

Gannon University
Math 242-01, Fall 2008
Calculus 3
MWF 8:00am – 8:55am
Palumbo 2011

Instructor: Dr. Geoffrey D. Dietz
Department: Mathematics
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Office: Zurn 408
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Office Hours: MWF 9am–11am or by appointment
Text: **Essential Calculus, 1st Edition.** Stewart, 2007
Web Site: http://www.gannon.edu/faculty_staff/faculty/dietz005/teaching/F08-242.html.

1. **Credits and Prerequisites.** Math 242 is worth 3 credits. The prerequisite is Math 141: Calculus 2.
2. **Course Content.** Infinite sequences and series; power series; Taylor series and polynomials; parametric equations; polar coordinates; vectors in the plane and space; vector-valued functions. We will cover Chapters 8–10 from the text listed above. You are expected to read the assigned sections before every class and be prepared to answer questions.
3. **Course Outcomes.** Identify whether a given integer sequence has a limit and compute the limit if it exists. Identify general series, power series, and Taylor series. Determine if a given series converges or not and use the appropriate series test. Compute the sum of a geometric series. Match a parametric or polar function with its graph in the plane. Graph parametric and polar functions with a calculator, computer, or by plotting points. Apply calculus methods to these curves. Represent vectors in two and three dimensions graphically and algebraically. Compute dot and cross products of vectors. Determine the equations representing lines and planes in three dimensions given by verbal descriptions. Match equations of quadric surfaces with their graphs. Apply calculus methods to functions defined in terms of vectors. Apply course topics to various scientific fields.
4. **Evaluation.** Approximately once per week you will be given a quiz or graded homework problems. Ordinarily make-up quizzes will not be offered. Although not all problems will be collected and graded, correctly solving all problems is an excellent way to prepare for the exams. Three exams will be held during regular class time, and the dates may be subject to change.

5. **Grading.** Final grades will be based on

A: 90–100 B+: 85–89 B: 80–84 C+: 75–79 C: 70–74 D: 60–69 F: 0–59.

The ranges may be widened at my discretion. The grades are weighted as follows:

Exam 1 (Wed. 9/24):	18%
Exam 2 (Wed. 10/29):	18%
Exam 3 (Mon. 11/24):	18%
Final Exam (Wed. 12/17, 8:30am–10:30am):	30%
Homework and Quizzes:	16%

6. **Attendance.** Attending every class is necessary to maximize your success in this course. Regular attendance of scheduled office hours is also recommended if you have additional questions or concerns about any aspect of the course. You are responsible for obtaining any information missed due to absence.
7. **Excused Absences.** An excused absence from an exam will only be given when the absence is truly unavoidable and beyond your control. If you have advanced warning of a situation that will cause you to miss an exam, you must arrange a make-up exam before your absence. An exam missed due to illness must be made up the following day unless excused by a doctor.

8. **Technology.** A graphing calculator is recommended for this course and will be useful during class and on exams. The TI-83 and TI-84 are the preferred models. The TI-89, TI-92, and other devices capable of symbolic differentiation and integration will not be allowed for exams and quizzes. It is your responsibility to understand how to operate your calculator.

9. **Academic Integrity.** Students are assumed to be familiar with the Academic Integrity Policy found in the current edition of the student handbook. Cheating or dishonesty may result in a failing course grade or even expulsion from the University.

10. **Student Disabilities.** Gannon University is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with me as early in the semester as possible. You must also be registered with The Program for Students with Learning Disabilities prior to receiving accommodations in this course.

11. **Homework Guidelines.**
 - Graded homework in this course must consist of complete, neatly written solutions to the assigned problems. I am more interested in seeing the method of solution than the final answer. If a final answer is given without a sufficient amount of work, then you may receive little or no credit for the problem.
 - If a problem submission ends with an answer (possibly from the back of the text) that does not match the work for the problem, a score of **zero** may be assigned for that problem.
 - Assignments are due at the beginning of class.
 - Print your name and “Math 242” at the top of the first page.
 - Staple all pages of your homework before submission.
 - Label each problem by section and number. The problems should be written out in the proper order when submitted.
 - Start each problem with a *brief* summary.
 - Discussing the solutions to problems with others is permitted and encouraged. You must, however, turn in your own copy of the homework with your own written solutions. Word-for-word copies constitute academic misconduct.
 - Failure to follow these guidelines may result in the loss of points on assignments.

Math 242-01 Tentative Schedule for Fall 2008

Date	Day	Sect.	Practice (runs are odds only)	HW	Dates	
8/27	W	8.1	3-25, 31, 32, 33-36(all),		Q#1	
8/29	F		37, 38, 41, 43		9/3	
9/1	M	No Class				
9/3	W	8.2	3-15, 21, 24, 27, 29, 31,	6, 8, 26, 32*	HW#1 due 9/12	
9/5	F		39, 44, 47			
9/8	M	8.3	3, 4, 6, 7-17, 21, 33, 35	14, 18, 20, 22		
9/10	W					
9/12	F		8.4	2, 3-7, 11, 19-27, 33-41, 42		Q#2 9/19
9/15	M					
9/17	W					
9/19	F	8.5	3-9, 13, 17, 21	10, 12, 14		
9/22	M	Review				
9/24	W	Exam #1				HW#2 due 10/3
9/26	F	8.6	3-9, 13, 23, 27, 29, 35	8, 14, 28		
9/29	M					
10/1	W	8.7	2, 4, 5, 7, 11-13(all), 23-31,		Q#3 10/10	
10/3	F		39, 43, 47, 59-63, 64			
10/6	M	8.8	3, 5, 6, 23			
10/8	W	9.1	1, 5, 9, 13, 19, 31	24		
10/10	F	9.2	1-5, 9, 13, 17, 23, 27, 29, 33-41	14, 28, 38	HW#3 due 10/24	
10/13	M					
Fall Break 10/15 - 10/17						
10/20	M	9.3	1-13, 17, 23, 25, 29, 47-53,	28, 48		
10/22	W		55, 57			
10/24	F	9.4	1-7, 8, 15, 19, 29-35			
10/27	M	Review				
10/29	W	Exam #2				
10/31	F	10.1	1-5, 6, 7, 11, 13, 21-33		Q#4 11/7	
11/3	M	10.2	3, 4, 5-9, 13-19, 22, 29			
11/5	W					
11/7	F	10.3	1-7, 11, 12, 13-17, 21, 25, 31, 33		Q#5 11/14	
11/10	M	10.4	1-13, 23, 25, 29, 33-37			
11/12	W	10.5	2-5(all), 7, 11-17, 21-25, 33,	10, 18, 26, 42, 48	HW#4 due 11/19	
11/14	F		37, 41, 47, 49			
11/17	M					
11/19	W	10.6	1, 3, 7, 11-25, 29, 31			
11/21	F	Review				
11/24	M	Exam #3				
Thanksgiving Break 11/26 - 11/28						
12/1	M	10.7	1-9, 13, 15, 17-22(all), 25,	16, 28, 48, 64	HW#5 due 12/10	
12/3	W		29, 35, 39-49, 57-65			
12/5	F	10.8	1, 2, 3, 7, 11-19, 35, 37	14, 38		
12/8	M	10.9	3, 7, 11, 15, 19, 21, 25, 29			
12/10	W	Review				
12/12	F	Review				
12/17	W	Final Exam, 8:30am-10:30am				