Math&151, Calculus I – Fall 2018

Instructor: Joseph White (ST-212; (360) 475-7720; email: jwhite2@olympic.edu)
Office Hours: Monday and Wednesday, 1:00 pm – 2:50 pm; Friday, 1:00 pm – 1:30 pm; or by appointment.
Text: *Calculus (Early Transcendentals),* (8th edition) by James Stewart.
Prerequisite: Math&142 or its equivalent with a grade of 2.0 or better, or satisfactory placement test score.

Student Learning Outcomes for Math 151: This course covers limits, the derivative function, techniques of differentiation, applications of differentiation (including related rates and optimization), and the antiderivative. To be successful in this course, you will need to have a strong foundation in algebra – specifically, being able to factor, recognize trigonometric identities, and solve polynomial/trigonometric equations. Students finishing this course should be able to:

- find and evaluate derivatives and antiderivatives graphically, numerically, and analytically;
- apply derivatives and antiderivates to problems from geometry and physics;
- use first and second derivatives to investigate and describe the behavior of a function;
- interpret derivatives to make inferences and generalizations about families of functions, their graphs, and the physical quantities they represent;
- write precisely about the meaning of the derivative and the antiderivative of a function, from the point of view of rates of change, graphical interpretations, and physical applications;
- demonstrate a conceptual understanding of important principles and theorems in calculus including limits, continuity, extreme values, and the Mean Value Theorem.

Assessment:

PRACTICE EXERCISE (HOMEWORK) COMPLETION. This is an integral part to one's success in mathematics. However, homework problems will NOT be collected and graded. If you do not keep up with the daily homework on a regular basis, you should not expect to do well in the course.

PROJECTS. There will be two project assignments. Guidelines for these assignments will be given at a later date.

QUIZZES. The quizzes will closely resemble those problems from the suggested homework.

EXAMS. There will be two in-class exams, one all take-home exam, and a comprehensive final exam.

The quizzes and exams will be returned within ONE WEEK after being taken, and the first project will be returned within TWO WEEKS after the due date.

Your course grade will be the weighted average of the above assignments as follows:

    30% Exams 1 & 2 (15% each)
    15% Quizzes (lowest quiz score dropped)
    10% Take-home Exam
    25% Final Exam
    20% Project(s)

Course grades will be assigned *numerical grades*; the scale for numerical grades will be:

    95% or above = 4.0   85% = 3.0   75% = 2.0   65% = 1.0   62% = 0.7   Below 62% = 0.0

[Each one percent = 0.1 grade point.]

Students who quit coming to class and do not officially withdraw through the registration office will receive an "F" for the course. I do not assign "WP" or "WF" grades. The last day to drop and receive a "W" is Monday, November 5th.

Math 151 Practice Problem Assignments (Stewart, 8th Ed.)
["eoo" means every other odd numbered exercise]

Section	Page	Problem Numbers
2.1	82	1, 3, 5, 7
2.2	92	7 – 51 odd
2.3	102	1 – 35 odd
2.4	113	1, 3, 5, 7, 9
2.5	124	3 – 39 odd, 45, 51 – 59 odd
2.6	137	3 – 41 odd, 45 – 51 odd, 61, 63, 65
2.7	148	3 – 27 odd, 31 – 39 odd, 43, 47
2.8	160	1 – 15 odd, 21 – 29 odd, 41 – 51 odd
End of material for Exam 1		
3.1	172	3 – 39 odd, 47, 49, 55, 57, 65, 67, 75
3.2	188	3 – 39 odd, 43, 45, 49
3.3	196	1 – 35 odd, 51, 55
3.4	204	1 – 57, eoo, 59, 61, 79, 81, 85
3.5	215	1 – 31 odd, 49 – 61 odd
3.6	223	3 – 33 odd, 39 – 51 odd
3.7	233	1 – 19 odd, 23, 25, 29
3.8	242	1, 3, 5, 9 – 17 odd
3.9	249	1 – 25 odd, 31 – 37 odd, 41
3.10	256	1 – 17 odd, 23, 25, 27
End of material for Exam 2		
4.1	283	3 – 9 odd, 29 – 43 odd, 47 – 61 odd
4.2	291	1 – 25 odd
4.3	300	1 – 31 odd, 35 – 53 odd
4.4	311	1 – 49 eoo
4.5	321	1 – 33 eoo
4.6	329	1 – 13 odd
4.7	337	3 – 25 odd, 37, 45
4.9	355	1 – 45 eoo, 59, 61, 63, 71, 77
End of material for Exam 3 (take-home)		

Math 151 Proposed Schedule – Fall 2018

Week 1: 9/17 – 9/21	Sections 2.1-2.3
Week 2: 9/24 – 9/28 Also: QUIZ 1, Tuesday	Sections 2.4-2.6, begin 2.7
Week 3: 10/1 – 10/5 Also: EXAM 1, Friday	Sections 2.7, 2.8
Week 4*: 10/8 – 10/12	Sections 3.1-3.3
Week 5: 10/15 – 10/19 Also: QUIZ 2, Tuesday	Sections 3.4-3.6
Week 6: 10/22 – 10/26 Also: QUIZ 3, Tuesday	Sections 3.7-3.9
Week 7: 10/29 – 11/2	Sections 3.10, 3.11
Week 8: 11/5 – 11/9 Also: EXAM 2, Tuesday	Sections 4.1, 4.2
Week 9*: 11/12 – 11/16 Also: QUIZ 4, Wednesday	Sections 4.3, 4.7, 4.4
Week 10*: 11/19 – 11/23 Also: QUIZ 5, Tuesday	Sections 4.5, 4.6
Week 11: 11/26 – 11-30 Also: TAKE-HOME EXAM given Monday, due Friday	Section 4.9, Review
Week 12: 12/3 – 12/6	Final Exam on Thursday, 12/6, 10:00 am – 12:00 pm

*Classes will **NOT MEET** on 10/8 (Annual Community Luncheon), 11/12 (Veteran's Day), 11/21 (Non-Student Day), or 11/22 – 11/23 (Thanksgiving)

Note: This is a proposed schedule only. I will make every attempt to stay as close to this schedule as possible, but changes may occur. Each student is responsible for all material presented and announcements made in class.

Disability Accommodation: If you need accommodations because of disability, contact the Office of Access Services (HSS 205, (360) 475-7540). Then touch base with me briefly. (The office will also have sent me notification.)

Mathematics Study Center: The Math/Science Study Center (ST 124 and ST 126) is open to all students at no charge. To help you be successful, we encourage you to use the study center as a place to study, get spot help as you need it, and possibly form study groups with other students.

Policies

a. **IF YOU MUST MISS A _TEST_, YOU WILL NEED TO MAKE PRIOR ARRANGEMENTS, OR CALL (360) 475-7720 TO LEAVE A MESSAGE IN CASE OF UNEXPECTED ILLNESS OR EMERGENCY.** If you do not call, or if the earliest reasonable opportunity to make-up the test has passed, you will not be allowed to make it up. (Note: If you leave a message, then call back during my next listed office hour. After that, you will be too late to make arrangements for a make-up. In all cases, the next class meeting is too late. If you have "car troubles," you will be expected to make up the test later THE SAME DAY.)

b. Classroom conduct is governed by the Olympic College **STUDENT CONDUCT CODE** (by contract upon enrollment). Its substance is mostly common courtesy and common sense. **Note**: Many students express that others whispering interferes with their concentration for math. It can be a distraction for the instructor, as well. For these reasons, sensitivity to this matter is required and enforced in the class. (Understand that discussing the class material does not constitute an exception!)

c. You are expected to **CONTRIBUTE TO A FOCUSED ACADEMIC ATMOSPHERE**.
- Class time is not for "socializing" at any time.
- Cell phone use for the purposes of texting, email, or other social media is not permitted (this applies for all electronic devices).
- Consultation with the instructor is not appropriate at the start of class.
- If you have asked a question or two – stop and give others a chance! (You will sometimes need to save other comments and questions until after some study time.)
- If entering class late or leaving early, do so quietly.
- _Any_ distractive behavior (or noise, etc.) becomes inappropriate in the classroom.

d. **CONCERNING ATTENDANCE**. I advise attending all class sessions, in the strongest terms; however, you do not need to notify me if you miss class occasionally, other than tests. **When you miss class, you are responsible to study the material, use other resources such as the Study Center, and keep up**. By far the most common reasons for some students having trouble in math are poor attendance or falling behind.

e. Students are RESPONSIBLE for material covered in class whether or not it is in the text.

f. Students are RESPONSIBLE for material covered in the text whether or not it is discussed in class.

g. Graded assignments, such as the projects or take-home portions of exams, are due at the **beginning of class** or at the designated time. Any late work will be penalized 20% per day. No work will be accepted after graded assignments are handed back.

Classroom format and class time usage:

- We will begin most days with **QUESTIONS AND ANSWERS**. You need to **COME TO CLASS PREPARED WITH SPECIFIC QUESTIONS ON PRACTICE PROBLEMS**. The questions will be taken at one time and discussed typically over 10 or 15 minutes.

- Most days, we will continue then with **"TRADITIONAL CLASSROOM FORMAT,"** mostly lecture and presentation by the instructor, on the new material scheduled to be covered that day. During this time, **QUESTIONS DIRECTLY RELATED TO THE MATERIAL AT HAND ARE WELCOME**, but _only_ those directly related. Everyone must be careful to keep the format _focused and structured_ to make good use of class time. (I may occasionally -- or will, as necessary -- ask you to save other comments and questions until after some study time!).