Math 1555: Calculus for Life Sciences Spring 2018
Syllabus

Course meeting times:

- **Lecture:** MWF, 08:00am-08:50am, College of Computing 17.

- **Recitation A1:** TR, 08:00am - 08:50am, Skiles 249.

Required Text: Calculus for Biology and Medicine 3rd edition, by Claudia Neuhauser.

Instructor: Kisun Lee, Skiles 138A, klee669@gatech.edu
TA for A1: Jonas Braun, Skiles 230, jbraun8@gatech.edu

Office hours:

- Kisun: MT 11am-12pm, and by appointment

- Jonas: F 11:15am-12:15pm

Course objectives: The course will provide a quick overview of integral calculus, multivariable calculus and differential equations. The focus will be on applications in Biology. The theoretical framework will be held to a minimum.

Grading system

Midterms: There will be three 50-minute tests during the term. The tests will be administered on the following Thursdays: **February 8th, March 1st, April 5th**.
  No books, notes, cell phones, calculators, or other electronic devices are allowed during the tests.

Quizzes: There will be weekly quizzes on Thursdays that will only cover concepts from the previous week. The problems will be similar to the ones assigned as homework exercises.

Each quiz will be administered in the last 15 minutes of class. The lowest quiz grade will be dropped.

Homework: There will be weekly homework which will not be graded. It can be considered as suggested problems, so really encourage to solve this to prepare quizzes and tests.

Final exam: The final exam will cover all course materials and will be administered on **May 3rd, Thursday, 08:00am to 10:50am.** All students must take the final examination. The place for the final exam will be communicated later.

Grading scale:

Your final average will be computed as the highest of the following two options:

Option	Count all tests	Halve Lowest Test
Participation	2%	2%
Quizzes	20%	20%
Midterms (16% each)	48%	40%
Final Exam	30%	38%

Letter grades will be determined based on the following intervals.

A: 90% and higher, **B:** [80%,90%), **C:** [70%,80%), , **D:** [60%,70%), , **F:** [0%,60%)

Midterm grades: A satisfactory grade will be assigned to all students with a midterm average of 70% or higher.

Class policies

Academic Dishonesty: All students are expected to comply with the Georgia Tech Academic Honor Code . Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Dean of Students. Cheating includes, but is not limited to:

- Using an unapproved calculator, books, or any form of notes on tests.

- Copying directly from any source, including friends, classmates, tutors, internet sources (including Wolfram Alpha), or a solutions manual.

- Allowing another person to copy your work.

- Taking a test or quiz in someone else's name, or having someone else take a test or quiz in your name.

- Asking for a regrade of a paper that has been altered from its original form.

Make-up quizzes and exams: Make-up quizzes and exams are not allowed for any reason other than for reasons associated to institute activities including sports, which must be accompanied by an official institute letter of consideration, and for such instances students must request a make-up test to be administered at a time convenient to both myself and the student before all other students receive their graded tests back.

Students with Disabilities and/or in need of Special Accommodations: Georgia Tech complies with the regulations of the Americans with Disabilities Act of 1990 and offers accommodations to students with disabilities. If you are in need of classroom or testing accommodations, please make an appointment with the ADAPTS office to discuss the appropriate procedures. Please also make an appointment with me to discuss your accommodation, if necessary.

Material to be covered: 1555.

Important Dates throughout the term:

    Jan 8 -- First Day of Classes
    Jan 15 -- MLK day (NO CLASS)
    Feb 8 -- Midterm #1
    Mar 1 -- Midterm #2
    Mar 14 -- Last day to withdraw with a grade of "W"
    Mar 19 - 23 -- Spring Break (NO CLASS)
    Apr 5 -- Midterm #3
    Apr 23 -- Last Day of Class
    May 3 -- Final Exam at 8:00 am - 10:50 am

    For further information on campus-wide dates see http://registrar.gatech.edu/calendar

Tentative Course Schedule

Please use this as an approximate class schedule; section coverage may change depending on class performance.

Week and Dates	Section Coverage	Topics
Week 1 Jan 8 – Jan 12	Sections 2.1, 2.2	Discrete models, sequences and difference equations
Week 2 Jan 15 – Jan 19	MLK day on Monday Sections 5.5, 5.8	L'Hôpital's rule, antiderivatives Quiz 1 on Thursday
Week 3 Jan 22 – Jan 26	Section 6.1 – 6.3	Integration and the fundamental theorem of calculus Quiz 2 on Thursday
Week 4 Jan 29 – Feb 2	Section 6.1 – 6.3	Integration and the fundamental theorem of calculus Quiz 3 on Thursday
Week 5 Feb 5 – Feb 9	Sections 7.1 – 7.4	Techniques of integration Midterm 1 on Thursday
Week 6 Feb 12 – Feb 16	Sections 7.1 – 7.4	Techniques of integration Quiz 4 on Thursday
Week 7 Feb 19 – Feb 23	Sections 7.6	Taylor approximations Quiz 5 on Thursday
Week 8 Feb 26 – Mar 2	Section 8.1, 8.2	Differential equations Midterm 2 on Thursday
Week 9 Mar 5 – Mar 9	Section 8.1, 8.2	Differential equations Quiz 6 on Thursday
Week 10 Mar 12 – Mar 16	Sections 10.1 – 10.4	Multivariable calculus Quiz 7 on Thursday
Week 11 Mar 19 – Mar 23	Spring Break	
Week 12 Mar 26 – Mar 30	Sections 10.1 – 10.4	Multivariable calculus Quiz 8 on Thursday
Week 13 Apr 2 – Apr 6	Section 11.1 – 11.3	Systems of differential equations Midterm 3 on Thursday
Week 14 Apr 9 – Apr 13	Section 11.1 – 11.3	Systems of differential equations Quiz 9 on Thursday
Week 15 Apr 16 – Apr 20	Section 11.1 – 11.3	Systems of differential equations Quiz 10 on Thursday
Week 16 Apr 23 – Apr 27	Section 11.1 – 11.3 Review for Final Exam	Systems of differential equations ***Final Exam on Thursday, May 3rd, 8:00-10:50 am.***