

MAT 272 Fall 2009

Instructor: Dr. Richard R. Reynolds

Web Address: http://math.asu.edu/~rich	Textbook: <i>Calculus, Early Transcendental Functions 3rd Ed.</i> by Smith and Minton (McGraw Hill)
e-mail: rich@math.asu.edu	Office: ECA-209A Office Hours: MWF: 1:00-2:30pm (Also by appointment)
Office Telephone: (480) 965-8984 Please contact me by <i>email</i> rather than the phone whenever possible.	

* **Important Note:** All items on this syllabus are subject to change.

Any in-class announcement, verbal or written, is considered official addendum to this syllabus.

Tentative Lecture and Test Schedule (43 class days!)

Week	Sections	Comments
8/24	10.1-10.3	Vectors in the plane and in space (\mathbb{R}^2 and \mathbb{R}^3), Dot Product
8/31	10.4-10.6	Cross Product, Lines and Planes in space, Surfaces
9/7	11.1-11.3	<i>Labor Day</i> , Vector-valued functions (space-curves), Arc Length, Calculus of Space-curves, Motion in Space
9/14	11.4-11.6	Test 1 , Curvature, TNB vectors, Parametric Surfaces
9/21	12.1, 12.2	Functions of several variables, Limits and Continuity
9/28	12.3, 12.4	Partial Derivatives, Tangent Planes & Linear Approximations
10/5	12.5, 12.6	Chain Rule, Directional Derivatives and the Gradient Vector
10/12	12.7, 12.8	Local and absolute extrema, Lagrange Multipliers
10/19	13.1, 13.2	Test 2 , Double Integrals, Area, Volume, Mass, Centroids
10/26	13.3-13.5	Double Integrals in Polar Coord., Surface Area, Triple Integrals
11/2	13.5-13.7, 14.1	Triple Integrals, Cylindrical and Spherical Coord., Vector Fields
11/9	14.2-14.3	Line Integrals, <i>Veterans Day</i> , Fun. Thm. Of Line Integrals
11/16	14.4, 14.5	Green's Theorem, Divergence and Curl, Test 3
11/23	14.6, 14.7	Surface Integrals, Divergence Theorem, <i>Thanksgiving</i>
11/30	14.7-14.9	Divergence Theorem, Stokes Theorem, Applications
12/7	Fnl Rev.	Final Exam is Thursday, December 10 from 7:10-9:00pm

Grade Allocation Min. Percentages for Grades Test Material

Grade Allocation	Min. Percentages for Grades	Test Material
Mathzone/ HW/Quizzes 15 %	97.5 – 100 %	Test 1, Sep. 14-15: 10.1-10.6, 11.1-11.3
	91.0 – 97.4 %	
Recitation 10 %	89.5 – 90.9 %	Test 2, Oct. 19-20: 12.1-12.8
	87.5 – 89.4 %	
Tests 1– 3 50 %	81.0 – 87.4 %	Test 3, Nov. 19-20: 13.1-13.7, 14.1-14.4
	79.5 – 80.9 %	
Final 25 %	77.0 – 79.4 %	Final: Cumulative, including 14.5-14.9 Thursday, Dec. 10, 7:10-9:00 PM Room TBA
	70.0 – 76.9 %	
Total 100 %	60.0 – 69.9 %	
	59 % or less	

You should recognize that this is a university level course conducted at a fast pace with a substantial workload. Expect to spend at least 10 – 15 hours weekly on homework, getting help in the Math or Engineering Tutor Center, etc. You also acknowledge that you are not assured of any minimum grade and will not be granted any exceptions other than those provided within university policy in place at this time. You understand that changes may be made to the syllabus in order to meet the needs of the students in the class and that it is your responsibility to attend class every time it meets to keep abreast of any such changes.

Prerequisites: MAT 271 (Calculus II) with a grade C or better. MAT 272 is a 4 credit class; you will meet three times a week with me (MWF 11:50-12:40 is SLN 74624) and also a recitation section.

Textbook: *Calculus, Early Transcendental Functions 3rd Ed.* by Smith and Minton (McGraw Hill). Everyone in the course must register for the Mathzone online system. See the last page of this syllabus for information to get registered. Once you've established your account, click on the 'Self Study' tab to access the various learning resources.

The textbook is available online while you do your homework. There is a Link to Text tab that enables you to view a pdf version of the entire section that the homework is taken from. You cannot print the section, but I believe you can save it for viewing at your convenience. *For this reason, a hardcopy of the textbook is optional.*

Students have access to MathZone for 2 years from the time of registration (for the same text). So, if a student registered for MathZone and then completes 3 terms of calculus (with the same text) within a 2 year period, he/she does NOT need to purchase a new access code.

Students with an existing MathZone account will login to MathZone with their personal username/password, click "Course Management" tab, and enter the new instructor's Student Section Code on the right-hand side of the screen. (If the student has forgotten his/her password, he/she can click "forgot password?" link to have it emailed to him/her.)

Optional Supplement: Schaum's Outline Series Mathematical Handbook by Murray Spiegel. This is not required, but I have constantly found it to be an invaluable reference, and it may even help with the comprehension of some topics.

Calculators: A graphing calculator is required for this course. If you already have a graphing calculator, you may use it. Examples of highly recommended models are the TI 83/84 or TI *n*-spire or Casio 9850GB Plus. Calculators with QWERTY keyboards or those that do symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, or TI-92 cannot be used during an exam.

HOMEWORK is required. There will be problems assigned from the textbook. Clarity of thought is what I am looking for, not just answers arrived at through a few lines of scribble. These must be written up so well, that you could look at your homework next year and be able to follow your entire thought process. Late homework will not be accepted.

There will also be problems assigned to be done online via Mathzone. The web address is: <http://www.mathzone.com> . See the last page of this syllabus for enrollment instructions.

Quizzes will be given in class, usually without warning. However, often you can work on the quizzes in groups and with open notes/books.

ATTENDANCE is required; missing more than eight classes (two weeks worth of classes) will result in a grade of **EN**, failure due to nonattendance. Students absent for university sponsored events must make arrangements for making up the work they will miss **before** they are absent. If you are feeling sick and/or ill (especially with flu like symptoms) let me know before class (via email) and I will excuse your absence.

Math Testing Center: The Mathematics Department Testing Center is in PSA 21 (basement). In order to be admitted to the Testing Center each student **must have** a valid ASU "**Sun Card**". The testing center is open 9:00 a.m. – 7:55 p.m. M-Th and 9:00 a.m. – 4:55 p.m. Fri. You must arrive *before* 6:30p.m. M-Th (3:30 Fri.), and the testing center employees are very prompt and unbending about locking you out! Students should take exams as early as possible during the allotted time frame, as the center can get extremely busy late in the day. The official web page is: <http://math.asu.edu/fym/tstcenter.html>

TUTORING: Two main resources:

Math Tutoring Center in PSA 116 will be open with the following schedule: Monday – Thursday from 8:00 AM – 8:00 PM, Friday 8:00 AM – 3:00 PM, Sunday 1:00 PM – 6:00 PM.

Come in for help before it is too late, and several days before an exam day to strengthen your preparation. In order to be admitted to the Tutor Center each student must present their valid ASU Sun Card. More information: <http://studentsuccess.asu.edu/home/mathtutoring>

Engineering Tutor Center, ECF 100, M-Th 9:00-5:00pm, Fri 9:00-3:00pm. More info:

http://www.fulton.asu.edu/fulton/students/sas/tutoring_center.php

ETHICS:

- Cellular phones and pagers must be turned off during class. **No Texting!**
- Do not wear an ipod while in class, not even in just one ear.
- Laptops must be off, closed, and **put away**.
- Calculators are for doing mathematics. Do not play games on your calculator during class or I will erase all programs on your calculator.
- Arriving late to class and/or leaving early will not be tolerated.
- It is highly unethical to bring to your instructor's attention the possible impact of your mathematics grade on your future plans, including graduation, scholarships, jobs, etc.
- You can find the definition of plagiarism at:

http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm#definitions

Academic dishonesty, including inappropriate collaboration, will not be tolerated. There are severe sanctions for cheating, plagiarizing and any other form of dishonesty.

Note: The instructor reserves the right to create class policies in regards to due dates, late assignments, etc. The syllabus is subject to change or revision at instructor's discretion; announcements made in class are considered addenda to the syllabus.

Departmental and University Policies and Procedures

See pages 83-86 of the Undergraduate Enrollment section of the course catalog

<http://www.asu.edu/aad/catalogs/general-pdf.html>

Unrestricted Withdrawal: A student may withdraw from a course with a grade of **W** during the course withdrawal period. The instructor's signature is not required.

The grade of Incomplete: A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents the student who is doing acceptable work from completing a **small** percentage of the course requirements. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed.

Final Exam Make-up Policy: The final exam schedule listed in the Schedule of Classes will be strictly followed. Common MAT 272 Final time: 7:10-9:00 PM on Thur., Dec. 10 (room still to be announced). Exceptions to the schedule and requests for make-up final examinations can be granted only by the Department Chair, Associate Department Chair or the Director of First Year Mathematics, and for one of the following reasons:

1. Religious conflict (e.g., the student celebrates the Sabbath on Saturday)
2. The student has more than three exams scheduled on the same day as the math final
3. There is a time conflict between the math final and another final exam.

Make-up exams will NOT be given for reasons of a non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

Honor Policy: Refer to the website: <http://provost.asu.edu/academicintegrity>

The grade of XE: A grade of XE is reserved for "failure for academic dishonesty." The grade goes on the student's transcript; the student needs to petition to have it removed after 1 year. **The grade of EN:** A grade of EN is reserved for "failure due to excessive absences." The grade goes on the student's transcript.