



Shanghai Jiao Tong University

MA080 Calculus I

Instructor:	Linghai Zhang	Email:	liz5@lehigh.edu
Home Institution:	Lehigh University	Office:	505 Main Bldg
Office Hours:	TBD		
Term:	28 May - 28 June, 2018	Credits:	4
Classroom:	TBD	Teaching Assistant(s):	TBD
Class Hours:	Monday through Thursday, 8:30 am-10:30am		
Discussion Session:	2 hours each week, leaded by teaching assistant(s)		
Total Contact Hours:	66 contact hours (1 contact hour = 45 mins, 3000 mins in total)		
Required Texts (w/ ISBN):	Thomas Calculus: Early Transcendentals (13th edition), Weir and Hass, Pearson. http://www.coursesmart.com/thomas-calculus-early-transcendentals-thirteenth/georgeb-thomas-maurice-d-weir-joel-hass/dp/9780321884138		
Prerequisite:	N/A		



Course Overview

This course concerns with differential calculus, including applications and the underlying theory of limits for functions and sequences. Topics in differentiation and integration of single variables will be covered, including the Fundamental Theorem of Calculus.

Grading Policy

Your letter grade will be assigned according the following scale:

Number grade	Letter grade	GPA
90-100	A	4.0
85-89	A-	3.7
80-84	B+	3.3
75-79	B	3.0
70-74	B-	2.7
67-69	C+	2.3
65-66	C	2.0
62-64	C-	1.7
60-61	D	1.0
≤ 59	F (Failure)	0



Course Schedule

Topic	Chapters
Week 1 (28-31 May)	
functions and their graphs, inverse functions, rates of change and tangents to curves, and limits of functions.	Chapter 1-2
Week 2 (4-7 June)	
limits and continuity, derivatives of functions, trigonometric function.	Chapter 2-3
Week 3 (11-14 June)	
chain rule, implicit differentiation, derivatives of inverse functions, related rates, differentials.	Chapter 3
Week 4 (18-21 June)	
Extreme values of functions, mean value theorem, curve sketching, L'Hopital's rule, Newton's method.	Chapter 4
Week 5 (25-28 June)	
Indefinite integrals, fundamental theorem of Calculus	Chapter 5