Course Syllabus MTH 230 Section 501 Summer II 2016

Course Title:	Calculus with Analytic Geometry II
Course Number:	MTH 230 -- Section 501– CRN: 5083 -- 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: 10.00 – 12:20 PM
Classroom:	Smith Hall 516
Instructor:	Dr. Basant Karna
Office:	Smith Hall 715
Office Hours:	After the class, 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 5 quizzes given. Problems in quizzes will be given from assigned homework problems (textbook will not be allowed). C. *Exams:* There will be 2 exams given in class during the semester. D. *Homework Problems: Five* homework assignments will be given 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. E. *Final Exam:* There will be a two-hour final exam on July 8.

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(5) 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 %
Make-ups:	A. Quizzes: For unavoidable missed quizzes with valid documentation, I will give you make up quiz (up to 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. You can't make up a make-up exam. C. *Final*: If you don't take final exam, you will receive "F" for the class.
Exam Dates:	There will be a quiz or an exam every third class day. Quizzes On: June 8, June 13, June 21, June 24, July 5 Exam 1 –June 16, Exam 2 –June 29 Final Exam: July 8@ 10 AM(SH 516)
Important Dates:	• June 7, Tuesday – "W" Withdrawal period begins • June 24, Friday – Last day to drop • July 4 – Independence Day – No class • July 7, Thursday – Last class day
Cell Phones:	All electronic devices should be shut off during class. **No Text messaging in the class at any time.**
University Policies	Please see the Marshall University Academic Affairs website http://www.marshall.edu/academic-affairs/?page_id=802 for policies regarding Academic Dishonesty, Excused Absence Policy, University Computing Services Acceptable Use, Inclement Weather, Dead

	Week, Academic Dismissal, Academic Forgiveness, Academic Probation and Suspension, Academic Rights and Responsibilities for Students, Affirmative Action, Sexual Harassment.
Free Tutoring:	Free tutoring in Music Smith Hall 115 from Monday to Friday.
Disable Students:	The Disabled Student Services web site is now available. You may visit it at http://www.marshall.edu/disabled . Students seeking special accommodations need to follow the university policy detailed at this web site. It is their responsibility to initiate the process for receiving accommodations based upon their disability. If you have any questions or comments, please contact Sandra Clements, the Director of Disabled Student Services.
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

---------- HW 1 ------- Due: June 10 (Friday) ----------
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 ------- Due: June 17 (Friday) ----------
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 ------- Due: June 24 (Friday) ----------
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 ------- Due: June 30 (Thursday) ----------
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 ------- Due: July 7 (Thursday) ----------
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 ------- Due: 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 the bold faced problems. You are free to do more.