Instructor: Nicki Gaswick
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Office Hours: MW 9:30-10:30AM, 2:30-3:30PM. If you have a conflict with these times, please make an appointment (after class, or by email) to see me at another time.

Text: Technical Calculus with Analytical Geometry by Peter Kuhfittig
Course: This is the first semester of a two-semester sequence in calculus for students in the School of Technology. We will cover functions and graphs, differentiation and integration with applications.
Prerequisite(s): MATH 1715 or 1513 and 1613.

Course Structure: This is a lecture-based class that meets three days a week. There will be twelve quizzes, three exams and a final exam in the class. To succeed in this class you should take responsibility for your own success by working and understanding all the homework assigned, attending lectures and use the course resources such as the MLRC. I encourage you to ask me when you have questions or concerns and I will be happy to help. I care about your general welfare as a student and am committed to your success in my class this semester.

Cell Phones: Cell phones and all other electronic devices (excluding calculators) must be turned off and be out of view during the entire class. Cell phones and electronic devices may not be used during class to play games, text, listen to music, making or receiving phone calls, using cell phones as a calculator, etc.

Calculators: A scientific or graphing calculator may be used to complete homework for this class. This calculator must be a dedicated calculator, not a cell phone or iPod or something similar. The use of the calculator may not be allowed on certain exams or quizzes.

Homework: Select problems from each section have been selected to provide a foundation of each topic covered in class. These problems should be worked in detail and will be the basis for many of the quizzes and exam topics.

Quizzes: There will be twelve quizzes throughout the semester. These may consist of in-class, take-home, or group quizzes. Each will be worth 20 points. The two lowest scores will be dropped. The quiz score, Q, will be your percentage score of the highest 10 quizzes, i.e. $Q = \frac{Q_1 + \cdots + Q_{10}}{2}$. **NO MAKE-UP QUIZZES** will be given.

Exams: There will be three exams throughout the semester plus a final exam. The three exams will be given on **February 8**[th]**, March 7**[th], and on **April 11**[th]. Each exam will be worth 100 points. Your exam score will be the total sum of scores of exams 1, 2, and 3 divided by 3, i.e. $E = \frac{E_1 + E_2 + E_3}{3}$.

There will be **NO MAKE-UP EXAMS** in this course. If one exam is missed due to official University activities, activities associated with military service, illness, family emergencies, mandatory court appearances, and any other events of comparable gravity., the score on the final will replace the missed exam score only if you request and obtain approval from the instructor in **advance** of the exam and only for very **serious and unavoidable** conflicts with proper documentation. If this condition is not satisfied, it is understood that a grade of 0 will be recorded for the missed exam.

Final Exam: The final exam will be comprehensive and will be worth 100 points. The final exam will be given on **Wednesday, May 2**[nd] from **10:00-11:50AM** in 004 HES (our regular class meeting room). This time for the Final exam is not negotiable (except when the OSU Final Exam Overload Policy applies). <u>You should note this on your calendar now; Plan ahead.</u>

Final Grades: The final grade will be based upon your semester score (consisting of the three exams and all the quizzes) and final exam. The semester score will be $S = \frac{3}{5}E + \frac{2}{5}Q$. The score of the final exam will be denoted F. Then the final grade for the course will be based on the number

$$G = \max\left(\frac{S+F}{2}, \frac{3S+F}{4}\right)$$

The final grade will be determined according to the University grading scale

90-100	A
80-89	B
70-79	C
60-69	D

Data Sheet & Course Contract: At the beginning of the semester you will be asked to complete a Data Sheet with picture ID and sign a Course Contract. This document is a very important requirement of the course. You should make it a high priority to complete it properly and return it to the instructor on time. No quiz or exam scores will be recorded for you and no attendance will count until you turn in the document. Copies of the document will be passed out during the first lecture.

MLRC: The Mathematics Learning Resource Center is located on the 4th floor of the Classroom Building just north of the Student Union in room 420 CLB. The MLRC is a place where students can receive tutoring and review topics in undergraduate math classes.

Important Dates:

Monday, January 9: Classes Begin

Monday, January 16: University Holiday

Tuesday, January 17: Last day to drop/add a class with no grade and no fees

Friday, January 20: Last day to drop a course with 50% fees and grade of "W"

Spring Break: March 19-23

Friday, April 6: Last day to drop or withdraw with an automatic grade of "W"

Friday, April 20: Last day to withdraw from ALL classes with a grade of "W" or "F"

Pre-Finals Week: April 23-27

Finals Week: April 30 – May 4th

University Policies / Academic Integrity: OSU is concerned about your success as a student here and has provided a website to answer questions most often asked by students. If you have questions regarding OSU policies, please visit: http://academicaffairs.okstate.edu/faculty-a-staff/48-syllabus-spring.

OSU is committed to the maintenance of the highest standards of integrity and ethical conduct. OSU's academic integrity policies will be followed in this class and these policies can be viewed online at http://academicintegrity.okstate.edu/

Doing Your Own Work: On homework and take-home quizzes you are encouraged to work with others and with tutors, but you should ultimately be able to work the problems and understand the concepts yourself. Copying is not allowed! You need to complete your own write up of problems even if you receive help.

Special Accommodations for Students: "If you think you have a qualified disability and need classroom accommodations, contact the office of Student Disability Services, currently located in 015 University Health Services (during Student Union renovation). Please advise the instructor of your disability as soon as possible, to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability from SDS but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified." (OSU Spring 2012 Syllabus Attachment)

Any changes in this syllabus or class schedule will be communicated to you in class by the instructor.

Week	Date	Section-Topic	HW Pages	Homework Problems
1	Jan 9 Mon	Course Introduction 1.1 Cartesian Coordinate System	3-4	1,5,19,23,27
	Jan 11 Wed	1.2 Slope 1.3 The Straight Line	8 12	3,11,15,17,23 1,7,15,17
	Jan 13 Fri	1.3 continued 1.4 Curve Sketching	12 21	21-33 odd 1,7,11,17,21,27,35,41
2	Jan 16 Mon	**No Class-University Holiday**		
	Jan 18 Wed	1.6 Conics 1.7 The Circle	25 28	No HW Problems 1,6,9,11,15,27,31,33
	Jan 20 Fri	1.8 The Parabola 1.9 The Ellipse	33-34 39-40	5,7,13,17,25,29,33 1,5,7,15
3	Jan 23 Mon	1.9 continued 1.10 The Hyperbola	39-40 45-46	23,25,27,39 1,7,11,17,21
	Jan 25 Wed	2.1 Functions and Intervals	58-59	1,3,7,19,23,27,35,43
	Jan 27 Fri	2.2 Limits	65-66	1,11-18, 29, 37-43, 55
4	Jan 30 Mon	2.3 The Derivative	67-69	No HW Problems
	Feb 1 Wed	2.4 The Derivative by 4-Step Process	74-75	1,7,11,19,23,25,27
	Feb 3 Fri	2.5 Derivatives of Polynomials	78	1-19 odd, 23
5	Feb 6 Mon	Catch-up and Review	74-75	1,7,11,19,23,25,27
	Feb 8 Wed	**Exam 1: 1.1-1.4,1.6-1.10,2.1-2.5**		
	Feb 10 Fri	2.6 Instantaneous Rate of Change	81-82	1-11 odd,18
6	Feb 13 Mon	2.7 Differentiation Formulas	88-89	Group A: 1-15 odd, 25
	Feb 15 Wed	2.7 continued	88-89	Group B: 1-13 odd,29
	Feb 17 Fri	2.8 Implicit Differentiation	94	1,5,9,13,15,23,33
7	Feb 20 Mon	2.9 Higher Derivatives	96	1,2,5,11,13
	Feb 22 Wed	3.1 The First Derivative Test	102-103	1,3,5,7,17,21
	Feb 24 Fri	3.2 The Second Derivative Test	109-111	1,5,9,17,27,29
8	Feb 27 Mon	3.4 Applications of Min and Max	118-120	1,11,13,19,23,37
	Feb 29 Wed	3.5 Related Rates	127-129	9,11,17,23,29
	Mar 2 Fri	3.6 Differentials	131	1,3,5,7

Week	Date	Section-Topic	HW Pages	Homework Problems
9	Mar 5 Mon	Catch up and Review		
	Mar 7 Wed	**Exam 2: 2.5-2.9, 3.1-3.6**		
	Mar 9 Fri	4.1 Antiderivatives	135-136	1-13 odd
10	Mar 12 Mon	4.2 The Area Problem	140	3,5
	Mar 14 Wed	4.3 Fundamental Theorem of Calculus	143	1,5,7,9
	Mar 16 Fri	4.4 The Integral	144	No HW Problems
11	Mar 19 Mon	**No Class- Spring Break**		
	Mar 21 Wed	**No Class- Spring Break**		
	Mar 23 Fri	**No Class- Spring Break**		
12	Mar 26 Mon	4.5 Basic Integration Formulas	149	1,3,7,11,13,21
	Mar 28 Wed	4.5 continued	149	33,37,55,59,61,67
	Mar 30 Fri	4.6 Area Between Curves	155-156	1,5,9,13,17,19,23
13	April 2 Mon	4.6 continued	155-156	25,27,29,31
	April 4 Wed	4.8 The Constant of Integration	163-164	1,5,7,9,13,23,25
	April 6 Fri	4.9 Numerical Integration	168	3,9
14	April 9 Mon	Catch up and Review		
	April 11 Wed	**Exam 3 4.1-4.6, 4.8-4.9**		
	April 13 Fri	5.1 Means and Root Mean Squares	174	1,3,5,9
15	April 16 Mon	5.2 Volumes of Revolution 1	177-178	1,3,5,7,9
	April 18 Wed	5.2 continued	177-178	13,15,18,25
	April 20 Fri	5.3 Volumes of Revolution 2	183-184	1,5,7,15,21,35
16	April 23 Mon	5.4 Centroids	193-194	3,5,15,23,33
	April 25 Wed	Catch up and Review		
	April 27 Fri	Review for Final		
17	**May 2 Wednesday**	**Final Exam 10:00-11:50AM** The date and time of the Final are set by the University. It cannot and will not be changed.		* The Final Exam is comprehensive