Comprehensive Final Exam (CFx) – INSTRUCTIONS

WHAT IS THE CFX?

The Comprehensive Final Exam (CFx) consists of **two proctored and timed exams: Exam 1 and Exam 2.** The exams will be a mix of qualitative and quantitative questions. Exam 1 covers more of the fundamentals of supply chain management (mainly but not exclusively contents from SC0x, SC1x and SC2x) and Exam 2 covers advanced and special topics (mainly but not exclusively contents from SC3x and SC4x).

Before starting the exam, you must read and agree with the "Terms of Service and Honor Code". Once you sign the honor code, you can start Exam 1. Both exams, Exam 1 and Exam 2, must be completed within a period of 12 hours. Each exam will be a:

TIMED EXAM | **Once you start the exam there is a limited time of 120 minutes (2 hours) to complete it**.

You cannot pause or reset a timed exam. When there is no time remaining, the course page automatically submits your exam. There is no reset option in the CFx. Please plan in advance for an adequate slot of time to take the exam. You need to plan in advance and be sure that you will have your computer ready, continuous internet connectivity, power cord plugged in, and so on, so you can take the exam without any interruption. Once you complete your exam, press the button "End My Exam" on the timer bar. You must also quit the proctoring software **after** you end the edX exam.

Once you finish the Exam 1, you can take Exam 2. Both exams must be completed within 12 hours. Students who violate this rule, will be automatically disqualified from the CFx and will not pass. Exam 2 is also 120 minutes long.

PROCTORED EXAM | **A proctoring software will monitor your computer while you are taking the exam.**

Please read: This document with basic instructions and FAQ,

edX guide to take a proctored exam,

software requirements.

BEFORE STARTING THE CFx EXAM YOU NEED TO…
- Make sure the room is well-lit
- Sit at a clean desk or table
- Close all other programs or windows on your testing computer
- Make sure you do not have more than one display or monitor connected to the computer on which you are taking the test. For example, if you usually use a laptop with a monitor connected, disconnect your monitor and use only the laptop screen.

WHAT TO DO WHILE TAKING THE CFx EXAM?

1. **Stay alone in the same room, within camera reach and use only one computer**
   - The room you take the test in must be the same room in which you performed the room scan during the proctoring session setup.
   - Do not leave the room during the exam for any reason
   - Do not move to another room during the test
   - Do not cover the camera
   - Do not be out of reach of the camera
   - Do not use an additional monitor, computer or laptop.

2. **Do not communicate with anyone**
   - During the proctored exam, you must not communicate with any other person by any means.
   - Do not use a phone (landline, mobile, or any other) for any reason during the proctored test.
   - Do not use email, chats or any other messaging application.
   - Do not have music or television playing in the background during the test.
   - Do not use headphones, ear buds, or any other type of listening equipment.
   - Do not allow other people to enter the room in which you are taking the test.

3. **Use a blank spreadsheet and your computer calculator to solve the problems**
   - Use Microsoft Excel or LibreOffice Calc
   - Do not use any other software, do not use Google Spreadsheet
   - You are NOT allowed to use pre-populated spreadsheets in the CFx
   - At the end of the exam, please make sure to close and NOT save any excel spreadsheets related to the exam. **You have to show the proctors that you close your Excel and do not save any file BEFORE ending the proctored session.**
   - Do not use any physical calculator, only your computer calculator is allowed

4. **Use the Key Concept Document (KCD) provided by the link within the exam (no other support material is allowed)**
   - Do not use a KCD file previously downloaded in your computer.
   - Do not use personal notes
   - Do not open any other document in your computer
   - Do now browse the internet (other than the stipulated translation websites, see the list of allowed materials below)
   - Do not use books or hard copy dictionaries

5. **Do not make any copy of the exam questions**
   - Do not copy, paste and save the exam questions
   - Do not print or take screenshots of the exam questions

6. **Do not stop the proctoring software at any time during the exam**
   - Start the proctoring software before starting the exam
   - Close the CFx exam and close your spreadsheet (do not save!) before closing the proctoring software.

7. **Do not use any other thing than the ALLOWED MATERIALS (see below)**

ALLOWED MATERIALS DURING THE CFx EXAM

- A government-issued photo ID that clearly identifies you by your full name, and that can be used to confirm your identity. The name must match the full name you use in your edx.org account.
- A computer that meets all system requirements to use the edX platform and virtual proctoring software.
- Key Concepts Document of all five courses will be **provided through the testing platform.** You must view it on the screen. Printed copies are NOT allowed.
- Microsoft Excel or LibreOffice Calc
- Computer calculator
- A two-sided blank piece of paper. Clearly and slowly show both sides of the blank paper to the camera before beginning the exam
- Pen or pencil (and eraser)
- The following translation websites (if needed, use only for translation!):
  - Google Translate | https://translate.google.com/
  - Fanyi Youdao Translation | http://fanyi.youdao.com/
  - Bing Translator | https://www.bing.com/translator

THINGS TO REMEMBER

- Linux is not supported
- Microsoft Surface computers are not supported
- Right mouse click will be disabled during your proctored exam
- You will not be told if your answer is right or wrong.
- When your answer is submitted, the answer box will become blue.
- Your corporate computer might not let you to install and run the proctored software

Comprehensive Final Exam (CFx) – FREQUENTLY ASKED QUESTIONS

1. **Am I eligible to take the CFx exam?**
   You are eligible to take the CFx if and only if you have passed all five SCx courses as a verified learner. Which means that you must have achieved a certificate in SC0x, SC1x, SC2x, SC3x and SC4x **before** the date the CFx opens.

2. **I am eligible to take the CFx exam and want to take it in the next run, what do I need to do?**
   If you are eligible to take the CFx exam, you will be automatically enrolled in the next CFx course. This does not commit you to take the exam, it only means that you have the option to do it. If you want to take the exam, you must get verified (pay the $200 fee) before the deadline and make sure that your ID verification in the edX platform is up to date and will not expire before the CFx certificates are issued.

3. **What is the minimum score required to pass the CFx exam?**
   In order to pass the CFx exam you must pass the proctored exam and achieve a final grade greater or equal to 60%. This final grade will be the average between your grade in Exam 1 and your grade in Exam 2.

4. **How many attempts do I have to answer each problem in the CFx exam?**
   You will have two attempts per problem, therefore you can submit your answers twice. Please, notice that:
   (1) You will not see if your answer is right or wrong (no red or green sign), you will only see that your answer has been submitted (answer box border becomes blue).
   (2) You will be graded based on your latest submission.

5. **If I saved my answers, will I receive any points?**
   No. You will be only graded based on the answers that you SUBMIT. Save button does not grant you any points

6. **If I used my second submission, could I still be graded on my first submission?**
   NO, you will be graded based on your latest submission.

7. **When will I know if I successfully passed the exam? Will the certificate be available for download?**
   The official final grades will be published within one month of the celebration of the CFx Exam. At the time the final grades are published, the certificates will become available for those who successfully pass the proctored exam and achieved a final grade of 60% or above.

8. **What if I fail to pass the exam? Is there a limit on the number of times I can take the exam?**
   If you fail to pass the CFx exam, you can try again in the next run of the CFx. You can take the CFx as many times as you need, but please remember that you will have to pay the verification fee ($200) every time you want to take the exam.

9. **I successfully completed the Micromasters, who should I contact or what should I do to apply for the SCM Blended Master's Program?**

   For more information about the SCM Blended Master's Program, please click here.

   Keep in touch with the SCx learners through the MicroMasters Portal here.

10. **What do I need for the proctored exam?**

    - A government-issued photo ID

    - A computer with a camera that meets all system requirements

11. **What am I allowed to use during the proctored exam?**

    - Key Concepts Document provided through the testing platform (printed versions are not allowed)

    - Microsoft Excel or LibreOffice Calc blank documents and your computer calculator

    - A two-sided blank piece of paper (only if you need it. You might not need it.)

    - Pen or pencil and eraser (only of you are planning to use the blank piece of paper)

    - One of these translation websites: Google Translator | Fanyi Youdao Translation | Bing Translator

    Anything that is not on this list will be flagged as suspicious by the proctors and will result in failure of the CFx!

12. **What can I have in the room during the proctored exam?**

    Your test-taking environment should be clear of materials other than the materials stipulated in Q3 and Q4. If there are other items in your test-taking environment such as a bookcase with books or cupboards, everything should be out of reach and not accessed during the exam.

13. **Can I use my personal notes, the course slides or any other documents apart from the KCD?**

    No, you cannot use your personal notes. No, you cannot use the course slides. No, you cannot use another KCD document you have previously saved in your computer. You cannot open any other document in your computer apart from the KCD provided through the testing platform.

14. **Can I browse webpages?**

    No. You can only use one of the three translation websites listed above. Accessing any other webpage during the CFx exam is strictly forbidden. You **cannot open any new tab** in your internet browser. You cannot access other parts of the edX platform. You cannot use Google Docs, Google Drive or Dropbox.

15. **Can I check my email during the proctored exam?**

    No, you are not allowed to check your email or to use any other communication software such as chats or discussion forums.

16. **Can I use Google Spreadsheets or Open Office?**

    No, you can only use Microsoft Excel or LibreOffice Calc. You are not allowed to use any other software.

17. Can I copy or take screenshots of the proctored exam questions?

No, copying and pasting, printing, taking screenshots, or saving exam questions in any format is strictly forbidden.

18. English is not my first language, can I use a dictionary?

You are not allowed to use a physical dictionary during the exam, but you can use one of the following translation websites: Google Translator | Fanyi Youdao Translation | Bing Translator

19. Music helps me concentrate, can I listen to music while taking the proctored exam?

No, you cannot listen to music while taking the CFx exam. Using earphones or headphones is forbidden, playing music in the background is also forbidden.

20. Should I have the proctoring software open during the whole proctored exam?

Definitely yes, you must open the proctoring software before starting the exam and close it only after ending the exam and closing (without saving!) your spreadsheet. This is mandatory. You need to show the proctors that you close the excel file without saving it, otherwise your proctored exam will be rejected.

Closing the proctoring software during the exam will jeopardize your options of passing the CFx. If you are not proctored, your exam is not valid.

If you accidentally close your proctoring software window, **end your exam** immediately and contact cfxhelp@mit.edu. Provide a detailed explanation of the situation (date and time of the issue, exam you were working on at the moment, your time into the exam, a screenshot that demonstrates that you have immediately closed your exam, an explanation of why you closed the proctored window). The CFx team will evaluate each case and make a decision.

21. Can I use prepopulated spreadsheets?

No, this is strictly forbidden. You should start the exam with a blank spreadsheet.

22. Can I save the spreadsheet that I have used during the proctored exam?

No, it is forbidden to save spreadsheets files during the exam or at the end of the exam.

23. Can I leave the room during the proctored exam?

No, you cannot leave the room during the exam under any circumstances. So please, make sure you have gone to the restroom and drink enough water before starting the exam.

24. Can I use an additional computer or an additional screen?

No, you can only use one computer. Additional screens connected to your computer are forbidden.

25. Can I pick up my phone if I receive a call?

No, you cannot use your phone during the exam (nor the landline nor the cell phone). The phone must not be on your desk or used during your proctored exam.

26. Can other people be in the room while I am taking the proctored exam?

No, it is not allowed to have other people in the room during the exam, so make sure that no one enters the room while you are taking the CFx exam.

27. How much time do I have to complete the proctored exam?

The proctored exam is a timed exam. Once you click the "Start my exam" button you will have 120 minutes to complete it. In summary, you will have 120 minutes to complete Exam 1 and another 120 minutes to complete Exam 2 (because they are two different proctored exams). You can take a break after Exam 1, but keep in mind that both exams must be completed within 12 hours.

28. What should I do once I have solved all the problems in Exam 1?

When you have completed Exam 1:
- Make sure that you have submitted all your answers (not just saved them).
- On the timer bar, select "End My Exam".
- Close the spreadsheet and make sure you DO NOT save it.
- In case you are using a letter-sized blank piece of paper, show both sides to the camera before ending your proctored session. Get rid of it before taking Exam 2.
- Close the proctoring software browser window. To do that click on "End my Proctored Exam". Do not close the proctoring software until you have submitted your exam and closed (without saving) the spreadsheet.
- When you receive a prompt, confirm that you want to quit the application.
- Once you have clicked the "End my proctored exam" button, do not shut down your computer or navigate away from the browser window until you see a message confirming that the proctoring software has completed the upload process. If your Internet connection has very limited speeds, this may take some time.

29. When can I start Exam 2?

You must finish and submit Exam 1 before you can start Exam 2. Remember that you can take a break after Exam 1 before starting Exam 2. But you have to complete both exams within 12 hours.

When you are ready to take Exam 2, please RESTART the proctoring software. You must complete the same software installation and environment scan steps again when you take Exam 2: ID verification (again); scan the room (again); show the two-sides of a blank piece of paper (only if you need it. You might not need a blank piece of paper, so you can avoid this part!). When you have completed Exam 2, follow the same steps listed in the previous question.

30. Can I access the proctored exam from a mobile device or a tablet?

No. There is no access to the proctored exam from a mobile device. This constraint affects all proctored and timed exams on edX.

31. Will resets be given during the exam?

No, no resets will be given during the exam.

32. What if I use the internet of my SIM card to connect to the Internet?

The phone must not be on your desk or used during your proctored exam.

33. What happens if I experience technical difficulties during the exam?

Remember that email is not allowed during the exam. If something minor happens during the exam, please complete your exam and finish the proctoring session before reporting the incident to us at cfxhelp@mit.edu. Only email us during the exam if a true emergency occurs.

34. What if I accidentally close the proctoring software window by mistake?

Please, do not do this, it can jeopardize successful passing of the exam. If you are not proctored, your exam is not valid.

If you accidentally close your proctoring software window, **end your exam** immediately and contact cfxhelp@mit.edu. Provide a detailed explanation of the situation (date and time of the issue, exam you were working on at the moment, your time into the exam, a screenshot that demonstrates that you have immediately closed your exam, an explanation of why you closed the proctored window). The CFx team will evaluate each case and take a decision.

35. What if I have intermittent internet that causes the exam to quit?

Make sure to take you exam in a place with continuous internet. Contact right away cfxhelp@mit.edu if you have issues.

36. What if I get stuck or have any issue with the proctoring software?

If you are not sure what to do – contact cfxhelp@mit.edu. But if it is explicitly about the software - access PSI's live chat available 24/7 from within the software.

37. Should I test the proctoring software before the exam?

Yes! Given the nature of the exam, it is of the utmost importance that you test the proctored software on your machine. Read edX Guide to Take a Proctored Exam. Try the Practice Proctored Test that we are providing in the edX platform.

38. How does PSI online proctoring work?

If you have chosen the Verified Track in the course you will be asked to re-verify your ID upon launching any proctored exam in a MicroMasters course. During a proctored exam, you will be monitored using video and audio for the duration of the exam, any suspicious behavior will be flagged and reviewed within 3-5 days of exam submission.

Read more here.

39. Where can I find more information about using RPNow with my edX course?

edX.org uses an online proctoring service for certain exams (typically final exams) that are part of courses that can be made eligible for credit. Read more here.

40. Where do I find RPNow system requirements?

View the RPNow Proctoring System Requirements to ensure that your setup will work. Note that proctoring is only supported for Mac OS and Windows machines. A functioning Webcam is required.

41. What does RPNow specifically do to my computer?
- Records video, audio, and desktop images.
- Uploads recorded video, audio and desktop.
- Blocks keystrokes combinations (print-screen, ctrl+c, ctrl+v, etc).
- Monitors/blocks processes and applications from running that are prohibited.

42. Does RPNow change settings on my computer?

Yes. For PC, RPNow adds a task to the task scheduler. For Mac, RPNow removes default sequence of screenshot shortcuts. These are automatically restored upon exiting the RPNow software.

43. RPNow uses Flash – how will this impact my computer and what do I need to do?

Flash is required for the system to connect with the camera for recording purposes. If you don't have Flash, you will be prompted by the RPNow Software to install it.

44. I have concern with Flash vulnerability to my system, what can I do?

If you have concerns with Flash, here are uninstall instructions after you have completed the exam:
- Uninstall instructions for Mac
- Uninstall instructions for PC

45. How long is my exam data retained by RPNow?

The data is currently stored for 3 months. PSI Software Secure does not store version numbers or what software applications you have running, or on your machine itself. PSI Software Secure only monitors this during the exam to prevent cheating.

46. How does PSI Software Secure protect student data?

PSI Software Secure leverages data encryption - TLS, and stores data in secure Amazon Hosting facilities. Access to student data is restricted to authorized personnel only.

47. Will RPNow work behind a firewall or VPN?

The only way to verify if RPNow will work with your specific network is to take a practice exam. If you can successfully take a practice exam, you should be able to successfully take the final exam on the same machine/network.

48. Does this application install permanently on the computer?

No, the RPNow application is not permanently installed.

49. Does RPNow have access to keystrokes or files that are not open?

RPNow prevents certain keystroke combinations (copy, paste, print screen), but does not record all keystrokes. It does not have access to any of your files – the software does detect what processes are running to prevent unauthorized applications from being used during an exam. **Right click will be disabled.**

50. I have some more questions, how can I reach the CFx team?

You can reach us through the forum available in the CFx course (once it is opened) or through our email help line: cfxhelp@mit.edu