Western Kentucky University

DEPARTMENT OF MATHEMATICS

MATH 137: CALCULUS II (Section A01)

Summer 2017

Syllabus date: May 2, 2017

INSTRUCTOR: Dr. Mikhail Khenner

OFFICE: Instructor: COHH 4104

EMAIL: mikhail.khenner@wku.edu

PHONE: Instructor: 270-745-2797

OFFICE HOURS: MTWThF 12:15 pm - 1:15pm, or by appointment

Learning Outcomes:

1. Master analytical and simple computational techniques for calculation and approximation of proper and improper integrals

2. Determine when computational techniques are needed

3. Use the techniques to solve applications, such as areas, volumes, arc lengths, etc.

4. Learn and master techniques for convergence analysis of the infinite series, including power series and Taylor and Maclaurin series

5. Learn representations of functions by Taylor and Maclaurin series

6. Learn about parametic equations and polar coordinates, and learn/master how to use them for finding lengths, areas and volumes

Information, Announcements: Blackboard (BB)
Homework: Online, at webassign.net
Prerequisites: MATH 136 the with grade of C or better.
Course outline: Chapters 7-10.
Textbook: Calculus of a Single Variable: Early Transcendental Functions, **6th edition**, by Larson and Edwards, ISBN-13: 978-1285774794. The ebook is available at no additional cost within the WebAssign platform (WA) at webassign.net; paid for access to WA course is required. WA is the online homework system. All students will be automatically billed by WKU bookstore for access to WA; this billing normally occurs at the end of WA grace period (explained below, thus keep reading), i.e. two weeks after the start of the course; you don't need to visit the store. You should notify the bookstore if you don't want this billing to occur - for instance, because you've already purchased the access code directly from webassign.net (purchasing a new code from webassign.net is not recommended, as the price may be higher and you will not get other benefits). NOTE: If you are repeating MATH 137 and were previously billed by the bookstore for access to WA *in this course*, call the bookstore and ask not to be billed again. The bookstore also sells an optional loose-leaf hardcopy of the textbook for $25. Call the bookstore at (800) 444-5155 for more information.
WA Quick Start Guide is at webassign.net, go to Students, then Get Started. First, you'll need a class key, which allows you to create WA account (or log into your existing account) and grants FREE access to online WA homework and ebook for 14 days from the start of the WA class/start of the course. This is called the grace period. After the grace period you'll need the paid-for access, as explained above. The class key is:
wku 4154 5925
Using the key, you will create an account or log into your existing account and complete the process of self-enrollment into your WA section. Notice that after logging in with class key, you will not see your WA class until its start date.

- **POLICIES:**

Scores and information about the current class standing: WA gradebook; all scores will be there in the raw and weighted forms and you'll see your current % and letter grade at all times. If you are uncertain about your class standing, you should pay a visit to my office and ask in person. I can't email or otherwise inform you of your standing due to Federal/State privacy laws. Also, I am NOT ANSWERING questions of the kind: "How many points do I need on future exam(s) or homework(s) to get C (or B, or A) in the class ?" It is YOUR responsibility to figure this out using the gradebook and weights (read on).

Attendance will be checked at every lecture or recitation class.
≤ 5 absences from lectures and recitations: nothing is subtracted from your class total %-score;
> 5 absences from lectures and recitations: a fraction of 5% is subtracted from your class total %-score, that corresponds to the actual number of non-attended classes.
It is the responsibility of the student to find out what work and announcements he or she missed during an absence from either a lecture class, or a recitation class (ask the Instructor, the TA and check the Blackboard).

Graphing calculators (TI-83 or 84) are allowed. The TI-89, TI-92, and TI-Nspire (unless you have the 84 faceplate) are not allowed. **You are required to show supporting work for any partial credit on an exam. Answers alone (unless a question is multiple choice) are NOT sufficient for receiving partial credit.**

Smartphones are absolutely disallowed on exams. During lectures it is up to you - I don't have patience to police the class every lecture. The TA will decide what he/she will do about the use of the smartphones at recitations. Same goes for laptops and other electronic devices.

WA Homework: You'll have at least two full days to complete each homework assignment. Some solutions to homework problems will be discussed in the recitation AFTER the homework due date; however, ON A CASE BY CASE BASIS the instructor and the TA will provide hints and other appropriate help with the homework. REMEMBER: the goal of recitation is NOT to directly help you with your homework; it is to provide additional practice, so that you are better positioned to do well on your future homeworks and exams. Homework accounts for **40%** of the total score (regular section).All homeworks are weighted equally; expect around 25 homeworks.
Homework extensions (read carefully !): In WA, you can request one automatic extension per assignment *during 3 days after* the assignment's original due date. Automatic means that the instructor is not involved in granting an extension, WA grants it at your request. The original due date + 3 days is also the final cutoff to submit work with an automatic extension, even if the length of the extension would otherwise extend past this date and time. After the original due date + 3 days you can still request a manual extension (an email to the instructor will be sent, who will decide whether to grant extension or not); manual extensions will be granted on a case-by-case basis and *only if* you request them *after* the original due date + 3 days. For automatic extension, you loose 15% of the score for the part of the assignment completed within the time frame of automatic extension (from the original due date to the original due date + 3 days). For manual extension, you loose 20% for the part of the assignment completed *after* the original due date + 3 days.

Exams: There will be four traditional exams (on paper, partial credit given), including the final non-comprehensive exam. Each exam accounts for **15%** of the total. A notecard with formulas/notes (size: standard paper sheet, both sides may be written) and a TI 83/84 calculator are allowed on all exams. **The tentative dates for the first three exams are June 16, June 29, July 12**; these exams will be given in the Math Testing Center on the 2nd floor of COHH. **Final exam will be on the last day of classes July 21 in the lecture classroom.**

Missing an exam: If you miss an exam for reason other than illness, emergency or athletics, your score for that missed exam will be zero, and you WILL NOT be allowed a makeup. Missed final exam automatically results in the grade of F, unless the instructor is notified in advance and allowed a make-up.

- **Grading Scale:**

$>= 90\%$	A
$>= 80\%$ and $< 90\%$	B
$>= 70\%$ and $< 80\%$	C
$>= 60\%$ and $< 70\%$	D
$< 60\%$	F

  Academic dishonesty (cheating, etc.) will not be tolerated; the instructor will not hesitate to take appropriate measures in order to penalize cheaters (like taking off points and even reporting a cheating student to an office).

- Student Disability: Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids/services) for this course must contact the Office for Student Accessibility Resource Center (SARC) in DUC, Rm. 1074, tel. 270-745-5004, email: sarc.connect@wku.edu. Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from SARC.

- **Suggestions on how to survive a calculus class and succeed:**

  1. Do not allow yourself any slack in learning/working starting from the first day. Do not hope that if you lagged behind you'll catch up later - 9 out of 10 students do not catch up.

  2. Immediately clear out all questions you have with the instructor or the TA. This is what the office hours are for.

  3. Mastery of algebra is of paramount importance. It is not an overstatement to say that your survival in a calculus class hinges 90% on algebra, since solving any calculus problem involves algebraic and trigonometric identities and manipulations. I will try my best to answer your qustions on algebra, as patiently as I am capable of (with the latter I may fail or partially fail, and I apologize in advance for all such instances) but I can't TEACH algebra in any consistent way due to time limitations and other constraints. You may find better luck with such questions with your TA, or with student staffers in the Math help center. What is absolutely certain is this: to get a passing grade of C, your skills in algebra must be good enough, that you generally make an algebraic error in the SECOND half of any assigned problem.

The schedule, policies, and assignments in this course are subject to change in the event of extenuating circumstances or by mutual agreement between the instructor and the students.