

CALCULUS & ANALYTIC GEOMETRY I SYLLABUS – MATH 231 – SPRING 2016

MATH 231 – 48672 – SECTION 004 – MW 1:00-2:50 PM – ROOM EMS E237

Textbook: *Essential Calculus (2nd Edition)*, by James Stewart.

Instructor: Xianghong Chen

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Office: EMS E490; (414) 229-4933

Office Hours: F 11:00 AM-12:00 PM (PHY 326); F 3:00-4:30 PM (office)

PRE-REQUISITES:

Math Placement Level A, or any of the following

A Math Placement Test Code of 40

A score of 61 or higher on the CLEP Precalculus Exam

A grade of C or better in both Math 116 and Math 117

A grade of C or better in both Math 211 and Math 117

A grade of C or better in Math 116 and Math Placement Test Code 36

A grade of C or better in Math 211 and Math Placement Test Code 36

A grade of C or better in Math 117 and Math Placement Test Code 35

IMPORTANT DATES:

Monday, Jan 25 First day of class

Friday, Feb 5 Last day to add or change among credit/no credit/audit status in PAWS

Friday, Feb 19 Last day to drop without a “W” (Withdrawn) on your record

March 13-20 Spring Recess

Friday, Mar 25 Last day to drop (no student may drop after March 25th for academic reasons)

Tuesday, May 10 Last day of class

Friday, May 13 Comprehensive final exam – 7:30-9:30 AM – Location TBA

GRADING:

HW and Quizzes	20%
Gateway Exams	20%
Two Midterm Exams	15% each
<u>Final Exam</u>	<u>30%</u>
Total	100%

There will be four gateway exams. You need to pass all of them with a score of 80% or better in order to get at least a “C” in this class (which is the prerequisite for taking Math 232). Each gateway exam will be given once in class, and that grade counts toward your final grade. The gateways may be retaken, once per day (Monday-Friday), in the Gateway Testing Center (NWQ B2461). The retakes are graded with no partial credit, and should be completed within two weeks of the original test date.

All quizzes, gateway exams, the two midterm exams, and the comprehensive final exam are closed book, no notes, no calculator. No makeups will be given except for tests missed for religious observance or documented medical emergency. The lowest two homework/quizzes scores will be dropped. Grading scale: 100-93 A, 92-90 A-, 89-87 B+, 86-83 B, 82-80 B-, 79-77 C+, 76-73 C, 72-70 C-, 69-67 D+, 66-63 D, 62-60 D-, 59 or below F.

There will be weekly homework assignments to be completed and graded via WebAssign. The homework problems are selected from the suggested problems listed below. Those not selected are assigned as practice homework, which you are strongly encouraged to attempt.

Prior to each class, you should read the sections of the textbook that will be covered that day. The course covers a lot of material quickly. It is important to keep up. If you find yourself falling behind or getting confused, act immediately to catch up. Take advantage of the instructor's office hours as well as other campus resources.

Course Outline (Subject to change)

Week 1	Jan 25-29	Sections 1.1, 1.2
Week 2	Feb 1-5	Sections 1.3, 1.4, 1.5
Week 3	Feb 8-12	Sections 1.6, 2.1; Gateway 1 (Limits)
Week 4	Feb 15-19	Sections 2.2, 2.3, 2.4
Week 5	Feb 22-26	Sections 2.5, 2.6, 2.7
Week 6	Feb 29-Mar 4	Sections 2.8, 3.1; Gateway 2 (Derivatives)
Week 7	Mar 7-11	Section 3.2; Review; Midterm Exam One
Spring Recess		
Week 8	Mar 21-25	Sections 3.3, 3.4, 3.5
Week 9	Mar 28-Apr 1	Sections 3.6, 3.7; Gateway 3 (Graphing)
Week 10	Apr 4-8	Sections 4.1, 4.2, 4.3
Week 11	Apr 11-15	Sections 4.4, 4.5, 5.2
Week 12	Apr 18-22	Section 5.3; Gateway 4 (Integration)
Week 13	Apr 25-29	Review; Midterm Exam Two
Week 14	May 2-6	Sections 5.1, 5.4, 5.5, 5.6
Week 15	May 9	Section 5.7; Review
Finals Week	May 12,13;16-20	The Final Exam is May 13 th , 7:30-9:30am, Room TBA

Suggested Homework Problems (o=odd; eoo=every other odd)

1.1	1-7, 19-29o, 33, 35, 39, 41, 57-59, 61, 63	3.4	1-33eoo, 39, 41
1.2	1-17 eoo, 19, 23-43eoo, 47, 49, 55abc,59	3.5	3, 5, 7, 9, 11, 15, 17, 25, 32-56 any 5
1.3	3-9o, 29-37o,	3.6	1-7
1.4	1, 11-27o, 33, 44, 49-55o	3.7	1-13o, 17-33eoo, 35-45o
1.5	3-5, 7, 13-23o, 27-33o, 39-42	4.1	1-15o
1.6	1-7o, 13-33eoo, 41, 43, 45, 49b	4.2	1, 7, 9, 11, 15-25o, 29-45o
2.1	1, 3-6, 9, 11, 15, 19, 21, 25-35o, 37-45o	4.3	1-29o, 31, 33, 37, 39, 43-49o, 50-66 any 4
2.2	1-15o, 19-23o, 33, 35, 39, 41	4.4	1-21o
2.3	1-43eoo, except 29, 47-57o, 61	4.5	1-47o
2.4	1-29o, 33-43o, 51, 53	5.1	1-25o, 33-41o
2.5	7-41eoo, 43-47o, 51, 53, 63, 67	5.2	1-41o, 45, 51-61o
2.6	1-15o, 19-27o, 35, 37, 39, 45	5.3	1-37o, 41, 43, 45, 49, 51, 61-69o
2.7	1-7o, 9, 13, 15, 21, 23, 27, 31, 37, 39	5.4	1-9o, 23-37o, 41-45o
2.8	1-4, 11, 13, 19, 21, 23	5.5	3, 9, 13, 19
3.1	1-43o, 45, 57o	5.6	1-6, 17-31o, 33, 35, 39-47o
3.2	1-11o, 15-25o	5.7	1-19o, 25, 27-41o, 44, 45, 47, 53-61o
3.3	1-35o, 37, 41, 43		

INCOMPLETES: In order to be given an incomplete, all of the following conditions should be met:

- a) You are already passing the course with the work that has been completed;
- b) You have only a "little" work to be finished; and,
- c) You can give substantiation of illness or other unusual non-academic circumstances beyond your control that have prevented you from completing the course on time.

REPEAT POLICY: Students repeating a Mathematical Sciences course for the second time (third taking) must do the following:

1. Obtain permission from student's academic deans' office for the repeat.
2. Meet with the Undergraduate Advisors for approval, Profs. Jay Beder or Suzanne Boyd.
3. Take completed and signed drop/add form (including academic dean approval and Math Department approval) to Mellencamp Hall 274.

Other pertinent information:

1. Room changes and cancellations are valid only if posted on Math Department letterhead and sent via email.
2. Students with disabilities or who qualify for accommodations (VISA) should contact me early in the semester to discuss the assistance they may need.
3. Texting is not permitted during class time. Cell phones should be turned off.
4. The minimum amount of time that an average student should expect to invest to successfully complete this course includes: 50 hours in class; 8 hours taking quizzes, tests and exams; 100 hours completing homework assignments; 35 hours studying for assessments. Total: 193 hours.
5. Drop-in tutoring is available in the East Wing of the library. Hours are posted here: <http://uwm.edu/math/undergraduate/resources/tutoring/>
6. The Brand New **Calculus Workshop** is debuting in Physics 326. Drop in and find a quiet place to study, do homework with peers from other sections, find tutors, meet with faculty, and fully engage in studying and learning the Calculus!
7. Academic Misconduct: The University has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Further information can be found at: <http://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/>
8. Discriminatory conduct: Discriminatory conduct will not be tolerated by the University. It poisons the work and learning environment of the University and threatens the careers, educational experience, and well-being of students, faculty, and staff. The policy on discriminatory conduct, including sexual harassment, can be found at: https://www4.uwm.edu/secu/docs/other/S_47_Discriminatory_Conduct_Policy.pdf