Syllabus for: Math50B- Brad Morin

Semester & Year:	Fall 2014
Course ID and Section Number:	Math-30-E6570
Number of Credits/Units:	4
Day/Time: **Location:**	MTWThF 7:50 am – 8:45 am Arcata High School, Room 108
Instructor's Name:	Brad Morin
Contact Information:	Help Sessions: generally as scheduled below in various locations Tuesday and Thurs – 7:00 – 9:00 pm Sunday - 10:00 am - 12:00 noon Email: brad.morin@gmail.com

Course Description:
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.

Special Notes or Advisories: A graphing calculator is required.

Student Learning Outcomes (as described in course outline) :

1. **Evaluate definite and indefinite integrals using a variety of integration formulas and techniques including the evaluation of improper integrals.**
2. **Apply integration to areas and volumes, and other applications such as work or length of a curve.**
3. **Apply convergence tests to sequences and series and represent functions as power series.**
4. **Graph, differentiate and integrate functions in polar and parametric form.**

Special accommodations: 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.

Academic Misconduct: 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.

Textbook: Calculus: Early Transcendentals, 5th Edition by James Stewart (not 7th edition).

Try Amazon. Save a bundle.

The text book is effectively my lecture notes.

Course Equipment: TI-83 Calculator or TI-84 (TI-89 won't work well for our class).

Bring text and calculator on lecture days -- calculator on exam days.

Basis for Grade: *Still under review, may be adjusted.*

25% Daily Quizzes on homework given at the end of class

50% Semester Exams.

20% Final Exam

5% Activities

Grade Scale: Letter grades will be determined based upon the following scale.

A 93% - 100% A- 90% - 92%

B+ 87% - 89% B 83% - 86% B- 80% - 82%

C+ 77% - 79% C 73% - 76% C- 70% - 72%

D 60% - 69%

F Below 60%

Learning Resources: Overview at http://msenux.redwoods.edu/mathdept/courses/math50A.php

Disabled Student Programs and Services

Academic Support Center

The L.I.G.H.T. Center

GUID 145

Placement: Make certain this course is appropriate for your skills and experience.

Modifications and additions to this syllabus will be necessary.

Prerequisites: Make certain this course is appropriate for your skills and experience.

Precalculus, or College Algebra and Trigonometryi, is/are prerequisites.

Math 50B Homework, Exams & Extra Curricular Activities
Morin

Fall Semester 2014

Homework and exam dates are given below. Each day you are to:

Turn in one problem (sometimes two). Work must be clearly presented. I'll specify which problems.
Take a quiz on the assigned homework. Access to your completed homework is allowed.

Missed assignments or quizzes can be made up by showing me your completed work on the assignment associated with the missed quiz or assignment. In addition, complete one of the following makeup activities (you choose which one you want to do) for each missed quiz or homework. Have it done by one day after the exam following the missed quiz of homework.

1. Memorize the Fundamental Trigonometric Identities
2. Memorize the Addition and Subtraction Trig Identities and the Double-Angle and Half-Angle Identities.
3. Memorize the derivatives of the Inverse Trigonometric Functions and the Hyperbolic Functions.
4. Memorize the integrals 1-18 from the integral tables in the reference pages at the back of the book.
5. Alcumus — Geometry Focus — Right-Triangle Trigonometry, 8 problems.
6. Alcumus — Geometry Focus — Unit Circle Trigonometry, 8 problems.
7. Alcumus — Algebra Focus — Polynomial Multiplication, 5 problems.
8. Alcumus — Algebra Focus — Logarithmic Basics, 8 problems.
9. Alcumus — Algebra Focus — Rational Expression of Polynomials, 5 problems.
10. Alcumus — Algebra Focus — Arithmetic Series, 5 problems.
11. Alcumus — Algebra Focus — Geometric Series, 5 problems.
12. More to come as needed.

You can come in 10 minutes before class to show your completed section and demonstrate your completion of one of the activities above.

Extra Curricular Activities. Find two that interest you if you choose to do this option.

HSU Integration Bee, high school students can participate, probably some evening in November.
Easy, unless you are preparing and expecting to win the cash prize for 1st place.
Attain level six in Algebra on Alcumus at http://www.artofproblemsolving.com.
Easy. Enjoyable. Great algebra review. May take four to ten hours.
Complete calculus problems on https://brilliant.org. — attain 1,000 points.
Challenging. Stirs your interest in some wonderfully engaging problems. Addictive.
Draw a cool picture using equations and inequalities on https://www.desmos.com
Fun to play with. Make some wonderful connections using rectangular or polar coordinates.
Pizza and Problems, held several times each fall semester.
How tough can it be to eat pizza and look at interesting problems on a Friday at 4:15 on CR campus?
Math competitions.
AMC, (we could try this)
FTW Join us online from home for some quick, friendly Sunday morning math contests.
Putnum (unofficially),
AMATYC Student Math League Competition (unofficially)
Science Night at CR, Friday, Oct 24, sometime around 6:00 pm to 9:00 pm

I'll entertain the notion of giving extra credit for doing more than two of the above activities. We'll decide later in the semester.

Date		Section	Turn in problem in parentheses Homework/Quiz Problems — Underlined problems can wait till the weekend.
Aug	25		Review Limits & Differentiation
	26		Chap 3 Review, page 271 — 1,5,9,13,17,21,25,29,33,37,41,45,49,53,57,61
	27		Chap 4 Review, page 362 — 1,5,9,15,17,18,19,29,39
	28	5.4	1-21 odd (15)
	29	5.5	3,13,21,27,33,**(41)**,57,65,68,73,79,80,83

Sep	**1**	**Labor Day — No School**	
	2	6.1	1, **(3)**, 5, 9, 19, 23, 25, 27, 29, 31, 33, — 45, 47, 49
	3	6.2	7, 9, **(11)**, 19, 21, 24, 26, 31, 33 — 35, 37, 41
	4	6.2	50, 53, 55, **(56)**, 57 — 63, 64, 65
	5	6.3	3, 5, 13, 17, 21, **(23)**, 25, 29, *31
	8	6.4	1,3,5,7,9,13a,**(13b)**,17 — 19, 21 (not on the quiz, but may be on the exam)
	9	6.5	1,3,5,7,9,13,19
	10	Chapter 6 Review	
	11	Exam 1	
	12	7.1	1,3,5,11,13,15,17,19, **(21)**, 25,29,35,41,45
	15	7.1	32, 34
		7.2	1,3,5,7,**(9)**,11,13,15 — 17,19,59
	16	7.2	21,23,25,27,29,31,**(33)**,35,37,39,41 — 43,45,47
	17	7.3	3,5,7,**(13)**,17,21,23 — 25,27
	18	7.4	1-8
	19	7.4	11,17,**(23)**,25,29,31,33,43,47
	22	7.5	5,11,**(17)**,23,31,41,45,49 — 57,63,69 (These 3 not on quiz, maybe on exam.)
	23	Review	
	24	Exam 2	
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Oct	1		
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Nov	3	
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	10	**Staff Development — no school**
	11	**Veteran's Day — no school**
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	Thanksgiving Week Holiday	
Dec	1	
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	18	**Course Final Part 1**
	19	**Course Final Part 2**