

OREGON INSTITUTE OF TECHNOLOGY
MATHEMATICS PROGRAM

STUDENT'S SYLLABUS - Spring 2018

COURSE TITLE: INTEGRAL CALCULUS

COURSE NUMBER: MATH 252

TEXTBOOK: *Calculus (Early Transcendentals)*
by Briggs, Cochran, Gillett (2nd Ed.)

Instructor: Dr. Randall Paul **CRN/Section:** 30157/02

Office #: Owens 126 x1467 **Office Hours:** MTW 11:00-12:00 or by appointment
e-mail: randall.paul@oit.edu **webpage:** <http://math.oit.edu/~paulr/>

Grading:

Homework:	10%	
Test 1:	20%	Fri, Apr 20
Test 2:	20%	Fri, May 18
Test 3:	20%	Fri, Jun 1
Final:	30%	2:00-4:00 Wed, Mar 21

Any student with a disability who anticipates a need for accommodation in this course is encouraged to talk with the instructor about their needs as soon as possible.

Exams:

All exam dates are tentative except that of the final.

If presented with a compelling reason **in a timely fashion** I will grant one—**and only one**—make-up exam. If you miss two exams for whatever reason (except participating in official OIT events—such as student athletics) you are out of luck. This includes, by the way, if you miss your make-up exam. (Don't laugh—it's happened more than once!)

In a timely fashion means that if you know you will miss an exam you must tell me at least a week before the exam so that we can arrange the make-up. If you are the victim of a sudden emergency (sickness, death in the family) you must get a message to me (e-mail or phone) **before or during the day of the exam!** You should come see me personally (physically—not e-mail or by phone) as soon as possible so that we can arrange the make-up.

Note that these policies don't apply to the final. The only excuse for missing the final is a sudden personal emergency. If I judge the emergency sufficiently dire I will grant you an incomplete. Do not ask to take the final at a different time—the answer is no.

Everyone has a bad day now and then, and sometimes that day happens to be an exam day. For this reason I may—**at my discretion**—replace one of your test grades with your grade on the final. My discretion is strongly affected by how much homework you've done and whether you've asked questions and/or come to office hours. Be warned, though, that most students—for whatever reason—do not help themselves on the final. It's best to already have the grade you want going into the final.

Homework:

Succeeding in this class is all a matter of **practice**, finding your mistakes, and **fixing them!** Doing your homework, therefore, should be your highest priority.

Homework will be due approximately two days after it is assigned. Each homework is worth 5 points. I grade two problems for correctness (1 point each) and give the remaining 3 points for making a good effort. You lose 1 point for handing in your homework a day or two late; you lose 2 points if it is more late than this. I accept late homework up until you sit down for the final. (I have had students who turn in many homeworks at the time of the final. They are accepted, but the student usually fails anyway. I do have a lenient late homework policy, but sometimes it results in giving the student enough rope to hang themselves with.)

I strongly encourage students in this class to make friends and work on homework problems together. This is not cheating unless you just mindlessly copy someone else's work. The important thing is to understand how a problem is done.

I am always available (and happy) to talk about homework in my office hours or by appointment. Try to do a problem yourself first. Then ask your friends and compare answers. If you're still confused come talk to me or try using the tutors at CFLAT. The critical thing is to find what you're doing wrong and fix it.

A quick warning about tutors (and friends and me). It's great to get help from lots of sources, but in the end **you** have to perform **by yourself** on the exams. Do not decide you've "got it" until you've done several problems by yourself with no help from anyone else!

Course Description:

Here is a list of the topics and sections of the notes that we will cover in the order we will cover them. The horizontal lines show (more or less) where each test will be.

sec	topic
5.1	Approximating Area
5.2	Definite Integrals
5.3	Fundamental Theorem of Calculus
5.4	Working with Integrals
5.5	Substitution Method
6.2	Area between two curves
6.3	Volume by Slicing
6.4	Volume by Shells
6.7	Physical Applications
7.2	Integration By Parts
7.3	Trigonometric Integrals
7.4	Trig Substitutions
7.5	Partial Fractions
7.7	Numerical Integration
7.8	Improper Integrals
6.5	Arc Length
6.6	Surface Area