, we can do a lot more to help you if we understand any circumstances that may affect your performance. Also, many students benefit from the support resources here. If you are facing academic, emotional, or family issues, a good place to start finding out about resources on campus is S^3 [http://studentlife.mit.edu/s3](http://studentlife.mit.edu/s3). We know the deans and have worked closely with them.

Improving communication is a continuous process of learning, doing, critiquing, evaluating, and doing again. It is a process you will continue throughout your life. How you manage your own state of mind is as important a part of this process as the part of you that others see when you communicate.

Text and Articles

This class has one required book, which is available in the Coop or online for free at [http://onlinelibrary.wiley.com/book/10.1002/9781119055259](http://onlinelibrary.wiley.com/book/10.1002/9781119055259) (and linked through Canvas). We are also assigning several articles, which you can access through links on Canvas as well. Finally, we reserve the right to assign a few more articles during the semester if we come across something interesting! We invite you to let us know if you have found an article that you think would be helpful to your classmates, and we’ll distribute it.


Assignments

The due dates and weights of the assignments follow. Details for the specific assignments can be found on the course website. We will discuss the expectations for each assignment in class before the due date.

Policies on Participation & Attendance

Communicating with Data is a highly interactive class. For top marks, attend and try to contribute to every class.

**Participation** in each class will be graded on a 0-3 scale according to the following standard:

- Attends class and engages with the topic by making a significant contribution to that class = 3
- Attends class and participates with at least one comment during class discussion = 2
- Attends class and listens actively (does not participate verbally) = 1
• Excused from class and completes a write-up = 2  
• Excused from class and does not complete a write-up = 1  
• Unexcused from class and completes a write-up = 1  
• Unexcused from class and does not complete a write-up = 0  

**Excused absences** are absences beyond your control. They include illness, injury, and religious observance. Except in the most extreme circumstances, excused absences will only be granted if the student contacts the professor or TA **before** class. This can be as short as an email saying you are not able to attend (for an excused reason) and will follow up later. We may ask for an e-mail from an S^3 dean (for example, if illness keeps you from several classes in a row). Athletic competitions may be excused with prior permission of the professor at least two weeks before.

If you are excused from class, you must submit a **write-up** for that class. The write-up is a half-page summary of either the assigned reading for that day or Professor Kazakoff’s recorded lecture. (We will tell you how to access the recordings.) The focus of the write should what you have learned. If you are absent because of sickness, injury, or a family situation, you and the TA will coordinate to establish a reasonable timeframe for you to complete the write-up. If you are absent due to an athletic competition, you must complete a write-up within 72 hours of the class.

**General Policies on Assignments & Grading**

This class focuses on **developing and demonstrating** skills rather than just expanding your knowledge, so the grading philosophy is very different from what you might be used to. Many knowledge-based classes have an idea of one correct answer (which receives 100%). Incorrect answers result in deductions from that theoretically perfect score. The larger the deviation from perfect, the higher the score deduction.

There is no single perfect answer in communications (though many choices are clearly inappropriate). Therefore, there is no “perfect” answer to deduct points from. Improving your communication skills is a lifelong process. We hope the process of practice and reflection that we use in class will arm you with the skills to continue improving forever. There is no point at which you are done, and there is no upper limit on how good you can get.

As a result, we assume that every student in this class begins at average and works to improve their skills. Many will rise to the A level, the rest usually rise to a B level. In the past, students have received a C when they have chosen other priorities over this class in an obvious way (such as late assignments without reasonable notice).

**Late policy:** For every 24 hours an assignment is late, 0.5 points will be deducted. We cannot commit to timely feedback for late assignments. **We will not accept assignments more than 72 hours after their due date.**

**Revisions:** You may revise as many assignments as you like. (You must revise the summary of your 1st presentation for a colleague who was not there.) The final grade for revised assignments will be the average of the original grade and the revision grade.
Creating graphs: You may use any software you want to create visualizations. We expect most students will use Excel because it is the most widely used, the easiest to combine with other tools (PowerPoint, email, etc.), and almost all major graph displays are possible. Unfortunately, it does not default to many of the best practices which we will expect you to use, and certain functions are challenging (trend lines, box plots, annotations). You may choose to use an alternate software. Tableau (Links to an external site.) is free to MIT students and worth checking out, but has a steep learning curve. R has state of the art graphic tools. Consider it only if you are highly familiar with R. D3 is the major JavaScript library for graphing. It is primarily used for online interactive graphics, which are beyond the introductory scope of this class.

You will create (or recreate) all of the visualizations you use for this class so that they conform to state-of-the-art best practices and are seamlessly incorporated into your assignments. You may redraw graphs from other sources (please cite the sources on the slide or in the document), but you may not copy them as images straight into your documents. In some cases, this may require estimating some data points.