COURSE SYLLABUS

Term: Spring 2016

Course: MATH 231 Calculus II

Instructor Information:

Instructor Name	Alyssa Rodriguez
Office Number:	405
Phone Number:	219-473-4266
Email:	arodriguez@ccsj.edu
Hours Available:	M: 12:45 – 1:45 T: 2:45 – 3:45 W: 2:45 – 3:45 R: 12:45 – 1:45

Instructor Background:

Alyssa Rodriguez has a BS in Mathematics Education, a MA in Leadership in Teaching, and is finishing a Ph.D. in Research Methodology.   Alyssa teaches research methods at the graduate level, statistics, math, and education courses at the undergraduate level, and consults in the areas of general research and data analysis.

Course Information:

Course Time:	MTWR 1:45 – 2:45
Classroom:	265
Prerequisites:	MATH 260 with a grade of 'C' or better.
Required Books and Materials:	Stewart, J. Calculus; Ed 8 Cengage ISBN: 9781285740621

Learning Outcomes/ Competencies:

Through appropriate assessments students will demonstrate that they are able to:

1. **Remember** the necessary steps and procedures for computing differential equations, parametric equations, infinite sequences and series, and vectors.
2. **Understand** what each computation means on a conceptual level. Students will also understand the historical context within which calculus was developed.
3. **Apply** their understanding of the concepts and use appropriate computations to solve problems in physics, economics, business, and biology.

4. **Analyze** problems in physics, economics, business, and biology to determine appropriate methods for solving them.

5. **Evaluate** proposed solutions with respect to commonly accepted practices used in physics, economics, business, and biology.

6. **Create** and demonstrate appropriate solutions to discovery projects applying calculus methods in their chosen field of study.

Course Description:

This is the standard second-semester college Calculus course. Topics include differential equations, parametric equations, infinite sequences and series, vectors and geometry of space, and vector functions. Students will study the applications of the aforementioned topics in geometry, science, and business.

Learning Strategies:

Group discussions, lecture, and lots of practice. The objective is to promote your understanding of mathematics concepts and to enable you to apply them in a meaningful way. You are encouraged to rely on logical thinking, rather than on memorization. It is VERY important that you READ the sections of the textbook, STUDY the examples and WORK problems. Active participation in class and utilization of services such as the CCSJ Student Success Center will help ensure your success.

It is also recommended that you use Khan Academy as an instructional resource as you work through the chapters and examples in the text.

http://www.khanacademy.org/math/integral-calculus
https://www.khanacademy.org/math/multivariable-calculus
https://www.khanacademy.org/math/precalculus/parametric_equations
https://www.khanacademy.org/math/linear-algebra/vectors_and_spaces

Experiential Learning Opportunities:

Applications of the course objectives.

Assessments:		
Major Assignments:	Tests (2)	30% of grade
	Comprehensive final exam	20% of grade
	Written homework	20% of grade
	Projects	10% of grade
	Homework quizzes	10% of grade
	Participation	10% of grade

Written homework assignments:

- Homework is critical to your success in this course. The written homework are meant to serve as practice for quizzes and exams.
- Your written homework should be neat and organized. Problems should be copied from the book and all necessary work should be shown. Answers without work will not be given credit. All written homework from the textbook will be due when you take your exams.

- It is expected that you will spend 5 – 10 hours outside of class each week practicing math. You must practice to succeed.
- NO LATE HOMEWORK will be accepted, for any reason, period. You are welcome to turn it in early, but never late.

Grading Scale: (given as a percent of total possible points)

A: 93-100	A-: 90-92	
B+: 87-89	B: 83-86	B-: 80-82
C+: 77-79	C: 73-76	C-: 70-72
D+: 67-69	D: 63-66	D-: 60-62
F: below 60		

Important Dates:

Monday, 1/11	Pre-Test
Monday, 1/18	Martin Luther King's birthday – No class
Thursday, 2/11	Exam 1
Monday, 2/22	Project Due
2/29 – 3/5	Spring Break
Thursday, 3/21	Project Due
Tuesday, 4/19	Exam 2
4/25 – 4/30	Semester Exams

I reserve the right to change this schedule to meet the needs of the class.

Responsibilities

Attending Class	Attendance is important and is expected. You are responsible for all material covered in class, including announcements of assignments and quizzes. If you miss class, you must contact the instructor by email (arodriguez@ccsj.edu) within 24 hours. The instructor is more than willing to meet you halfway on this, but remember that there are TWO halves. You are allowed to miss 2 classes, without penalty. After that, every class that you are absent from will result in a one (1) percentage point loss from your final grade. You should 'save' your two absences for emergencies. If you are more than 15 minutes late to class, that will count as an absence. BE PRESENT, BE ON TIME.
	You cannot succeed in this class if you do not attend. We believe that intellectual growth and success in higher education occur through interaction in the classroom and laboratories. However, we do not want to penalize students for participating in college-sponsored events. When you miss class because of a college event, you must give notice of

	your absence in advance, and you are responsible for all missed work. Being absent doesn't excuse you from doing class work; you have **more** responsibilities to keep up and meet the objectives of this course.
Turning In Your Work	You cannot succeed in this class if you do not turn in all your work on the day it is due. NO LATE HOMEWORK will be accepted, for any reason, period. You are welcome to turn it in early, but never late.
Using Electronic Devices	Electronic devices are out of place in the classroom. Please keep them silent and put away during class. Calculators are allowed on most tests and quizzes.
Participating in Class	You must be on time, stay for the whole class and speak up in a way that shows you have done the assigned reading. If you are not prepared for class discussion, you may be asked to leave, in which case you will be marked absent.
Doing Your Own Work	If you turn in work that is not your own, you are subject to judicial review, and these procedures can be found in the College Catalog and the Student Planner. The maximum penalty for any form of academic dishonesty is dismissal from the College. Using standard citation guidelines, such as MLA or APA format, to document sources avoids plagiarism. The Library has reference copies of each of these manuals, and there are brief checklists in your Student Handbook and Planner. **PLEASE NOTE:** All papers may be electronically checked for plagiarism.
Withdrawing from Class	After the last day established for class changes has passed (see the College calendar), you may withdraw from a course by following the policy outlined in the CCSJ Course Catalog.

Resources	
Student Success Center:	The Student Success Center provides faculty tutors at all levels to help you master specific subjects and develop effective learning skills. It is open to all students at no charge. You can contact the Student Success Center at 219 473-4287 or stop by the Library.
Disability Services:	Disability Services strives to meet the needs of all students by providing academic services in accordance with Americans with Disabilities Act (ADA) guidelines. If you believe that you need a "reasonable

	accommodation" because of a disability, contact the Disability Services Coordinator at 219-473-4349.
CCSJ Alerts:	Calumet College of St. Joseph's emergency communications system will tell you about emergencies, weather-related closings, or other incidents via text, email, or voice messages. Please sign up for this important service annually on the College's website at: http://www.ccsj.edu/alerts/index.html. In addition, you can check other media for important information, such as school closings: **Internet:** http://www.ccsj.edu **Radio:** WAKE – 1500 AM, WGN – 720 AM, WIJE – 105.5 FM, WLS – 890 AM, WZVN – 107.1 FM, WBBM NEWS RADIO 78 **TV Channels:** 2, 5, 7, 9, 32