# MATH 10250 Elements of Calculus I - Summer 2018 <br> Syllabus 

Website: http://sites.nd.edu/elements-of-calculus/
Class Time/Location:

|  | Instructor | Time | Location |
| :---: | :---: | :---: | :---: |
| Section 01 | Lyda Urresta | $1: 00-2: 20$ p.m. | Hayes Healy 129 |
| Section 02 | José Pastrana Chiclana | $1: 00-2: 20$ p.m. | Hayes Healy 229 |

Instructor Information

| Instructor | Office | Email | Office Hours |
| :---: | :---: | :---: | :---: |
| Lyda Urresta | Hayes Healy 253B | lurresta@nd.edu | TBD <br> or by Appointment |
| José Pastrana Chiclana | Hayes Healy B22 | jpastran@nd.edu | TBD <br> or by Appointment |

Text: Applied Calculus for the Managerial, Life, and Social Sciences: A Brief Approach, 10th Edition (Hybrid Edition with access to online homework).

Alternatively: You may buy an access code to the online homework system. This system includes an online copy of the book.

EXAMS: Two 80 minute exams and one 120 minute final exam will be given during the semester. The Final Exam will be comprehensive. Review sessions will be held before each exam. No calculators will be allowed on exams. Review material will be available on the course website.

|  | Exam 1 | Exam 2 | Final Exam |
| :---: | :---: | :---: | :---: |
| Date | Friday, June 29 | Friday, July 13 | Friday, July 27 |
| Points | 100 | 100 | 150 |
| Exam Material | Ch1 Sections 1,2,3,4 | Ch3 Sections 4,6,7 | All Material |
|  | Ch2 Sections 1,2,3,4,5,6 | Ch4 Sections 1,2,3,4,5 |  |
|  | Ch3 Sections 1,2,3,5 |  |  |

QUIZZES (60 Points): Six quizzes will be given in class throughout the semester. Each quiz is worth 10 points and is given in the beginning of class. You have 10 minutes to complete the quiz. There will be NO make up quizzes for unexcused absences, or showing up late to class (if you show up 2 minutes late to class you will only have the remaining 8 minutes to complete the quiz). For excused absences contact your instructor at least two days in advance.

|  | Date | Sections |
| :---: | :---: | :---: |
| Quiz 1 | Wednesday, June 20 | $1.1,1.2,1.3,1.4$ |
| Quiz 2 | Monday, June 25 | $2.1,2.2,2.3,2.4,2.5$ |
| Quiz 3 | Thursday, July 05 | $3.4,3.6$ |
| Quiz 4 | Monday, July 09 | $3.7,4.1,4.2$ |
| Quiz 5 | Thursday, July 19 | $5.1,5.2,5.4,5.5$ |
| Quiz 6 | Monday, July 23 | $5.3,5.6,6.1$ |

ONLINE HOMEWORK ( 60 points): This portion of homework will be assigned and submitted electronically via WebAssign. You will need to purchase an access code before registering for online homework. See the course website for details.

WRITTEN HOMEWORK (50 points): You will be assigned a small amount of problems per week which you will need to write up and hand in the following class (in the beginning of class). You will be graded on not only correctness but also on your ability to neatly and completely write your solution to the problems.

ATTENDANCE (30 points): You will be given an attendance point for each day of class. This point takes into account your participation in class and is at the discretion of your instructor. You are expected to attend the section in which you are enrolled. You are expected to come to each class and be on-time. You are expected to abstain from cell phone use and the use of electronic devices unless otherwise informed.

DISRUPTION PENALTY: Any disruptive behavior that interferes with your classmates' learning or your instructor's teaching will be penalized with a 2 point deduction from your attendance total.

GRADES: A total of 550 points will be distributed as follows:

| Attendance | 30 |
| :---: | :---: |
| Online HW | 60 |
| Written HW | 50 |
| Quizzes | 60 |
| Exam 1 | 100 |
| Exam 2 | 100 |
| Final Exam | 150 |
| Total | $\mathbf{5 5 0}$ |

HOMEWORK POLICY: You will find a complete list of electronic homework due dates attached. Note ALL DEADLINES ARE AT 1:00 PM ON THE DUE DATE. You are expected to get started on this homework immediately so that you can iron out any problems you might have with the system on time. Submission of homework can be carried out with any internet connection at any time. Therefore late homework will not be accepted. It is expected that you will start your homework well before the time at which it is due and that if you have to be out of town, you will plan ahead appropriately. In the case of extenuating circumstances, you should get a note from the dean of First Year of Studies or your advisor in order to get credit. Poor time management or a lapse of memory about the deadline for online homework will not be considered as extenuating circumstances. If your computer is not working please use one of the many computers available on campus. The online system keeps a complete record of the time you spend online and automatically saves your work. If you are having any trouble with the system mysteriously not giving you credit for your work, please print out your completed work as you do your homework and bring it to class, show it to your instructor in person and they will give you credit.

MAKE-UP EXAMS: Please check the exam dates. Do not make travel plans conflicting with any exam date! In the event that you miss an exam, a note from your advisor or a dean from First Year of Studies will be required in order to gain credit for the make-up exam.
Please send an e-mail to your instructor as soon as possible if you miss an exam.
HONOR CODE: Examinations, quizzes and homework are conducted under the Notre Dame Honor Code (see http://honorcode.nd.edu). While discussion in small groups in doing homework is permitted (and strongly encouraged) in this course, the work should be your own. Letting someone log in in your name and do your online homework is a violation of the honor code. Exams are closed book and are to be done completely by yourself with no help from others. You will NOT be allowed to collaborate on exams or quizzes. NO calculators will be allowed for exams.

## Tentative Schedule Math 10250 Summer 2016

06/18 Monday 1.1: Precalculus Review Calculus I
1.2: Precalculus Review Calculus II

06/19 Tuesday 1.3: The Cartesian Coordinate System
1.4: Straight Lines

06/20 Wednesday Quiz 1
2.1: Functions and Their Graphs
2.2: The Algebra of Functions

06/21 Thursday 2.3: Functions and Mathematical Models
2.5: One-Sided Limits and Continuity

06/22 Friday 2.5: One-Sided Limits and Continuity (cont.)
2.4: Limits

06/25 Monday Quiz 2
2.6: The Derivative
3.1: Basic Rules of Differentiation

06/26 Tuesday 3.3: The Chain Rule
3.2: The Product and Quotient Rules

06/27 Wednesday 3.2: The Product and Quotient Rules (cont.)
3.5: Higher-Order Derivatives

06/28 Thursday Review for Exam 1
06/29 Friday Exam 1
07/02 Monday 3.4 Marginal Functions in Economics
07/03 Tuesday 3.6: Implicit Differentiation and Related Rates
07/04 No class :)
07/05 Thursday Quiz 3
3.7: Differentials
4.1: Applications of the First Derivative

07/06 Friday 4.1: Applications of the First Derivative (cont.)
4.2: Applications of the Second Derivative

| $07 / 09$ | Monday | Quiz 4 <br> 4.3: Curve Sketching |
| :--- | :--- | :--- |
| $07 / 10$ | Tuesday | 4.4: Optimization I |
| $07 / 11$ | Wednesday | 4.5: Optimization II |
| $07 / 12$ | Thursday | Review for Exam 1 |
| $07 / 13$ | Friday | Exam 2 |
| $07 / 16$ | Monday | 5.1: Exponential Functions |
|  |  | 5.2: Logarithmic Functions |
| $07 / 17$ | Tuesday | 5.4: Differentiation of Exponential Functions |
|  |  | 5.5: Differentiation of Logarithmic Functions |

5.6: Exponential Functions as Mathematical Models

07/20 Friday 6.1: Antiderivatives and the Rules of Integation
07/23 Monday Quiz 6
6.2: Integration by Substitution

07/24 Tuesday 6.3: Area and the Definite Integral
6.4: The Fundamental Theorem of Calculus

07/25 Wednesday 6.5: Evaluating Definite Integrals
07/26 Thursday Review for Final
07/27 Friday Final Exam

