

Instructor: Dr. Wendy Huang
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Lectures and labs hours:

Lectures: Mon./Wed./Fri. 10:30 – 11:30 AM UC 2011
Labs (Tutorials): Thursdays 8:30 – 9:30 AM UC 2011

Office Hours: Mondays 2:00 – 3:00 PM (RB 2007, or Skype: drwendyhuang)

Email Communication: Any time. When sending email regarding the course, include course number, your name, and keywords in the subject line. For example, "Subject: Math 1210, Jen Smith, fundamental theorem of calculus". (Otherwise, your message will not be opened.)

Textbook: Larson & Edwards, Calculus – Early Transcendental Functions (5th Edition), Brooks/Cole, 2011.

Performance Evaluation:

Assignments:	15%
Midterms (Oct. 19):	25%
Final Exam:	60%

Assignments:

1. Assignment problems are tentatively included in this outline, together with the due date. Due to limited marking resource, only a small number of questions are assigned and will be collected for marking. In order to master the contents of this course, to get better final grade, and prepare for future math courses in the coming years of your programs, students are strongly encouraged to practice more questions than that are assigned. There is a drop-off box at the hallway, 2nd floor of Ryan Building. Late assignments will receive a zero grade under any circumstance.
2. All assignments must include a cover page with course number, assignment number, student's name, and student's ID number.
3. Any sign of academic dishonesty will receive a mark of "0" for the course.

Midterm and Final Exams:

There are a 50-min midterms (**Oct. 19**), a three-hour final exams. All are close-booked. Each student is allowed to bring up to 3 pages (letter size, both sides) of personal study notes. No calculator is allowed.

Professor's expectation from students:

1. Regularly check the course website for assignment questions and other information;
2. Attend all lectures and labs and prepared;
3. Private discussions and/or conversations are not permitted during lecture time;
4. Cell phones are to be turned off during lecture time;

Tentative Schedule (subject to change):

Week	Sections	Assignment Questions (Due Dates)
Week 1 (Sept. 12)	Sec. 1.1-3: Graphs and Models, Linear Models and Rate of Change, Functions and their graphs	<u>Assignment 1 (Sept. 20, 12:00 AM):</u> P8: 10, 22, 34, 52, 84; P16: 12, 18, 20, 24, 34, 42, 48, 56, 64, 82, 90; P27: 6, 18, 22, 28, 34, 42, 46, 58, 64, 70.
Week 2 (Sept. 19)	Sec. 1.4-6: Fitting models to data, inverse functions, exponential and logarithmic functions	<u>Assignment 2 (Sept. 27, 12:00 AM):</u> P44: 16, 24, 32, 46, 56, 62, 76, 80, 100, 116, 118, 126, 136, 140, 144, 148; P54: 4, 14, 28, 38, 54, 60, 64, 90, 102.
Week 3 (Sept. 26)	Sec. 2.1-3: Preview of Calculus, Definition of limits, Evaluating limits	<u>Assignment 3 (Oct. 4, 12:00 AM):</u> P74: 6, 14, 22, 28, 32; P87: 12, 22, 34, 38, 44, 46, 56, 70, 126, 128;
Week 4 (Oct. 3)	Sec. 2.4-5: Continuity and one-side limits, Infinite limits	<u>Assignment 4 (Oct. 11, 12:00 AM):</u> P99: 12, 20, 30, 34, 36, 44, 58, 72, 80; P108: 6, 18, 32, 40, 50, 60, 74, 76;
Week 5 (Oct. 10)	Sec. 3.1-3: Differentiation, Basic differentiation rules, rate of change, Product and quotient rules	<u>Assignment 5 (Oct. 25, 12:00 AM):</u> P124: 6, 16, 36, 58, 86, 102, 104; P136: 8, 20, 30, 36, 46, 64, 72, 102, 114, 116; P147: 4, 10, 16, 28, 36, 42, 50, 78, 86, 90.
Week 6 (Oct. 17)	Sec. 3.3-4: Higher-order derivatives, Chain Rule (Midterm on Wed.)	<u>Assignment 6 (Nov. 1, 12:00 AM):</u> P149: 98, 104, 132, 134, 136, 138; P161: 14, 26, 62, 80, 102, 110, 118, 138, 170;
Week 7 (Oct. 24)	Sec. 3.5-6: Implicit differentiation, derivative of inverse functions	P171: 8, 18, 26, 30, 42, 76, 102; P179: 4, 10, 20, 28, 42, 70.
Week 8 (Oct. 31)	Sec. 3.7-8, 4.1: Related Rates, Newton's method. Extrema on an interval.	<u>Assignment 7 (Nov. 8, 12:00 AM):</u> P187: 2, 12, 18, 22, 28, 34; P195: 22, 30; P209: 4, 16, 28, 44.
Week 9 (Nov. 7)	Sec. 4.2-4: Rolle's Theorem and the MVT, Increasing and decreasing functions and the first derivative test, Concavity and the second derivative test	<u>Assignment 8 (Nov. 19, 12:00 AM):</u> P216: 14, 20, 46, 54, 68, 78; P226: 6, 14, 28, 52, 62, 78, 82; P235: 12, 24, 38, 54, 84.
Week 10 (Nov. 14)	Sec. 4.5-7: Limits at infinity, Curve sketching, Optimization problems	<u>Assignment 9 (Nov. 22, 12:00 AM):</u> P245: 14, 16, 24, 36, 72, 114; P255: 12, 30, 46; P265: 6, 18, 22, 26, 40, 50, 60;
Week 11 (Nov. 21)	Sec. 4.8, 5.1-2: Differentials, antiderivatives and indefinite integration, Area	<u>Assignment 10 (Nov. 29, 12:00 AM):</u> P276: 8, 16, 26, 34, 38, 42; P291: 10, 18, 30, 44, 56, 68, 78, 82, 90; P303: 2, 10, 18, 38, 52.
Week 12 (Nov. 28)	Sec. 5.3-4: Riemann sums and definite integrals, the Fundamental Theorem of Calculus	<u>Assignment 11 (Not to be collected):</u> P314: 6, 12, 18, 28, 34, 42; P329: 10, 32, 40, 48, 54, 62, 72, 88, 96, 102, 110.