MATH 119 - CALCULUS II
Spring 2014
MWF 11:30am - 12:35pm
Bullock Science Center, Room 112W

Professor: Rachel Bayless   **Office:** Buttrick Hall 325
Email: rbayless@agnesscott.edu   **Office Hours:** M 9:30-10:20, W 3:15-4:15
Phone: x6231   Th 2:00-3:00, and by appointment

Text: *Calculus Single Variable* by Hughes-Hallett, Gleason, McCallum, et al, Wiley, 4th Edition, ISBN 0471484822 (paperback) or 0471484814 (hardback) [**Not** the latest edition]

Prerequisites: MATH 118 and a sufficient knowledge of calculus and trigonometry. Students are assumed to be well versed in the standard Calculus I topics of limits, continuity, taking derivatives of fairly complicated functions, using derivatives, and calculating the definite integral for basic functions.

Course Goals:

1. Learn the concepts and techniques of differential and integral calculus.

2. Develop problem-solving and critical-thinking skills.

3. Learn to interpret real-world problems in the language of mathematics.

4. Learn to effectively communicate mathematics, both orally and in writing.

Description: The chapters and topics that will be covered are as follows:

Chapter 6 Constructing Antiderivatives . . . . Sections 1-5
Chapter 7 Integration . . . . Sections 1-8
Chapter 8 Using the Definite Integral . . . . Sections 1, 2, 7, 8
Chapter 9 Sequences and Series . . . . Sections 1-5
Chapter 10 Approximating Functions Using Series . . . . Sections 1-3

Note: You should expect to spend about 3 hours outside of class for every hour spent in class.

Attendance/Classroom Policy: You are expected to be in class each day prepared to learn. If you do not attend class, then you are still responsible for the material covered. Make-up homework and exams will not be given. While you are in class please refrain from using cellphones, laptops, and other electronic devices. These devices are distracting to me and your fellow students.

Homework: Three types of homework will be assigned during this course. You will have reading assignments, Egrade homework, and regular written homework problems.

1. **Reading Assignments:** You are expected to read the chapter and complete the reading assignments before you attend class. The reading assignments will be 2-3 questions on definitions, simple examples, or concepts from the chapter. There will also be one question where you must give an example of how the material in the reading relates to your life or another

course you have taken. You will submit these assignments through **MOODLE by 8:00am** on the due date. I will read over your submissions before class, and use them as a guide during our class discussions. Your assignments will be graded out of 2 total points with a breakdown as follows:

- 0 - Nothing was submitted
- 1 - An effort was made, but the assignment was not complete or there were large errors in the answers
- 2 - Everything correct (or very minor errors).

The reading assignments are worth 5% of your final grade.

2. **Egrade Assignments:** You will be assigned Egrade homework problems to practice from each section. These problems will be due at 5:00pm each Friday, and a detailed schedule is available on bot Egrade and MOODLE. For these problems, you have the option to re-do them until they are correct (provided you do so before the deadline). There is no penalty for getting them wrong the first time (or second, third, fourth, etc...). All the Egrade assignments are currently on the website, and I encourage you to start them early. I also encourage you to write out complete work for all the problems even though only the answer is submitted online. There are two Egrade instructional documents posted on MOODLE. Please read them for a general description of how Egrade works. The Egrade assignments are worth 10% of your final grade.

3. **Additional Problems:** There will also be additional homework problems that you are expected to complete by hand. These will be odd numbered problems, and it is your responsibility to check your answers with the back of the book. If you have questions about these problems, then you should come ask me during office hours. The list of problems is already posted on MOODLE. These problems will not be collected (for the most part).

4. **Additional Problem Collections:** If you're reading this syllabus, then I'm sure you're wondering "what is for the most part?" As I mentioned above, the additional problems are already posted on MOODLE. You should start working on the problems early and complete problems as we cover the material in class. For certain sections I will collect and grade the additional problems. I will make in-class announcements about when certain sections will be collected (usually about a week in advance). There will be about 1-2 additional collections per chapter. The additional collections serve many purposes, and a list of a few positive outcomes is given below (in no particular order):

- Students keep up with the problems as we cover the material in class.
- Students keep an organized record of their work that will be helpful when studying.
- I get the chance to provide feedback on your written work before the exam (Egrade does not give me any indication as to how you're actually working through problems).
- I get a snapshot of how the class is doing and can adjust the lectures accordingly.

The additional collections are worth 5% of your final grade.

You are encouraged to work together on all homework, but **the work you turn in must be your own**. In particular, copying answers from an outside source (another student, solutions manual, tutor, internet, etc...) is forbidden. **No make-up homework will be accepted**.

Integral Proficiency Test: All Calculus II students will be expected to pass an integral proficiency test that will be given on Egrade. This test will have integration problems from sections 7.1 and 7.2, and you must get every problem correct in order to pass. You may re-take the test as often as needed until you pass. You should have all the material you need to start taking the test on Wednesday, February 5, and the deadline to pass it is 5:00pm on Wednesday, February 12. This test is worth 5% of your final grade, and no partial credit will be given. This is an individual assignment, so unlike homework, you must complete the integral proficiency test yourself. Please note that, like many computer systems, the server occasionally goes down for short periods of time. This does not affect the deadline for completion; so don't wait until the last moment, no matter how confident you are of passing!

Writing Project: There will be one writing project this semester, and you will work in groups of 2-3 students. I will assign the writing project during class on Friday, March 28 and it will be due at the beginning of class on Friday, April 11. The writing project will be centered around a problem that is more involved than the homework/exam problems. You will be given a "real world" scenario, and you will need to analyze the situation mathematically. You will be expected to type-up a written report on your theories, explorations, and findings. More detailed information about the writing project will be given when it is assigned. The writing project is worth 10% of your final grade.

Exams: There will be three in-class exams given during the semester. **No make-up exams will be given**. Each exam is worth 15% of your final grade. The **tentative dates** for the exams are

    1. Monday, February 17   2. Monday, March 24   3. Wednesday, April 23.

Final Exam: The final exam will be a self scheduled final exam. It is cumulative and worth 20% of your final grade.

Grade Policy: The scale used for this course is a ten point scale (90+ = A, 80-89 = B, 70-79 = C, and so on). Pluses and minuses will be given at my discretion. Your grade will be computed as follows:

Reading Assignments	5%
Additional Collections	5%
Integral Proficiency Test	5%
Egrade Homework	10%
Writing Project	10%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Final Exam	20%

Resources: Course materials, announcements, and homework assignments will be updated on MOODLE. It is your responsibility to check the MOODLE site regularly.

Please come to office hours. This is time set aside just for you, so take advantage of it. If your schedule conflicts with the preassigned times, then let me know, and we can find a time to meet by appointment.

Course Evaluations: The completion of course evaluations is an expectation of students in this class. Near the end of the semester you will be notified by email and provided with a link to follow to complete the evaluations online outside of class. Your feedback on the course is extremely valuable. You are responsible for completing an evaluation of the course at the end of the semester.

Academic Honesty: The Agnes Scott College honor code embodies an ideal of character, conduct, and citizenship, and is an important part of the College's mission and core identity. This applies especially to academic honesty and integrity. Passing off someone else's work as your own represents intellectual fraud and theft, and violates the core values of our academic community. To be honorable, you should understand not only what counts as academic dishonesty, but also how to avoid engaging in these practices. You should:

- review each course syllabus for the professor's expectations regarding course work and class attendance.

- attribute all ideas taken from other sources; this shows respect for other scholars. Plagiarism can include portraying another's work or ideas as your own, buying a paper online and turning it in as if it were your own work, or not citing or improperly citing references on a reference page or within the text of a paper.

- not falsify or create data and resources or alter a graded work without the prior consent of your professor. This includes making up a reference for a works cited page or making up statistics or facts for academic work.

- not allow another party to do your work/exam, or submit the same or similar work in more than one course without permission from the course instructors. Cheating also includes taking an exam for another person, looking on another person's exam for answers, using exams from previous classes without permission, or bringing and using unauthorized notes or resources (i.e., electronic, written, or otherwise) during an exam.

- not facilitate cheating, which can happen when you help another student complete a take home exam, give answers to an exam, talk about an exam with a student who has not taken it, or collaborate with others on work that is supposed to be completed independently.

- be truthful about the submission of work, which includes the time of submission and the place of submission (e.g., email, online, in a mailbox, to an office, etc.).

You should understand that penalties result from dishonest conduct, ranging from failure of the assignment to expulsion from the college. You should speak with your professors if you need clarification about any of these policies.

This syllabus is subject to change at my discretion.