Math 102 - Differential Equations and Modeling Spring 2025

Instructor: Christina Edholm Office: Miller 107

Time: TR 1:15 - 2:30 pm **Zoom Room ID:** <u>cedholm</u>

Open Hours: T 4:00-5:00 pm HUM 202, R 11:00 am -12:00 pm, 4-5 pm HUM 204

(Location Updates on Piazza and Canvas)

 Drop in to chat about concepts, homework, problem sets, assessment review, life, or anything else.

- If these times don't work for you, message me on <u>Piazza</u>.
- Feel free to post about the meeting on <u>Piazza</u> publicly if you want more students to attend. Group appointments are welcome.
- If you have a personal question (sensitive/confidential information) contact me via email.

The format of open hours might change with the semester, updates will come via Piazza.

Welcome: We will be learning about many different mathematical concepts, so questions are welcome! While working through the concepts in the course, remember you can attend my Open Hours, these are times for you to come and ask me questions. Also, feel free to use YouCanBookMe or message me on Piazza about setting up an appointment if those times don't work.

Text:

We will primarily be using <u>The Ordinary Differential Equations Project</u> by Thomas W. Judson through <u>Runestone</u>. Another source we will reference is <u>Paul's Online Notes</u>. Additional resources will be listed on Canvas.

Reading the content material before each lecture is expected. This will keep the reading interesting and give the lectures more clarity. Reading the sections of the textbook corresponding to the assigned homework exercises is considered part of the homework assignment. You are responsible for material in the assigned reading *whether or not it is discussed in the lecture*.

Course Communications and Resources:

- To access Canvas: https://scrippscollege.instructure.com
- We'll be conducting all class-related announcements, messages, and discussions on *Piazza* through Canvas. Please post questions, ideas, and discussions to *Piazza*.
 - o Sign Up Link: https://piazza.com/scrippscollege/spring2025/scmath10201
- If you have a personal message, please email me. CONTACT me about an emergency or illness that affects your work in this course. CONTACT me about missing a homework, assessment, or class.
- Assignments will be uploaded to <u>Gradescope</u> for submission, linked through Canvas.

• Here is a link to the <u>Tentative Class Schedule</u>

Classroom Norms:

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Assessment and Evaluation:

• Community and Content Engagement (6%): Attending the class and participating in discussions is a fundamental part of the course and expected, along with engaging with our community and class content. You are responsible for material presented in the lecture whether or not it is discussed in the textbook.

Throughout the semester we will be using *Piazza* to engage in discussion about course material and topics. You are required to make at least 7 contributions to Piazza throughout the semester. To do so, one may ask a question, answer a question, post a note, etc...

Additionally, through the text there are Reading Questions, along with additional resources for engagement with content outside of class.

During class we will be doing group work and some coding for the models, these activities go towards this area.

There will also be check-ins during the semester, to see how you are doing and get feedback on the course.

All of these different methods make up engagement in the course, if you think of others please let me know.

• **Homeworks** (25%): Homeworks are intended to give you feedback about your ability to solve problems and show work, along with working through applications of the concepts. Homeworks will typically be assigned on Thursday and due the following Tuesday by 11:59 pm PST to Gradescope.

A Few Comments Regarding Homework

Part of the problem-solving process is trying things until you find something that works. Genuinely "struggling" with the exercises is an important part of mathematics: do not expect to know immediately how to solve every problem by looking at it.

You should make every effort to complete each assigned homework problem. You may seek help during open hours, piazza, and tutor centers with any exercises you have difficulty solving. A thorough understanding of how to solve the homework exercises is a good first step in preparing for the assessments.

- **Projects** (15%): We will tentatively have three projects for this course, tentative deadlines are in the schedule, details forthcoming.
- Assessments (36%): There will be 2 assessments throughout the semester. During the last day of class (Tuesday 5/6) you can take an alternate version of one of the assessments to replace your previous score on that assessment.

You should expect questions on the assessments to test your understanding of concepts discussed in the lecture *and* in the textbook.

- **Final** (18%) The Final for the class will consist of a project and take-home assessment, tentative deadlines are in the schedule, and details forthcoming.
 - Final Period (Monday, May 12 2-5pm)

Evaluation Scale:

The following is an approximate grading scale.

Α	93.0-100	В	83.0-86.9	С	73.0-76.9	D	63.0-66.9
A-	90.0-92.9	B-	80.0-82.9	C-	70.0-72.9	D-	60.0-62.9
B+	87.0-89.9	C+	77.0-79.9	D+	67.0-69.9	F	Below 60

The grading scale below represents a lower bound on your letter grade given a particular percentage score. After the class is over, I may adjust the final scale based on data I receive about class grades as a whole, but your grade will not be made to be worse than shown here.

That being said, you should not expect that your grade will be better than shown here either. Adjustments are typically minor if they are made at all.

Class Policies: If you have extenuating circumstances (something unexpected, unavoidable, and/or severe has occurred - typically requiring the Dean of Students "DOS"), please email me.

- For Homeworks and Projects: You can receive a 24-hour extension if you reach out before the due date by sending Instructors a private Piazza post using the "24_hours_ext" tag and specific problem set/project tag. Provided the message is sent before the due date, you will receive a 24-hour extension. If you do not message before the due date and turn it in during the 24-hour window, you will be penalized 10%. The timing for all submissions will follow Gradescope's timestamp.
 - For Homeworks: We will drop one Homework.
 - For Projects: If a component is turned in past the deadline, you will be penalized
 10% off the component for each day or part thereof if it is late.
 - Please frequently save and back up your work (and do not leave it until the last minute!) to avoid an unfortunate situation. The timing will follow Gradescope's timestamp.
- For Assessments: If there is an issue that you feel may affect your performance, you
 need to discuss it with me beforehand. If you must miss an assessment for any reason,
 you should contact me in advance (at least a week when possible) or at a minimum,
 within 24 hours after missing the assessment. You will typically be required to provide
 documentation to be allowed to make up an assessment and contact your Dean of

Students. Assuming that you have a valid excuse (documented illness, family emergency, etc.), I will reply to your email shortly with instructions on when and where to make it up (the make-up will usually be the next day or as soon as feasible).

• For Final: Details will be on the specific assignments.

Accommodations/Accessibility:

Scripps College values diversity and inclusion; we are committed to a climate of mutual respect and full participation. As such, our goal is to create learning environments that are equitable, inclusive, and welcoming. If you anticipate or experience any barriers to learning related to a disability or condition, please schedule a time to meet with the Office of Academic Resources and Services at ars@scrippscollege.edu.

ARS will work with you to discuss your experiences and range of options to ensure your full participation in this course and others. Please note that a student's home campus is responsible for establishing and providing accommodations. If you are not a Scripps student, you must contact your home institution to establish accommodations. Below is a list of coordinators on the other campuses:

• CMC: AccessibilityServices@cmc.edu

• HMC: access@g.hmc.edu

Pitzer: academicsupport@pitzer.eduPomona: disability@pomona.edu

• Claremont Graduate University: disabilityservices@cgu.edu

Keck Graduate Institute: student.accessibility@kgi.edu

Additional Support

Outside the Classroom - College comes with many challenges, and while some can be taken in stride, others are best faced with the support of others. If you experience anything that compromises your safety and/or well-being, we urge you to seek support. You can come to a faculty member, your advisor or you can go directly to one of the other resources available on campus—whatever makes you feel more comfortable and safe. Faculty members are mandated reporters on some topics (such as sexual assault) and not others, but we will maintain confidence insofar as we are able.

A few available campus resources are listed below:

Campus Safety	From campus phone: Extension 7-2000 or 7-7233 (7-SAFE)
	From cell phone or off-campus phone: 9090-607-2000 or -909-607-7233 (SAFE)

	or 911
Student Health Services (SHS)	909-621-8222
	After Hours Emergency: 909-607-2000
Monsour Counseling Center (MCAPS)	909-621-8202 (Ext 1-8202)
	Crisis support via telephone will continue to be available to all students 24hrs/day. To access this service, please call us at 909-621-8202, and press "1" to be connected to an on-call therapist.
Student Disability Resource Center (SDRC)	909-607-7419
Office of the Chaplains	909-621-8685
International Place (I-Place)	909-607-4571
The emPOWER Center	909-607-1817
The Queer Resource Center (QRC)	909-607-4571
Office of Black Student Affairs (OBSA)	909-607-3669
Office of Chicano/Latino Student Affairs (CLSA)	909-621-8044

Title IX

Scripps	909-607-7142
CMC	Title IX Coordinator: 909-607-8131 After hours: 909-607-2000
<u>Pomona</u>	(909) 621-8017
Pitzer	909-607-2958
Harvey Mudd	909-607-3470

If the instructor finds it necessary to make informational changes (e.g. open hours, schedule adjustments) due to students' needs or unforeseen circumstances, students will be notified in writing/email of any such changes.

Any circumstances that are not specifically covered by this syllabus will be resolved on a case-by-case basis by the course instructor and in accordance with college policy. This includes cases of academic dishonesty, class disruption and civility issues, extenuating circumstances, etc. In no way will this syllabus be construed to restrict the instructor's options in responding to these circumstances.