Calculus I

Loyola University Chicago – Math 161.001 – Spring 2012 Course Syllabus & Ground Rules

Course Details

Class Meetings: Dumbach Hall, Room 230; MoWeFr 8:30–10:10 a.m. Office Hours: Loyola Hall, Room 302; to be announced on course webpage

FINAL EXAM:

- what: cumulative, closed-book, closed-notes, approved calculators allowed.
- when: Monday, May 7, 9:00 a.m.-11:00 a.m.

Course Text: M.D. Weir and J. Hass, *Thomas' calculus: early transcendentals*, 12th ed. (2010), ISBN# 978-0-321-62883-1, Pearson/Addison-Wesley Press. MyMathLab bundle.

Instructor Coordinates

Aaron Lauve	
Loyola Hall, Room 302	lauve@math.luc.edu
773.508.3727	www.math.luc.edu/~lauve

Contact

Communication by email is preferred. Include 161 in the subject line. Expect a reply within 48 hours.

Course Web Page

This document and other information and materials relevant to the course are posted on the course webpage (www.math.luc.edu/~lauve/161.html). The BlackBoard system will not be used.

Important Dates

If you are unable to make any of the (tentative) exam dates, please let me know as soon as possible.

Last day to drop with no penalty	January 23	Easter Break	4/5-4/9
Exam $\#1$	February 29	Exam $#2$	April 11
Spring Break	3/5 - 3/9	Last day of class	April 27
Last day to drop with a "W"	March 26	Final Exam	May 7

Requests to reschedule your final exam will be heard only for extenuating circumstances (e.g., four courses on one exam day) and must be made through your Dean's office.

Course Catalog & Syllabus

COURSE CATALOG. Math 161 (4 units): A traditional introduction to differential and integral calculus. Functions, limits, continuity, differentiation, intermediate and mean-value theorems, curve sketching, optimization problems, related rates, definite and indefinite integrals, fundamental theorem of calculus, logarithmic and exponential functions. Applications to physics and other disciplines. Prerequisites: Math 118 (with grade of C- or better) or Math Placement Test.

Syllabus. We cover most of Chapters 1-5 in the text.

Technology

A *TI-84 Plus* or equivalent graphing calculator is **required** for this course. I am also likely to use *Mathematica* during class. I will be happy to help you learn more about any tool that I use in class. The "ebook" that comes with MyMathLab contains video solutions to several exercises in each chapter.

Course Components (Percentage)

HOMEWORK (5% + 5%). Students will work and submit homework exercises using the online system MyMathLab (portal.mypearson.com/mypearson-login.jsp?). Use the course ID lauve27565 when setting up your account and registering for this course. See the above link for instructions. To offset inevitable problems with the online homework system, a score of 90% across all homework assignments will be counted as 100% towards your final grade, 80% will be counted as 90%, etc.

In addition to the graded online homework, students will be graded on their participation in the weekly homework sessions: every Wednesday, students will be asked to solve chosen problems at the board.

GROUP WORK (15%). Roughly every two weeks, students will be asked to work in groups on more challenging problems. This work will begin during class, with a formal group solution submitted the following class period. These problems will be graded using the three criteria below (weights indicated).

- Accuracy (80%). I hope this is self evident.
- *Neatness (10%).* This is to show your grader some kindness (and respect). Write as legibly as you can; write in multi-column format very rarely, if ever; write only on one side of each page; staple your work together; submit tidy paper (i.e., no crinkles or spiral-bound jaggedness).
- *Clarity (10%).* This is to practice communicating mathematics. Use complete sentences (often) and proper mathematical grammar (always). It takes time to learn how much to say (students say too much as often as not enough). Use the textbook as a guide (e.g., Example 6 on page 45).

QUIZZES (15%). There will be a short quiz roughly every two weeks on the most recent material. The dates will be announced in advance and posted on the course web page.

EXAMS $(3 \times 20\%)$. There will be two midterm exams and a final. The final exam will be cumulative.

Course Grade

Your final grade will be determined from the course components and indicated percentages above. Letter-grade cutoffs (in %) are as follows:

A(91) A-(90) B+(88) B(81) B-(80) C+(78) C(71) C-(70) D+(68) D(60)

Getting Help

It may take awhile to adjust to the different style and pace of this course. My first piece of advice is to use your book well: learn the definitions and read the examples' solutions; think in terms of ideas (not formulas) when solving exercises; ask yourself from time to time, "how does this topic contribute to the overarching themes of the course?"

Please, **SEEK HELP** if you are falling behind. Form study groups, come to my office hours, find online resources, give me feedback, ..., visit the **tutoring center**:

The Center for Tutoring & Academic Excellence (Sullivan Room 245) offers free collaborative learning opportunities that include small group tutoring and tutor-led study halls to Loyola students. The groups meet once a week through the end of the semester and are led by a peer tutor who has successfully completed study in the course material. To learn more or request tutoring services, visit the Center for Tutoring & Academic Excellence online at www.luc.edu/tutoring.

Study Hall for 161: Tu. 5:30 p.m.–7:25 p.m. We. 10:25 a.m.–1:25 p.m. Th. 10:25 a.m.–12:45 p.m.

Escape Routes

At any time, even after the last date for W-dropping the course, students who are experiencing medical or personal difficulties should not hesitate to consult their advisors or the Student Development Office or their dean. Don't allow yourself to be overwhelmed by such problems; Loyola has resource persons who may be able to help you.

Academic Integrity

The Academic Standards and Regulations web page

www.luc.edu/academics/catalog/undergrad/reg.shtml

outlines the definition and ramifications of cheating at Loyola University (the "Academic Integrity" link) as well as the recourses available to you should you be accused of cheating (the "Academic Grievance Procedure" link). By attending this course, you agree to uphold the high standards of Loyola. If you are found cheating on an exam, you will receive an F for the course and your academic dean will record the incident in your permanent file.

GROUP WORK. If the group problems begun in class are not finished in class, it is your responsibility to meet as a group outside of class to finish the solution and discuss how best to write it up. Assigning one group member to finish the solution and merely write your names on the finished product is *CHEATING!!* If I suspect this has occurred, individual group members will be called into the office to explain their solution or to solve similar problems; unsatisfactory performance by any member will result **minimally** in a grade of **0** on the assignment for **every** member of the group.

Disability Services

The Americans with Disabilities Act (ADA) is a federal statute that provides comprehensive civil rights protection for persons with disabilities. It requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please contact the SSWD office (www.luc.edu/sswd/) in the Sullivan Center: suite 117, phone 773.508.3700, fax 773.508.3810.

Course Etiquette

Sleeping in class happens and is always forgiven. Reading newspapers or surfing the web is impolite and is a distraction to your instructor; please find a better use for your time. Please set your cell phones to "silent" upon entering class; these are a distraction to everyone. Likewise, talking with your neighbor while I am lecturing is **unacceptable**.

Finally, and most importantly, respect for others is *stressed* above all else; please allow me the **first chance** to answer your fellow students' questions. I expect everybody to participate in class discussions, but that begins by fostering an environment where we do not hesitate to ask our questions.

Odds and Ends

MAKE-UP QUIZZES/EXAMS. If a real emergency or University-sponsored event arises which prevents you from appearing at a scheduled examination time, you must notify me prior to the next regularly scheduled class (and before the examination if possible). Make-up examinations will be administered only at my discretion. If a student fails to appear for a make-up at the mutually arranged time, no further opportunities will be extended. **Failure** to contact me as stated above or inability to sufficiently document the extenuating circumstances of your absence will result in a grade of zero on the examination.

COPYRIGHT INFORMATION. All printed handouts and web-materials for this course are protected by US Copyright Laws. No multiple copies can be made without written permission by the instructor.

LOYOLA EMAIL. On the occasion that I need to contact students outside of class, this is the only sensible way to proceed. If you would rather not use your **@luc.edu** email account, ... tough! If you are unable to receive my email messages, please let me know.

USE OF THE INTERNET. Insofar as *course delivery* is concerned, students are expected to have access to the internet (specifically, the course webpage) and to be able to view .pdf files, such as solutions to past exams/quizzes.