

CALC 1501B - Calculus II for Mathematical and Physical Sciences Fall/Winter 2021-2022 Course Outline

1. Course Information

| Section | Dates | Time | Room | Professor |
|---------|-----------|------------------|-----------|----------------|
| LEC 001 | M/Tu/W/F | 8:30am – 9:30am | 3M-3250** | M. Pinsonnault |
| LEC 002 | M/Tu/W/Th | 12:30pm – 1:30pm | SH-3345** | D. Jeffrey |

The fourth lecture each week will be a tutorial-style review of the course material. These lectures may take the form of a supplementary lesson, problem session, or a discussion, depending on the week. A list of suggested exercises from the textbook will be provided in OWL to supplement the weekly lectures.

**Covid-19 update: In accordance with university policy, the course lectures will be held online (using Zoom) beginning January 10th, 2022. Specific details for your professor's meetings will be sent via OWL announcements and posted on the main OWL site for the course (CALCULUS 1501B 001 FW21.) Lectures will return to an in-person format as soon as it is permitted, but not before January 31st, 2022. Note that the lectures will not be recorded. You are responsible for getting notes from another student if you miss a lecture.

Prerequisites: A minimum mark of 60% in one of Calculus 1000A/B (or 1100A/B), Calculus 1500A/B, Numerical and Mathematical Methods 1412A/B, the former Applied Mathematics 1412A/B.

Antirequisites: Calculus 1301A/B, Applied Mathematics 1413.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Email communication Protocol

If you have questions you can email your instructor. Your email must comply with the following rules:

- You must use your UWO email address.
- You must include "CALC 1501B" in your title.

- You must inlude your full name as it appears on your UWO id in the body of the message.
- You must include your student number in the body of the message.

Not following any these rules may create confusion and may result in unexpected delays.

Feedback on calculus should be sought through office hours, in class, or via the math help centre. Remember to check announcments on our OWL page before contacting your instructor. Instructors will endevour to reply to student queries within five business days, although response times may be longer depending on the volume of emails received. It is your responsibility to ensure you raise your concerns in a timely manner.

3. Instructor Information

Course Staff:

Dr. David Jeffrey Dr. Martin Pinsonnault Dr. James Uren [Section 002] [Section 001] [Coordinator]

Professor Associate Professor Program Coordinator
Dept. of Mathematics Dept. of Mathematics

Office Associate Professor Program Coordinator
Dept. of Mathematics Dept. of Mathematics

Office: MC252 Office: MC 133 Office: MC 125 Phone: x8876 Phone: 86517 Phone: TBA

Email: djeffrey@uwo.ca Email: mpinson@uwo.ca Email: juren2@uwo.ca

Office hours: Each instructor will offer weekly consultation time and the details can be located on the OWL page associated to the course. These office hours will be held online (Zoom/MS Teams) until January 31st, and it is important that you check OWL regularly for updates/changes to the scheduling of these times.

4. Course Description

Students who intend to pursue a degree in Mathematics, Applied Mathematics, Statistics, Actuarial Sciences, Physics or Astronomy should take this course. Techniques of integration; The Mean Value Theorem and its consequences; series, Taylor series with applications; parametric and polar curves with applications; first order linear and separable differential equations with applications.

Important Dates

Classes begin: January 10, 2022. Reading Week: February 19–27, 2022.

Classes end: April 8, 2022. Study Day: April 9, 2022.

Exam Period: April 10-30 2022.

COVID Contingency plan

In the event of a COVID-19 resurgence during the course that necessitates another delay to in-person classes, we will continue to deliver LEC sessions online via Zoom. The times for these synchronous meetings will coincide with those listed in the timetable. The nature of the homework assignments will remain the same. The grading scheme will **not** change. Any remaining term tests will also be conducted online as determined by the course staff.

5. Course Materials

Required Text:

CLP Calculus 1 and 2, by Joel Feldman, Andrew Rechnitzer, and Elyse Yaeger (UBC 2018) – Access for free at https://secure.math.ubc.ca/~CLP/

Optional Additions:

Single Variable Calculus: Early Transcendentals (8^{th} edition), by James Stewart (Cengage/Brooks Cole) – This is another text sometimes used for first year calculus. While it is not required that you have access to this text, some students may benefit from an additional resource. The text is currently in its 9^{th} edition.

Students are responsible for checking the course OWL site (http://owl.uwo.ca) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class.

All course material will be posted to OWL: http://owl.uwo.ca.

If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

Technical Requirements

Students will need:

- a laptop or computer;
- a stable internet connection;
- a working microphone and webcam;
- o to have installed recent versions of Chrome AND Firefox browsers, a pdf reader, and Zoom on their computer;
- o a device for scanning (either a scanner or an app that can be used in conjunction with your device's camera).

Students without reliable access to YouTube must install an mp4 player on their computer so they may view video lessons. An up-to-date browser like Chrome will likely satisfy this requirement.

Gradescope (https://www.gradescope.ca/) will be used as a grading platform for written work in the course. A free account will be created on your behalf, although you will be required to verify the account and change the password during the first weeks of class. Details regarding the set-up of your account and the submission requirements for your written work will be posted on OWL. It is the responsibility of the student to ensure their homework assignments are submitted in the correct format (PDF or PNG.) Submitting work in an improper format may result in your work not being graded, and this cannot form the basis of a regrade request. Additionally, the two term tests may be scanned by the course staff and uploaded to Gradescope for grading and viewing.

iClicker may be used during lectures and tutorials. You will need to sign up for it using the instructions found at http://presswestern.uwo.ca/ and click on **Students and Audience** (if you're on your phone, you may need to click on **Menu** first).

In the event examinations could not be held on campus, they will be conducted using the remote proctoring service **Proctortrack**. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and that the session will be recorded. More information about this remote proctoring service is available at https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf. Information about the technical requirements are available at https://www.proctortrack.com/tech-requirements/

6. Methods of Evaluation

The overall course grade will be calculated as listed below:

| Assessment | Format | Weighting | Date |
|------------|-----------|-----------|--|
| Test 1 | In-person | 30.5% | Tentatively scheduled for February 17 th , 7pm until 9pm |
| Test 2 | In-person | 30.5% | Tentatively scheduled for March 18 th , 7pm until 9pm |
| Final Exam | In-person | 39% | TBA (3 Hours) |

- Test 1 and test 2 will be 120 minutes in duration and will consist of a mixture of short answer and multiple-choice-style questions. These will be closed book tests.
- The final exam will be cumulative, 180 minutes in duration, and will consist of a mixture of short answer and multiple-choice-style questions. *This will be a closed book exam.*

Accommodated Evaluations

Missing an evaluation component will result in a grade of zero unless appropriate permission is sought and granted (see section 7 below).

7. Student Absences

Academic Consideration for Student Absences

Students who experience an extenuating circumstance (illness, injury or other extenuating circumstance) sufficiently significant to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes:

- (i) Submitting a Self-Reported Absence (SRA) form provided that the conditions for submission are met. To be eligible for a Self-Reported Absence:
 - an absence must be no more than 48 hours
 - the assessments must be worth no more than 30% of the student's final grade
 - no more than two SRAs may be submitted during the Fall/Winter term
- (ii) For medical absences, submitting a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner to the Academic Counselling office of their Faculty of Registration.
- (iii) Submitting appropriate documentation for non-medical absences to the Academic Counselling office in their Faculty of Registration.

Note that in all cases, students are required to contact their instructors within 24 hours of the end of the period covered, unless otherwise instructed in the course outline.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. All documentation required for absences that are not covered by the Self-Reported Absence Policy must be submitted to the Academic Counselling office of a student's Home Faculty.

For the policy on Academic Consideration for Student Absences – Undergraduate Students in First Entry Programs, see:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf and for the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf.

Religious Accommodation

When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Counselling office of their Faculty of Registration. Please consult University's list of recognized religious holidays (updated annually) at

https://multiculturalcalendar.com/ecal/index.php?s=c-univwo.

Absences from Final Examinations

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (e.g., more than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

8. Accommodation and Accessibility

Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD), which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic Accommodation_disabilities.pdf,

9. Academic Policies

The website for Registrarial Services is http://www.registrar.uwo.ca.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

The use of calculators and other electronic devices during the term tests or final exam is prohibited.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Computer-marked multiple-choice tests and exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

In the event of a health lock-down tests and examinations in this course will be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide **personal information** (including some biometric data) and the session will be **recorded**. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western's Remote Proctoring website at:

https://remoteproctoring.uwo.ca.

10. Support Services

Please visit the Science & Basic Medical Sciences Academic Counselling webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: https://www.uwo.ca/sci/counselling/.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at (519) 661-2147 if you have any questions regarding accommodations.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: https://www.uwo.ca/se/digital/.

Learning-skills counsellors at the Student Development Centre (http://www.sdc.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mentalhealth) for a complete list of options about how to obtain help.

Additional student-run support services are offered by the USC, http://westernusc.ca/services.