Course Syllabus   MTH 230   Section 101   Fall   2017

Course Title:	Calculus with Analytic Geometry II
Course Number:	MTH 230 -- Section 101– CRN: 3176 -- Credit: 4 Hours
Textbook:	Calculus, Early Transcendental, by Rogawski, Third Edition
Sections Covered:	6.1-6.5, 7.1-7.3, 7.5-7.7, 7.9, 8.1, 10.1-10.7, 11.1-11.4
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:	MTWRF: 9.00 – 9:50 AM
Classroom:	Smith Hall 513
Instructor:	Dr. Basant Karna
Office:	Smith Hall 715
Office Hours:	MW: 10:00-11:00, TRF: 11:00-12:00 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:	- Integrals - Techniques of Integration - Further Applications of Integration - Infinite Sequences and Series - Parametric Equations and Polar Equations
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:	A. *Quizzes*: Throughout the semester, there will be 12 quizzes given during the last 15 minutes of the class on Fridays. Problems in quizzes will be given from assigned homework problems (textbook will not be allowed). Two lowest quizzes scores will be dropped. B. *Exams*: There will be 2 exams given in class during the semester. C. *Homework Problems*: Homework problems will be assigned and collected. D. *Final Exam*: There will be a two-hour final exam on December 15, 2017.

Learning Outcomes:	*Reasoning:* 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.
	Representations: 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.
	Information literacy: 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.
Points Distribution:	Attendance 25 Pts Homework(5) 50 Pts Quizzes(10) 100 Pts 2 Exams 200 Pts Final Exam 125 Pts --- Total Pts: 500 Pts
Grades	The semester grade will be based on the percentage of the 500 total possible points, using the following scale. A: 90 -100 % , B: 80 - 89 %, C: 70 - 79 %, D: 60 - 69 %, F: 0 - 59 % Note: The class score will be posted on MUOnline.
Make-ups:	A. Quizzes: For unavoidable missed quizzes with valid documentation, I will give you make up quiz within a week of the original quiz date (two quizzes). B. *Exams*: 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. C. *Final*: If you don't take final exam, you will receive an "F" for the class.
Exam Dates:	Exam 1 – Sep 28, Exam 2 – Nov 9 (Thursdays) Quizzes: Q1-A24, Q2-A31, Q3-S7, Q4-S14, Q5-S21, Q6-O5, Q7-O12, Q8-O19, Q9-O26, Q10-N2, Q11-N16, Q12-N30 (Thursdays) Final Exam: December 15 @ **8:00 AM**(Friday)
Important Dates:	▪August 28, Monday – "W" Withdrawal period begins ▪ September 4, Monday – Labor Day – No Class ▪October 27, Friday – Last day to drop ▪November 20, Monday – November 25, Saturday – Thanksgiving Break ▪December 8, Friday – Last class day
Disruptive Actions:	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.

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:	The Disabled Student Services web site is now available. You may visit it at http://www.marshall.edu/disabled .
Coming Late:	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.

Homework Problems

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Section 6.1: 1, **3**, 6, **8**, 9, 10, **13**, 14, 15, **17**, 18, 31, **39**, 43
Section 6.2: 1, **2**, **9**, **11**, 13, 39, 41, 59, 60
Section 6.3: 1, **3**, 5, **8**, 11, **13**, 14, **15**, 17, **21**, 23, 27, **29**, 31, 33, 39, **41**, 45, 51
Section 6.4: 1, **3**, 7, **8**, 9, **15**, 16, **21**, 23
------------------- HW 2 ------------------------------
Section 7.1: 1, **2**, 3, **5**, 7, **11**, 13, **15**, 17, 19, **23**, **27**, **35**, 38, 43, 44, **49**, 50
Section 7.2: **1**, 2, **3**, 5, 9, **11**, 13, **15**, **17**, 21, **23**, 26, 28, **35**, 37, 39, 45, 51, 56, **59**
Section 7.3: 1, **3**, 5, **7**, 9, **11**, 13, **15**, 17, **19**, 25, 31, **37**, 40
------------------- HW 3 ------------------------------
Section 7.5: **1**, 2, **3**, 5, **7**, **9**, 12, **13**, **15**, 17, **18**, 19, **24**, 28, **37**, 41, 43
Section 7.6: **1-10**, **11**, 12, **13**, 14, **17**, 21, 26, **29**, 31, 37, 43, 51
Section 7.7: **1**, 2, **3**, 4, **5**, 7, **11**, 13, 19, 20, 25, 31, **33**, 35, **37**, **45**, 47, 61, 63, **67**
Section 7.9: **1**, 3, **5**, 9, **13**, 17
------------------- HW 4 ------------------------------
Section 8.1: **1**, 3, **5**, 9, 17, **35**, 37, 39, 41
Section 10.1: **1**, 2, **3**, 5, 7, 10, **13**, 14, 15,-29(**ODDS**), 35-61(**ODDS**), **63**, 65, **67**
Section 10.2: **1**, **2**, 3, **5**, 6, **17**, 18, **19**, **20**, 21, 23-36(**ODDS**)
Section 10.3: 1-78(**ODDS**)
Section 10.4: **1**, 2, **3**, 4, **7**, 15, 17-32(**ODDS**)
------------------- HW 5 ------------------------------
Section 10.5: 1-21 (**ODDS**), 27, 36-62 (**ODDS**)
Section 10.6: 3-41 (**ODDS**)
Section 10.7: **3**, 5, **6**, **7**, 8, **9**, 12, **15**, **19**, 20, **21**, 25, **27**, 29, **30**, 32, **33**, 34, 37
------------------- HW 6 -------Optional -----------------------
Section 11.1: 1, 5, 6, 7, 9, 11, 15, 19, 23, 25, 27, 29, 31, 36, 39, 49, 51, 55, 57, 85, 87
Section 11.2: 1, 3, 5, 7, 9, 16
Section 11.3: 1, 3, 5, 6, 7, 11, 13, 17, 19, 23, 26
Section 11.4: 1, 3, 5, 6, 7, 8, 10, 11, 13, 14, 25, 28

Turn in at least boldface problems.
Due dates are Mondays after the Sections are covered.