

# Calculus 1301A sec. 270 Calculus II Course outline for Fall 2020



Although this academic year might be different, Western University / King's University College is committed to a thriving campus. We encourage you to check out the Digital Student Experience website to manage your academics and well-being. Additionally, the following link provides available resources to support students on and off campus: https://www.uwo.ca/health/.

1.	<b>Technical</b>	Red	wirem	ents
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Stable internet connection



Laptop or computer



Working microphone

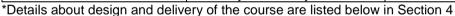


Working webcam

### 2. Course Overview and Important Dates:



Delivery Mode	Dates	Time
Online	Tuesday / Thursday	11:30 AM - 1:30 PM





Classes Start	Reading Week	Classes End	Study day(s)	Exam Period
September 9	November 2 - 8	December 9	December 10	December 11 - 22

November 12, 2020: Last day to drop a first-term half course or a first-term full course without penalty

**Contact Information** 

### **Contact Information**

Instructor



Dr. Zinovi Krougiy	zkrougiy@uwo.ca
Tanahina Ansistant	
Teaching Assistant	
Dr. Natalia Kiriushcheva	nkiriush@uwo.ca

Emails: Any email sent to an instructor MUST say Calc 1301A (section 572) in the subject line. The email must also be sent from your UWO email account. Any email without this, and/or any email sent from a non-UWO email address, could be blocked by a spam filter or otherwise be deleted unread.

# 4. Course Description and Design

Class Times: Tuesday Thursday 11:30 AM - 1:30 PM (online using Zoom)

Office Hours: Thursday 1:30 PM - 2:30 PM (online using Zoom)

#### **Required Textbook:**

- Single Variable Calculus: Early Transcendentals, 8th edition, by J. Stewart, Brooks/Cole editors, with Student's Solutions Manual for the 8th edition. OR
- Enhanced Web and electronic "You Book" Card

### Optional:

- Lecture Notes for Calculus Volume 2 (8th edition), by R. N. Bryan (Custom Course Materials)
- Midterm Tests and Final Exams for Calculus 1301B, by R. N. Bryan (Custom Course Materials)

Course Website: http://owl.uwo.ca

This course continues from Calculus 1000A/B and 1100A/B. We will cover selected topics from Chapters 7-11 of the textbook: techniques of integration (integration by parts, partial fractions, special substitutions, etc.); series, Taylor series, parametric curves, arc length, first order differential equations with applications. See the **Recommended Practice Problems** for more details.

### **Textbook Chapters:**

Selected topics from Chapters 7-11 of the textbook.

Antirequisite(s): CALC 1501A/B, Applied Mathematics 1413.

Prerequisites: A total mark of at least 55% in Calculus 1000A/B or 1500A/B

Mode	Dates	Time	Frequency
Virtual synchronous	Tue / Thu	1 hours	weekly
Virtual asynchronous	N/A	1 hours	weekly

Attendance at synchronous sessions is strongly recommended

All course material will be posted to OWL: http://owl.uwo.ca. Any changes will be indicated on the OWL site and discussed with the class.

# 5. Learning Outcomes

General learning objectives:

- Techniques of integration, integration by parts, trigonometric integrals
- Trigonometric substitution, partial fraction decomposition, improper integrals
- Infinite sequences and series, tests and convergence of series
- Parametric equations and polar coordinates
- Differentials equations, separable and linear differential equations

# Specific learning objectives:

- Applications of integration, areas and arc lengths
- Power series, Taylor and Maclaurin series
- Area and length in polar coordinates
- Applications in differential equations, models of population growth
- First order differential equations with applications.

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### 6. Course Content and Schedule



Week	Dates	Topic by chapters	Comments
1	Sept 9 – 13	7.1, 7.2	Presentation of the course
2	Sept 14 – 20	7.3, 7.4	
3	Sept 21 – 27	7.5, 7.8	Cut-off for material for Midterm 1 on Friday, October 9, 2020, 7:00 - 9:00 PM.
4	Sept 28 – Oct 4	11.1, 11.2, 11.3	
5	Oct 5 – 11	11.4, 11.5, 11.6	Midterm 1, Friday, October 9, 2020, 7:00 - 9:00 PM
6	Oct 12 – 18	11.8, 11.9	
7	Oct 19 – 25	11.10, 8.1	
8	Oct 26 – Nov 1	Catch-up + Review	Midterm 2, Friday, October 30, 2020, 7:00 - 9:00 PM. Covers up to 11.9 included.
9	Nov 2 – 8	Reading Week	No classes
10	Nov 9 – 15	10.1, 10.2	November 12, 2020, last day to drop a first-term half course without penalty.
11	Nov 16 – 22	10.3,10.4	
12	Nov 23 – 29	9.1, 9.2, 9.3	
13	Nov 30 – Dec 6	9.5 + catchup	
14	Dec 7 – 9	Catch-up + Review	Wednesday, December. 9, 2020, Classes end

# 7. Online Participation and Engagement



- Students are expected to participate and engage with content as much as possible
- □ Lectures are delivered asynchronously

#### 8. Evaluation

Below is the tentative evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Format	Weighting
Midterm 1	Online	25%
Midterm 2	Online	25%
Final exam	Online	50%

#### **Notes:**

- The Midterm 1 will be scheduled for Friday, October 9, 2020, 7:00 9:00 PM. Specific details on the exam will be posted online closer to the exam date.
- The Midterm 2 will be written on Friday, October 30, 2020, 7:00 9:00 PM. Specific details on the exam will be posted online closer to the exam date.
- The final examination will be 3 hours and will be cumulative. It will be scheduled by the Registrar's Office and will be held during the examination period.

#### Information about tests and examinations:

$\boxtimes$	The Midterm 1 will be 2.0 hours long, closed book
$\boxtimes$	The Midterm 2 will be 2.0 hours long, closed book
$\boxtimes$	Final examination will be 3.0 hours long, closed book
$\boxtimes$	Calculators will not be allowed in any test or examination
$\boxtimes$	The use of communication devices is strictly prohibited
$\boxtimes$	If permission is granted, a prorated mark will be assigned, or makeup test
	arranged

#### 9. Communication:

A weekly update will be provided on the OWL announcements

#### 10. Office Hours:



☑ Office hours will be held online using Zoom on Thursday, 1:30 - 2:30 PM.

Students are able to arrange Zoom appointment

#### 11. Resources



⊠All resources will be posted in OWL

Required textbook: Single Variable Calculus: Early Transcendentals, 8th Ed., by J. Stewart

\*Details about required textbook are listed above in Section 4

### 12. Professionalism & Privacy:

Western students are expected to follow the <u>Student Code of Conduct</u>. Additionally, the following expectations and professional conduct apply to this course:



- Students are expected to follow online etiquette expectations provided on OWL
- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed
- Students will be expected to take an academic integrity pledge before some assessments
- All recorded sessions will remain within the course site or unlisted if streamed

# 13. What is expected of the student:

Students are responsible for learning the material presented in lectures, for learning how to solve the recommended practice problems, and for demonstrating that learning on exams, quizzes, and/or assignments. For each hour of lecture, an average student should spend about 2 hours studying the material at home. This includes reading the relevant sections of the textbook and, above all, doing the exercises at the end of each section. Do as many of them as necessary to feel comfortable with the material. This course covers a lot of material, and is cumulative, so it will be necessary to work regularly throughout the term to do well.

# 14. SENATE POLICY ON PREREQUISITES:

Prerequisite checking is the **student's responsibility.** Unless you have the prerequisites for this course or written special permission from the Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision cannot be appealed. You will receive no adjustment to your fees if you are dropped from a course for failing to have the prerequisites.

#### STATEMENT ON ACADEMIC OFFENCES:

Scholastic offences are taken seriously, 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/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

### ABSENCE / MISSED WORK:

If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to your Dean's Office as soon as possible and contact your instructor. It is the student's responsibility to make alternative arrangements with his or her instructor once the accommodation has been approved and the instructor has been informed. In the event of a missed final exam, a "Recommendation of Special Examination" form must be obtained from the Dean's Office immediately. For information concerning UWO's Policy on Accommodation for Medical Illness please refer to this policy at:

http://www.uwo.ca/univsec/pdf/academic policies/appeals/accommodation medical.pdf.

# **SUPPORT SERVICES**

Office of the Registrar:

UWO http://www.registrar.uwo.ca

King's http://www.kings.uwo.ca/academics/academic-deans-office/

Student Development Services Learning Skills Services USC

Student Development Services

Academic Calendar

**ITS** 

http://www.sdc.uwo.ca

http://www.sds.uwo.ca/learning

http://westernusc.ca/services

http://www.sdc.uwo.ca

http://www.westerncalendar.uwo.ca

http://uwo.ca/its/helpdesk