

Course Syllabus MTH 230 Section 201 Spring 2018

Course Title:	Calculus with Analytic Geometry II
Course Number:	MTH 230 -- Section 201 -- CRN: 3953 -- Credit: 4 Hours
Textbook:	Calculus, Early Transcendental by Stewart, Eighth Edition
Sections Covered:	6.1-6.5, 7.1-7.5, 7.7, 7.8, 8.1, 8.2, 10.1-10.4, 11.1-11.10
Course Description:	Applications of the integral, techniques of integration, and infinite series. A study of conic sections, polar coordinates, and parametric equations.
Calculator:	TI-83 or higher, graphing calculators may not be allowed for some problems in exams.
Prerequisites:	MTH 229 or MTH 229H with "C" or higher or IST 230
Meeting Time:	MTWR: 9:00 – 9:50 AM
Classroom:	Smith Hall 513
Instructor:	Dr. Basant Karna
Office:	Smith Hall 715
Office Hours:	TR: 11:00-1:00 PM, W: 12:00-1:00 PM, others by appointment
Phone/Email:	Phone: (304) 696-4332 Email: karna@marshall.edu
Web:	http://www.science.marshall.edu/karna/
Course Objectives:	MATH 230 students will learn various integration techniques. They will learn how to use these techniques in applications such as finding the area, volume, and work. Through the study of sequences and series students will learn how to recognize patterns and how to creatively manipulate expressions in order to arrive at familiar patterns. Students will also learn parametric equations and polar coordinates and their applications.
Course Contents:	<ul style="list-style-type: none"> - Applications of Integration - Techniques of Integration - Further Applications of Integration - Parametric Equations and Polar Equations - Infinite Sequences and Series
Attendance Policy:	Attendance is required and you must come with your text. Attendance will be taken every class day either by sign-in-sheet or by quiz. Having more than 25% absences (excused or unexcused) may result in a course grade of F ! Absences which can be excused include illness, emergencies, or participation in another university activity. Documentation from an outside source must be provided.
Grading Policy:	<p>A. <i>Quizzes</i>: Throughout the semester, there will be 5 quizzes given during the last 20 minutes of the class on Fridays. Problems in quizzes will be given from assigned homework problems (textbook will not be allowed).</p> <p>B. <i>Exams</i>: There will be 3 exams given in class during the semester.</p> <p>C. <i>Homework Problems</i>: Homework problems will be assigned and collected. You are responsible for reading the text, working the exercises, coming to office hours for help when you're stuck, and being aware of the dates for the major exams.</p> <p>D. <i>Final Exam</i>: There will be a two-hour final exam on May 4(Friday) @ 8:00.</p>

Learning Outcomes:	<p><i>Reasoning:</i> Calculus is a collection of reasoning techniques that allows one to understand how changing quantities behave. This understanding is fundamental to progress in science and engineering. Students will use mathematical reasoning in their study of calculus concepts to verify properties of the concepts they study, and they will use scientific reasoning to determine whether possible solutions are reasonable for a given situation.</p> <p><i>Representations:</i> Students will work with information specified in verbal, graphical, tabular, and symbolic forms. Many problems will require students to take information in one of these forms, analyze it, and create a solution in a different form. Students will be required to produce verbal explanations of the meanings of mathematical concepts, both in general and in the context of specific problems.</p> <p><i>Information literacy:</i> To solve the applied problems in this course, students must determine which information in the problem is relevant to the solution, access this information and use it to obtain a mathematical solution, and then translate the mathematical solution back into the language of the original problem.</p>														
Points Distribution:	<table> <tr> <td>Attendance</td><td>25 Pts</td></tr> <tr> <td>5 Homework Assignments</td><td>25 Pts</td></tr> <tr> <td>Quizzes</td><td>50 Pts</td></tr> <tr> <td>3 Exams</td><td>300 Pts</td></tr> <tr> <td>Final Exam</td><td>100 Pts</td></tr> <tr> <td colspan="2">-----</td></tr> <tr> <td>Total Pts:</td><td>500 Pts</td></tr> </table>	Attendance	25 Pts	5 Homework Assignments	25 Pts	Quizzes	50 Pts	3 Exams	300 Pts	Final Exam	100 Pts	-----		Total Pts:	500 Pts
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Total Pts:	500 Pts														
Grades	<p>The semester grade will be based on the percentage of the 500 total possible points, using the following scale.</p> <p>A: 90 -100 % , B: 80 - 89 % , C: 70 - 79 % , D: 60 - 69 % , F: 0 - 59 %</p> <p>Note: The class score will be posted on MUOnline.</p>														
Make-ups:	<p>A. Quizzes: For unavoidable missed quizzes with valid documentation, I will give you make up quiz within a week of the original quiz date.</p> <p>B. <i>Exams:</i> Making up a missed exam is possible only if you receive prior permission from me and only for serious and unavoidable circumstances. Make-ups must be taken within a week of the original exam date.</p> <p>C. <i>Final:</i> If you don't take final exam, you will receive an "F" for the class.</p>														
Exam Dates:	<p>Exam 1 –February 8, Exam 2 – March 8, Exam 3 – April 12 (Thursdays)</p> <p>Quizzes: Q1-Jan 18, Q2-Feb 1, Q3-Feb 22, Q4-Mar 29, Q5-Apr 19 (Thursdays)</p> <p>Final Exam: May 4 @ 8:00 AM(Friday)</p>														
Important Dates:	<ul style="list-style-type: none"> • January 15, Monday – MLK, Jr. Holiday – No Class • January 16, Tuesday – “W” Withdrawal period begins • March 16, Friday – Last day to drop • March 19, Monday – March 24, Saturday – Spring Break- No Class • April 27, Friday – Last class day 														
Disruptive Actions:	<p>If your actions become disruptive or distracting for me or another student, you will be asked to cease your behavior. If you choose to continue, you will be asked to leave. Disruptive behavior may include, but are not limited to the following: cell phone use in class, talking during class, and the use of iPods or MP3 players during class. These will count as unexcused absences.</p>														
Free Tutoring:	<p>Free tutoring in Smith Music Hall 625 (10:00 - 4:00 PM, 5:00 - 6:30 PM from Monday to Thursday and 10:00 – 12:00 PM on Friday).</p>														
Coming Late:	<p>Students should come on time and stay in the class for entire class. If you are late by more than 5 minutes, you will be considered to be absent.</p>														

University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to http://www.marshall.edu/academic-affairs/policies/ Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment
Disable Students:	Policy for Students with Disabilities: Marshall University is committed to equal opportunity education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disability Services (ODS) in Prichard Hall 117 (304.696.2467) to provide documentation of their disability. Following this, the ODS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experience, outside assignment, testing, and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, access the website for the Office of Disabled Student Services: http://www.marshall.edu/disabled .

General Homework Problems

Section 6.1: 1, 3, 4, 5, 7, 9, 11, 13, 18, 22, 27, 33
 Section 6.2: 1, 3, 7, 9, 11, 12, 15, 19-30(Odds), 33
 Section 6.3: 3, 5, 9, 11, 13, 15, 17, 21, 29
 Section 6.4: 1, 3, 5, 11, 13(a)
 Section 6.5: 1, 3, 7, 9, 10, 13
 Section 7.1: 1, 2, 3, 5, 7, 9, 10, 13, 15, 17, 26, 29, 33, 37, 39, 52
 Section 7.2: 1, 3, 5, 7, 11, 15, 16, 17, 21, 23, 25, 27, 29, 31, 33, 41, 61
 Section 7.3: 1, 3, 4, 6, 9, 11, 13, 17, 19, 23, 27
 Section 7.4: 1-6, 7, 9, 12, 15, 17, 19, 23, 25, 31, 39, 43
 Section 7.5: 1, 3, 7, 11, 23, 31, 36, 43, 46, 58, 59, 71, 73
 Section 7.8: 1, 2, 5, 7, 9, 13, 17, 23, 29, 37, 41
 Section 8.1: 3, 5, 9, 11, 13, 15, 17, 19
 Section 8.2: 1, 6, 7, 9, 11, 13, 15, 17
 Section 10.1: 1, 3, 5, 7, 9, 11, 13, 16, 19, 21, 24, 25, 28
 Section 10.2: 1, 3, 5, 7, 11, 13, 15, 17, 19, 29, 33, 34, 41, 43, 61, 63, 65
 Section 10.3: 1, 3, 5, 7, 9, 11, 15, 17, 18, 21, 23, 29, 30, 31, 35, 39, 55, 57, 61, 63
 Section 10.4: 1, 3, 8, 9, 11, 23, 27, 29, 31, 37, 39, 45, 47
 Section 11.1: 5, 8, 12, 13-18, 23, 25, 27, 31, 33, 35, 39, 43, 47, 50, 53, 72-78
 Section 11.2: 3, 5, 9, 11, 17, 20, 23, 27, 29, 31, 35, 37, 42, 43, 51, 52, 57
 Section 11.3: 3, 5, 7, 11, 13, 15, 17, 21, 25, 29
 Section 11.4: 3, 5, 7, 9, 11, 3, 15, 17, 19, 21, 28, 30
 Section 11.5: 2, 3, 4, 5, 7, 9, 11, 13, 15, 17
 Section 11.6: 2, 3, 5, 7, 9, 13, 17, 19, 25, 26, 28, 32
 Section 11.7: 1-38 (Odds)
 Section 11.8: 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 25
 Section 11.9: 3, 5, 7, 9, 11, 15
 Section 11.10: 5, 8, 11, 12, 13, 14, 19, 23