

# MAT 1320 A    Calculus I    Fall 2015

**Instructor:** Dr. Steve Desjardins

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**Website:** <http://mysite.science.uottawa.ca/sdesjar2/1320a.html>. (Note: the website is very important to the course – students are expected to be aware of all material and announcements posted there.) Your grades will appear in the Blackboard GradeBook for this course.

**Office Hours:** Mondays 12:00 - 14:00, Tuesdays 11:00 - 13:00 and Wednesdays 11:00 - 13:00. Other times may be arranged by appointment.

**Text:** *Calculus: Early Transcendentals* by James Stewart, 7th Edition.

**Lectures:** Mondays 10:00 - 11:30 and Wednesdays 8:30 - 10:00 in UCU AUD. Prepare for class by reviewing the material of the previous class and reading the text.

**DGDs:** These are discussion groups on Fridays, led by a graduate student TA. **Attendance is mandatory. The first DGD is Friday, September 11th and in the second one on the 18th, we will have a Diagnostic Test.** You will have registered for one of several equivalent DGDs:

- 8:30 - 10:00 in SCS E218
- 10:00 - 11:30 in FSS 1007
- 11:30 - 13:00 in MRT 221
- 13:00 - 14:30 in TBT 323
- 14:30 - 16:00 in CBY D103

In DGDs, you work through suggested exercises as a group, as well as go over solutions to assignments. Prepare for the DGD by attempting all exercises from the previous week. You should then ask the TA to go over the problems you found difficult. There will also be a Diagnostic Test and brief Quizzes given in the DGDs.

*The list of exercises from the textbook, together with the assignment problems, provide excellent practice for the midterm tests and the final exam, which will consist of similar problems.*

**Midterm Tests:** There are two 80 minute midterm tests, written during the lecture period:

**Test 1:** Week 5: Wednesday October 7th. Covers up to the end of week 4.

**Test 2:** Week 10: Wednesday November 18th. Covers weeks 5 to 9 inclusively.

**Final Examination:** The 3-hour final exam will be scheduled during the exam period (December 10th - 22nd). It will cover all of the material of this course.

**Calculation of the final grade:** Assignments 10%, Diagnostic Test and Quizzes 10%, Midterm Tests  $2 \times 15\%$ , Final Exam 50%.

Note: if your final exam mark is below 40%, then your final grade will be **F** regardless of other marks. Also, you must write at least one midterm test and most of the DGD quizzes to pass the course.

### Midterm Test Procedures:

- If a midterm is missed for a valid reason, its percentage weight will be transferred to the final exam provided you notify your professor by e-mail *before* the test is written and submit a proper justification (e.g. certificate from UO Health Services) when you return to class.
- Only Faculty-approved calculators are allowed on tests and during the final exam. These are basic scientific calculators: non-programmable, non-graphing, no differentiation or integration capability. The use of a calculator with any of these banned capabilities is considered academic fraud. *Don't forget to set your calculator to radians!*
- Students may not enter after or leave before 20 minutes have passed from the beginning of a test.
- Students must present their student cards if asked.
- Any attempt at copying is treated as a case of academic fraud, as is the facilitation of copying by others. Students must take reasonable care to prevent others from copying their work.
- Any questions concerning marks or the marking must be submitted to the professor within two weeks after the test.

### Assignment Procedures:

**Electronic Assignments** will be completed using a web-based software called Maple TA.

- Your username is *your student number*.
- To get your password, go to <http://aix1.uottawa.ca/~bdionne/teaching/MapleTA.en.html> and follow the instructions.
- Log on to the Maple TA website at <http://place32.placementtester.com:8080/uottawa/login/login.do> (link on website).
- The first assignment is “How does Maple TA work?”. Please log in and complete this assignment to familiarize yourself with the system.
- Please note that server access will be slower during peak times (such as a few hours before the deadline) – **plan ahead and avoid frustration**.

Please note that one assignment mark will be dropped (lowest or missing grade) in the calculation of your final grade.

**Need Help?** In addition to your weekly DGD, the Lectures, and the Professor's Office Hours, you can get help at the *Mathematics Help Centre*

[http://www.mathstat.uottawa.ca/ugrad/help\\_center\\_en.html](http://www.mathstat.uottawa.ca/ugrad/help_center_en.html).

The Help Centre is located in Marion 021. It is open Monday – Wednesday 10:00 – 19:00, Thursday 10:00 – 17:00 and Friday 10:00 – 15:00.

The staff at the Help Centre and the TAs in the DGDs will be pleased to help you solve the practice problems or other problems from the text, but *not problems for the next assignment*. If you have difficulties with an assigned problem, ask for help with a similar problem from the text instead. If you have difficulties with the material presented in the lectures rather than with particular problems, see your professor during office hours or make an appointment.

### Suggested Exercises:

- §1.1 p19 # 1, 3, 7, 9, 13, 15, 23, 25, 31, 33, 35, 37, 45, 47, 49  
§1.2 p33 # 1, 3, 9, 15  
App D pA32 # 1, 3, 7, 11, 23, 27, 29, 31, 49, 51, 65, 69  
§1.3 p42 # 3, 29, 31, 33, 35, 41, 43, 45, 51, 57  
§1.5 p57 # 1, 3, 17, 19, 21, 23  
§1.6 p69 # 1, 3, 7, 11, 15, 17, 21, 23, 25, 29, 33, 35, 37, 39, 41, 51, 53, 63, 65, 67, 69, 71  
§2.1 p86 # 3, 5  
§2.2 p96 # 5, 7, 11, 23, 29, 31, 33  
§2.3 p106 # 1, 11, 13, 19, 21, 23, 25, 27, 31, 41  
§2.5 p127 # 17, 19, 21, 35, 37, 39, 45  
§2.6 p140 # 3, 7, 9, 15, 17, 19, 23, 25, 29, 31, 33, 41, 43, 45  
§2.7 p150 # 5, 7, 13, 15, 23, 27, 29, 31, 43  
§2.8 p162 # 3, 13, 25, 27, 29, 37, 39, 43, 45  
§3.1 p181 # 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 43, 47, 49, 51, 53, 61  
§3.2 p189 # 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 41, 43, 45, 47, 51, 55, 59  
§3.3 p197 # 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 29, 31, 33, 35, 37, 51, 53  
§3.4 p205 # 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 51, 53, 59, 61, 63, 69, 71, 75, 79  
§3.5 p215 # 5, 7, 9, 11, 13, 15, 17, 19, 25, 27, 29, 31, 37, 43, 49, 51, 53, 55, 57, 59, 71, 75, 77  
§3.6 p223 # 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 31, 33, 37, 39, 41, 43, 45, 47, 49, 51  
§3.9 p248 # 1, 3, 5, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 39, 41  
§3.10 p255 # 1, 3, 5, 7, 9, 23, 25, 31  
§4.1 p281 # 3, 5, 9, 11, 29, 31, 33, 35, 37, 39, 41, 43, 47, 49, 51, 53, 55, 57, 59, 61, 69  
§4.2 p288 # 1, 5, 7, 9, 11, 19  
§4.3 p297 # 1, 5, 7, 9, 11, 13, 15, 17, 19, 21, 25, 27, 33, 35, 37, 39, 41, 43, 45, 49, 67  
§4.4 p307 # 7, 9, 11, 13, 15, 19, 23, 25, 29, 33, 39, 41, 45, 47, 49, 51, 55, 57, 61  
§4.5 p317 # 1, 3, 9, 13, 15, 19, 37, 39, 41, 43, 45, 51  
§4.7 p331 # 7, 9, 13, 15, 19, 33, 35, 37, 43, 49  
§4.8 p342 # 7, 11, 13, 15  
§4.9 p348 # 3, 7, 11, 15, 17, 25, 27, 29, 33, 35, 37, 39, 41, 45, 47, 51, 59, 61, 63, 65  
§5.1 p369 # 3, 5, 13, 15  
§5.2 p382 # 5, 7, 11, 17, 19, 21, 25, 33, 35, 37, 39, 43, 49, 71  
§5.3 p394 # 3, 5, 7, 11, 13, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 41, 43, 57  
§5.4 p403 # 1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 27, 29, 31, 33, 37, 39, 41, 43, 45, 53, 57, 59, 61, 63  
§5.5 p413 # 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 39, 41, 43, 45, 47, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 79  
§7.1 p468 # 1, 3, 5, 7, 9, 11, 13, 15, 17, 23, 27, 33, 37, 39, 41, 51, 53  
§7.2 p476 # 1, 3, 7, 11, 19, 21, 23, 27, 29, 41, 43, 47  
§7.3 p483 # 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 25, 27  
§7.4 p492 # 7, 9, 11, 15, 19, 21, 23, 27, 29, 39, 41, 43, 47  
§7.5 p499 # 1 – 81 (do as many of the odd-numbered questions as you can (but not # 53))  
S 7.7 p516 # 1, 5, 7, 9, 15, 35

**Weekly Schedule:**

**Week 1**

Wed. Sept. 9 §1.1, 1.2, 1.3

**Week 2**

Mon. Sept. 14 §1.5, 1.6, App D

Wed. Sept. 16 §2.1, 2.2, 2.3

**Week 3**

Mon. Sept. 21 §2.5, 2.6

Wed. Sept. 23 §2.7, 2.8

**Week 4**

Mon. Sept. 28 §3.1, 3.2

Wed. Sept. 30 §3.3, 3.4

**Week 5**

Mon. Oct. 5 §3.5, 3.6

Wed. Oct. 7 **Test 1.** Covers §1.1 - 3.4

**Week 6**

Wed. Oct. 14 §3.9, 3.10

**Week 7**

Mon. Oct. 19 §4.9

Wed. Oct. 21 §5.1, 5.2

**Week 8**

Mon. Nov. 2 §5.3, 5.4

Wed. Nov. 4 §5.5

**Week 9**

Mon. Nov. 9 §7.1, 7.2

Wed. Nov. 11 §7.2, 7.3

**Week 10**

Mon. Nov. 16 §7.4, 7.5

Wed. Nov. 18 **Test 2.** Covers §3.5 - 7.3

**Week 11**

Mon. Nov. 23 §7.7

Wed. Nov. 25 §4.1, 4.2

**Week 12**

Mon. Nov. 30 §4.3, 4.4

Wed. Dec. 2 §4.5

**Week 13**

Mon. Dec. 7 §4.7, 4.8

Wed. Dec. 9 Review

**Some Sessional Dates:**

Sept. 9 Classes Begin

Oct. 12 Thanksgiving Day

Oct. 26 - 30 Study Break (no classes)

Nov. 20 Last day for withdrawal

Dec. 9 Classes End (Monday schedule)

Dec. 10 - 22 Examination Period