MATHEMATICS COMPUTER LABORATORY

MATH 1200, CRN 11310, Summer 2024

http://faculty.weber.edu/aghoreishi/Math1200_SU24/Math1200_SU24.asp/

Prerequisites/Corequisites: Prerequisites: Math 1050 and Math 1060 or Math 1080, or Corequisite: Math 1210

Class Meetings: This course will be delivered online. There are two online lectures in Canvas Modules to help you get started. However, the entire course is self explanatory. In the first week, you must view the First Lecture and complete labs 1 and 2. In the second week, you must view the Second Lecture and complete Lab 3.

Software Access: You may access the required software, called Mathematica, in the following three ways. I highly recommend that you follow the first option.

- Get your own free copy at https://www.weber.edu/software/mathematica_request.html. Activate your copy of
 Mathematica through "Activate through your organization (SSO)". See Wolfram support page
 https://support.wolfram.com/54713 for help. If you need a laptop/tablet, contact WSU Computing Services
 https://www.weber.edu/ComputerLabs/laptopcheckout.
- 2. Any campus computer lab, including Tracy Hall Computer Lab, TY 126, and Elizabeth Hall Computer Lab, EH 213.
- 3. Virtual Lab: For the Virtual Lab instructions, see http://weber.edu/virtuallab.

Reference Texts: The following texts are suggested but **not** required.

- 1. The Student's Introduction to Mathematica A Handbook for Precalculus, Calculus, and Linear Algebra, Bruce F. Torrence and Eve A. Torrence, Cambridge.
- 2. Mathematica: A Problem-Centered Approach, Roozbeh Hazrat, Springer.
- 3. The following text is part of the help menu of Mathematica. The Mathematica Book, Stephen Wolfram, Cambridge.

Instructor Information: Dr. Afshin Ghoreishi, http://faculty.weber.edu/aghoreishi/. Office: TY 450M. Our main method of communication will be through email. My Email address is aghoreishi@weber.edu. Office Hours: I don't have fixed office hours in the summer. We can communicate through email (or in a Zoom meeting). Include the file you are working on with your email.

Objectives: To obtain a basic understanding of a computer algebra system so that it can be used in subsequent mathematics classes. Because our current lab supports Mathematica, we will use that program.

Course Coverage: General syntax of Mathematica commands. Solving problems related to the student's current mathematical training.

Procedures: This course consists of eleven labs. Each will take 1 to 4 hours. You must attend the first two classes. After the first two classes, we will correspond electronically. You will access Mathematica in one of the three ways stated above.

You will submit your work electronically. **Get your labs from** http://faculty.weber.edu/aghoreishi, or **Canvas website under assignments**. Upload your finished notebook (.nb file) in Canvas, using the Submit Assignment button. (Don't email your lab to me since due to large number of students and emails, I might lose track of them.) For help, send me an email describing the problem and attaching your file. We can also set up a Zoom meeting.

Grading: Your grade will be solely based on your performance on the projects. We expect your work to be:

1. correct and precise, 2. well written and polished,

3. neat and clear, 4. all extraneous materials should be deleted.

Grading of each lab will be on a 20-point scale.

Ethical Conduct: The Weber State University policy regarding all forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, and plagiarism will be strictly enforced. Penalties for academic dishonesty may include failure from the course. The policy can be found online at http://documents.weber.edu/ppm/6-22.htm.

Project Completion/Due Dates: All labs are for Mathematica version 14.x.

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Lab 1 (Not to be turned in.) - 1<sup>st</sup> week, (week of May 6)
Lab 2 (Not to be turned in.) - 1<sup>st</sup> week, (week of May 6)
Lab 3 - Start in 2<sup>nd</sup> week, Due on Tuesday May 21
Lab 4 - Start in 3<sup>rd</sup> week, Due on Tuesday May 28
Lab 5 - Start in 4<sup>th</sup> week, Due on Tuesday June 11 (one extra week)
Lab 6 - Start in 6<sup>th</sup> week, Due on Tuesday June 18
Lab 7 - Start in 7<sup>th</sup> week, Due on Tuesday June 25
Lab 8 - Start in 8<sup>th</sup> week, Due on Tuesday July 9 (one extra week)
Lab 9 - Start in 10<sup>th</sup> week, Due on Tuesday July 23 (one extra week)
Lab 10 - Start in 12<sup>th</sup> week, Due on Tuesday July 30
Lab 11 - Start in 13<sup>th</sup> week, Due on Tuesday August 6
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You have the option of redoing one of the earlier labs to improve your score. This lab will be due on Wednesday, **August** 7.

WSU's Virtual Lab Software

Go to http://weber.edu/virtuallab for instructions to access and use Virtual Lab Software.

Desktop/Laptop

If you are using a Desktop or Laptop computer, you will need to download and install the Citrix Receiver. You may be automatically prompted to download and install the Citrix Receiver when you go to the Login page. If you are not prompted and you have never installed the receiver, go to http://receiver.citrix.com and download and install the receiver.

NOTE: Make sure you insert your flash drive before logging into the Virtual Lab.

Once that is done, go to https://xendesk.weber.edu (NOTE: make sure to include https)
Login with your Weber username and password. (The same as your login to the portal)
To add the application to the Green Screen, click on the + sign on the left side.
Find and click on the folder with the application you want to launch.
Click on that application and it will be added to your green application screen.
Click on the icon for the application you wish to launch from the green screen.
You may be prompted to allow access from the server to your device. Click "Allow" when you are prompted to "Permit Access"

Once you have added the applications to your green screen, you shouldn't need to add them the next time you use Virtual Lab.

Tablet/Smartphone

If you are using a Tablet or Smartphone, you will need to download and install the Citrix Receiver from your App store.

NOTE: When you are prompted to enter an email or server address make sure to use **xendesk.weber.edu WITHOUT the http.** Do NOT use your email address.

IOS Instructions (iPad/iPhone)

Enter your eWeber username and password

Enter ad for the domain

Android and Windows Instructions (Tablet/Smartphone)

Enter your username as ${\bf ad}\setminus {\bf username}$ (This is your eWeber username – you MUST include the ${\bf ad}\setminus {\bf in}$ front of your username

Other info

Before launching applications, make sure you inserted your flash drive before logging into Virtual Lab Saving documents:

Before you save a document, check the folder you are saving to for other files that belong to you. This will help ensure that you are not saving to the server. if you save to the server, your documents may be lost.

If you having problems call **801-626-7777** – IT Service Desk or go to the WSU help page (http://weber.edu/help) and click on the "Live Chat" button.

If you can successfully access the Virtual Lab on campus but are having problems elsewhere make sure there is no firewall blocking your use of the virtual lab. (Hospitals, HAFB and some businesses block access). Also many businesses will not allow you to install the Citrix Receiver Client on their machines, so please check with your company network administrator.