Math 103 Section 002: Introduction to Calculus
SAIL (Structured Active In-class Learning)
TTh 10:30–11:50, DRL 3N1H
Fall 2015

Professor	Teaching Assistant
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Office Hours: T 4:00–5:00 or by appointment	Office Hours: TBA

Recitations:

211: M 8–9 DRL 4E19	212: M 9–10 DRL 4E19

Course Description: Math 103. Introduction to Calculus. "Introduction to concepts and methods of calculus for students with little or no previous calculus experience. Polynomial and elementary transcendental functions and their applications, derivatives, extremum problems, curve-sketching, approximations; integrals and the fundamental theorem of calculus."

Our section will be using the SAIL format (Structured, Active, In-class Learning). SAIL courses "emphasize the active engagement of students in class through structured work, guided by the instructor. SAIL classes begin with the related premises that students benefit from learning by doing and that class time should be used to help students learn to work with material. To that end, class time is built around highly structured activities, in which students work to solve problems, interpret data or evidence, or otherwise engage in real practices in the discipline. Often this work is done in groups, with instructors circulating and guiding the process. To support this process, instructors may provide out-of-class materials or assignments that prepare students for the in-class learning."

Textbook: *Thomas' Calculus Early Transcendentals Custom Edition for the University of Pennsylvania* Pearson 2014. Package ISBN : 978-1-269-95070-1. **DO NOT USE ANY OTHER EDITIONS.**

Websites:

- **Canvas.** `https://upenn.instructure.com/`
  Weekly homework and class prep work will be posted on Canvas, as will course grades. Make sure you're on the page for our section (MATH103-002 2015C).
- **MyMathLab.** `http://www.pearsonmylabandmastering.com/northamerica/mymathlab/`
  Weekly practice assignments will be posted here. To setup and link to our section, visit `http://www.pearsonmylabandmastering.com/northamerica/mymathlab/students/get-registered/`. You will need a valid email address, a student access code (which should come packaged with your textbook) and the Course ID `gressman28392` for our section.

Weekly Assignments:

- **Readings.** Textbook readings are by far the most important resource for learning the material. A suggested timeline for the readings is included at the end of the syllabus. In particular, students will be expected to have read relevant sections of the textbook *before* the class period or recitation in which they are discussed and practiced.
- **Video Lessons.** In this section, there will be relatively little lecturing in the traditional sense. Instead, readings are supplemented by a series of short videos which demonstrate skills and ideas found in the textbook. Videos will be clearly labeled to correspond with textbook sections. Like the reading, it is

your responsibility to watch videos before the relevant class period or recitation. Keeping current with readings and videos is absolutely to performing well in this class. Beyond preparing you to use class time efficiently, problems and examples from readings and videos will frequently appear verbatim in quizzes, exams, and other course work.

- **Class Preparation Work.** A small number of practice problems will be assigned for you to complete before class periods and recitations. These will be collected and graded on completeness and quality. In addition, you will be allowed to use your answers to these questions as a resource during quizzes in class and recitation.
- **MyMathLab Practice Work.** Most weeks there will be a MyMathLab assignment of roughly 10–14 questions. These questions are designed to be of moderate difficulty and to provide an opportunity to practice recently-encountered skills. Students should expect these assignments to require roughly 30 minutes of attentive effort.
- **Homework.** Homework assignments will be posted on Canvas roughly one week before they are due. Most weekly homework assignments will be due at the beginning of class on Tuesday. Homework assignments will generally be more challenging than MyMathLab practice and will be designed for you to demonstrate mastery of the week's material. Homework will be graded by giving points for overall completeness and legibility of the submission and for correctness of a randomly-selected subset of problems. You are encouraged to work together on the homework and come to office hours, etc. However, homework assignments must be written up independently in your own words.
- **Participation.** Your presence in class and recitation is crucial for the SAIL curriculum to work. For full participation credit, you must be present for all class activities (unless you have excusable reasons for your absence) and must be willing to participate when called upon to do so.

Due Dates and Late Work Policies.

- **Class Prep Work.** Typically due at the beginning of your recitation on Monday with another assignment typically due at the beginning of class on Thursday. Late work will not be graded; students not present to submit their own work will receive no credit. You may not submit work on behalf of other students.
- **MyMathLab Practice.** Typically due before midnight on Friday. All answers submitted after the assignment is due will be subject to a penalty of 10% per day.
- **Homework.** Typically due at the beginning of class on Tuesday. Late work will not be graded.
- **Quizzes.** Quizzes may occur at any time in recitation or in class. Students not present for a quiz will receive no credit for that quiz. There will not be opportunities for make-up quizzes.
- **Midterm 1.** This exam will take place in class on Thursday, October 1st. Students who miss the exam will be given no credit.
- **Midterm 2.** This exam will take place in class on Tuesday, November 3rd. Students who miss the exam will be given no credit.
- **Final Exam.** This exam will take place (location TBA) Thursday, December 17th, from 9am to 11am. Rules governing rescheduling and make-up final exams are set by the Provost: `http://www.upenn.edu/registrar/pdf_main/provost-rules.pdf`.
- **Some Exceptions.** If you have a genuine medical or other emergency which physically prevents you from submitting work or taking an exam on time, you may be eligible for an exception subject to verification of the circumstances of your absence. The exact accommodations granted in such cases will be determined case-by-case and might include dropping the assignment from your grade, shifting grade weight from this assignment to another future assignment, or special make-up work permission.

Recitations: You must be enrolled in and attend one of the recitation sections associated with this section. Generally speaking, you must attend the recitation you have signed up for. If you need to miss your recitation for some reason, you should contact the TA *beforehand*.

Grading: At the end of the semester, your work will be weighted as follows to determine your course grade:

Class Prep	MyMathLab	Homework	Quizzes	Midterm 1	Midterm 2	Final	Participation
3%	8%	8%	5%	20%	25%	30%	1%

Numerical scores will be ranked to determine letter grades. Roughly 30% of grades will be in the A range, 30% in the B range, and 30% in the C range. The precise percentages will not be determined until after the final exam, and will be computed by comparing overall performance on the common final among all sections.

Code of Academic Integrity: You are expected to comply with the University's Code of Academic Integrity throughout the entirety of this course, and are advised to avoid even the appearance of dishonesty in your dealings in this course. In the event of apparent violations of the Code, students may or may not receive a warning from the professor or TA (depending on the apparent severity) before the matter is referred to the Office of Student Conduct for review. Some issues to be particularly wary of in this course are noted below.

- Cheating is the use of any unauthorized materials or resources for any assignment (homework, quiz, or exam) or interfering with another student's attempted completion of an assignment. For example, solutions for even-numbered exercises are not permitted in this course, regardless of the source. Also, books, cheat-sheets and calculators are not permitted for quizzes or exams unless explicitly approved on a case-by-case basis.
- Plagiarism is the use of non-original ideas or language without proper attribution. Using homework solutions from any source (including other students or the internet) for help without explicit acknowledgement is an act of plagiarism. Note that plagiarism can occur even when there is no malicious intent to deceive, so always be generous with attributions when they apply.

For a more complete listing of the expectations surrounding academic integrity, see `http://www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html`.

Resources For Success

- **The Usual Suspects:** Lecture (ask questions!), recitation (ask questions!), office hours, fellow students
- **Internet Resources:**
  - Math 103 Departmental Page: `http://hans.math.upenn.edu/ugrad/calc/m103/`
  - Never underestimate the power of Wikipedia!
- Departmental Help: `http://www.math.upenn.edu/ugrad/calc/help/schedule.html`
  - **Math/Maple Help Centers:** Run from 6:30-9:30pm various weeknights at various locations (usually starting a few weeks into the semester)
    - Monday: Dubois Seminar Room A
    - Tuesday: Rodin House, Room M20
    - Wednesday: King's Court/English College House Library
    - Wednesday: Stouffer College House-D Section Seminar Room (double-check this online)
    - Thursday: Library, 4th Floor Memorial Tower (Ware College House)

- **Tutors:** (Note there's often a waiting list, so 1–2 weeks before the exam might be too late.)
  - The Tutoring Center: `http://www.vpul.upenn.edu/tutoring/index.php`
  - Private Tutors for hire: `http://www.math.upenn.edu/ugrad/tutors.html`
- **Weingarten Learning Resources Center:** `http://www.vpul.upenn.edu/lrc/index.php`

Course Calendar

Monday	Tuesday	Wednesday	Thursday	Friday
		August 26 Study: §1.1	**August 27**	**August 28** Study: §1.2–1.3 MML Due
August 31 Study: §1.5 Prep Due	**September 1** No Homework	**September 2** Study: §1.6	**September 3** Prep Due	**September 4** Study: §2.1 MML Due
September 7 Study: §2.2 No Recitiation	**September 8** Homework 1 Due	**September 9** Study: §2.3	**September 10** Prep Due	**September 11** Study: §2.4 MML Due
September 14 Study: §2.5 Prep Due	**September 15** Homework 2 Due	**September 16** Study: §2.6	**September 17** Prep Due	**September 18** Study: §3.1 MML Due
September 21 Study: §3.2 Prep Due	**September 22** Homework 3 Due	**September 23** Study: §3.3	**September 24** Prep Due	**September 25** Study: §3.4 MML Due
September 28 Study: §3.5 Prep Due	**September 29** Homework 4 Due	**September 30**	**October 1** Midterm 1	**October 2** Study: §3.6 No MML
October 5 Study: §3.7 Prep Due	**October 6** Homework 5 Due	**October 7**	**October 8** Fall Break No Class	**October 9** Fall Break No MML
October 12 Study: §3.8 Prep Due	**October 13** No Homework	**October 14** Study: §3.9	**October 15** Prep Due	**October 16** Study: §3.10 MML Due
October 19 Study: §3.11 Prep Due	**October 20** Homework 6 Due	**October 21** Study: §4.1	**October 22** Prep Due	**October 23** Study: §4.2 MML Due
October 26 Study: §4.3 Prep Due	**October 27** Homework 7 Due	**October 28** Study: §4.4	**October 29** Prep Due	**October 30** Study: §4.5 MML Due
November 2 Prep Due	**November 3** Midterm 2	**November 4** Study: §4.6	**November 5** Prep Due	**November 6** Study: §4.7 MML Due
November 9 Study: §4.8 Prep Due	**November 10** Homework 8 Due	**November 11** Study: §5.1	**November 12** Prep Due	**November 13** Study: §5.2 MML Due
November 16 Study: §5.3 Prep Due	**November 17** Homework 9 Due	**November 18** Study: §5.4	**November 19** Prep Due	**November 20** Study: §5.5 MML Due
November 23 Study: §5.6 Prep Due	**November 24** Homework 10	**November 25**	**November 26** Thanksgiving No Class	**November 27** Thanksgiving No MML
November 30 Study: §7.1 Prep Due	**December 1** No Homework	**December 2** Study: §7.2	**December 3** Prep Due	**December 4** MML Due
December 7	**December 8** Homework 11	**December 9**		