# Information Sheet for Math 307    Winter 2026

**Class meets:** MTRF 9:00 - 9:50 am in HH 233

**Credits:** four credits

**Teacher:** Branko Ćurgus, Professor of Mathematics

**Office Hour:** MTRF 11 am or by appointment in BH 184A

**Email:** curgus@wwu.edu

**Class website:** https://faculty.curgus.wwu.edu/Courses/307_202610/307.html

**Goals:** In this course, students will be introduced to the computer algebra system *Wolfram Mathematica*. The goal is for students to use *Mathematica* for numerical, symbolic and graphical computations and simulations to explore interesting mathematics.

**Organization:** This class requires intensive computer use. In particular, we will use the computer algebra system *Wolfram Mathematica*, which is available on the computers in the labs HH 233, BH 215, BH 209/211A, and CF 312.

There are four important sources of information for this class:

**Class attendance** The class meets in the computer lab HH 233 at 9:00 am on MTRF. During each class I will do live coding in *Mathematica* and explain the basic principles of the *Mathematica* language. I will also discuss strategies for solving the assignment problems.

**Folder** `Math307` During each class I will create a *Mathematica* notebook, which will be available to you in the OneDrive folder `Math307` that I will share with you. In this folder I will also place notebooks that may be relevant to solving assignment problems. The folder `Math307` has two subfolders: `Math307\2026` and `Math307\Assignments`. Files related to class content will be in `Math307\2026`.

You will receive an email in your Western email account with the subject line

&#9632;      Branko Curgus shared the folder "Math307" with you.      &#9632;

Open this email and click on the folder link. It will take you to OneDrive. Above the contents of the folder `Math307` you will see a link that says

&#9632;      Add shortcut to My files.      &#9632;

Click this link to add the folder shortcut to your OneDrive. You can move the shortcut anywhere you want in your OneDrive. You may copy files from `Math307\2026` to any location where you prefer to keep your own working copies.

**Class website** An important source of information will be the class website.

**Discussions on Canvas** Whenever you encounter a difficulty with *Mathematica* coding or with developing a strategy for solving an assignment problem, you can post your question in Discussions on Canvas. Note that the class Canvas page will **not be used** for anything else besides Discussions.

**This class** is not just about learning the computer algebra system *Mathematica*. I view *Mathematica* as a tool that enables us to work on fascinating mathematical problems. Any fascinating problem involves a certain level of uncertainty. The beauty is that, with intellectual effort, uncertainty can be overcome. This takes time. With time spent on fascinating problems, we

develop our intellectual powers: critical and creative thinking, the ability to analyze, conjecture, synthesize, and evaluate, and much more. *The cumulative effect of time spent engaged in creative pursuits is an amazing and often neglected aspect of life.*

Working with computers, especially when we attempt sophisticated tasks, often leads to unexpected difficulties. I strongly believe that the benefits overwhelmingly outweigh the difficulties, and I am dedicated to helping you overcome them. Please do not allow yourself to become frustrated with either *Mathematica* or the mathematics I assign for homework. If you cannot make progress after what you consider a reasonable effort, post your question on **Discussions on Canvas**, and a classmate or I will help you get going.

**Assignments:** There will be three assignments. The assignments will be posted as *Mathematica* notebooks in the folder `Math307\Assignments`. The first assignment notebook will be called `202520_A1.nb`. Assignments will be due at least seven days after they are posted. Each assignment will have its due date at the top of the file, immediately below the title. You will submit your finished assignment as a *Mathematica* notebook.

To facilitate submission of your assignments (as a *Mathematica* notebook), you need to share a folder with me. The procedure is as follows. Go to your OneDrive **My files**. Click the large plus sign in the box labeled Create or upload. Create a new folder and name it

■                                 307_YourLastName.                                 ■

Please do not forget the underscore _ between 307 and YourLastName. While in this folder, click Share. In the popup window, enter my email address `curgus@wwu.edu`. On the right, click the down arrow next to the eye icon and choose Can edit. Finally, click Send.

Your finished assignment should be deposited in your folder `307_YourLastName` on OneDrive, which you shared with me. Your homework file (notebook) should be named using your last name, an underscore _, the capital letter `A`, and the assignment number. For example, my first assignment notebook should be named `Curgus_A1.nb`.

Please use the folder `307_YourLastName` only for your Math 307 assignments.

If you have any questions about using OneDrive, post them on **Discussions on Canvas**.

**Your Assignment Notebooks:** ➢ The notebook with your assignment should be named using your last name, an underscore _, the capital letter `A`, and the assignment number. For example, my first homework notebook would be named `Curgus_A1.nb`.

➢ Your homework notebooks should be organized neatly. A notebook should start with a title cell. Individual assigned problems should be presented as sections.

➢ Each problem should contain enough text so that I can follow what is being presented. If I ask a specific question, then that question should be answered by a specific complete sentence. Your answer should be followed by a justification.

➢ Save your notebooks with all output deleted (click Cell, then Delete All Output).

➢ Make sure that all calculations evaluate properly. A good way to test this is to close your notebook, open it again, and evaluate the entire notebook by clicking Evaluate Notebook in the Evaluation menu.

Here is a short list of useful *Mathematica* advice:

➢ Never include text in input cells. Text should be put in "text" cells. If you include text in an input cell, comment it out using `(* ... *)`.

- ➢ If *Mathematica* reports an error, do not ignore it. Address it. You may copy and paste your code into ChatGPT and ask what is wrong. You may also post your code in **Discussions on Canvas**. Please do not post your solutions. Post only the relevant code that illustrates your difficulty.

- ➢ Include only your work in your notebook. There is no need to repeat the statements of the problems. Make clear which question you are answering by its number. Present your solutions in a teacher-friendly way.

- ➢ Justify your claims with mathematical arguments, *Mathematica* calculations, and pictures.

- ➢ Identify each specific question I asked and answer it as best you can.

- ➢ Before defining new functions, use `Clear[]` to clear names of functions and variables you plan to use.

**You:** The work you submit for assignments must be your own. Please make a special effort to make your assignments truly yours. The best way to do this is to develop your own solutions, written in your own words, and supported by your own calculations and illustrations.

If you receive significant help from another student, or if a solution arises from collaboration, you must still present it in your own way and with your own examples and illustrations. In particular, do not copy and paste another student's notebook structure, code, commentary, or figures. Your homework should be clearly your own and should differ from other submissions.

**Assessment:** Students will be assessed on the quality of the assignments submitted. Each assignment will be graded by an integer between 0 and 100. This score will reflect

- ➢ the mathematical accuracy and completeness of your work, and the quality of the justifications you provide,

- ➢ the accuracy, efficiency, and completeness of your *Mathematica* code,

- ➢ the organization of your homework notebook and your original contribution.

Your grade for the *Mathematica* part of the course will be the average of the three assignment scores. Your final course grade will be the average of the MATLAB part and the *Mathematica* part. The letter grade for the course will be assigned according to the following table.

| F  : 0 - 49 | D  : 50 - 54 | C−: 55 - 59 | C  : 60 - 64 | C+: 65 - 69 |
|---|---|---|---|---|
| B−: 70 - 74 | B  : 75 - 79 | B+: 80 - 84 | A−: 85 - 89 | A  : 90 - 100 |

**Academic Honesty Policy:** Academic dishonesty is not tolerated at Western Washington University. Representing the work of another as one's own is an act of academic dishonesty. For a full description of the academic honesty policy and procedures at Western, see Appendix D in the University Catalog.

**Flexibility Statement:** This syllabus is subject to change. Changes, if any, will be announced in class or online. Students will be held responsible for all changes.

**Sylabii@WWU:** Please go to `https://syllabi.wwu.edu/` where you will find Syllabi Policies for Students and Campus Resources for Students