# Course Syllabus



# TMath 124

SPRING Term 2023 (SLN 20954-20957)

Instructor: Ruth Vanderpool contact: email <a href="mailto:rvanderp@uw.edu">rvanderp@uw.edu</a>)

Best method to contact: Canvas Discussions

Drop-In Hours: Tuesday & Thursday 1:30-2:30pm @ TLC

#### Class Time:

- Tuesday & Thursday 8:00-10:00pm or 3:40-5:40pm
- Zoom links on Canvas Calendar

### **Course Description:**

TMath 124 is a calculus course studying the mathematics of motion and change and its applications. Topics include advanced functions and their limits, maximums and minimums, rates of change (derivatives), and areas (integrals).

#### **Prerequisites:**

Prerequisite Content Knowledge: Mastery of functions, its notation, and rudimentary examples including polynomial, exponential, logarithmic, trigonometric, and inverse trigonometric functions. Mastery can be verified by one of the following:

- 2.0 in TMath 120 or TMath 116,
- Score of 68% on MPT-A placement test,
- Score of 276 on the ACC-AAF,
- Score of 75% on MATHEC Placement Test, or
- Score of 2 on AP test

Prerequisite Technical Knowledge: General familiarity with computers, email systems, accessing the internet, installing software, and manipulating/digitizing files. Specific requirements for this class are posted in the <u>Computer Requirements</u>

(https://docs.google.com/document/d/14zc6MFDMUQJkLa\_USNusYD6VfoThLsC0Zca5SjucebU/edit) page of the Technology Module.

#### **Course Objectives**

(https://docs.google.com/document/d/1ilUjse9JCVzJT0rzaS0CQS8rLFr0ZaqNuuijZZb5nHl/edit)
(https://docs.google.com/document/d/1ilUjse9JCVzJT0rzaS0CQS8rLFr0ZaqNuuijZZb5nHl/edit) are listed here. (https://docs.google.com/document/d/1ilUjse9JCVzJT0rzaS0CQS8rLFr0ZaqNuuijZZb5nHl/edit)

Required Items:

(https://docs.google.com/document/d/1zx3S8LkfWJxjRhZGQfBQrz7bsnZqnSw2kV4ll0lyCzk/edit)

Textbook, WebAssign access (online homework system), and a system meeting the technology requirements posted in the Technology Info Module. (More details about the required items, including textbook ISBN #'s are posted <a href="here">here</a>

(https://docs.google.com/document/d/1zx3S8LkfWJxjRhZGQfBQrz7bsnZqnSw2kV4ll0lyCzk/edit)\_.)

#### **Tentative Schedule:**

(https://docs.google.com/document/d/1Ba4GyW6OcJjOQ9ik4aM8DnLd0cghpolS Db8ixp8ePs/edit)

Upcoming due dates for assignments and exams are posted in the "Coming Up" section on the right side of your screen immediately after you log into Canvas. The due dates for the entire course are listed at the bottom of this Syllabus and can also be found on the Calendar link (at the top of this page). Details about topics to learn, material to review, and projects that need work are posted in weekly Modules (whose link is always available on the left when in the TMath 124 Canvas course) and summarized in the "Objectives & Tasks" page. A tentative weekly schedule is posted <a href="https://docs.google.com/document/d/1Ba4GyW6OcJjOQ9jk4aM8DnLd0cghpolS\_Db8ixp8ePs/edit">https://docs.google.com/document/d/1Ba4GyW6OcJjOQ9jk4aM8DnLd0cghpolS\_Db8ixp8ePs/edit</a>)

## **Evaluation/Grading:**

(https://docs.google.com/document/d/1W2o8YwMfAdYbkc62qoLFBtV8UfxxPC6BEfUvRpZyA-k/edit)

Specific weights for homework and exams are posted here

(https://docs.google.com/document/d/1W2o8YwMfAdYbkc62goLFBtV8UfxxPC6BEfUvRpZyA-k/edit)

Generally, Web-based homework will be recorded inside WebAssign and all other marks be recorded in Canvas. The two systems will not synch with each other which means Canvas **cannot** estimate your grade automatically! Note that there is an assignment inside of Canvas that you can modify from within the Gradepage to have Canvas compute your grade.

#### **Opportunities for Mastery:**

- WebAssign & WrittenHW allow multiple attempts for full credit.
- WebAssign assignments are easily extended up until the day before exams so that you can improve your score.
- Discussion boards in Canvas responses improve WrittenHW or WebAssign averages.
- Two-stage quiz structure allows for improving quiz scores immediately.
- Group presentations before each exam can add up to 4% to your exam scores.
- -Communication & Netiquette: □→

(<a href="https://docs.google.com/document/d/1rwcQya8ETAHpm2RhsYPGRnJpU3veqRa-3A0M0GJdPZg/edit?usp=sharing">https://docs.google.com/document/d/1rwcQya8ETAHpm2RhsYPGRnJpU3veqRa-3A0M0GJdPZg/edit?usp=sharing</a>)

You are expected to work regularly with others in this class and thus need to make sure you:

- Expect to make mistakes but be sure to reflect/learn from them!
- Are civil and are aware of your impact on others.
- Assume and engage with the strongest argument while assuming best intent.

General communications policies and netiquette are posted <a href="https://docs.google.com/document/d/1rwcQya8ETAHpm2RhsYPGRnJpU3veqRa-3A0M0GJdPZg/edit?">https://docs.google.com/document/d/1rwcQya8ETAHpm2RhsYPGRnJpU3veqRa-3A0M0GJdPZg/edit?</a>
<a href="https://docs.google.com/document/d/1rwcQya8ETAHpm2RhsYPGRnJpU3veqRa-3A0M0GJdPZg/edit?">https://docs.google.com/document/d/1rwcQya8ETAHpm2RhsYPGRnJpU3veqRa-3A0M0GJdPZg/edit?</a>

#### **Participation:**

Posting attempts/work/answers for problems from activity sheets in the classroom count towards your participation marks. Opportunities for these are given most class days and also on Discussion boards following class. You need to collect 5 of these throughout the term.

#### **Homework Policies:**

Three homework assignments are due every week. Two are posted through the online homework system <a href="WebAssign">WebAssign</a> (<a href="https://www.webassign.net/login.html">https://www.webassign.net/login.html</a>) and one is handwritten and electronically submitted through Canvas.

Online Homework: (https://docs.google.com/document/d/1Dd0yhp8fofSFEwavKF8IEHsMknc0ijhskWl4lx6s4M/edit) Two homework assignments will be posted every week on WebAssign. One
assignment will be due at 6pm on Wednesday and the second will be due at 6pm Friday. All
assignments for the week will be announced in the "Objectives & Tasks" page of the respective
Module and posted on the class calendar. (More details about access, help, and policies for online

homework are posted <a href="https://docs.google.com/document/d/1Dd0yhp8fofSFEwavKF8IEHsMknc0-ijhskWl4lx6s4M/edit">https://docs.google.com/document/d/1Dd0yhp8fofSFEwavKF8IEHsMknc0-ijhskWl4lx6s4M/edit</a>)

 Written Homework (https://docs.google.com/document/d/1zRnNIYc5c1nkRPxZcLANnG-BPHw0wZMYo24ZCcB4bFk/edit): Handwritten assignments will also be assigned weekly and are due at 6pm on Wednesdays. You have one chance to regain lost points on homework by completing a rewrite that is due a week from the homework's return. (More details about written homework scheduling, formatting, and grading are posted <a href="here">here</a>

(https://docs.google.com/document/d/1zRnNIYc5c1nkRPxZcLANnG-BPHw0wZMYo24ZCcB4bFk/edit)\_)

#### -Quiz Policies:

Quizzes are administered in a two-stage process in person. In the first stage, students have 15 minutes to take the quiz without notes, books, internet resources, or collaboration. Non-internet accessing calculators are allowed.

The second stage again gives students 15 minutes to take the quiz, but now with open notes, open book, and collaboration with student group. After 15 minutes, one (pdf) (and only one!) copy of the completed quiz is turned in with everyone's name on it.

The marks recorded for your quiz will be the higher of the two options:

the score from the individual stage-one of the quiz, or the average of your individual stage-one quiz and the group completed stage-two quiz.

#### -Exam Policies:

The dates of the exams are **Thursday April 20th** & **Thursday May 11th**. Exams are to be done individually and in person. Explicitly this means notes, books, internet tools and collaboration are not allowed for these exams. Non-internet accessing calculators are allowed. The final exam is will be a two-hour comprehensive online proctored exam either on **June 6th 8:00-10:00am** or **June 8th 3:40-5:40pm**.

Make-up tests will only be given for absences deemed justifiable by the instructor (e.g., illness, family emergency), and may be considerably more difficult than the original test. If you must be absent for an exam, I will only give a make-up exam if notified in advance.

<u>Getting Help: (https://docs.google.com/document/d/1h-9ks1Rj1AswJswn4qgjn-veRxVH9WkAfS6Cu89JCHY/edit)</u> Many resources exist, are available, and are intended to help you with

math, technology, and personal issues and questions. A few of the most helpful are listed <a href="https://docs.google.com/document/d/1h-9ks1Rj1AswJswn4qgjn-veRxVH9WkAfS6Cu89JCHY/edit">https://docs.google.com/document/d/1h-9ks1Rj1AswJswn4qgjn-veRxVH9WkAfS6Cu89JCHY/edit</a>.

### **Tips for Success:**

(https://docs.google.com/document/d/1RNOFp6Aeg6pb5v23hWejiMhxKTltPxw06uYIYSjZB5l/edit)\_A few, class-specific things to do that will help you get the most out of this class.

#### **General Policies:**

(https://docs.google.com/document/d/1FjxC22UgjVM7JT 2e6DHKSpk5ZWdIEVUU34AJIhQMhY/edit)

Campus-wide and class policies regarding inclement weather and emergency procedures are posted <a href="https://canvas.uw.edu/courses/603479/wiki/general-policies">here (https://canvas.uw.edu/courses/603479/wiki/general-policies)</a>.

# Course Summary:

Date	Details	Due
Mon Mar 27, 2023	Welcome to Calculus 1!  (https://canvas.uw.edu/calendar?  event_id=3119904&include_contexts=cours	12am se_1642606)
Tue Mar 28, 2023	8:00am Calculus With  Analytic Geometry I  (https://canvas.uw.edu/calendar? event_id=3119920&include_contexts=cours	8am to 8pm se_1642606)
	Drop-In Hour  (https://canvas.uw.edu/calendar?  event_id=3124295&include_contexts=cours	1:30pm to 2:30pm se_1642606)
	3:30pm Calculus With  Analytic Geometry I  (https://canvas.uw.edu/calendar?  event_id=3119864&include_contexts=cours	3:30pm to 5:45pm se_1642606)