Math 5B: Math Analysis II, FALL 2013

Instructor: Walid Tayar
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Phone: 559-638-3641 ext. 3263 (use email)
Office hours: MWF 11:00am-11:50am in FEM 1K or by appointment
My Math Center hours: TTH 11:00am-11:50am in FEM 1
Courses: 50146 MTWF from 12:00am-12:50am in FEM 4

Prerequisites:
Subject Prerequisites: Math 5A or equivalent.
Basic skills advisories: Eligibility for Engl 125 and Engl 126

Required text:
Howard Anton. Calculus, Early Transcendentals, Single Variable, 10th Edition.
The Student Solutions Manual (Optional) can be purchased at the bookstore.

Catalog Description:
This class investigates the applications of integration, many techniques of integration, improper integrals, parametric equations, polar coordinates and functions. Further study involves conic sections, exponential growth/decay models, infinite series including Maclaurin and Taylor Series.

Class Notes:
Notes for this class are available at the bookstore and are required.

Course Materials:
- Calculator (Scientific non-graphing and TI-83 or 84 (I will discuss this in class)
- Notebook paper (no spiral bound will be accepted for HW)
- Graphing paper
- 3-ring binder (for class notes)
- Ruler
- Pencils and Eraser
- Stapler (try the dollar store)

Blackboard: You can access blackboard at http://blackboard.reedleycollege.edu
Username: "your student ID#"
Password: "your student ID#"

Homework:
HW will be assigned after each lecture and will be collected the following class session. Your homework will be graded on completeness, neatness, and effort. Problems must be written out in pencil and all work must be shown in order to receive credit. I will not accept HW on spiral bound notebook paper. Please staple your HW in the top left corner and clearly highlight the section number at the top of each page or it will not be accepted. I will not provide a stapler, this will be your responsibility. If you come to class after the HW has been collected or are absent it will not be accepted for full credit. All late HW must be

turned in by the following class meeting for half credit. If you are absent, you are still responsible for any HW assignments. It is your responsibility to keep up with the pace of the class.

Attendance:
If you are absent more than once in the first two weeks of the semester, more than twice in the first four weeks or more than 3 times in the first nine weeks, you may be dropped from the course. Attendance is a key factor in your success as a college student. Students are expected to attend all class meetings, be on time, and be in class the entire class session. 5 absences over the course of the entire semester may result in a drop from the course. However, if you decide to drop the course, it is your responsibility to make the drop official in the Admissions and Records office or else possibly receive an F in the course. Also, there are to be no visitors in class for any reason. Pagers, cell-phones, CD/DVD/MP3 players, and any other electronic device must be turned off, silenced, and out of sight before entering class. You will be asked to leave if your phone rings in class. Also, cell phones are NOT to be used as calculators. NO EXCUSES!!

Tardies:
It is distracting, rude and unfair to classmates and to the instructor when a student is late. Leaving class at anytime during the lecture will not be allowed. Please use the restroom/make phone calls before or after class. If you leave class at any time, it will count as a tardy. Two tardies will be counted as an absence. You are responsible for telling me, at the end of class, that you were tardy. If I mark you absent and you do not tell me of your tardy, you will remain absent. If you leave class early, you will be marked absent. Students with chronic tardiness may be dropped from the course**.**

In-Class Assignments:
There will be quizzes, in-class assignments and possibly group projects assigned throughout the semester. No in class assignments can be made up so attendance is very important. These assignments will be included as part of your HW grade.

Exams:
There will be an exam at the end of each unit, approximately every 2-4 weeks. Each exam will be worth 100 points each. There are no make-ups for missed tests. No exceptions. Calling the day of the exam and telling me that you cannot make it to class is inexcusable. All tests will be taken using pencil. A final exam worth 100 points will be given at the end of the semester during finals week.

ALL CELLPHONES/ELECTRONICS ARE TO BE COMPLETELY OUT OF SIGHT AND TURNED OFF DURING THE EXAMS OR YOU WILL RECEIVE A 0% ON THAT EXAM AND IT WILL NOT BE DROPPED OR REPLACED BY THE FINAL EXAM SCORE. THIS WILL BE COUNTED AS CHEATING (SEE CHEATING POLICY BELOW). NO EXCEPTIONS!!!

Grading:

- Chapter Exams and the Final will be worth 80% of your overall grade. At the end of the semester, your lowest exam score will be replaced by your score on the final.
- Homework will be worth 20% of your overall grade.

Percent	Grade
90 - 100	A
80 –89	B
70 – 79	C
60 – 69	D
0 – 59	F

Lecture Outline:

Integration Review
Applications of the Definite Integral
Techniques of Integral Evaluation
Analytic Geometry
Exponential Growth and Decay Applications
Infinite Series

Important Dates:

August 12 (M) Start of Fall 2013 semester
August 12 - October 11 (M-F) Short-Term classes, first nine weeks
August 23 (F) Last day to drop a full-term class for a full refund
August 30 (F) Last day to register for a full-term Fall 2013 class in person
August 30 (F) Last day to drop a Fall 2013 full-term class to avoid a "W" in person
September 1 (S) Last day to drop a Fall 2013 full-term class to avoid a "W" on WebAdvisor/Phone
September 2 (M) Labor Day holiday (no classes held, campus closed)
September 13 (F) Last day to change a Fall 2013 class to or from a Pass/No-Pass
October 11 (F) Last day to drop a full-term class (letter grades assigned after this date)
October 14 - December 13 (M-F) Short-Term classes, second nine weeks
November 11 (M) Veterans Day observed (no classes held, campus is open)
November 28-29 (Th-F) Thanksgiving holiday (no classes held, campus closed)
December 9-13 (M-F) Final exams week
December 13 (F) End of Fall 2013 semester

Special Needs Requests:

If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Academic Dishonesty

Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is

expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Note: This syllabus is subject to change at the discretion of the instructor.

Section 6.1

① Find the greatest common factor

$77 = 7 \cdot 11$ GCF = $\boxed{7}$
$343 = 7 \cdot 7 \cdot 7$

②
$66 = 2 \cdot 3 \cdot 11$
$78 = 2 \cdot 3 \cdot 13$
GCF = $2 \cdot 3 = \boxed{6}$

③ $12 = 2 \cdot 2 \cdot 3$
$28 = 2 \cdot 2 \cdot 7$
$24 = 2 \cdot 2 \cdot 2 \cdot 3$
GCF = $2 \cdot 2 = \boxed{4}$

④ a^6
a^8
GCF = $\boxed{a^6}$

⑤ a^7b^2 GCF = $\boxed{a^7b^2}$
a^7b^6

⑥ $55 = 5 \cdot 11$ x^3 GCF = $\boxed{5x^3}$
$35 = 5 \cdot 7$ x^7

⑦ $3y - 6 = \boxed{3(y-3)}$

⑧ $14a^2 + 3a = \boxed{a(14a+3)}$

⑨ $315x^2 + 105x + 21$
$315 = 3 \cdot 3 \cdot 5 \cdot 7$
$105 = 3 \cdot 5 \cdot 7$ GCF = 21
$21 = 3 \cdot 7$

$\frac{315x^2}{21} + \frac{105x}{21} + \frac{21}{21}$
$\boxed{21(15x^2+5x+1)}$