Information for Students in Math10560, Fall 2016

Instructors:

Section	Instructor	Office	Phone	e-mail
Section 1:	Qing Han	232 Hayes-Healy	631-6834	qhan@nd.edu
Section 2:	Antonio Ache	124 Hayes Healy	631-6288	aache@nd.edu
Section 3:	Anand Pillay	281 Hurley	631-8847	apillay@nd.edu
Section 4:	Antonio Ache	124 Hayes Healy	631-6288	aache@nd.edu

Teaching Assistants:

Section	Teaching Assistant	Office	Phone	e-mail
Sections 11, 12, 21:	Xiaoxiao Li	235 Hayes-Healy	631-3221	xli24@nd.edu
Sections 22, 31, 32:	Rachael Alvir	253A Hayes-Healy	631-6277	ralvir@nd.edu
Sections 41, 41:	Lien Yung Kao	289 Hurley	631-9586	lkao@nd.edu

Text: Stewart, *Calculus*, Eighth edition

Syllabus: We will cover Chapters 6 and 7, parts of Chapters 8 and 9, Chapter 11 and lastly Chapter 10. The topics are logarithmic and exponential functions, techniques of integration and applications, an introduction to differential equations, infinite sequences and series, power series and parametric equations and polar coordinates.

You are encouraged to read each section of the text before it is covered in class and review any concepts from Calculus 1 and Precalculus that will be used.

Examinations: There will be three midterms, eleven quizzes/group activities (in tutorials) and a final exam.

Exam Time

	Exam 1	Exam 2	Exam 3	Final Exam
Time and	8-9:15 a.m.	8-9:15 a.m.	8-9:15 a.m.	1:45-3:45 p.m.
Date	Tue. Sept. 20	Thur. Oct. 13	Thur. Nov. 17	TBA
Section 1	101 Jordan Hall	101 Jordan Hall	101 Jordan Hall	TBA
Section 2	105 Jordan Hall	105 Jordan Hall	105 Jordan Hall	TBA
Section 3	101 Jordan Hall	101 Jordan Hall	101 Jordan Hall	TBA
Section 4	105 Jordan Hall	105 Jordan Hall	105 Jordan Hall	TBA

Calculators will **NOT** be allowed on exams.

Class Attendance: A first-year student who accumulates more than 3 unexcused absences may be given an F.

Tutorials: The Tuesday tutorials are mandatory. Quizzes and/or group activities will be conducted during the tutorial sessions. Tutorials count for a total of 100 points toward your final grade. **There will be no tutorials in the weeks of midterm exams, even for a Thursday exam.**

Homework: Homework problems will be assigned and graded electronically. The online homework system has many extra learning tools such as interactive practice problems (master it), videos and links to Wolfram Alpha demonstrations in the text. You are encouraged to make full use of these extra features. Please refer to the separate document Information on Online Homework.

Missed Exams: Note that there will be three midterm exams and a final exam. A student who misses an examination will receive zero points for that exam unless he or she has written permission from the Dean of the First Year of Studies. Please be aware that travel plans, sleeping in, defective alarm clocks, etc. are not considered to be a valid excuse by the Dean of the First Year of Studies! If you have a valid excuse (illness, excused athletic absence, etc.) for missing an exam, please contact your instructor ASAP (preferably before the exam) and a makeup exam will be scheduled.

Exam Conflicts: The exam conflicts are governed by academic code. According to Section 14.2, students with more than 2 finals in one day, or more than 3 finals in a 24 hour period, may negotiate to change the time of one of these finals. **If you intend to request to have the time of your Math 10560 final changed, you should talk to your advisor in FYS well before final exam week.**

Grading:
   Midterms: 100 points each
   Final: 150 points
   Quizzes/Group Activities: 100 points
   Homework: 50 points (each homework (after the first two) carries equal weight)
Your final grade will be determined by your total score (out of 600).

Honor Code: Both examinations and homework are conducted under the honor code. While discussion in small groups in doing homework is permitted (and strongly encouraged) in this course, the work should be your own. Exams are closed book and are to be done completely by yourself with no help from others.

Schedule   Math10560   Fall 2016

08/23	Tue.	No Tutorial
08/24	Wed.	6.1. Inverse Functions
08/26	Fri.	6.2*. The Natural Logarithmic Function
08/29	Mon.	6.3*. The Natural Exponential Function
08/30	Tue.	Quiz 1
08/31	Wed.	6.4*. General Logarithmic and Exponential Function
09/02	Fri.	6.5. Exponential Growth and Decay
09/05	Mon.	6.6. Inverse Trigonometric Functions
09/06	Tue.	Quiz 2
09/07	Wed.	6.8. Indeterminate Forms and L'Hospital's Rule
09/09	Fri.	7.1. Integration by Parts
09/12	Mon.	7.2. Trigonometric Integrals
09/13	Tue.	Quiz 3
09/14	Wed.	7.3. Trigonometric Substitution
09/16	Fri.	7.4. Integration of Rational Functions by Partial Fractions
09/19	Mon.	Review for Exam 1
09/20	Tue.	**Exam 1** (No Tutorial)
09/21	Wed.	Return and discussion of Exam 1
		(Topics discussed will appear on Quiz/WS 4)
09/23	Fri.	7.4. Integration of Rational Functions by Partial Fractions
09/26	Mon.	7.5. Strategy for Integration
09/27	Tue.	Quiz 4
09/28	Wed.	7.7. Approximate Integrals
09/30	Fri.	7.8. Improper Integrals
10/03	Mon.	8.1. Arc Length
10/04	Tue.	Quiz 5
10/05	Wed.	9.2. Direction Fields and Euler's Method
10/07	Fri.	9.3. Separable Equations
10/10	Mon.	9.5. Linear Equations
10/11	Tue.	No Tutorial
10/12	Wed.	Review for Exam 2
10/13	Thur.	**Exam 2**
10/14	Fri.	Return and discussion of Exam 2
		(Topics discussed will appear on Quiz/WS 6)
10/17	Mon.	Fall Break
10/18	Tue.	Fall Break
10/19	Wed.	Fall Break
10/21	Fri.	Fall Break

10/24	Mon.	11.1. Sequences
10/25	Tue.	Quiz 6
10/26	Wed.	11.2. Series
10/28	Fri.	11.3. The Integral Test and Estimates of Sums
10/31	Mon.	11.4. The Comparison Tests
11/01	Tue.	Quiz 7
11/02	Wed.	11.5. Alternating Series
11/04	Fri.	11.6. Absolute Convergence and the Ratio and Root Tests
11/07	Mon.	11.7. Strategy for Testing Series
11/08	Tue.	Quiz 8
11/09	Wed.	11.8. Power Series
11/11	Fri.	11.9. Representations of Functions as Power Series
11/14	Mon.	11.10. Taylor and Maclaurin Series
11/15	Tue.	No Tutorial
11/16	Wed.	Review for Exam 3
11/17	Thurs.	**Exam 3**
11/18	Fri.	Return and discussion of Exam 3
		(Topics discussed will appear on Quiz/WS 9)
11/21	Mon.	11.11. Applications of Taylor Polynomials
11/22	Tue.	Quiz 9
11/23	Wed.	Thanksgiving Holiday
11/25	Fri.	Thanksgiving Holiday
11/28	Mon.	10.1. Curves Defined by Parametric Equations
11/29	Tue.	Quiz 10
11/30	Wed.	10.2. Calculus with Parametric Curves
12/02	Fri.	10.3. Polar Coordinates
12/05	Mon.	10.4. Areas and Lengths in Polar Coordinates
12/06	Tue.	Review worksheet
12/07	Wed.	Review for Final
TBA		**Final Exam**