

MATHEMATICS COMPUTER LABORATORY

MATH 1200, CRN 34045, Spring 2025

http://faculty.weber.edu/aghoreishi/Math1200_S25/Math1200_S25.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.

1. 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. Office Hours: M 10:30-11:20, T 10:30-11:20, 11:30-12:20, W 10:30-11:20, 12:30-1:20, and F 10:30-11:20. At other times, you can see me whenever I am in my office and not busy. You can also see me by making an appointment. However, our main method of communication will be through email. My Email address is aghoreishi@weber.edu. 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**.

- Lab 1 (Not to be turned in.) - **1st week**, (week of Jan 5)
- Lab 2 (Not to be turned in.) - **1st week**, (week of Jan 5)
- Lab 3 - Start in 2nd week, Due on Tuesday **Jan 21**
- Lab 4 - Start in 3rd week, Due on Tuesday **Jan 28**
- Lab 5 - Start in 4th week, Due on Tuesday **Feb 11** (one extra week)
- Lab 6 - Start in 6th week, Due on Tuesday **Feb 18**
- Lab 7 - Start in 7th week, Due on Tuesday **Feb 25**
- Lab 8 - Start in 8th week, Due on Tuesday **Mar 11** (Spring Break is an extra week)
- Lab 9 - Start in 10th week, Due on Tuesday **Mar 25** (one extra week)
- Lab 10 - Start in 11th week, Due on Tuesday **Apr 8** (one extra week)
- Lab 11 - Start in 13th week, Due on Tuesday **Apr 15**

You have the option of redoing one of the earlier labs to improve your score. This lab will be due on Wednesday, **Apr 16**.

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 **ad\username** (This is your eWeber username – you **MUST** include the **ad** 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.