



MATH*1080 Elements of Calculus I - Fall 2015

Department of Mathematics and Statistics

University of Guelph, Guelph Campus

Course Description

MATH*1080 Elements of Calculus I F,W(3-1) [0.50] This course provides an introduction to the calculus of one variable with emphasis on mathematical modelling in the biological sciences. The topics covered include elementary functions, sequences and series, difference equations, differential calculus and integral calculus.

- Prerequisite(s): 1 of 4U Advanced Functions, 4U Adv. Functions and Calculus or equivalent
- Restriction(s): [MATH*1000](#), [MATH*1030](#), [MATH*1200](#)

Required Study Materials

- *Math 1080 Elements of Calculus Course Notes and Laboratory Manual, 8th. Edition.* Author: Joseph Cunsolo, Publisher: Pearson Custom Publishing, © 2015. ***You are required to bring this manual to every lecture and lab session.***
- CourseLink at: <https://courselink.uoguelph.ca/shared/login/login.html>

Lecture Sections

(01) MWF 12:30-13:20 in WMEM
(02) MWF 13:30-14:20 in WMEM
(03) TTh 08:30-09:50 in WMEM

Lab Sections

(01) F 09:30-10:20 in ROZH 104
(02) F 10:30-11:20 in THRN 1200
(03) F 11:30-12:20 in ALEX 200
(04) F 14:30-15:20 in ROZH 104

Lecturer

S. Gismondi (sections 01, 02 & 03)
(Voice: x53104)

Email

uog.math1080f15@gmail.com

Office Hours

TTh 10:00-10:50 (basement WMEM)
TTh 11:10-12:00 (office MACN510)
MW 14:30-15:30 (basement WMEM)

Lab Instructors

Marianne Wilcox (sections 01 & 03)
Ram Sigdel (sections 02 & 04))

Email

wilcoxm@uoguelph.ca
rsigdel@uoguelph.ca

Office Hours

TBA
TBA

Extra Office Hours

Erin Wild

Email

ewild@uoguelph.ca

Office Hours

TBA

Lecture and Lab Procedures

Our class is divided into three lecture sections (01, 02 & 03) and four lab sections (01, 02, 03 & 04) and each student is assigned to exactly one lecture section and one lab section e.g. 01 & 04. It's very important that you attend your *assigned* lecture and lab sections i.e. our classes are large, so there's an issue of sufficient seating capacity. You are required to bring the "Course Notes and Laboratory Manual" (that you purchased) to every lab and lecture session. These notes are partially completed – to help save you time i.e. copying less notes allows you more time to focus your concentration on learning and understanding concepts and examples presented in lab and lecture.

- Lecture material is divided into 15 sections presented over 12 weeks, and each section concludes with an exercise module.
 - *Homework Task I (not for marks)*. Each exercise module is to be completed as independent study, not handed in. Answers are in our course manual.

- Lab material is divided into 12 labs presented over 12 weeks on the Friday of each week (except labs 5 & 9 where we have term tests instead AND lab 12 is done in class). Each lab consists of two sets of word problems, Part A and Part B (except labs 5 and 9 – consisting only of Part B). Part A is always completed together in lab.
 - *Homework Task II (not for marks)*. Part B is to be completed as independent study, not handed in. Answers for Part B are in our course manual.
 - *Homework Task III worth 3% in total. There are 3 online sample/practice quizzes worth 1% each.* You can try each sample quiz as often as you like – for the purpose of “mastery”. It’s intended that you score perfect. Even better yet, we help you i.e. *at the beginning of labs 3, 7 and 11, we’ll take-up these quizzes with a focus on related numeracy / arithmetic / algebra skills – and then you’ll take “real” online quizzes that same day. We want you to score perfect on the “real” quizzes too – and this is part of the plan for how we’ll support you ☺.*
- There are three online lab quizzes taken outside of lab time (worth 4% each). They are usually based upon the material presented in the preceding two labs, scheduled on the Friday of weeks 3, 7 and 11. *Please refer to our lecture and lab schedule on the last page of our outline.*
- There are two written term tests taken in lab time (worth 20% each). They are usually based upon lecture, module and lab material, scheduled in lab on the Friday of weeks 5 and 9. Recall that there is no Part A for both labs 5 & 9 (Part B is independent study) i.e. we write term tests instead. *Please refer to our lecture and lab schedule on the last page of our outline.*

Assessment Procedures

3% Online Practice Quizzes (3) @ 1% each: As indicated earlier, *there are three online practice quizzes* taken any time before the final examination. You can attempt each quiz as often as you like until you score perfect. Each practice quiz accounts for 1% of your final grade. ***These quizzes are intended as a gift for practice, familiarization and mastery AND at the beginning of labs 3, 7 and 11, we’ll take-up these quizzes with a focus on related numeracy / arithmetic / algebra skills – and then you’ll take “real” online quizzes that same day.***

12% Online Quizzes (3) @ 4% each: As indicated earlier, *there are three online quizzes* taken outside of lab time, on the Friday of weeks 3, 7 and 11. Each quiz normally accounts for 4% of your final grade. ***These quizzes are intended as “evaluation” – you can attempt each quiz only once.*** Please be sure to have reviewed and prepared as best you can re: online practice quizzes.

- **Online Lab Quiz 1, completed on Friday, October 2, 2015 between 8:30 – 21:30.**
 - **Online Lab Quiz 2, completed on Friday, October 30, 2015 between 8:30 – 21:30.**
 - **Online Lab Quiz 3, completed on Friday, November 27, 2015 between 8:30 – 21:30.**
- ☒ **THERE ARE NO ALTERNATE QUIZ DATES NOR MAKE-UP QUIZZES. Missed quiz marks are automatically transferred to the final examination.**

40% Written In Lab Term Tests (2) @ 20% each: As indicated earlier, *there are two term tests, 50 minutes each, WRITTEN IN LAB, in each of weeks 5 & 9.* Each term test normally accounts for 20% of your final grade. ***These term tests are intended as “evaluation” – you have exactly one attempt in lab.*** So please be sure to have reviewed and prepared yourself as best you can i.e. see the sample term tests & solutions posted online. All term tests are returned to you. Details about how tests are returned, timeline, grading, regrading etc. are discussed later.

- **WRITTEN in Lab Term Test I, Friday, October 16, 2015**
 - **WRITTEN in Lab Term Test II, Friday, November 13, 2015**
- ☒ **THERE ARE NO ALTERNATE TERM TEST DATES NOR MAKE-UP TERM TESTS. Missed term test marks are automatically transferred to the final examination, and even better (no matter if you perform poorly or miss a term test) ...**

IF your final examination grade is better than your term test grade(s), I will automatically replace your term test grade(s) with your final examination grade. i.e. this applies to BOTH term tests.

But don't get the idea that this is a gift. I simply want you to work harder with a plan for better performance. Sometimes you may not be prepared as well as you'd like, and it's your own decision to skip a term test (and opt for an increased weight automatically placed upon the final examination). It's NOT advised!! Don't 'mortgage your future', and NEVER miss two term tests. Unlike final examinations, 1) term tests provide opportunities for feedback and 2) in the case of poor performance, there's another term test or the final examination, an opportunity to improve. Term tests contribute less to your final grade than does the final examination. Poor performance on a term test has less impact upon your final grade than does poor performance on the final examination, especially a more heavily weighted final examination; *and* they provide 'final examination like' writing conditions, a great way to gain examination writing experience in preparation for the 'biggy', the final examination. Term tests encourage you to prepare and develop skill through-out the semester. That's WHY we do it. Knowledge and capability in mathematics builds in a 'pyramidal' fashion. You need foundation knowledge and practice to move forward. Preparing for the final examination late in the semester is not nearly as 'foundation building' as is a module-like, semester long approach. Besides, if you can't make small amounts of time available for study during the semester, do you honestly believe that you'll make large amounts of time available at the end of the semester?

More About How Term Tests are Returned & Posted Solutions / Marking Scheme

About one week (normally) after a term test, your grade is posted to your account on CourseLink and all term tests are returned to a set of wooden orange cabinets labelled MATH*1080 located outside the learning centre (300A of the McLaughlin Library). Please respect the original order / location of previously filed term test papers.

- If you cannot find your term test, then PLEASE LOOK IN ALL OF THE BOXES. Often people are in a rush and they may not re-file papers as originally filed.
- If you cannot find your term test after searching all boxes, check CourseLink to confirm that a grade was indeed assigned before contacting your TA or instructor.
- Solutions and marking schemes for all term tests are posted to CourseLink.

More About Re-grades / Incorrectly Posted Grades / Missing Grades

- Re-grade requests are usually processed "in person" by the TA that graded your term test. Please meet with him/her and discuss with him/her how you were graded. Your TA is available to meet with you according to the *schedule below* i.e. a function of which lab you wrote your term test in. Please note your TA's name, office location and office hours, and then visit them in person. Be sure to have reviewed the posted online solutions for your term test, and be prepared to respond to questions about how your solution method(s) compare to posted solution methods.
- If the grade posted for your term test is wrong, please see your TA (bring the test).
- If your grade is not posted, then please come and see me directly.

TA That Graded Your Term Test – Version/Name/Email/Office Hours

	Lab 1	Lab 2	Lab 3	Lab 4
Term Test I	Version A Safia Athar sathar@mail.uoguelph.ca • TBA Version B Bryson Boreland bborelan@mail.uoguelph.ca • TBA Version C Brady Dortmans bdortman@mail.uoguelph.ca • TBA	Version A Fei Yu fyu03@mail.uoguelph.ca • TBA Version B Tyler Jackson tjacks05@mail.uoguelph.ca • TBA Version C Kamal Jnawali kjnawali@mail.uoguelph.ca • TBA	Version A Ross Kett rkett@mail.uoguelph.ca • TBA Version B Adrian Lee alee15@mail.uoguelph.ca • TBA Version C Tong Liu tliu06@mail.uoguelph.ca • TBA	Version A Comfort Mintah cmintah@mail.uoguelph.ca • TBA Version B Meghan Timmins timmins@mail.uoguelph.ca • TBA Version C Richard Yam ryam@mail.uoguelph.ca • TBA
Term Test II	Version A Ross Kett rkett@mail.uoguelph.ca • TBA Version B Adrian Lee alee15@mail.uoguelph.ca • TBA Version C Tong Liu tliu06@mail.uoguelph.ca • TBA	Version A Comfort Mintah cmintah@mail.uoguelph.ca • TBA Version B Meghan Timmins timmins@mail.uoguelph.ca • TBA Version C Richard Yam ryam@mail.uoguelph.ca • TBA	Version A Safia Athar sathar@mail.uoguelph.ca • TBA Version B Bryson Boreland bborelan@mail.uoguelph.ca • TBA Version C Brady Dortmans bdortman@mail.uoguelph.ca • TBA	Version A Fei Yu fyu03@mail.uoguelph.ca • TBA Version B Tyler Jackson tjacks05@mail.uoguelph.ca • TBA Version C Kamal Jnawali kjnawali@mail.uoguelph.ca • TBA

45% Final Examination (1) @ 45%: *There is one two-hour final examination composed of 45 multiple choice questions, similar to module questions, worth 45% of your final grade.*

- **Final Examination. Date, Time & Location – December 14, 2015; 14:30 – 16:30; TBA.**
 ☞ **THERE IS NO ALTERNATE FINAL EXAMINATION DATE NOR MAKE-UP FINAL EXAMINATION. Don't miss it!**
 ➔ ***EVEN IN THE CASE OF ILLNESS, if you miss the final examination, a committee (not me) independently decides your fate (final grade) in the course.***

Just as TT I and TT II each tested four weeks of material worth 20% each, the final examination will test the last four weeks of material as if we had a third term test. That is, 20 out of 45 MC questions are guaranteed to come from content presented in the last 4 weeks of the course. The remaining 25 out of 45 MC questions on the final examination come from all course content with no special emphasis.

Accessibility

The services of Student Accessibility Services (SAS) are available to students registered at the University of Guelph who have a permanent disability. This includes full-time or part-time, graduate and undergraduate students. The SAS also has a number of services available to students with temporary disabilities. Students must provide appropriate documentation from a medical or mental health professional to verify their disability. You must identify yourself as early as possible and no later than the 40th class day in the semester in which you are requesting accommodation and/or support. Failure to do so will mean that accommodation cannot be guaranteed for that semester. See <https://www.uoguelph.ca/csd/current-students>

HELP!!! Free HELP from the Mathematics & Statistics Department

The Mathematics and Statistics Department operates a drop-in learning centre. This is YOUR RESOURCE for support with lab and course-work related problems. The TA's ARE FRIENDLY. They KNOW MATH*1080 material, and they are usually AVAILABLE TO HELP YOU 6 hours a day! Our learning centre is located on the third floor of the McLaughlin Library. During the 12-week scheduled class times, scheduled 'open times' are:

Days	Monday	Tuesday	Wednesday	Thursday	Friday
Times	09:30-15:30	10:00 - 16:00	09:30-15:30	10:00- 16:00	09:30-14:30

MORE HELP!!! Free HELP from Your Own Supported Learning Groups (SLG)

The SLG Program has provided course specific support for thousands of students since 1998. They are an enthusiastic group of undergraduate students and professional staff who are dedicated to helping students succeed. SLG sessions are free peer-led study groups. They help you navigate course material and will show you new ways to approach difficult concepts. The sessions are designed for everyone in the class, regardless of your comfort with the material. <http://www.lib.uoguelph.ca/get-assistance/studying/slgs>.

EVEN MORE HELP!!! First: Learning Resources for First-Year Students

First is a collection of resources, services, and technologies designed to help make the transition to university learning smooth and successful. Visit <https://admission.uoguelph.ca/template.aspx?SiteID=bfdc36b8-2456-47fe-8c67-10366a3a3b97>.

Steve's Course Policies & Miscellaneous Comments

No Calculator Rule

Regarding both term tests and the final examination, calculators are NOT ALLOWED. Additional aids are not allowed e.g. notes, books, communication or scrap paper.

“Not Withstanding” Clause a.k.a. What About Unforeseen Fateful Events?

When fate intervenes e.g. snow days, emergencies, work disruptions & other fateful events, and the conduct of the course falls outside of my control in a way that lectures, labs, quizzes / term tests etc. might need to be cancelled/rescheduled, then please refer to CourseLink for further instruction *which may now deviate in any manner whatsoever from published course outlines, past cases and any other commitments previously made by me with or without knowledge of these unforeseen fateful events.*



➔ **IN THE EXTREMELY UNLIKELY EVENT THAT ALL COMMUNICATIONS FAIL (strike/lock-out, pandemic, war, terrorism etc., AND EVEN CourseLink is unavailable):**

- 1. DURING THE FIRST TWO WEEKS, try to keep to our schedule (last page) independently however you can manage i.e. try and stay current so that it'll be easier when we finally resume from where we left off.***
- 2. BEYOND TWO WEEKS, it's a disaster. We'll worry about it later, if ever.***

Miscellaneous Comments

- **PERSONAL TUTORS:** If you would like to find/work with a private tutor, then perhaps work with all of the TA's in the learning centre, and if you find that you get along especially well with a particular TA, why not ask them if they would tutor privately? You might also visit <http://thecannon.ca/> or the connection desk on the 3rd floor of the University Centre.
- **UNIVERSITY RELATED EVENTS THAT WILL BE ACCOMMODATED re: TERM TEST CONFLICTS.** For University related events only, e.g. sporting events, if you need to be away from campus at the same time that a term test is scheduled, then ask your coach to contact me. I'll try (NOT promise) to arrange for you to write the term test under your coach's supervision while you are away.
- **SHARING COURSE MATERIALS: UNIVERSITY OF GUELPH BASED TEACHING ORGANIZATIONS** e.g. SLG's: We completely support our SLGs. Please feel free to share course materials with SLG members and leaders.
- **SHARING COURSE MATERIALS: NON-UNIVERSITY OF GUELPH BASED TEACHING ORGANIZATIONS:** We neither endorse nor support these groups, e.g. Prep 101. They exist separate from, and independent of the University. They may or may not be useful, credible, helpful etc., they are in no way associated with the University, and they may or may not act in your best interests. We do not provide materials, hints, notes, sample tests, examinations, texts, course outlines etc. to these groups, no matter what you may be shown and/or told. Whatever materials these groups develop, promote, claim as relevant to the course etc., these materials are in no way sanctioned by us and/or the University. While these groups can be helpful to you, they are not accountable to the University, unlike University of Guelph instructors that are accountable for their decisions - a benefit and security that you surrender in dealing with these groups. Please do not copy / provide any course materials to these organizations i.e. copyright issues to be negotiated / resolved. Please contact me directly if you are asked to lend / share your materials with these groups.

University Policies, Course Evaluation & Drop Date

About Illness & Sudden Illness: If prior to a term test or the final examination, and even during a term test or final examination, you are/become ill and are unable to complete, YOU MUST 1) seek help for your illness that very instant and 2) later when you become well, obtain documentation as per "Undergraduate Degree Regulations: Illness or Compassionate Reasons". ***You cannot re-write, be excused or change the grade that you receive, if for example AFTER WRITING A TERM TEST OR EXAMINATION, you indicate that you were/became ill. Illness (inc. scheduled surgery) or compassionate reasons can be accommodated in advance/during assessment in accordance with University policy, but RARELY after assessment.***

Academic Consideration: When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures or visit: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Academic Misconduct: The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor. The Academic Misconduct Policy is detailed in the Undergraduate Calendar: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Accessibility: The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact SAS at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website <https://www.uoguelph.ca/csd/current-students>

Course Evaluation Information: Please see <http://www.mathstat.uoguelph.ca/files/TeachevaluationformF10.pdf>

Drop Date: The last date to drop one-semester courses, without academic penalty, is **Friday, November 6, 2015**. For regulations and procedures for Dropping Courses, see the Academic Calendar: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

MATH1080F15 Schedule

Lecture, Lab & Module Schedule. Post this schedule on your fridge! Do it now! Right now!	Quizzes & Term Test Schedule
Thursday September 10 & Friday September 11 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) NONE. NO LAB class this week. 	Online practice quizzes 1, 2 & 3. Due anytime before the final examination.
Week 1: Sept. 14 - 18 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 1. Lab 1: Friday Sept. 18. Complete Part B as independent study. 	
Week 2: Sept. 21 - 25 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 2 & 3. Lab 2: Friday Sept. 25. Complete Part B as independent study. 	
Week 3: Sept. 28 - Oct. 2 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 4. Lab 3: Friday Oct. 2. Complete Part B as independent study. 	<u>Online Quiz 1 due Friday October 2, taken online Friday (4%). Usually covers lecture, module and lab material from weeks 1 & 2. BUT the instructor will advise with certainty. Always attend lecture!</u>
Week 4: Oct. 5 - Oct. 9 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 5 & 6. Lab 4: Friday Oct. 9. Complete Part B as independent study. 	<u>Term Test I (20%) written in Friday's LAB, October 16.</u> Term Test I usually covers lecture, module and lab material from weeks 1 through 4 inclusive. I will advise with certainty via CourseLink.
Week 5: Oct. 12 - 16 <ul style="list-style-type: none"> * HOLIDAY * Monday October 12 & Tuesday October 13. Lectures Wednesday-Friday as regularly scheduled. Complete module(s) 7. Complete Part B of Lab 5 as independent study. 	
Week 6: Oct. 19 - 23 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 8 & 9. Lab 6: Friday Oct. 23. Complete Part B as independent study. 	
Week 7: Oct. 26 - 30 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) NONE. Lab 7: Friday Oct. 30. Complete Part B as independent study. 	<u>Online Quiz 2 due Friday October 30, taken online Friday (4%). Usually covers lecture, module and lab material from weeks 5 & 6. BUT the instructor will advise with certainty. Always attend lecture!</u>
Week 8: Nov. 2 - 6 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 10. Lab 8: Friday Nov. 6. Complete Part B as independent study. 	<u>Term Test II (20%) written in Friday's LAB, November 13.</u> Term Test II usually covers lecture, module and lab material from weeks 5 through 8 inclusive. I will advise with certainty via CourseLink.
Week 9: Nov. 9 - 13 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 11 & 12. Complete Part B of Lab 9 as independent study. 	
Week 10: Nov. 16 - 20 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 13. Lab 10: Friday Nov. 20. Complete Part B as independent study. 	
Week 11: Nov. 23 - 27 <ul style="list-style-type: none"> Lectures as regularly scheduled. Complete module(s) 14. Lab 11: Friday Nov. 27. Complete Part B as independent study. 	<u>Online Quiz 3 due Friday November 27, taken Friday (4%). Usually covers lecture, module and lab material from weeks 9 & 10. BUT the instructor will advise with certainty. Always attend lecture!</u>
Week 12: Nov. 30 - Dec. 4 <ul style="list-style-type: none"> Lectures Monday-Wednesday as regularly scheduled. Complete module(s) 15. NO LAB class this week. Lab 12 Part A is covered in class. Complete Part B as independent study. <u>Thursday December 3 is a Tuesday schedule</u>, to make up for the missed class following the Thanksgiving Holiday i.e. Tuesday October 13. <u>Friday December 4 is a Monday schedule</u>, to make up for the missed class on the Thanksgiving Holiday i.e. Monday October 12. 	<u>Final Examination (45%). December 14, 2015; 14:30 - 16:30. Location TBA.</u> Covers all lecture, module and lab material from all weeks.