THE UNIVERSITY OF WESTERN ONTARIO DEPARTMENT OF MATHEMATICS

Mathematics 1225B Methods of Calculus

January - April 2017

NOTE: Many science/technically oriented courses and programs, at Western and at other universities, require a full-year calculus course (such as Calculus 1000A and 1501B). Mathematics 1225B may not be appropriate and will not serve as a prerequisite for Calculus 1301B or 1501B.

INSTRUCTORS: (Course Coordinator: V. Olds)

001 - C. Okay; 002 - V. Olds; 003 - H. Seyedinejad; 530 (Brescia) - C. Florence; 550(Huron) - J. Rosario-Ortega; 551(Huron) - M. Ataei; 570 & 571 (King's) - D. Meredith; 572 (King's) - T. Moschandreou; 573 (King's) - J. Turnbull (See Class Schedule and Instructor Contact Information on next page.)

TEXTBOOK: (required)

Applied Calculus for the Managerial, Life, and Social Sciences Tenth edition, by S. T. Tan, published by Nelson. Custom package with text and Student Solutions Manual ISBN: 9781337596619 or text ISBN: 9781305657861 and Student Solutions Manual ISBN: 9781305657885 if purchased separately.

OR Math 1225A/B Methods of Calculus (Excerpts from Tan et al) Custom Edition, published by Nelson.

Custom package with text and Student Solutions Manual ISBN: 0176705538 or text ISBN: 0176588906

and Student Solutions Manual ISBN: 0176588914 if purchased separately. (This is the Revised Edition, which has many typos corrected. Used copies of ISBN: 0176637680 (text) and ISBN: 0176649697 (solutions) may be used, but a student using these needs to be sure to consult the errata list on the course web site for the typos.)

PREREQUISITES:

Ontario Secondary School MCV4U or equivalent (High School Calculus), or Mathematics 0110A/B.

ANTIREQUISITES:

Applied Mathematics 1201A/B, 1413, Calculus 1301A/B, 1501A/B. **If Calc 1000A/B or 1500A/B was completed after Sept. 1 2016 it is an antirequisite** (but not if it was completed before that time).

COURSE OUTLINE:

Logarithmic, exponential and trigonometric functions; integration, applications of integration (area, volume); techniques of integration, improper integrals; functions of several variables, Second Partials Test, Lagrange Multipliers; differential equations.

COURSE WEB SITE:

Some supplemental material and extra homework problems for the hardcover text will be posted on the OWL web site. Various other materials, such as practice tests and solutions to some of the homework exercises, are also posted. In addition, there are forums on which students may post questions. Important information will be posted on the NEWS forum and/or on the class page on the web site. All students are expected to be aware of information, and make use of materials, posted on the course web site.

WHAT IS EXPECTED OF THE STUDENT?

Attend all classes, make a serious effort to understand all course material, and do all assigned homework. Be aware of all information posted on the NEWS forum in OWL. The student must assume responsibility for any missed classes. It is up to the student to seek out help when needed.

Please contact the course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x82147 for any specific question regarding an accommodation.

EVALUATION OF STUDENT PERFORMANCE:

Students will be assessed on the basis of "Class Work", 2 Term Tests, and a Final Exam. The means of assessing the Class Work component will be determined by the instructor of each section, and may be for participation, quizzes, assignments, etc. For each class, information about how the Class Work component will be assessed, and details of the timing, will be announced in class and/or posted on the appropriate "class page" on the OWL web site. (Some sections will use Online Quizzes in OWL.)

The 2 Term Tests, each 90 minutes in length, will be held on:

Friday February 10 2017, 7:00 - 8:30 p.m. and **Friday March 17 2017**, 7:00 - 8:30 p.m.

Locations of these tests will be announced in class and/or on the course web site.

The Final Exam will be 3 hours in length, covering all of the course material. This exam will be scheduled by the Registrar's Office during the April Exam Period.

Calculation of Final Grade:

Each Term Test will count for 20%, the Final Exam will count for 40% and the Class Work component will count for 10%. The remaining 10% weight will be assigned to whichever of the 3 tests/exams is the student's best mark.

Notes

- 1. The Tests and Examination will all have some multiple choice questions and some written answer questions.
- 2. NO calculators or other electronic devices or any other aids are allowed on tests and exams.
- 3. See Absence / Missed Work policy on next page.

CLASS SCHEDULE:

Section	Campus In	nstructor	Days & Times	Location
001	Main	C. Okay	MWF 9:30	AHB 1R40
002	Main	V. Olds	MWF 12:30	MC 110
003	Main	H. Seyedinejad	Tu 7:00 - 9:00	UCC 146
			Th 7:00 - 8:00	UCC 146
530	Brescia UC	C. Florence	MTuW 9:30	BR - 203
550	Huron UC	J. Rosario-Ortega	MWF 1:30	HC - V 214
551	Huron UC	M. Ataei	MWF 8:30	HC - V 214
570	King's UC	D. Meredith	Tu 1:30 - 2:30	KC - SA 150
			Th 1:30 - 3:30	KC - W 166
571	King's UC	D. Meredith	Tu 9:30 - 10:30	KC - W 168
			Th 9:30 - 11:30	KC - W 168
572	King's UC	T. Moschandreou	MW 7:00 - 8:30	KC - W 168
573	King's UC	J. Turnbull	M 3:30 - 5:30	KC - SA 151
			W 2:30 - 3:30	KC - LH 100

INSTRUCTOR CONTACT INFORMATION:

- V. Olds (002 & Course Coordinator): volds@uwo.ca, MC 103G, X86520
- C. Okay (001): cokay@uwo.ca, MC 134, X86540
- H. Seyedinejad (003): sseyedin@uwo.ca, MC 129, X86528
- C. Florence (530): cflorenc@uwo.ca, BUC MSJ 301E, 519 432-8353
- J. Rosario-Ortega (550): jrosari3@uwo.ca, HUC OR 154
- M. Ataei (551): mataeija@uwo.ca, HUC OR 154
- D. Meredith (570 & 571): meredith@uwo.ca, KUC DL 120, KUC X4322
- T. Moschandreou (572): tmoschan@uwo.ca, KUC SA 231
- J. Turnbull (573): jturnbu7@uwo.ca, KUC W 233

Note: Any email sent to an instructor (and especially to the course coordinator) **MUST say Math 1225B in the subject line**. Any email without this, and/or any email sent from other than a UWO email address, may be deleted unread.

SENATE POLICY ON PREREQUISITES:

Prerequisite checking is the **student's responsibility**. Unless you have either the prerequisites 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.

STATEMENT ON ACADEMIC OFFENCES:

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/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* **immediately**. 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 further 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

A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services. The form can be found here: https://studentservices.uwo.ca/secure/medical_document.pdf

A makeup will be held for each term test as well as for the final exam. Only students with prior permission from their instructor will be allowed to write the makeup for a test. Only students with a Recommendation for Special Exam from their Dean's Office will be allowed to write a makeup for the Final Exam. Any student who misses a portion of the Class Work component of the grade for any legitimate reason should contact your instructor as soon as possible. Supporting documentation may be required. In the case of missed Class Work, or if a student is unable to write the scheduled makeup for a Term Test due to a documented prolonged or recurring absence or other legitimate conflict, your instructor will decide whether to accommodate by rescheduling or by reweighting that component of the grade.

SUPPORT SERVICES

Office of the Registrar

UWO www.registrar.uwo.ca

Brescia <u>www.brescia.uwo.ca/academics/registrar-services</u>

Huron www.huronuc.on.ca/CurrentStudents/StudentLifeandSupportServices/AcademicResources

King's <u>www.kings.uwo.ca/academics/academic-deans-office/</u>

Student Development Services <u>www.sdc.uwo.ca</u>

Learning Skills Services http://sdc.uwo.ca/learning/

USC http://westernusc.ca/services/

Academic Calendar <u>www.westerncalendar.uwo.ca</u>

ITS <u>www.uwo.ca/its/helpdesk</u>

Students who are in emotional/mental distress should refer to Mental Health @ Western via the link given below for a complete list of the options about how to obtain help: http://www.uwo.ca/uwocom/mentalhealth/