

<b>Syllabus for: (name of class): Math 50B</b>	
<b>Semester &amp; Year:</b>	Spring 2014
<b>Course ID and Section Number:</b>	E5182 (035182)
<b>Number of Credits/Units:</b>	4
<b>Day/Time:</b>	MWF
<b>Location:</b>	6:05-7:20 pm
<b>Instructor's Name:</b>	David Arnold
<b>Contact Information:</b>	Office location and hours: SC 216H Phone: 476-4222 Email: <a href="mailto:david-arnold@redwoods.edu">david-arnold@redwoods.edu</a>
<b>Course Description (catalog description as described in course outline):</b>	
<p>The second in the series of three calculus courses. Integral Calculus develops a set of advanced symbolic and numerical integration techniques, building on skills developed in the first course in the series, Differential Calculus. The course includes applications of integration, sequences and series, and the use of the Taylor polynomial to approximate functions. Students are introduced to parametric and polar equations.</p>	
<b>Student Learning Outcomes (as described in course outline) :</b>	
<ol style="list-style-type: none"> <li>1. Apply the concepts of the derivative and integral to solve real-world problems and applications.</li> <li>2. Use graphing technology to visualize functions, explore mathematical concepts, and verify results.</li> <li>3. Write solutions to mathematical exercises using sound mathematical reasoning with appropriate use of numerical, graphical, and symbolic representations.</li> </ol>	
<b>Special accommodations:</b> College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.	
<b>Academic Misconduct:</b> Cheating, plagiarism, collusion, abuse of resource materials, computer	

misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.

The student code of conduct is available on the College of the Redwoods website at:

<http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%2002-07-2012.pdf>

Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods homepage.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.



# David Arnold

## Mathematics

- [Department Home Page](#)
- [myCR](#)
- [WebAdvisor](#)
- [Optimath](#)
- [David Arnold Home](#)

## Math 50B: Instructor's Syllabus

### The Adobe Reader

There are files on this site in PDF format. You will need to [download](#) a free copy of the Acrobat Reader to read them. Click the following icon to obtain a free copy of the Acrobat Reader.



It is important that you have the most current version of the Acrobat Reader that your system will allow. The above links will take you to the Adobe site. The Adobe site will analyze your system, but you may be asked to choose the appropriate version of the reader for your system. If this happens, carefully select the appropriate version of the reader.

### Official Course Outline

The official course outline for Math 50B, Integral Calculus, including content, objectives, and student learning outcomes, can be viewed online via the following link:

[Math 50B Course Outline](#)

### Prerequisite Classes

Math 50A with a grade of "C" or better.

### Instructor's Schedule

The following link contains a copy of my schedule, including office hours.

## Schedule and Office Hours

Note that there are three one-hour office hour sessions on Sunday, Tuesday, and Thursday evenings. These will be conducted online using CCCConfer. Your instructor will share more information on taking advantage of these "special online" office hours during class.

Instructions for online office hours are here:

## CCCConfer Office Hours

Note: These are "official" office hours. However, I will make myself available whenever I can. Please do not be afraid to ask for help at any time as I am always eager to help.

## **Office Location and Phone**

- Science building SC 216H
- Office phone: (707) 476-4222

## **Cancelled Classes**

Those driving long distances to attend classes are advised to call (707) 476-4210 before driving to the CR campus. Choose #5 from a menu of choices. You will then be advised of any cancelled classes for the day in the Sciences complex (math/science). Thus, you can avoid the frustration of driving to campus, only to find that your class has been cancelled.

## **Email**

My email address is: [David-Arnold@redwoods.edu](mailto:David-Arnold@redwoods.edu)

## **myCR**

Click the myCR icon that follows. This will initiate contact with myCR. Click the Account tool, then the Modify Details button. Change your password. Be sure to write down your login name and password for future reference. Once you complete your password entry, click Update Details to complete the process

Next, click the Profile tool and enter any information you wish to share. Don't enter things like phone numbers that you wish to keep private. Click the Save button when you are finished.

In order that email messages to be forwarded to an email address other than your MyCR email address, click the Messages tool, then the Settings tab. Select "Yes" to Autoforward Messages, then fill in your personal email address where you want email messages forwarded. Click Save Settings when finished. This is extremely important as I send out hundreds of email messages each semester. This will help you not miss important announcements.

Once you login to myCR, locate your math class and take some time to find out what is provided. Then read the "Welcome Message" in the Discussion Board and reply to to the "Welcome Message" thread. In the future, use the Discussion Board to discuss issues and problems you are having with your class.



## Getting Help

Help is available in many forms.

- Your instructor is always available for help in SC 216H when he isn't teaching class or attending a meeting. Take advantage.
- The Discussion Board on MyCR is a great place to post and answer questions.
- It's quite OK to email your instructor with questions. In fact, you are encouraged to do so.
- We definitely miss our study rooms in the old Physical Sciences building on the Eureka campus where the "math geeks" used to hang out, but we now have a computer lab in the sciences building, SC 212. Good place to meet and work on homework.
- The Academic Support Center (ASC) on the Eureka campus in the library provides individual and group tutoring. You need to check in at the ASC desk and make an appointment to meet with a tutor.
- The "Mathlab" on the Eureka campus resides along the windows in the ASC. You must first go to registration (Forum Building) and register for Math 52 to make use of the mathlab. You can either register for 1/2 unit or a full unit.
  1. If you register for 1/2 unit, you must complete 22.5 hours in the mathlab. This amounts on average to 1.5 hours per week.
  2. If you register for 1 unit, you must complete 45 hours in the mathlab. This amounts on average to 3 hours per week.

After you complete the registration process at Registration, proceed to the Mathlab which is located in the Academic Support Center (ASC) of the Learning Resource Center (LRC). There will be an instructor there who will give you an information page, and a contract to sign.

Comprehensive information on the Mathlab is available at the following link:

[Information on the MathLab](#)

You can find a list of instructors who work in the Mathlab (Math 52) and a schedule for the hours that Mathlab is open at the following link.

[Math 52 Instructor Schedule and Hours](#)

The mathlab is not a great place to get personal, extensive, one-on-one tutoring (you should make an appointment with an ASC tutor for that), but it is a great place to work on your homework and get quick help when you are stuck. People work on their homework, then raise their hand when stuck, and tutors come by as soon as they are available. Tutors are trained to jump around from student to student, hopefully not taking too much time with each question, so it's likely that you can get quick attention as you need it.

## Classroom Environment

It is expected that everyone involved in this class, teacher and students alike, will act in a manner conducive to

providing a comfortable environment for learning, a classroom where students feel free to ask and answer questions without fear of embarrassment or ridicule.

It is important to stay on task when class is in session. Hence, conversation not pertaining to the subject at hand should be taken outside the classroom.

I understand that students will have to get up and leave the room for various reasons and I also understand that students will arrive late from time to time. However, courtesy requires that you enter and leave as quietly as possible, without disturbing discussion or lecture.

It is essential for student success to maintain a good environment in the classroom. If you have any personal difficulties with the learning environment in the classroom, please visit me in my office, phone me, or drop me an email to discuss them.

## Textbooks

The Mathematics Department continues to be concerned with the rising prices of textbooks. Consequently, students in Math 50B do not have to buy a text. You may check one out from the College of the Redwoods library or, if you must, you can purchase online. For more information, the following link has detailed discussion and instruction:

[Obtaining a textbook for Math 50B.](#)

## Reading the Textbook

It is important that you read and work the examples in the textbook before attempting the exercises. Many students will work the process in reverse. That is, they begin working the exercises, then if stuck, they page back through the narrative in the text seeking a similar example to the exercise on which they are working. This is **not** a recommended approach to the study of mathematics.

## Computing Resources on the Eureka Campus

The Eureka campus houses computing facilities for its calculus students. They are located in the physical sciences building, room PS116. There are a number of powerful software packages on the machines in this room that will aid in the study of calculus. See your instructor for login name and password.

When you login to a PC, open up the Explorer or My Computer. The H: drive is mapped to your personal space on the server. You should see your login name on this folder. Double-click this folder to open it and reveal several more folders: Desktop, Documents, Library, Movies, Music, Pictures, Public, and Sites.

When you login to a Mac, double-click the Finder icon on the Dock to open the Finder and reveal several more folders: Desktop, Documents, Library, Movies, Music, Pictures, Public, and Sites.

- You should not be downloading music, movies, or pictures, so don't use those folders.
- The Library folder is used by programs. You probably won't need to use this.
- The Desktop folder is for files on the Desktop.
- Anything you put into the Public folder is just that, it's "public" and anyone can see it. This is a great way to share files with a lab and/or project partner.
- The Sites folder is your personal web page repository. Browse to <http://msemac.redwoods.edu/~loginname/>, where you replace loginname with your personal login. For

example, I would enter <http://msemac.redwoods.edu/~darnold/>. You are not to use this folder for building a personal web site. Offenders of this policy will lose all computing privileges. You should only use this site to create materials specifically requested by your instructor.

- The Documents folder is where you should put all of your work. This folder is secure and the files in this folder cannot be read or written to by anyone but you.
- Computer Lab Information: A nice summary of information for our computer labs is available in the document [Math Computer Labs](#).

## Computer Lab -- Code of Conduct

Please see [Computer Labs --- Code of Conduct](#) for a set of rules and guidelines for computer use and maintaining decorum in the study rooms available in the physical sciences building.

## Transferring Files to and from the Department Server

Along with your username and password, which allow you to log on to computers in the Math/Science/Engineering computer labs and print your class assignments, you are granted some file storage space on the Math department's file server, MSEM Mac, which allows you to save files and access them at school as well as at home. Using the server to store and back up your class files will help ensure that you are always up-to-date on your assignments, will let you work on projects in multiple places, can guard against computer failure, and lets you transfer files from campus and back without needing a memory stick.

The process for connecting to MSEM Mac is different for Macs and PCs (the former is somewhat simpler). If you have a Mac, please read our [guide to connecting to MSEM Mac for Macs](#), and if you have a PC, please read our [guide to connecting to MSEM Mac for PCs](#).

## Useful Software (It's Free!)

There are two very useful software resources that you will find invaluable in this course:

1. Open your browser then enter the URL <http://www.wolframalpha.com/examples/>. Explore the various links under "Mathematics," particularly [Plotting](#) and [Calculus](#). You will find these extremely useful.
2. Go to <http://www.geogebra.org/cms/en/download> and click on the "Webstart" icon. This will install Geogebra and put a icon on your desktop for future use. We will use Geogebra extensively in this class.

## Calculators

I don't use graphing calculators in teaching calculus. Instead, I rely on Geogebra for graphing.

One important issue is the TI89 graphing calculator, which does symbolic calculation, including differentiation and integration. It is my position that you should be able to both integrate and differentiate without the use of this calculator. Therefore, it is essential that you show all steps on your homework and exams when performing any differentiations or integrations in order to receive credit for your work.

It is highly likely that some exams will not allow the use of a calculator or computer.

## Homework

Homework will be assigned daily and will be due the next class meeting. Each homework will be assigned a grade ranging from 0-10 points, bases on completeness, the following of directions, and the quality of work.

It is essential that students keep up with the homework on a daily basis. Each time you come to class without your homework, you are not prepared to take part in the class at a level geared to your success. Therefore, students are encouraged to hand in homework on time. However, I am acutely aware of the responsibilities that many students have to deal with outside the classroom. Consequently, I do allow a "grace period" of one class period for late work. That is, if you hand your homework in by the next class period, I will still accept the assignment. However, there is an automatic 2-point deduction for late work. Homework later than one class period will not be accepted.

If you are experiencing difficulty getting your homework in on time, or if you know an upcoming event will interfere with getting your homework in on time, please discuss this with your instructor. We can possibly make some arrangement to help facilitate the completion of your work.

In order to facilitate the recording of homework scores, students are required to place their name in the upper right-hand corner of their homework assignment and staple the pages together with a single staple in the upper left-hand corner. On the first line of the of the first page of your homework, please write down the assignment number, the pages that encompass the assignment, and list each exercise number assigned. For example, the first line of your homework might read:

Assignment #12, Page 150, #1, 3, 5, 7, 8, 10, 11, 23, 45

## **Distance Education Students**

Each televised meeting begins with a splash screen that contains important information for the class. Be sure to pay close attention to the information provided. The splash screen will contain a phone number you can use to ask questions during class time. The number is: (707) 476-4378.

When you call this number, our technician, John Anderson, will answer the phone and inform me that a question is pending. At the first available moment, we will pause instruction and take your question. The call will be placed on speaker phone so that the entire class can hear your question and my response.

It is a requirement that all distance education students have an email account. It is very important that you keep in contact with me on a regular basis, letting me know how your are doing. Always email or call if your are experiencing difficulty. Do not wait until it is too late.

There are a number of ways that distance students can submit their homework. *Note: These options are available to distance students only. All others must submit their work in class.*

- If you happen to be on the Eureka campus, the division office in the Physical Sciences building has a mail slot for submitting homework to instructors. Place your homework in the mail slot and the division secretary will place it in my mailbox.
- You may scan your homework and then attach it to an email message to me at this address: david-arnold@redwoods.edu.
- Distance education students may send in their homework via FAX (This option is available only to distance students. All others must submit their homework during class). The division FAX number is (707) 476-4424.
- Distance students are bound by the same rules as in-class students. Homework must be submitted on the day it is due. I always try to grade homework on the evening of the day it is collected. If you have not faxed it to me by the time I've gone home, or if it is not available via email when I correct the homework, it is considered late.

### **Guidelines for submitting homework via FAX.**



FAXing homework that is legible when I receive it is particularly challenging.

1. Use only white paper.
2. Use a dark (soft lead) pencil or erasable pen to write your work.
3. Write on only one side of each page. If you write on the back of a page, it will show through when Faxed and it will be a mess.
4. Leave at least a 1/2 inch margin on all sides of the paper.
5. Number and write your name on each page.
6. Always send a cover sheet with your name, contact information, and the number of pages sent.
7. There is a simple test you can use to determine what your homework will look like when I receive it via FAX. Simply XEROX your homework; the result is probably a little better than what I will receive on my end.

Distance students have several options for collecting their graded homework.

- If you are taking the class at one of the centers via distance learning, I'll be happy to return your homework via intercampus mail. However, be aware that there will be a 2-3 day turnaround.
- If you scan and submit your homework via email, if I have any comments I will return it via email. If I have no comments, I will simply record the grade in your gradebook, but not return anything to you. Of course, you still have the original pages. I usually send a reply email saying "Got it" so you know I received your homework.
- On the Eureka campus, I will keep an envelope outside my office door that will contain returned homework. You should contact me to make arrangements for the return of homework using some other method.
- If none of these options work for you, give me a call or send an email and we'll try to set something up.

## Examinations

We will have several examinations and a comprehensive final examination. Some will be take home examinations, some will be taken in class. For inclass exams, students should sit for the exam on the day that it is administered. Distance students must make arrangements to sit in a proctored environment when taking in class exams. Contact your instructor to make these arrangements in advance.

If you miss an examination, there is no guarantee that you will be allowed to make up the examination. Indeed, makeup examinations are given only at the instructor's discretion.

Students who need special arrangements for examinations are expected to meet with the instructor before each examination to insure that all examination materials are on file in the Academic Support Center (the ASC is in the library).

If you know ahead of time that you have a conflict that will prevent you from sitting for an examination, please meet with me to discuss alternatives.

Every student will be required to sit for a final, cumulative examination. The time and day of this examination is posted in the Schedule of Classes and students are expected to sit for the exam at the time and on the day posted. No exceptions. Any student failing to sit for the final examination will receive an F in the class. Please keep this in mind when making travel plans for December. Plan ahead!

## Quizzes

Short quizzes will be administered regularly so that students can see how they are progressing. Students will be allowed to work on these at home.

## **Grades**

To determine your grade in the class, points from homework, exams, quizzes, will be totaled, then curved to determine a final grade in the class.

## **When Problems Arise**

Should problems arise during the semester, always contact your instructor to let me know what's going on. That's the only way I can help.

## **The Syllabus is Subject to Change**

As instructor, I reserve the right to make adjustments to the syllabus should things not proceed as smoothly as expected. However, in general, I do not anticipate making changes.

Last Revision: 1/13/14 | [Email Webmaster](#) | © Design by [Andreas Viklund](#)