**Instructor**: Nicki Gaswick
**Office:** MSCS 431
**Phone**: 405-744-8412
**Email:** ngaswick@math.okstate.edu (preferred method of contact)
**Office Hours:** MWF 10:30-11:20AM, TR 12:30-1:50PM.  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 4th Edition
**Course:** This is the second semester of a two-semester sequence in calculus for students in the
    School of Technology. We will extend the concepts of elementary calculus (primarily
    differentiation and integration) to trigonometric, inverse trigonometric, exponential and
    logarithmic functions.
**Prerequisite(s):** MATH 1715 or 1513 and 1613 and 2123.

**Course Structure:** This is a lecture-based class that meets three days a week.  There will be
    thirteen 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 MLSC. 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; however, this homework will not be
    collected for a grade.

**Quizzes:** There will be thirteen 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. $Q = \frac{Q_1 + \cdots + Q_{10}}{2}$.

**Exams:** There will be three exams throughout the semester plus a final exam. The three exams will be given on **February 8$^{th}$, March 13$^{th}$**, and on **April 12$^{th}$**. 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. $E = \frac{E_1 + E_2 + E_3}{3}$.

**Final Exam:** The final exam will be comprehensive and will be worth 100 points. The final exam will be given on **Wednesday, May 1$^{st}$** from **10:00-11:50AM** in 305 HSCI (our regular class meeting room). This time for the Final exam is not negotiable (except when the OSU Final Exam Overload Policy applies). You should note this on your calendar now; Plan ahead.

**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 total score of at least 90% will ensure an 'A', a score of at least 80% will ensure at least a 'B', a score of at least 70% will ensure at least a 'C', and a score of at least 60% will ensure at least a 'D'.

**Missed Work:** The Mathematics Department suggests a policy on missed work, which I shall be following in this class. Here it is in full:

(A) Every student shall be offered reasonable accommodation in the event that he or she misses a major assessment activity for a valid and documented reason.

(B) Appropriate documentation shall be provided by the student in a timely fashion to support his or her request for accommodation.

(C) Major assessment activities are those such that a zero on that activity could reasonably be foreseen to impact the student's grade substantially; this category includes, but is not limited to, exams.

(D) Valid reasons include official University activities, activities associated with military service, illness, family emergencies, mandatory court appearances, and any other events of comparable gravity.

(E) Reasonable accommodation means that the student will be given the opportunity to earn a grade on the assessment activity that is based on criteria as similar as possible to those used to grade his or her classmates. This opportunity should normally be made available in a timely fashion.

What all this means is that if you have to miss a quiz or exam for a *serious* reason, *and you are able to provide acceptable documentation verifying that reason*, then you will be allowed to make up the missed work. If you have a scheduled University activity (like a field trip or sporting event) then it is normally best to do this beforehand. I try to be flexible and fair, so if you encounter an unusual circumstance then it is worth at least asking about make-up work, although I might say no.

**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 until you turn in the document. Copies of the document will be passed out during the first lecture.

**MLSC:** The Mathematics Learning Success Center is a place where students can receive tutoring and review topics in undergraduate math classes. To find the hours of operation please visit http://www.math.okstate.edu/mlrc.

**D2L:** I use D2L to post information about the class. If I need to contact the class I will use the email system through D2L. This means you need to check your OSU email regularly.

**Important Dates:**
   **Monday, January 7:** Classes Begin
   **Monday, January 14:** Last day to drop/add a class with no grade and no fees
   **Friday, January 18:** Last day to drop a course with 50% fees and grade of "W"
   **Monday, January 21:** University Holiday (MLK Day)
   **Mon-Fri. March 18-22:** Spring Break
   **Friday, April 5:** Last day to drop this class with a grade of "W"
   **Friday, April 19:** Last day to withdraw from ALL classes with a grade of "W/F"
   **Pre-Finals Week:** April 22-26
   **Finals Week:** April 29 - May 3

**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/46-syllabus-attachment.

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. You must credit those of whom you received help from on take-home quizzes.

**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 2013 Syllabus Attachment)

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

| Wk | # | Date | Section-Topic | Wk | # | Date | Section-Topic |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 7-Jan | Course Introduction<br>Review of Concepts | 11 | 29 | **18-Mar** | **NO CLASS (SPRING BREAK)** |
|  | 2 | 9-Jan | 6.1 Review of Trigonometry |  | 30 | **20-Mar** | **NO CLASS (SPRING BREAK)** |
|  | 3 | 11-Jan | 6.1 continued |  | 31 | **22-Mar** | **NO CLASS (SPRING BREAK)** |
|  |  |  |  |  |  |  |  |
| 2 | 4 | 14-Jan | 6.2 Derivatives of Sine & Cosine | 12 | 32 | 25-Mar | 7.7 continued |
|  | 5 | 16-Jan | 6.2 continued |  | 33 | 27-Mar | 9.1 Surfaces in 3 Dimensions |
|  | 6 | 18-Jan | 6.3 Other Trig Functions |  | 34 | 29-Mar | 9.2 Partial Derivatives |
|  |  |  |  |  |  |  |  |
| 3 |  | 21-Jan | **NO CLASS-MLK Day** | 13 | 35 | 1-Apr | 9.2 continued |
|  | 7 | 23-Jan | 6.3 continued |  | 36 | 3-Apr | 9.5 Iterated Integrals |
|  | 8 | 25-Jan | 6.4 Inverse Trig Functions |  | 37 | **5-Apr | 9.6 Volumes by Double Integration |
|  |  |  |  |  |  |  |  |
| 4 | 9 | 28-Jan | 6.5 Deriv. of Inverse Trig Functions | 14 | 38 | 8-Apr | 9.7 Mass and Centroids |
|  | 10 | 30-Jan | 6.5 continued |  |  | 10-Apr | Catch up and Review for Exam 3 |
|  | 11 | 1-Feb | 6.6 Exponential and Log Functions |  |  | **12-Apr** | **Exam 3 (7.7, 9.1-9.2, 9.5-9.7)** |
|  |  |  |  |  |  |  |  |
| 5 | 12 | 4-Feb | 6.6 continued | 15 | 39 | 15-Apr | 8.1 Vectors & Parametric Equations |
|  | 13 | 6-Feb | Catch up and Review for Exam 1 |  | 40 | 17-Apr | 8.2 Arc Length |
|  | 14 | **8-Feb** | **Exam 1 (6.1-6.6)** |  | 41 | 19-Apr | 8.3 Polar Coordinates |
|  |  |  |  |  |  |  |  |
| 6 | 15 | 11-Feb | 6.7 Derivative of Log Functions<br>6.8 Derivative of Exp Functions | 16 | 42 | 22-Apr | 8.4 Curves in Polar Coordinates |
|  | 16 | 13-Feb | 6.7 & 6.8 continued |  | 43 | 24-Apr | 8.5 Areas in Polar Coordinates |
|  | 17 | 15-Feb | 6.9 L'Hospital's Rule |  | 44 | 26-Apr | Review for Final Exam |
|  |  |  |  |  |  |  |  |
| 7 | 18 | 18-Feb | 7.1 The Power Rule Again |  |  |  | **FINAL EXAM** |
|  | 19 | 20-Feb | 7.2 The Exponential and Log Forms |  |  |  | **Wednesday, May 1st** |
|  |  | 22-Feb | 7.2 continued |  |  |  | **10:00-11:50 AM** |
|  |  |  |  |  |  |  |  |
| 8 | 20 | 25-Feb | 7.3 Trigonometric Forms |  |  |  | The final exam is held in our |
|  | 21 | 27-Feb | 7.3 Continued |  |  |  | regular classroom |
|  | 22 | 1-Mar | 7.4 Further Trig Forms |  |  |  |  |
|  |  |  |  |  |  |  | The final exam time and date is set |
| 9 | 23 | 4-Mar | 7.5 Inverse Trig Forms |  |  |  | by the University and cannot be |
|  | 24 | 6-Mar | 7.6 Integration by Trig Substitution |  |  |  | changed |
|  | 25 | 8-Mar | 7.6 continued |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 10 | 26 | 11-Mar | Catch up and Review for Exam 1 |  | ** | 5-Apr | Last day to drop class with "W" |
|  | 27 | **13-Mar** | **Exam 2 (6.7-6.9, 7.1-7.6)** |  |  |  |  |
|  | 28 | 15-Mar | 7.7 Integration by Parts |  |  |  |  |