Math 2123 – Calculus for Technology I – Section 002

Course:	12:30PM – 1:20PM MWF, MSCS 422
Instructor:	Chase Meadors (Office: MSCS 442)
Email:	chase.meadors@okstate.edu
Office Hours:	Thursdays, 1:30PM through 3:30PM in the MLSC
Text:	Technical Calculus with Analytic Geometry (Peter Kuhfittig)

Course Structure

This is a lecture-based course that meets three times a week. There will be three exams, and weekly homework (discussed below). Students are expected to be responsible for knowing all the material covered by (1) attending class, (2) completing the homework, and (3) taking advantage of external resources such as free tutoring at the MLSC (Mathematics Learning Success Center) on the 5th floor of the Library.

Devices

Calculators used during tests must be numeric, scientific or graphing *calculators* only. However, **calculators that can perform symbolic manipulation are not allowed**. This means that the TI-83 and TI-84 are acceptable, while the TI-89 and TI-Nspire are *not*. Phones, tablets, and other internet-connected devices are also not allowed during tests. The use of phones and other devices in class is permitted within reason, but I may request that you put it away if I feel your activity is distracting to you or others.

On homework, you are free to use any computational aid or resource you find helpful. However, *you still must show your work*. It is highly encouraged that you only use external resources to check your work. Remember, **you should be able to complete the homework under the same conditions as a test** to ensure success.

Homework

Written homework will be assigned weekly and will *usually* be due in class every Monday. I will announce and discuss any exceptions that occur in class, or if necessary by email. Completing homework thoroughly is crucial to success in this course. Not only will it help you understand the material, but it is also a very good indicator of

what material will appear on tests. Assigned problems may be from the textbook or prepared by me. There is no mandated format for what you turn in, but in general I expected your completed homeworks to be legible, and your work shown in an organized manner.

Copying work directly from other students *or* the internet is a violation of academic integrity. However, you are certainly allowed to collaborate and consult other resources. If working in groups, each person is expected to turn in their *own* solution to the homework written independently. The best way to learn from homework is to try to work as many problems as possible individually, only then consulting your classmates or tutors for help.

When grading your homework, I will only grade a certain subset of the assigned problems that I will not announce. However, **I will still look to verify completion**. In other words, you should prepare all the problems as if I am planning to grade them.

Exams

There will be three midterm exams that will occur (tentatively) on **February 17**, **March 11**, and **April 15** unless discussed otherwise in class. The final exam is on **Friday, May 6** at **10:00 AM**.

Attendance

Attendance is highly recommended for success in this course. Students with **3 or fewer** absences at the end of the semester will have their **2** lowest homework grades dropped. Students with **4 to 6** absences at the end of the semester will have only **1** homework dropped. Students with **more than 6** absences will not have any homework grades dropped.

Grading

There are two possible ways that your final grade will be calculated:

Option 1	Option 2
Homework: 30%	Homework: 30%
Midterm Exams: 15% each	Midterm Exams: 10% each
Final Exam: 25%	Final Exam: 40%

The better of the two scores will be taken, and then the final letter grade is determined using the standard grading scale:

90-100% **A**   80-89% **B**   70-79% **C**   60-69% **D**   <60% **F**

Grades in these ranges are guaranteed to receive at least the corresponding letter grade. However, if you are on the borderline between letter grades, I reserve the right to use discretion considering final exam performance, improvement during the semester, attendance, and my subjective judgement of your effort when assigning your final grade.

Additional Information

Feel free to read the Spring 2016 Syllabus attachment:

https://academicaffairs.okstate.edu/sites/default/files/documents/Spring%202016%20Syllabus%20Attachment.pdf

You are expected to understand and follow OSU's academic integrity policies. Information on these polices can be found at:

http://academicintegrity.okstate.edu/

Week	Date	Weekday	Topic
1	1/11/2016	Monday	Introduction, Review
	1/13/2016	Wednesday	Review
	1/15/2016	Friday	1.2 Slope, 1.3 The Straight Line
2	1/18/2016	Monday	HOLIDAY
	1/20/2016	Wednesday	1.3 Continued, 1.4 Curve Sketching
	1/22/2016	Friday	1.4 Continued
3	1/25/2016	Monday	1.6 Conic Sections
	1/27/2016	Wednesday	1.7 The Circle
	1/29/2016	Friday	1.7 Continued, 1.8 The Parabola
4	2/1/2016	Monday	2.1 Functions and Intervals
	2/3/2016	Wednesday	2.2 Limits
	2/5/2016	Friday	2.3 Definition of the Derivative, 2.4 Four step process
5	2/8/2016	Monday	2.4 Continued
	2/10/2016	Wednesday	2.5 Derivatives of Polynomials
	2/12/2016	Friday	2.6 Instantaneous Rates of Change
6	2/15/2016	Monday	Review
	2/17/2016	Wednesday	**Exam 1: Up to section 2.6**
	2/19/2016	Friday	2.7 Differentiation Formulas
7	2/22/2016	Monday	2.7 Continued
	2/24/2016	Wednesday	2.8 Implicit Differentiation
	2/26/2016	Friday	2.9 Higher Derivatives, 3.1 First Derivative Test
8	2/29/2016	Monday	3.1 Continued, 3.2 Second Derivative Test
	3/2/2016	Wednesday	3.4 Applications of Min and Max
	3/4/2016	Friday	3.4 Continued, 3.5 Related Rates
9	3/7/2016	Monday	3.5 Continued
	3/9/2016	Wednesday	Review
	3/11/2016	Friday	**Exam 2: Up to section 3.5**
10	3/14/2016	Monday	SPRING BREAK
	3/16/2016	Wednesday	SPRING BREAK
	3/18/2016	Friday	SPRING BREAK
11	3/21/2016	Monday	4.1 Antiderivatives
	3/23/2016	Wednesday	4.2 The Area Problem
	3/25/2016	Friday	4.3 Fundamental Theorem of Calculus
12	3/28/2016	Monday	4.5 Basic Integration Formulas
	3/30/2016	Wednesday	4.5 Continued

	4/1/2016	Friday	4.6 Area between curves
13	4/4/2016	Monday	4.6 Continued
	4/6/2016	Wednesday	4.7 Improper Integrals
	4/8/2016	Friday	4.8 Constant of Integration
14	4/11/2016	Monday	4.9 Numerical Integration
	4/13/2016	Wednesday	5.1 Means and Root Mean Squares
	4/15/2016	Friday	**Exam 3: Up to section 4.8**
15	4/18/2016	Monday	5.2 Volumes of Revolution 1
	4/20/2016	Wednesday	5.3 Volumes of Revolution 2
	4/22/2016	Friday	5.4 Centroids
16	4/25/2016	Monday	5.4 Continued
	4/27/2016	Wednesday	Review
	4/29/2016	Friday	Review
17	5/2/2016	Monday	FINALS WEEK
	5/4/2016	Wednesday	FINALS WEEK
	5/6/2016	Friday	FINALS WEEK