ImageImage

Students in this course will deepen their understanding of the foundational topics in calculus, including techniques of integration, applications of integration, and infinite sequences and series, including Taylor series. Ongoing emphasis on problem-solving strategies and the development of mathematical communication.

CORE STATEMENT

The University of Portland offers a liberal arts Core Curriculum with a vision of students acquiring knowledge, skills, and values that will prepare you to respond to the needs of the world and its human family, while having a foundation of multiple lenses to address enduring questions of human concern. The University Core Curriculum strives to achieve this vision by cultivating six habits of heart and mind in all graduates regardless of major.

As a priority for this Core class, our focus is the “scientific and quantitative literacy and problem solving” habit. As part of developing that habit this course will prioritize students learning to employ mathematical and statistical skills to explore and make sense of data. Toward this end, as one specific Core learning outcome for this class, the expectation is that students who complete this course will be able to use the tools of differential calculus to solve complex problems and effectively communicate solutions in written form.

CALCULUS II

MTH 202 X | Fall 2022 | Dr. Carolyn James (she/her) | MWF 10:20-11:15 am | Franz Hall 222

# Text & Technology

*Calculus Volume 2 from OpenStax*

* Textbook available for free online at [www.openstax.org/details/calculus-volume-2](http://www.openstax.org/details/calculus-volume-2)
* Course requires access to Desmos, online graphing calculator
* Access to Zoom required in case a shift to remote instruction is required

# Where to find me

Email: jamesc@up.edu

Office: Buckley Center 265

Phone: 503.943.8507

# Help Hours

Mondays 1:30-2:30

Wednesdays 11:30-12:30

Thursdays 2:00-3:00

+ appointment

Come by to ask questions, talk about math, or retake a quiz in BC 265 (my *office*!)

You belong here.

In our classroom, diversity and individual differences are respected, appreciated, and recognized as a source of strength. I support the use of mathematics as an analytic tool to challenge power, privilege, and oppression. It is our collective responsibility to create a welcoming space where ideas can be challenged while individuals are respected. I ask you to support one another as you develop as mathematicians and analytic thinkers.

Graphical user interface, application

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Graphical user interface

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Text, letter

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# Methods of Assessment

This course is guided by the philosophy that learning mathematics requires focused effort, reflection, and revision. Assessment of this course is based on a proficiency system, in which students have multiple attempts to demonstrate proficiency, with opportunities to reflect on and improve previous understanding.

Participation

You are expected to actively participate in this classroom community. Participation includes coming to class on time, being prepared, being willing to ask questions and share ideas, setting up study groups outside of class, attending tutoring sessions, posting helpful resources online, and contributing to the classroom virtual chat. Exit cards will be assigned regularly at the conclusion of class as part of participation assessment. Group and individual presentations of ideas is a required component of participation.

We will cover new course material on Monday, Wednesday, and Friday. Most Tuesday class times will be for small group work on labs and for proficiency assessment.

Homework

Regular practice is required to convert new skills into lasting, automatic procedures. For most sections, you will be required to complete an online homework via WebWork. The online homework will be due at 5:00 pm. Homework is due Monday, Wednesday, or Friday the class period after it is covered in class. Homework is graded automatically.

It is strongly suggested that you do your homework regularly; it's best done following class, when it is fresh in your mind. Most questions allow unlimited attempts and there is no penalty for incorrect answers. If you find yourself stuck on a problem after many attempts, please reach out for additional help! Late homework can earn up to half credit.

Labs

Semi-weekly labs will be due on Wednesdays at 5pm. Lab problems should be either typed or written and submitted as a pdf file in Moodle. These labs are part of the Core Assessment, and will have common grading across all MTH 201 sections. Labs will be graded on three components:

* **Validity**: Is the method correct? Is the final solution correct?
* **Explanation**: Is the solution method well explained? Is the reasonableness of the solution justified?
* **Representation**: Is the solution process clearly written? Is the solution supported with appropriate graphs/diagrams/equations? Is mathematical notation used clearly and correctly?

Labs are graded on a proficiency scale and revisions are due one week after the original due date.

Proficiency Quizzes

Weekly proficiency quizzes provide opportunities to demonstrate your understanding of the course learning targets. Each quiz will include 2-3 learning targets as well as the option to reassess past targets. **Proficiency should be attained twice for each learning target.**

Reflections

Periodically throughout the semester I will ask you to think about your process and assess your progress in the course. Reflections are a place to consider how things are going (and communicate that to me). Self-assessments are an opportunity for you to connect the skills and proficiencies that you're practicing with the course-level objectives, as well as make the case that your progress in the course warrants a particular grade.

Final Reflection and Assessment

The final exam includes two components: a written assessment of the big mathematical ideas of the course. This assessment will be cumulative: it will focus on connections between ideas, conceptual understanding of the material, and applications rather than nitty-gritty computations. The second half of the final exam time will allow for reassessment of past learning objectives.

Note that these percentages are guidelines more than hard and fast rules. I will consider the entire body of your work when making these determinations, and this will also be informed by your own self-assessments. I will never impose standards *higher* than those outlined in the table but reserve the right to round down the needed minimum percentages (in a way that favors you).

Decisions about +/- cutoffs will be based on (a) your performance on the final assessment and (b) your achievements as a whole.

**Our Final Exam period is 1:30-3:30 pm Wednesday, Dec. 14**

## Homework Champion

At mid-semester, students may apply to become Homework Champions. Those who wish to become a homework champion must submit the Homework Champion application no later than Wednesday after midsemester break at 5pm. The homework Champion application includes the following:

* WebWork, video quiz, and participation average of 95% or better.
* Score of proficient or highly proficient on all Learning Objectives.
* A written reflection on your current study habits, the portions of the course that have been most beneficial to your learning, and the portions that have not been as beneficial to your learning.
* A suggested contract for how you would like future Webwork, video quizzes, and participation to impact your grade. (For example, you may request not to have to complete video quizzes to prepare for class, and instead submit notes on the video viewing.)

I will review contract suggestions and update grading policy on your reflections.

|  |  |
| --- | --- |
| Level 1 | All students begin the semester with the ability to retake each Learning Objective once per week, following reassessment protocol. |
| Level 2 | After completing 5 retakes, students achieve Level 2. At Level 2 students can retake each Learning Objectives twice in a week. |
| Level 3 | After completing 10 retakes, students achieve Level 3. At Level 3 students can retake each Learning Objectives past the four week barrier. |

## Leveling Up

To qualify for additional reassessment opportunities, students can “level up”. This encourages students to get in the habit of reassessing early.

## How your final grade is determined

| Final Grade: | A | B | C | D |
| --- | --- | --- | --- | --- |
| Proficiency (P, P+) in Core LTs | 100% | 100% | 80% | 65% |
| Proficiency across all LTs (% of those assessed) | 90% | 80% | 70% | 60% |
| % of P+ in LTs | 75% | 35% | 0% | 0% |
| Webwork and participation | 85% | 70% | 60% | 50% |
| Proficient Labs (P, P+) | 100% | 100% | 75% | 50% |
| Minimum requirements for each letter grade. | | | | |



# Reminders & Expectations

* **Moodle.** Consider Moodle your “base camp” for this course. All information, assignments, updates, Zoom links, etc. will be posted there. If you have a question, it's probably answered on Moodle (perhaps in this very syllabus...). I expect you to check the site frequently to stay on top of deadlines and course communications.
* **I believe in you.** Doubting yourself? It's human. Need an affirmation? Let me know... I've got your back!
* **Classroom climate.**

As someone who works hard to facilitate an environment that is safe and productive and that fosters inclusivity and deep belonging for each and every person in the room, I ask that you be courteous and respectful. I hope we can all learn to recognize individual differences as a source of strength and believe that each one of you is vital to the successful creation of a rich and diverse classroom space -- regardless of background, identity, or beliefs. Moreover, I contend that all perspectives are valuable (even those that are unpopular or that cause discomfort) because they are precisely what help broaden our understanding of the world and the people in it. As such, it is important that we approach one another with curiosity and kindness while trying to avoid judgement and bias. Please listen to others carefully, and thoughtfully consider ideas that are different from your own. Whatever your goals in life, you will be a better maker, builder, salesperson, colleague, leader, friend, and citizen if you are able to understand and accommodate a diverse range of perspectives! Also consider that mathematics is a robust and potentially persuasive analytic tool that can be used to challenge inherently inequitable systems of power and privilege. I treat it as such and want you to feel similarly empowered.

I expect our classroom to be a true community of learners, and anyone who acts in a negative, threatening, or disruptive way through their words or actions harms that community and inhibits the participation of others. Rude, mocking, obscene, hateful, racist, sexist, and all other forms of disrespectful speech have a negative impact on everyone's learning and will not be tolerated. If a person disrupts our class in any of these ways, I will address it and reserve the right to remove the disruptive person from the class. Moreover, if you witness a peer behaving in an objectionable way, I invite you to try to help them examine their actions with empathy and care. We will all make mistakes in the messy and complicated

process of working together and must

help one another be accountable for

reflecting on how our impact may differ

from our intent. When I make such a

mistake, I hope you will hold me to the

same high ideals and courageously help

me examine my own impact. There will

be a feedback form on our Moodle page

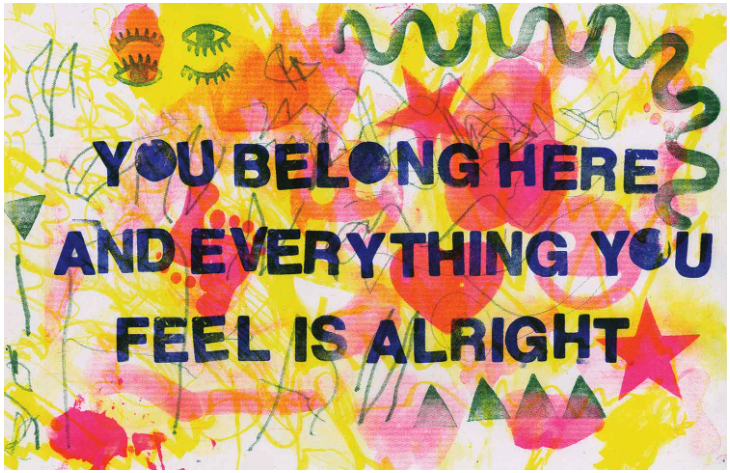
in case you ever wish to report something

to me (anonymously, if you prefer) that

you find objectionable along any of the

lines described above (e.g., behavior you

experience as unwelcoming in any regard).



Art by Monica Johnson, 2020.

**In-Person Learning During COVID-19**

To create a successful in-person learning environment while keeping everyone safe, all students and instructors must follow the University’s COVID-19 rules and procedures that are in place at any given time during the semester for classrooms, labs, and all common areas of academic buildings. Such rules and procedures may include required face coverings, suggested distancing protocols and directions, and cleaning one’s desk space after usage, among other things. No food will be allowed in the classrooms or laboratories. Only water will be allowed in the classrooms but is not allowed in laboratories. If the University requires face coverings, they may only be removed temporarily when taking a drink of water. Failure to follow any of the COVID-19 classroom rules could result in a student’s removal from the course and/or a report filed with the Office of Student Conduct.

Generally, students are expected to attend all class sessions according to the instructor’s direction. Students who feel unwell or have a temperature above 100 degrees should NOT attend class in person. These students should inform their instructor as soon as possible.

Students who must be in quarantine or isolation due to their own symptoms or exposure to someone with COVID-19 should also contact their instructor as soon as possible to work out details for keeping up with the course material remotely while in quarantine or isolation.

Please note, should the instructor test positive for COVID-19, even without symptoms, the course will be temporarily conducted remotely. Should the instructor be unable to teach for an extended period of time, the respective department or unit will find a substitute to continue the course either in person or online.

**University of Portland’s Code of Academic Integrity**

Academic integrity is openness and honesty in all scholarly endeavors. The University of Portland is a scholarly community dedicated to the discovery, investigation, and dissemination of truth, and to the development of the whole person. Membership in this community is a privilege, requiring each person to practice academic integrity at its highest level, while expecting and promoting the same in others. Breaches of academic integrity will not be tolerated and will be addressed by the community with all due gravity.

**Accessibility Statement**

The University of Portland endeavors to make its courses and services fully accessible to all students. Students are encouraged to discuss with their instructors what might be most helpful in enabling them to meet the learning goals of the course. Students who experience a disability are also encouraged to use the services of the Office for Accessible Education Services (AES), located in the Shepard Academic Resource Center (503-943-8985). If you have an AES Accommodation Plan, you should make an appointment to meet with your faculty member to discuss how to implement your plan in this class. Requests for alternate location for exams and/or extended exam time should, where possible, be made two weeks in advance of an exam, and must be made at least one week in advance of an exam. Also, you should meet with your faculty member to discuss emergency medical information or how best to ensure your safe evacuation from the building in case of fire or other emergency.

**Assessment Disclosure Statement**

Student work products for this course may be used by the University for educational quality assurance purposes.

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**Mental Health Statement**

As a college student, you may sometimes experience problems with your mental health that interfere with academic experiences and negatively impact daily life. If you or someone you know experiences mental health challenges at UP, please contact the University of Portland Health and Counseling Center in Orrico Hall (down the hill from Franz Hall and Mehling Hall) at www.up.edu/healthcenter or at 503-943-7134. Their services are free and confidential, and if necessary they can provide same day appointments. In addition, after-hours phone counseling is available if you call 503-943-7134 and press 3 outside of business hours. Also know that the University of Portland Public Safety Department (503-943-4444) has personnel trained to respond sensitively to mental health emergencies at all hours. Remember that getting help is a smart and courageous thing to do – for yourself, for those you care about, and for those who care about you.

**Non-Violence Statement**

The University of Portland is committed to fostering a community free from all forms of violence in which all members feel safe and respected. Violence of any kind, and in particular acts of power-based personal violence, are inconsistent with our mission. Together, we take a stand against violence. Join us in learning more about campus and community resources, UP’s prevention strategy, and reporting options on the Green Dot website, www.up.edu/greendot or the Title IX website, www.up.edu/titleix.

**Ethics of Information**

The University of Portland is a community dedicated to the investigation and discovery of processes for thinking ethically and encouraging the development of ethical reasoning in the formation of the whole person. Using information ethically, as an element in open and honest scholarly endeavors, involves moral reasoning to determine the right way to access, create, distribute, and employ information including: considerations of intellectual property rights, fair use, information bias, censorship, and privacy. More information can be found in the Clark Library’s guide to the Ethical Use of Information at libguides.up.edu/ethicaluse.

**The Learning Commons**

This year, you have the choice of working with Learning Commons peer educators face-to-face in Buckley 163 or online in Zoom or Teams.

The Learning Commons invites you to connect with trained writing assistants, tutors, and consultants as an effective learning strategy for greater success in your college courses. As with any skill, practice helps. Engaging with peer educators is a form of practice that can make your college learning experience more enjoyable and successful.

*The Writing Center:* Students can increase their confidence and competence in writing by booking an appointment at www.up.mywconline.net. Please note WCONLINE is not associated with your UP login credentials. The first time you

## University Policies

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Math Resource Center: For support in 100-300 level math courses, including Finite Math (MTH 141) and Statistics (MTH 161) we offer both individual appointments and walk-in tutoring. Go to our webpage for the most current walk-in schedule. To make an appointment, go to our Bookings Scheduler at https://bit.ly/learning-up.

Appointments for all other tutoring programs can be accessed through our Bookings Scheduler at https://bit.ly/learning-up or on our website at https://www.up.edu/learningcommons/. Please make appointments at least 12 hours in advance.

• Business Tutoring: Our trained peer educators can help you excel in economics, accounting, finance, OTM, and business law.

• Group Work Lab: Our Group Work Lab peer consultants can help project groups run effectively. Students can meet as a group to develop their project with a Group Work Lab consultant for both in-person and online group projects.

• Language Studio: Students can meet with French, German, Spanish, and Chinese language tutors to practice their conversational skills and unlock their understanding of grammar.

• Natural Sciences Center: Students can make appointments for biology, chemistry, and physics tutoring for 200 and 300 level courses. Our peer educators can demonstrate strategies for effective learning in the sciences.

• Nursing Tutoring: Individual and group peer tutoring is available for all the 100–400 level nursing classes, as well as BIO 205, microbiology, and anatomy and physiology courses for nurses.

• Speech & Presentation Lab: Students can improve the highly sought-after skills of presentation writing and delivery with our trained peer consultants.

Tutoring works best when you use it proactively and consistently throughout the semester. For example, you can use the Writing Center for brainstorming ideas for a paper and later for working on your first draft. Likewise, those seeking tutoring can work with a tutor a few times in the weeks leading up to a test. We also welcome small group appointments for 2-4 students at a time, as such social learning can be very effective.

Embedded tutoring and PAL: The Learning Commons offers embedded tutoring and online Peer Assisted Learning (PAL) group sessions for specific classes. PAL sessions are voluntary and offer you the opportunity to learn material through collaborative learning activities that are guided by a trained peer facilitator. Your instructors, embedded tutors, or PAL facilitators will contact you if your class offers this option.

Our peer educator resources are here for you

Questions about the Learning Commons and our programs can be directed to the Learning Commons staff at learning@up.edu.

COVID-19 safety policies

The Learning Commons will follow current UP safety guidelines for the semester. Our COVID-19 safety protocols are subject to change depending on the current situation with the virus. The most up-to-date policies and protocols will be posted on our website and in the Learning Commons in BC 163.

Learning Assistance Counselor: Learning assistance counseling is also available in BC 101. The counselor teaches learning strategies and skills that enable students to become more successful in their studies and future professions. The counselor provides strategies to assist students with reading and comprehension, note-taking and study, time management, test-taking, and learning and remembering. Appointments can be made in the on-line scheduler available to all students in Moodle or during posted drop-in hours.

Requirements for University Core Course Syllabi

Starting in the Fall of 2021, all Foundation Level Core courses will have new syllabus language that reflects the revitalized Core and includes one priority student learning outcome for the Core identified at the department level. CAS department chairs should be able to refer faculty to the specified course learning goals and student learning outcomes, or you can contact Core Curriculum Director Andrew Guest at guesta@up.edu.

After customizing the second paragraph for your particular Core courses, please include the below text in all Core Foundation Level course syllabi. Additional information for faculty about the revitalized Core is available at pilots.up.edu/group/core-curriculum, and additional information for the community as a whole is available at www.up.edu/core.

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As a priority for this Core class, our focus is the “[...insert here which of the six habits of heart and mind the course will address...]” habit. As part of developing that habit this course will prioritize students learning to [...insert here the course learning goal assigned to the class as part of the Core...]. Toward this end, as one specific Core learning outcome for this class, the expectation is that students who complete this course will be able to [...insert here the one priority student learning outcome agreed to by your department and for the Core...].

Note: The Undergraduate Core Curriculum Committee is also interested in promoting Core syllabi and course design that attends to diversity, equity, and justice. We encourage faculty to use the Core revitalization process as an opportunity to de-center traditional approaches to syllabi and course organization, offering a draft of encouragements toward inclusive and equitable course design at this link to consider when drafting Core course syllabi.

Voluntary Syllabus Statement

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