

Math 271 for Croft/Honors

Spring Semester 2017

Class meets TT 1:00-2:15 in Croft 204.

Welcome to Calculus of Decision Making I for the Croft and the Honors College. There are three goals for this class besides making you better prepared for courses you will take in completing the International Studies major and becoming *an independent thinker and problem solver*.

- I. By the end of this class, you will be able to maximize certain functions of one variable as well as functions of several variables subject to a constraint, using the **Lagrange method**. This approach, as does calculus overall, has many interesting applications as well as a strong philosophical appeal.
- II. An overarching goal is to show the usefulness and playfulness of the mathematical method in general. We will conduct class projects on logic/math puzzles, prime numbers, encryption, solving equations in the tradition of the ancient Greeks, include some mathematical history and do calculus.
- III. We will also make a **connection between thinking, doing and articulating (orally and on paper) mathematical concepts**.

Offices, phone numbers, e-mail addresses, and office hours:

Buskes: Hume Hall 105, 915-7425, mmbuskes@olemiss.edu, TTh 10:00-11:00 and by appointment with the TAs.

David Gonzalez: Croft 320, 915-1500, dfragoso@olemiss.edu, MW 11:00-12:00 and by appointment with the TAs.

Text Book:

Essential Calculus with Applications, by Wright, Hurd, and New, Second Edition, available at the bookstore:

DO NOT BUY THE SOFTWARE CODE

Grading System: The grading scale will be A (90%-100%), B (80%-90%), C(70%-80%),D(60%-70%),F(<60%)

Daily class work	10 %
5 to 10 homeworks	20 %
Special Project	10%
2 mid term exams	20%+10%=30%
Final Exam	30%

Some Key Dates:

1. 1st Homework due: Thursday, January 26.
2. 1st Midterm: Tuesday, February 28.
3. Deadline for course withdrawals, Tuesday, March 2
3. Spring Break: March 10-18.
4. 2nd Midterm: Thursday, April 25.
5. Project Due: Final Exam.
6. Last Day of Class: Thursday, May 3.
7. Final Exam: Thursday, May 11, Noon.

Disability Accommodations

It is University policy to provide, on a flexible and individual basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or meet course requirements. Students with disabilities, which have been verified through the [Office of Student Disability Services](#), are encouraged to contact their instructors to discuss their individual needs for accommodations.

Attendance

Attendance roll will be taken at each class meet. Late arrivals will count as absent after the roll has been read. You are allowed to have three absences, excused or unexcused. Any absences beyond three will lower your grade.

Start of Schedule and Midterm Dates

WEEK	DATE	SECTION	EXAMPLES	HOMEWORK
Week 1	Thu 1/24	Introduction		Sections 1.2 and 1.3
	Th 1/28	Logic and games		Sections 1.2 and 1.3
Week 2	Tu 1/31	Logic and puzzles		Sections 1.2 and 1.3
	Tu 2/3	Section 2.1		20-37, 72-77
Week 3		Section 3.1		
		Section 3.2		
Week 4		Section 3.3		
		Section 3.4		
Week 5		Section 4.1		
		Section 4.2		
Week 6		Puzzles		
	February 28	First Midterm		
Week 7		Section 4.3		
		Puzzles		
Week 8		Section 5.1		
		Section 5.2		
Week 9		Section 5.3		
		Section 5.4		
Week 10		Section 8.1		
		Section 8.2		
Week 11		Section 8.3		
		Section 8.4		
Week 12		Encryption		
		Encryption		
Week 13		Encryption		
	April 25	Second Midterm		
Week 14				
Week 15				