



WESTMINSTER COLLEGE

MAT 122 - Business Calculus Online **TENTATIVE COURSE SYLLABUS** **Summer 2015**

Instructor:	Mrs. Jill Nichols
Contact info:	<ul style="list-style-type: none">▪ jill.nichols@westminster-mo.edu▪ Google Hangouts (search jill.marleigh@gmail.com. Call or message anytime I'm online. Office Hours at differing times through Hangouts)▪ Skype anytime status is "Online" (search for jill.marleigh.nichols)▪ Cell: 254-299-7978 (call, or text with name, 8:00-5:00 only please)
Times/Location:	June 1 – July 10, 2015
Prerequisites:	ACT math score 24 or SAT math score 540 and at least 4 years of high school math, including 2 years of algebra and some pre-calculus with at least B's. Students not meeting these prerequisites requires the students to successfully complete MAT 111 with a grade of C or better.
Course Description:	A terminal calculus course, including a brief review of algebra and the study of the derivatives and integrals of algebraic, exponential and logarithmic functions. Applications of the derivative and the definite integral are also studied.
TIER Requirements:	This course does not satisfy any Westminster Tier requirements.

Teaching & Learning Philosophy

My goal is to make a meaningful difference in my student's lives by helping guide them through a small part of their education, which is this math course. I want for my students to learn and grow, both mathematically and as learners. I want to help students learn to think independently, abstractly, and to gain the confidence to attempt seemingly large problems by teaching them how to read for understanding, to break down large chunks into small pieces, to work through problems step-by-step, to realize when mistakes have been made, to backtrack, correct, and learn from those mistakes, and to find joy and accomplishment through success, further motivating hard work and continual learning.

Learning math happens through student's personal will and determination. Math skills are not a "gift" to be given or received. Mathematical skills are earned through hard work, struggle, practice, and successes. As the instructor, my goal is to structure this course in such a way as to support students as they embark on their journey to learn new mathematical concepts and to further their problem solving skills. I will explain new concepts in ways that students can understand, model the process of problem solving through example, and support students as needed to help them learn, gain skills, and succeed.

Students who choose not to work hard, struggle, and practice, will likely not see many successes, and may struggle with motivation towards this course and harbor negative feelings towards math generally. Students who dedicate themselves to learn and grow, to work hard, to ask pointed questions, and to work with the instructor will be rewarded with increased self-confidence and problem solving skills.

I am incredibly excited to get to know my students and to guide them along through this course!

SUPPLIES

Textbook (\$68)

Applied Calculus for Business, Life and Social Science, by Danny Burzynski.
isbn: 978-1-936368-33-4

An “All-Access Pass” is included with the purchase of a new physical textbook.

Purchase the book either through the Bookstore or at <http://www.xyztextbooks.com/store>

All-Access Pass (\$40)

Includes unlimited access to all e-content with xyztextbooks for 1 year, including access to

OR
(*not both*)

MathTV.com videos	MathTV mobile
eBooks	QR Code Access
Worksheets	Xyz homework

Purchase at <http://www.xyztextbooks.com/store>

xyzhomework.com Course ID: 5859

AND

Calculator (required):

You will need, at minimum, a scientific calculator. The most powerful calculator allowed is a TI-84+.

Spiral Notebook (recommended):

I recommend working all your problems in one place, such as a spiral notebook. Working out all homework practice problems in one place will make it easier for you to study, get help, and stay organized.

Google Hangouts or Skype:

You are required to connect with Mrs. Nichols using either Google Hangouts or Skype. Both are free, and are available for computers, tablets and smartphones.

EVALUATION

Grades will be available through xyzhomework.com.

Standard rounding rules will be used.

Category	Percentage	Percent	Grade
Exam 1	20	≥ 93%	A
Exam 2	20	90% - 92%	A-
Exam 3	20	87% - 89%	B+
Assignments	20	83% - 86%	B
Homework	10	80% - 82%	B-
Participation	5	77% - 79%	C+
Oral Exam	5	73% - 76%	C
Total	100%	70% - 72%	C-
		67% - 69%	D+
		63% - 66%	D
		60% - 62%	D-
		< 60%	F

COURSE COMPONENTS

- Pencil/Paper Exams (60%):** There will be three regular pencil-and-paper exams, each counting equally towards your course grade at 20% each. There is not a cumulative final exam.
- You must take the exams with a proctor of your choice. I recommend using either a public library, or finding a teacher (K-12 or college) that is willing to proctor your exam for you. I will email the exams to your proctor's professional email address, and he or she will be responsible for scanning and emailing your test to Mrs. Nichols.
- You may work ahead and take the exams at your earliest convenience. They are due from your proctor by Mondays June 15, June 29, and July 13.
- Late Test Policy: If you need to take an exam late for an excused or legitimate reason, you must provide documented proof of your reason. If you take an exam late for an unexcused reason, there will be a penalty of 20% off.
- Assignments (20%):** Assignments will vary in nature and in point value. Most assignments will involve working through and explaining your solution to a problem on a forum, and then replying to your classmates posts. You will usually have two assignments per week. Details will be on xyzhomework.com.
- Homework (10%):** Homework will be assigned and completed through the online system called xyzhomework.com. Homework will be due on Sundays, Mondays, Tuesdays, Wednesdays and Thursdays at midnight.
- Late homework can be submitted until the end of the course, which will result in a 20% point deduction from only the questions not correctly answered before the due date. If you need an extension due to illness or a good reason, and you have proof (such as a doctor's note, athletic notice, obituary link) show Mrs. Nichols and she will remove the late penalty.
- Weekly Participation (5%):** Week 1: Call Mrs. Nichols on Hangouts or Skype. This is a simple introductory call to get to know each other. Also, to verify your identity, you will be asked to show an ID with your name and picture.
- Weeks 2 – 5: You may satisfy the participation requirement by doing any one of the following.
- Ask and/or answer at least three questions on the Q&A forums.
 - Call Mrs. Nichols on Hangouts or Skype and ask questions or let Mrs. Nichols ask you questions.
 - Participating in "Office Hours" one day by asking or answering questions.
- Each week, participation will be graded 0 or 1 for completion. 1 point = 1% of your course grade.
- Oral Exam (5%)** Week 6: Schedule an "oral exam" through Hangouts or Skype with Mrs. Nichols. The oral exam will be graded on a scale of 1-5 points. The point is largely to verify that the student enrolled participated and understands the basic concepts of calculus.
- Surveys (Extra Credit):** For extra credit, you can fill out an online, anonymous survey at the end of each week. The link will appear at the top of the course page in xyzhomework.com.
- Study Problems (ungraded):** If you feel that the required homework and quizzes are not enough for you to learn the material well enough to meet your goals, then you may want to practice extra problems from the book. Answers to all odd problems are in the back of the book.

TOPICS

Ch. 1 – Functions, Limits, and Rates of Change
Ch. 2 – Differentiation: The Language of Change
Ch. 3 – Applying the Derivative
Ch. 4 – The Natural Exponential and Logarithmic Functions
Ch. 5 – Integration: The Language of Accumulation
Ch. 6 – Applications of Integration
Ch. 7 – Calculus of Functions of Several Variables

Tentative COURSE CALENDAR with Due Dates

<i>week of</i>	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday/Saturday
May 31	<ul style="list-style-type: none"> ▪ Course Orientation 	<ul style="list-style-type: none"> ▪ 1.1 HW ▪ Assignment 1 due 	<ul style="list-style-type: none"> ▪ 1.2 HW 	<ul style="list-style-type: none"> ▪ 1.3 HW ▪ Assignment 2 first post due 	<ul style="list-style-type: none"> ▪ 1.4 HW 	<ul style="list-style-type: none"> ▪ Assignment 2 replies due ▪ Week 1 Survey due
June 7	<ul style="list-style-type: none"> ▪ 1.5 HW 	<ul style="list-style-type: none"> ▪ 1.6 HW ▪ Assignment 3 first post due 	<ul style="list-style-type: none"> ▪ 2.1 HW 	<ul style="list-style-type: none"> ▪ 2.2 HW ▪ Assignment 4 first post due 	<ul style="list-style-type: none"> ▪ 2.3 HW ▪ Assignment 3 replies due 	<ul style="list-style-type: none"> ▪ Exam 1 ▪ Assignment 4 replies due ▪ Week 2 Survey due
June 14	<ul style="list-style-type: none"> ▪ 2.4 HW 	<ul style="list-style-type: none"> ▪ 2.5 HW ▪ Assignment 5 first post due ▪ Exam 1 due from proctor 	<ul style="list-style-type: none"> ▪ 3.1 HW 	<ul style="list-style-type: none"> ▪ 3.2 HW ▪ Assignment 6 first post due 	<ul style="list-style-type: none"> ▪ 3.3 HW ▪ Assignment 5 replies due 	<ul style="list-style-type: none"> ▪ Assignment 6 replies due ▪ Week 3 Survey due
June 21	<ul style="list-style-type: none"> ▪ 3.4 HW 	<ul style="list-style-type: none"> ▪ 4.1 HW ▪ Assignment 7 first post due 	<ul style="list-style-type: none"> ▪ 4.2 HW 	<ul style="list-style-type: none"> ▪ 4.3 HW ▪ Assignment 8 first post due 	<ul style="list-style-type: none"> ▪ 4.4 HW ▪ Assignment 7 replies due 	<ul style="list-style-type: none"> ▪ Exam 2 ▪ Assignment 8 replies due ▪ Week 4 Survey due
June 28	<ul style="list-style-type: none"> ▪ 5.1 HW 	<ul style="list-style-type: none"> ▪ 5.2 HW ▪ Assignment 9 first post due ▪ Exam 2 due from proctor 	<ul style="list-style-type: none"> ▪ 5.3 HW ▪ 5.4 HW 	<ul style="list-style-type: none"> ▪ 5.5 HW ▪ Assignment 10 first post due 	<ul style="list-style-type: none"> ▪ 6.1 HW ▪ Assignment 9 replies due 	<ul style="list-style-type: none"> ▪ Assignment 10 replies due ▪ Week 5 Survey due
July 5 <i>Oral Exam this Week</i>	<ul style="list-style-type: none"> ▪ 6.2 HW 	<ul style="list-style-type: none"> ▪ 6.3 HW ▪ Assignment 11 first post due 	<ul style="list-style-type: none"> ▪ 7.1 HW ▪ 7.2 HW 	<ul style="list-style-type: none"> ▪ 7.3 HW 	<ul style="list-style-type: none"> ▪ 7.4 HW ▪ 7.7 HW ▪ Assignment 11 replies due 	<ul style="list-style-type: none"> ▪ Exam 3 ▪ Week 6 Survey due
July 12		<ul style="list-style-type: none"> ▪ Exam 3 due from proctor July 13 				

EXPECTATIONS

The Course: You are expected to keep up with the course. Because the material you will be learning in this course builds upon itself extremely quickly, it is very important that you study and practice the skills you will learn *every day*. **Getting behind by even one class day can easily cause you fall so far behind that you will be unable to catch up.** If you do not understand something or are unable to solve a particular type of problem, **get help immediately.**

Important Dates: You are expected to keep up with due dates and exam dates. All information and announcements will be posted on xyzhomework.com, so check it often. Urgent announcements will be e-mailed, so check your Westminster e-mail everyday.

Daily Preparation: You should anticipate 20-25 hours of study per week, although the precise number of hours of study necessary to master the material varies by student. It will be difficult to earn an acceptable grade without keeping up with the homework and asking many questions. Consistent daily preparation will facilitate the ability to meet your grade expectations.

Help: You are expected to seek help when you need to do so.

- I am your number one resource! It's okay to ask me for help – even if you know you should already know it. I am available during my office hours, or you can call anytime I'm online.
- Ask questions and look for answers to your questions on the Q&A forums.
- Go to the class “Hangout” to see if any classmates are online.

POLICIES

Scholastic Dishonesty: Will NOT be tolerated. Westminster College students, staff, and faculty shall act in academic matters with the utmost honesty and integrity. Any form of academic dishonesty is a serious offense and, *at a minimum*, constitutes grounds for failure of the course. All instances of academic dishonesty will be handled as consistent with Westminster College regulations.

ADA: All faculty and students are required to follow the College's Honor Code, the ADA policy statement, college-wide policies prohibiting harassment and discrimination, the College Duty policy, and the Emergency Procedures. These policies and procedures can be found in the *Faculty Handbook*, Appendix R (hardcopy and on the Westminster College website), the *Faculty Advisor Handbook*, and the *Student Life Handbook*.