How to Navigate SCx Classes

Chris Caplice
Agenda of Items

• How are SCx courses laid out?
• How and who should I ask for help?
• How should I respond to numeric questions?
• What is the academic honesty policy?
SCx Course Layout
SCx courses are between 6 and 10 weeks in length, plus a final exam. Each week is its own section. Material is made available each week according to the class schedule.
The Home Tab contains:

- Updates & Announcements – posted ~weekly
- Important Course Dates & UTC Time Clock
- Course Handouts – differs by class
  - Course Documents
  - Key Concept Document
  - FAQs

Welcome to MITx's CTL.SC1x!
Supply Chain Fundamentals

Course Updates and News

April 27, 2016
Certificates
Hello Global Supply Chainers!
The Final Exam due date is approaching, less than one week from now! The due date will be on the 4th of May at 15:00 UTC. I highly encourage you not to wait until the due date!

If you are one of the students who took SC1x as a certificate course (honor or verified) then you will want to check back on May 18th. As always, your edX certificates are delivered online through edx.org. Once course grades are finalized, May 18th, if you earned a certificate you will see it available for download on your dashboard.

Best,
Eva, Chris, Fredrik, and the entire SCx Team

Important Course Dates
Today is Apr 29, 2016 (14:48 UTC)
Course End
in 2 weeks - May 10, 2016
To earn a certificate, you must complete all requirements before this date.

Course Handouts
1. Course Overview
2. Class Schedule
3. SC1x Key Concepts Document v5.1
4. FAQ for SC1x
5. FAQ on edX Issues
6. FAQ for MIT MicroMaster

Show Earlier Course Updates
Each week typically consists of:

- 1 Welcome Video
- 1-3 Lessons (videos & quick questions)
- 1 Set of Practice Problems
- 1 MicroMaster's Section
- 1 Graded Assignment.

Course Tab – shows all material by week
Each Lesson consists of 6-10 video segments interspersed with quick questions. Total video time per lesson is ~ 60 minutes.

The first video segment is special. It contains all Reference Materials for the entire lesson.

If there are corrections or specific handouts for another video segment, they will be shown below that segment.

Note that all videos will have a transcript and they can be sped up or slowed down in the edX platform. If you download the video, these features may not be available due to your media player.

The upper scroll bar can help you go through the video segments or QQ’s in each lesson.

Reference Material section is on first segment of each lesson. It contains all needed materials for that lesson. You might need to scroll down to find this!
Quick Questions are interspersed between the videos. They are not graded and are intended to only reinforce the basic concepts of the video segment.

Note that all videos and quick questions have a Discussion Forum link. Please use this link as it automatically categorizes your post!
Practice Problems for the entire week (not each lesson) are in a separate section. They are not graded and tend to be more involved than Quick Questions. They are usually numeric and are intended to test your ability to apply the concepts within the week.

All Practice problems have detailed explanations to help you learn the concepts. Collaboration is encouraged for Practice Problems and Quick Questions in order to improve learning!

**Practice Problem 2: Uncertainty in Supply Chains**

Suppose that daily demand for bagels at the local coffee shop where you work is found to be Normally distributed with a mean of 250 and a standard deviation of 75 units.

**Part 1**

Suppose you have 350 bagels ready to sell on a certain day. What is the probability that you will run out? That is, what is the probability that the demand is greater than 350 on a certain day? (Enter your solution as a probability between 0 and 1 rather than as a percentage.)

\[
\text{We can transform this into the Unit Normal, where } k = \frac{x - \mu}{\sigma} = \frac{350 - 250}{75} = 1.33. \text{ Using this } k \text{ in the Unit Normal Table tells us the probability that demand is less than or equal to 350 is equal to 0.9082. The probability of stocking out is one minus this value or } 1 - 0.9082 = 0.0918. \text{ So, this level of inventory leads to just about 10% probability of running out of bagels! You can use the function NORMSDIST(k) or NORMDIST(x, mean, StdDev, true) in a spreadsheet in lieu of the tables.} \]
The MicroMaster’s Supplemental Material section contains additional practice problems and optional readings on that week’s topics. This material is available only to Verified Certificate students for that class.

The material is NOT required for any of the graded assignments. It is supplemental and complimentary to all of the other material.
Many of the readings in the Supplemental section are theses from the MIT SCM Program.

Students who complete the MicroMaster’s Credential and continue on to earn the MIT SCM Master’s degree will need to complete a comparable thesis.
The **Graded Assignments** section contains the only problems that are graded for that week.

The purpose of these questions is to assess and evaluate how well you understand the concepts. You will have limited number of responses, solutions will not be shown, and explanations will not be released.

Also, Graded Assignments will naturally be more difficult and involved than either the Practice Problems and Quick Questions. They are here to challenge you!

COLLABORATION OF ANY SORT BETWEEN STUDENTS IS NOT TOLERATED ON GRADED ASSIGNMENTS.
The **Discussion Tab** leads to the Discussion Forum. This is where you can post comments and ask general questions. I **strongly** recommend that you use the link after each problem or video to post your questions – that makes it easier to answer! Some posts will be “Pinned” this means we will keep it at the top. You may sort and search the discussions.
De-leveling seasonality

Hello,

So far I did understand how the seasonality component was updated. But here I don't get it. Why isn't beta involved? It does affect the trend too, as it multiplies (a+bt).

In the last model, we were ‘de-leveling’ by dividing the actual observation by a^t. Why shouldn’t we ‘de-level+trend’ it now? That is to say, dividing actual observation by (a^t +b^t).

Thank you for your help!

Related to: Week 3 / Lesson 2, Video 4
This post is visible to everyone.

ChrisCaplice  STAFF
7 months ago - marked as answer 7 months ago by COMMUNITY 12

Sorry for the delay in replying. The first answer is that this is the traditional method that is used - but that is not very satisfying, eh? So here is a better answer - you are already correcting for trend by the update in the beta or trend term. Look at the definition of the a^t term - it includes the de-seasonalized most recent observation weighted with the most recent estimate of the level and trend (a^(t-1) and b^(t-1)) so it is capturing it. In the earlier model the trend term was not part of the a^t update - since there was no trend to capture.

Does this make sense?

Alright, it does. Thank you for the explanation!
The Progress Tab shows how well you have done in all **work for grade**. To pass, your average end grade needs to be 60% or higher – not each assignment.

Practice problems and Quick Questions do NOT show up even when you complete them! Only work that goes to your final grade (Graded Assignments and Final Exam).
How to ask for help

Inspired by Roger Peng and Arun Kunchithapatham
Who is there to help on Course Material?

- Your Fellow Classmates (10k to 30k)
- Community TAs (5-10)
- MIT TAs (1-3)
- Instructors (1-2)
Asking for Help – Three Paths

- **SCx Discussion Forum**
  - For general questions, thoughts, and comments
  - For Quick Questions and Practice Problems
  - NEVER USED FOR GRADED ASSIGNMENTS
  - TAs and CTAs will monitor and assist

- **TA Email** sc#xhelp@mit.edu
  - Only used for Graded Assignment and Final Exam clarification questions
  - Not intended to be a “Tip Hotline”! No tips or hints will be provided.

- **edX Technical or Financial Issues**
  - The course staff cannot help you with payment, Photo ID, or technical platform issues.
  - [https://www.edx.org/contact-us](https://www.edx.org/contact-us) for general requests
  - technical@edx.org for technical platform issues
Which Path To Use?

Example 1.
“Why isn’t Graded Assignment question 2.3 accepting decimals?”

Example 2.
“I do not understand how to calculate the critical ratio as shown in video 4?”

Example 3.
“Hey, why is my credit card being turned down?”

Example 4.
“I am down to my last attempt on Graded Assignment question 1.2. I need help!

Example 5.
“I am down to my last attempt on Practice Problem 1.2. I need help.

TA Email sc#xhelp@mit.edu
• It involves graded work – DO NOT POST TO FORUM!
• It is exploring whether there is an error or if they have a misunderstanding of the question.

Discussion Forum
• It involves a general concept
• It is not specific to any graded work
• Use the link provided from the Video Segment in question

edX Issue https://www.edx.org/contact-us
• It involves the platform not the course material
• edX controls all verification and financial issues

There is no path for these types of questions!
• Graded Assignments are here for assessment
• Make sure you understand the concepts in the Practice Problems prior to trying the Graded Assignment problems.

Discussion Forum
• This is where your peers, the TAs, and the CTAs can help you understand the concept in question.
• Collaboration is ENCOURAGED for Practice Problems.
• Use the link provided at the Practice Problem
When Requesting Help to a Problem . . .

• CHECK WHETHER THE QUESTION HAS ALREADY BEEN ANSWERED!!!!
• Be sure to let us know which problem you are talking about
  – If a quick question or practice problem – use the discussion link from that location
  – If a Graded Assignment – specify the Week and Problem Number in the subject line
• Be explicit about your question
  – What exactly is the problem and what have you tried already?
  – Sometimes explaining the problem helps you understand where you made a mistake anyway
• Provide the minimum amount of information needed to help solve
  – Again – this helps you understand your own problem
  – No one wants to debug your spreadsheet from scratch or read through hundreds of formulas
  – Just posting your convoluted spreadsheet and asking someone to fix it is not helpful!
• Be courteous
  – Electronic communication is inherently impersonal – frustration translates into anger in email!
  – Everyone is trying to help
  – Community TAs especially are doing this out of the goodness in their hearts!
• Let us know if you solved your own problem
  – This saves us time and also makes us feel good that you figured it out on your own!
Things to Not Do

• Claim that you found an error or bug in the problem
  – 99.9% of the time it is not the case
  – Don’t make it your default response to not getting a correct answer.

• Post graded assignments on the Discussion forum
  – This is considered a form of illegal collaboration and violates the honesty policy
  – They will be removed and the posting student will be dealt with severely

• Ask the TA to “Find the problem”
  – This is especially true for sc#xhelp emails
  – This email is to clarify the questions, not provide tips or hints!

• Be unreasonable in requesting help
  – Sending in a question and asking for a status every 30 minutes will not speed things up!
  – Emailing us a question for a Graded Assignment an hour or two before it is due is a bad idea
  – We strive to respond to every posted and emailed question within 24 hours

• Post a question that is barely legible or understandable
  – We know that English is not the first language for many students – but please take the time to at least proof read your email prior to posting.
  – It is hard enough to trouble shoot the problems without having to troubleshoot the posting!
Very Bad to Bad to Better Emails!

The Ugly
This type of email wastes everyone’s time. We have no information to help solve your problem! Our response back to will always be “What problem are you talking about?”

The Bad
The question is named in the subject – good! But, immediately blaming the problem is not helpful. Again, we have no understanding of what you did. We will have to reply back – “What steps did you take?” or “What assumptions have you made?”

The Good
You identify the problem and you tell us what you have tried and the assumptions you made. We can now respond intelligently – “Perhaps you should check your conservation of flow constraints for your DC’s?”
Tips on Numerical Responses
Hints & Tips on Numerical Responses

• Most of the problems will require numerical responses. If so, please use the following rules:
  – Use a period symbol (.) to designate a decimal point (not a comma)
  – Never enter commas or any other notation to separate thousands (e.g. enter 12340 rather than 12,340)
  – Never enter currency or percentage signs
  – We will ALWAYS allow for some tolerance in numerical problems.
  – If it is a multi-part problem, always check the solution of the previous part to see if we tell you a specific number to use going forward (this limits error propagation).
  – We will always provide guidance on how many decimal places to use or the number of significant digits to use.
    • General rule for rounding (in this example) to no decimal places:
      – For x.0 to x.499999 round down to x
      – For x.50 to x.999999 round up to x+1
Rounding Examples

• Question:
  – What is the area of a circle with a radius of 5.62 miles?

• Raw Answer from calculator:
  – Since $A=\pi r^2$, the Area = $(3.14159)(5.62)^2 = 99.225235196$

• Answer under different rounding rules:
  – Round to nearest integer (0 decimal places) = 99
  – Round to nearest 1 decimal places = 99.2
  – Round to nearest 2 decimal places = 99.23
  – Round to nearest 3 decimal places = 99.225
  – Round Up to nearest integer = 100
  – Round Down to nearest integer = 99
MITx Academic Honesty Policy
Academic Honesty Policy

As an edX student, you have certified that all work for grade (Graded Assignments and Final Exams) is your own work and only your own work. This means that for all work for grade:

1. You will not submit the work of any other person or have anyone else submit work under your name,
2. You will maintain only one user account and not let anyone else use your username and/or password. Having two active user accounts in this course will constitute cheating.
3. You will not collaborate with anyone other than staff on work for grade. This means no comparing answers, working as teams, or sharing answers in any way for graded work. We allow and encourage collaboration for Practice Problems and Quick Questions but do not tolerate it on any of the graded assignments.

We continuously monitor for suspicious activity. We will take action (remove credit, not award or revoke a certificate, ban from any and all SCx courses as well as notify edX for other actions) immediately as appropriate.

We take academic honesty very very seriously at MIT. With the introduction of the MicroMaster's Credential, the importance of honesty in work has been elevated to a much higher level than before. We will diligently monitor this and be very proactive. So please, do your own work.
How to Get Around SCx Classes

Chris Caplice