

<b>MATH 2564 – Calculus II</b> <b>Course Syllabus – Fall 2013</b>
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**Office Hrs:** 12:45-1:45 MWF, or by appointment (drop-ins are welcome if I'm in my office; however, calling, emailing, or setting up a time will increase your chances of meeting)

**Course Number:** MATH 2564  
**Course Name:** Calculus II  
**Semester Credit Hours:** 4  
**Meeting Time:** 2:00 p.m. – 2:50 p.m. Monday, Wednesday, Friday  
**Meeting Location:** JB Hunt 144

**Required Materials:** There are two aspects of the required materials: the MYLABSPLUS Student Access Kit and the Turning Technologies response card (e.g., clicker).

**SOFTWARE:** MYLABSPLUS (MLP) Student Access Kit – This kit is **REQUIRED** for this class. The textbook is recommended, but not required since an electronic version of the textbook is included in the kit. If this is your first math course that requires the MyLabsPlus software, you will receive an email with your login/password information and how to enroll in this course. Please follow those instructions. If you have previously taken a course that requires the My LabsPlus software, then go to [uark.bb.mylabsplus.com](http://uark.bb.mylabsplus.com) and log in using your current login (which is your University of Arkansas email address including the @uark.edu part) and password. This course will now appear in the course listing. Click on this course and follow the instructions.

**PROBLEMS WITH THE SOFTWARE:** If your login fails, please check that you typed in the correct web address for MLP: [uark.bb.mylabsplus.com](http://uark.bb.mylabsplus.com). If you are able to open your course but you are not able to access your assignments, please try again. If you have tried a few times and still receive some type of an error message, then you need to contact the MLP Technical Support line at 888-883-1299 (available 24/7) or click on the Support Tab and then click on the email address. If you contact the company please make sure that they give you a case number and keep that number in case it is needed for verification.

**AUDIENCE RESPONSE:** The Turning Technologies audience response system will be used in all lectures. The student is required to purchase a Turning Technologies response card (clicker) unless one has previously been purchased for another class. The student is required to bring the clicker to every lecture. The channel setting for this class will be **channel 37**. Each student must register his/her clicker online as follows:

- Go to the website [webreg.turningtechnologies.com](http://webreg.turningtechnologies.com)
- Enter your First Name, Last Name, User ID, Email address, and Device ID in the correct spots
- Enter the Captcha image and click Register Device.
- Verify the information is correct and click Final Submission to complete your registration, or Cancel to start over

**Textbook:** *Calculus, Early Transcendentals*, William Briggs, Lyle Cochran, 2011, Pearson. As stated earlier, this is not required, as there is an electronic version of the textbook included in the

MYLABSPPLUS kit. However, if you work better from a print version, I suggest you obtain a copy, as it will be used in future calculus courses as well.

### **Calculators:**

Calculators are not necessary for the course. No calculators or computers will be allowed during exams or quizzes. Calculators and computers may be used for homework or for in-class investigations but are not necessary.

### **OTHER TECHNOLOGY**

Please do not have your cell phone on during class. Cell phones, palm pilots, Blackberries, iPods, etc. will not be allowed to be visible or used in any way during class. Do not plan to use these devices for a clock on the exam. Any device using earplugs/headsets is not allowed in class. If you have any of these devices in your back-pack or pocket during class, be sure that they are turned off and left in your back-pack or pocket.

### **GRADING:**

Grades for this course will be determined as follows:

Homework (Mylabsplus + Attendance)	10%
Quizzes	15%
Exam 1 (tentatively Sept 20)	15%
Mid-Term (departmental)	20%
Exam 3 (tentatively Nov 18)	15%
Final (departmental & comprehensive)	25%

Letter grades will typically follow a 90-80-70-60 scale, although the instructor reserves the right to revise downward if necessary.

There are two COMPREHENSIVE, COURSE-WIDE exams. These exams are written by the course coordinator, and graded by all course instructors.

<b>THURSDAY, OCT 17</b>	<b>MIDTERM EXAMINATION</b>	<b>6:00-7:30 pm</b>
<b>MONDAY, DEC 16</b>	<b>FINAL EXAMINATION</b>	<b>6:00-8:00 pm</b>

These exams are scheduled before the semester begins. **Students should ELIMINATE ANY CONFLICTS NOW.** Students who are entitled for accommodation by ADA must notify their instructor, and their instructor must notify the coordinator, at least one full week before the common examinations. Students who have a legitimate University-related conflict with the midterm or final exam must also identify themselves at least a week in advance. Last minute requests for make-up exams may not be granted.

The single best indicator of success in any calculus course is **DOING THE HOMEWORK!** There is simply no better tool for mastering the material. The course moves very quickly, so don't get behind! The homework will have a written component (e.g., paper HW from the textbook) and an online component (e.g., computer HW from mylabsplus). Generally, there will be a paper homework assignment for each class meeting. Not all homework assignments will be collected for grading. However, it is extremely important that you keep up with homework, as this is the practice and important learning experiences you need in order to be successful on quizzes, investigations, and exams. (A minimum of two hours per night is to be expected.) Computer homework will be posted on MLP and will contain two types of assignments—required ones and suggested ones. You are strongly encouraged

to complete all of the online HW, as well as the assigned book problems. Note that computer homework comes with deadlines. After the deadline deductions will be given for late HW. Computer homework applies to your course grade.

You will have a chance to ask questions on homework problems in the drill sections, and will be able to attempt the online questions as many times as you like, before each assignment's due date. If you are keeping up with the material you should do well on the HW. The HW will count for 10% of your final grade.

Additionally, there will be weekly quizzes in your drill section. The problems will usually be from the book HW. The quizzes will count for 15% of your final grade.

### **Attendance & Class Participation:**

Class attendance is required and extremely important. Attendance is part of your grade—therefore, absences from class will influence your grade in more ways than just your overall performance. The Turning Technologies audience response system will be used in the lecture class. You are required to purchase a Turning Technologies remote clicker unless you have previously purchased one for another class. Attendance will be taken in lecture class using the clicker. Participation in class activities and discussion is encouraged and also contributes to your overall grade. Attendance will be worth two HW grades in your final grade, while your clicker responses will account for an additional HW grade.

### **Statement for Academic Integrity:**

As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail." Each University of Arkansas student is required to be familiar with and abide by the University's Academic Integrity Policy which may be found at <http://provost.uark.edu/>. Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor. In addition, given the common coordination across Calculus 2 courses, it is considered academic dishonesty to discuss the contents of exams or quizzes with other students prior to their completing these assignments. Failure to abide by this rule is grounds for academic dishonesty charges being brought against all students involved.

### **TUTORING**

There are free student tutors in the Enhanced Learning Center (Gregson Hall), Mullins Library, ENGR, Reid, Futrall, Maple Hill, and MRTC – SCEN 209. Visit their websites for the latest hours. In addition, private tutoring is also available.

### **Inclement Weather Policy:**

Class will meet unless the University is closed. On-campus students are expected to be present. Off-campus students should make their own decisions in the best interest of personal safety. Off-campus students will not be penalized for being absent on those days the Fayetteville Public Schools are closed due to weather. If attendance is severely affected by weather, deadlines and exam dates may be adjusted. Please do not call the Department of Mathematical Sciences with weather-related inquiries. You may email me for information.

### **EMERGENCY PROCEDURES**

Many types of emergencies can occur on campus; instructions for specific emergencies such as severe weather, active shooter, or fire can be found at [emergency.uark.edu](http://emergency.uark.edu).

**Severe Weather (Tornado Warning):**

- Follow the directions of the instructor or emergency personnel
- Seek shelter in the basement or interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building
- Stay in the center of the room, away from exterior walls, windows, and doors

**Violence / Active Shooter (CADD):**

- **CALL-** 9-1-1
- **AVOID-** If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- **DENY-** Barricade the door with desk, chairs, bookcases or any items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it's safe.
- **DEFEND-** Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

***THIS SYLLABUS IS SUBJECT TO CHANGE. You will be notified in email, on MLP, and/or in class of changes. Failure to check your email and/or failure to read the announcements in MLP and/or failure to attend class will not constitute a reason to be allowed to make up any assignments, tests, or changes to the course.***

**MATH 2564 COURSE OUTLINE AND SUGGESTED SCHEDULE:**

**This schedule is an approximation and subject to change.**

<b>Week of</b>	
<b>26 August</b>	<b>Cal I Review</b> <b>7.1 Integration by Parts</b>
<b>2 September</b>	<b>Labor Day Holiday</b> <b>7.2 Trigonometric Integrals</b> <b>7.3 Trigonometric Substitutions</b>
<b>9 September</b>	<b>7.3 Trigonometric Substitutions</b> <b>7.4 Partial Fractions</b> <b>7.7 Improper Integrals</b>
<b>16 September</b>	<b>7.7 Improper Integrals</b> <b>Exam 1 (Covering Sections 7.1-7.4, 7.7)</b>
<b>23 September</b>	<b>6.1 Velocity and Net Change</b> <b>6.2 Regions Between Curves</b>

	<b>6.3 Volume by Slicing</b> <b>6.4 Volume by Shells</b>
<b>30 September</b>	<b>6.5 Length of Curves</b> <b>6.6 Physical Applications</b>
<b>7 October</b>	<b>6.6 Physical Applications</b> <b>6.8 Exponential Models</b> <b>8.1 An Overview (of sequences and series)</b>
<b>14 October</b>	<b>8.2 Sequences</b> <b>Review</b> <b>MIDTERM EXAM – THURSDAY, 6:00 – 7:30 PM</b> <b>8.3 Infinite Series</b>
<b>21 October</b>	<b>Fall Break</b> <b>8.4 Divergence and Integral Tests</b> <b>8.4/8.5 Integral Test/Comparison Tests</b>
<b>28 October</b>	<b>8.5 Ratio and Root Tests</b> <b>8.6 Alternating Series</b>
<b>4 November</b>	<b>9.1 Approximating Functions with Polynomials</b> <b>9.2 Properties of Power Series</b> <b>9.3 Taylor Series</b>
<b>11 November</b>	<b>9.3 Taylor Series</b> <b>9.4 Working with Taylor Series</b>
<b>18 November</b>	<b>Exam 2 (Covering Chapters 8 and 9)</b> <b>L1 An Introduction to Matrices</b> <b>L2 Determinants of 2x2 and 3x3 Matrices</b>
<b>25 November</b>	<b>L3 Matrix Multiplication</b> <b>Thanksgiving Break</b>
<b>2 December</b>	<b>L4 Linear Independence</b> <b>L5 Linear Transformations</b>
<b>9 December</b>	<b>L6 Eigenvalues and Eigenvectors</b> <b>Review</b>
<b>16 December</b>	<b>FINAL EXAM – MONDAY, 6:00 – 8:00 PM</b>