Math 202 – Calculus and Analytic Geometry 1

2018-2019 School Year (4 Credits)

Instructor: Ms. Sarah Hansen

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Availability: 1st hour and 3rd hour and before or after school by appointment

Required Text: Calculus – Graphical, Numerical, Algebraic by Finney, Demana, Waits, Kennedy

ISBN: 0-2014-32445-8

Class Schedule: 5th hour daily

Tentative Syllabus:

Week Beginning	Material
August 23	Section 1.1 - Lines
	Section 1.2 – Functions and Graphs
August 27	Work Day
	Section 1.3 - Exponential Functions
	Work Day
	Quiz Sections 1.1-1.3
September 4	Section 1.4 – Parametric Equations
	Work Day
	Work Day
	Section 1.5 – Functions and Logarithms
September 10	Section 1.6 – Trigonometric Functions
	Work Day
	Chapter Review
	Chapter Review
	Chapter 1 Test
September 17	Section 2.1 – Rates of Change and Limits
	Work Day
	Work Day
	Section 2.2 – Limits Involving Infinity
	Work Day
September 24	Section 2.3 – Continuity
	Work Day
	Work Day
	Quiz Sections 2.1-2.3
	Section 2.4 – Rates of Change and Tangent Lines
October 1	Work Day
	Work Day

	Chapter Review
	Chapter 2 Test
	Chapter 2 Test
October 8	Section 3.1 - Derivative of a Function
	Work Day
	Work Day
	Section 3.2 – Differentiability
October 15	Work Day
	Section 3.3 – Rules for Differentiation
	Work Day
	Work Day
	Quiz Sections 3.1-3.3
October 22	Section 3.4 – Velocity and Other Rates of Change
	Work Day
	Work Day
	Work Day
	Section 3.5 – Derivatives of Trigonometric Functions
October 29	Work Day
	Work Day
	Section 3.6 – Chain Rule
November 5	Work Day
	Work Day
	Quiz Sections 3.4-3.6
	Section 3.7 – Implicit Differentiation
	Work Day
November 12	Work Day
	Section 3.8 – Derivatives of Inverse Trigonometric Functions
	Work Day
	Section 3.9 – Derivatives of Exponential and Logarithmic Functions
	Work Day
November 19	Chapter Review
	Test Chapter 3
November 26	**Test Chapter 3**
	Section 4.1 – Extreme Values of Functions
	Work Day
	Section 4.2 – Mean Value Theorem
	Work Day
December 3	Work Day
	Section 4.3 – Connecting f’ and f’’ with the Graph of f
	Work Day
	Work Day
	Quiz Sections 4.1-4.3
December 10	Section 4.4 – Modeling and Optimization
	Work Day
	Work Day
	Work Day

	Work Day
December 17	Section 4.5 – Linearization and Newton's Method
	Work Day
	Work Day
	Work Day
January 2	Section 4.6 – Related Rates
	Work Day
	Work Day
	Chapter Review
January 7	Chapter Review
	Cumulative Test Chapters 1-4
	Cumulative Test Chapters 1-4
January 15	Section 5.1 – Estimating with Finite Sums
	Work Day
	Work Day
	Section 5.2 – Definite Integrals
January 21	Work Day
	Work Day
	Section 5.3 – Definite Integrals and Antiderivatives
	Work Day
January 28	Work Day
	Quiz Sections 5.1-5.3
	Section 5.4 – Fundamental Theorem of Calculus
	Work Day
	Work Day
February 4	Section 5.5 – Trapezoidal Rule
	Work Day
	Work Day
	Chapter Review
	Chapter Review
February 11	**Chapter 5 Test**
	Chapter 5 Test
	Section 6.1 – Antiderivatives and Slope Fields
	Work Day
	Work Day
February 18	Section 6.2 – Integration by Substitution
	Work Day
	Work Day
	Section 6.3 – Integration by Parts
	Work Day
February 25	Work Day
	Quiz Sections 6.1-6.3
	Section 6.4 – Exponential Growth and Decay
	Work Day
	Work Day
March 4	Section 6.5 – Population Growth

	Work Day
	Work Day
	Section 6.6 – Numerical Methods
	Work Day
March 11	Work Day
	Chapter Review
	Chapter Review
	Chapter 6 Test
	Chapter 6 Test
March 18	Section 7.1 – Integral as Net Charge
	Work Day
	Work Day
	Section 7.2 – Areas in the Plane
	Work Day
April 1	Work Day
	Section 7.3 – Volumes
	Work Day
	Work Day
	Quiz Sections 7.1-7.3
April 8	Section 7.4 – Lengths of Curves
	Work Day
	Work Day
	Section 7.5 – Applications from Science and Statistics
	Work Day
April 15	Work Day
	Work Day
	Chapter Review
	Chapter Review
April 23	Chapter Review
	Chapter 7 Test
	Chapter 7 Test
	Section 8.1 – L'Hopital's Rule
April 29	Work Day
	Work Day
	Section 8.2 – Relative Rates of Growth
	Work Day
	Work Day
May 6	Section 8.3 – Improper Integrals
	Work Day
	Work Day
	Quiz Sections 8.1-8.3
	Final Exam Review
May 13	Final Exam Review
	Final Exam Review
	Final Exam Review
	Final Exam Review

May 20	**Final Exam**
	Final Exam
	Final Exam
May 23	**Final Exam**

GRADING POLICY:	Tests	40%
	Final Exam	20%
	Quizzes	20%
	Homework	20%

Extra Credit Opportunities will not be available.

HOMEWORK: Homework is vital to understanding the mathematics of the lesson. Make sure you ask questions. You may work with other students on homework.

Homework will be assigned after each section and should be worked on every day. The only way to learn is by doing the assigned daily practice. Homework should be done completely and all work shown. Credit is given assuming the homework is done completely on the date specified.

ATTENDANCE: Attendance is taken daily. Please make your best effort to be in class every day. If you are not present for a class please get the notes and homework from me or another student.

EXAMS: After each chapter there will be a test. There are no cellphones, Ipods, etc. during exams. No calculators may be shared.

Calculators: Please make sure you have a calculator that has the ability to do trigonometry functions and statistics manipulation easily. TI-83 and TI-84 family calculators are acceptable and encouraged.

Class Preparation: You are expected to come prepared to class by reading the material and having completed the homework for the preceding sections. Mathematics builds upon itself. Please make sure you ask questions when you have them.

GRADES: We will use the UWGB grading scale.

A 100-92% AB 91-89% B 88-82% BC 81-79% C 78-70% D 69-60% F 59-0%