Math 200 Spring 2013-2014
http://www.math.drexel.edu/classes/math200/201335/

It is the prerogative of the Math 200 team to change the course during the term at our discretion. Any changes will be communicated via the course website, so be sure to check it frequently. Course announcements, exam information, and other details will be regularly posted to the course website.

You are expected to be fully aware of the following policies and expectations, so review this information carefully and ask your instructor if you have further questions.

Prerequisites
Students entering Math 200 are expected to have completed and passed Math 122 or its equivalent. If you earned a D in Math 122, you should consider retaking it. Any questions regarding your readiness for the course should be resolved immediately.

Course Coordinators

Jason Aran  jsa33@drexel.edu  215-571-3585  Korman 258
Dimitri Papadopoulos  dp399@drexel.edu  215-895-1957  Korman 236

Course Description and Expectations
The subject matter of the course is calculus for functions of more than one variable and the tools required to study such functions (the geometry of 3-dimensional space, vectors, curves and surfaces). You will be expected to acquire problem solving skills appropriate to the material, including (but not limited to) the following:

- Performing basic calculations with vectors, including: addition, scalar multiplication, dot products, and cross products.
- Describing lines, planes, spheres, and quadric surfaces in 3-space.
- Evaluating limits, derivatives, and integrals of vector valued functions.
- Computing level curves for functions of two variables and level surfaces for functions of three variables.
- Computing and interpreting partial derivatives.
- Applying differentiation to solve application problems, including: computing a tangent plane to a surface at a specified point, finding critical points, and finding extrema.
- Working with cylindrical and spherical coordinates.
- Using an iterated integral to compute a specified area or volume.
- Evaluating double integrals in rectangular coordinates or polar coordinates (where appropriate).
- Evaluating triple integrals in rectangular coordinates, cylindrical coordinates, or spherical coordinates (where appropriate).
- Performing change of variables to simplify the computation of an iterated integral.
**Attendance**

Regular attendance is essential for success in this course. You are responsible for all the material discussed in class. The quarter system moves very quickly – if you don’t do your work regularly, it is easy to fall behind.

**Recommended Textbook**

We do not require that you purchase any particular calculus textbook. However, we do recommend that you have a calculus book or electronic resource available to use as a supplemental reference to the material discussed in lecture.

Our calculus courses will loosely follow the order of *Calculus: Early Transcendentals*, 10th edition, by Howard Anton. We have worked with the Wiley Publishing Company to offer this book at a discounted rate when purchased via the following website:

http://www.wiley.com/WileyCDA/Section/id-817840.html

There are options for the full book (with all chapters) or a custom book containing chapters 1-4 (which is meant for students who intend to take ONLY Math 121). Both options have the choice of being a loose-leaf printed copy or a digital copy which is downloadable on up to two devices.

Other textbooks, e-books, and old editions are also acceptable resources.

**Webwork**

Webwork is a free, web-based, online homework system. To access the Webwork assignments, go to https://www.math.drexel.edu/webwork2/200-S-14-ARAN/. Your username is your Drexel User ID (abc123) and your initial password is your Drexel University ID Number (12345678). After logging in, you may change your password by clicking on the appropriate link in the “Main Menu.”

If you added the course after Sunday 3/30/2014, go to http://tinyurl.com/200webwork201335 and fill out the form. Within 24 hours, you will receive an e-mail giving you log-in credentials to the Webwork website.

There will be a Webwork assignment for each week of the course. Each assignment will open on a Monday at 8 am and will close on a Sunday at 11:55 pm. You are given an unlimited number of attempts at each assignment, until the deadline passes. During the time that the assignment is available, you may click the “Check Answers” button. Webwork will let you know whether or not your answer is correct; if your answer is not correct, you may continue to try again as many times as needed to solve the problem correctly.

**Since you have unlimited attempts and approximately two weeks to complete each assignment, no make-up assignments will be given & no assignments will be dropped.**
Assigned Practice Problems

Just solving the graded Webwork homework assignments will not give you enough practice to become proficient with the course material; and, as a result, it is extremely unlikely for you to be successful in the course if your only practice is completing the short Webwork assignments. So, for each section covered in class we have crafted additional assigned problems which have been chosen to illustrate important concepts and techniques that you are expected to master. These problems can be found on the main course website. They are for your benefit and should be worked regularly and in detail. It is only by doing the problems yourself that you will acquire the skills needed for proficiency in the course. Some of these problems will be discussed in lecture, but it is your responsibility to do the work and look at all of the problems. These problems will not be turned in or graded.

Tutoring Services

In addition to your instructor’s office hours, you can receive extra assistance in the Math Resource Center (MRC) located in Korman 249. The MRC is staffed by faculty and teaching assistants who can help you with your math courses. No appointment is necessary. Hours and staff schedules can be found at:

http://drexel.edu/math/resources/undergraduate/mrc/

In-Class Quizzes

Once a week (with the exception of exam weeks) there will be an in-class quiz which will cover material discussed up to that point in the class. Each quiz will be worth 10 points; so there will be 80 available points for the entire term. Your final in-class quiz grade will be the total number of points obtained divided by 70. As a result, you can earn over 100% on your final quiz grade. There are no make-up quizzes. You must be present in your scheduled class to take the quiz.

Exams

There will be two midterm exams during the term. These will be common exams (all students take the exam at the same time) given during the 8:00 - 8:50 a.m. exam period. The tentative coverage of each midterm exam is as follows:

- **Exam 1**: Friday 5/2, 8-8:50 am  Chapters 11.1-11.7, 12.1, 12.2, 13.1, 13.3
- **Exam 2**: Friday 5/30, 8-8:50 am  Chapters 13.4-13.8, 14.1-14.3

An announcement about the exact coverage of the exam as well as the room assignments will be posted to the main course webpage at least one week prior to the exam date.

There will be a SINGLE make-up exam for anyone who misses one of the two regularly scheduled exams. It will be given during the 10th week of the term (exact details will be posted on the course website) and will be comprehensive for the material covered on exams 1 and 2.
There will be a comprehensive two-hour final exam scheduled during the final exam week at the end of the term. The exact date and time is to be determined by the registrar. **Do not make travel plans until after the announcement of the exam is made. You are expected to take the exam at the time scheduled by the registrar!**

Your University ID is REQUIRED for all exams. You must know your section number for all exams. All exams are closed book and closed notes. Calculators or other electronic devices are not permitted for any of the exams. Using such a device during an exam will be considered a violation of the university’s academic honesty policy.

**Course Grading**

Your grade will be computed in two different ways (see below). The grade that you earn for the course will be the higher of these options.

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<thead>
<tr>
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<th>Option 1</th>
<th>Option 2</th>
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</thead>
<tbody>
<tr>
<td>Webwork</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
<td>20%</td>
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<tr>
<td>Lower Midterm</td>
<td>25%</td>
<td>15%</td>
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<tr>
<td>Higher Midterm</td>
<td>25%</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
<td>35%</td>
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NOTE: Other than the extra credit that is already included in the quiz average, we do not offer any extra credit opportunities.

**Grade Cutoffs**

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<thead>
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<th>A</th>
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<th>B</th>
<th></th>
<th>C</th>
<th></th>
<th>D</th>
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<th>F</th>
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<tbody>
<tr>
<td>90 - 100 %</td>
<td></td>
<td>80 - 89 %</td>
<td></td>
<td>70 - 79 %</td>
<td></td>
<td>60 - 69%</td>
<td></td>
<td>0 - 59 %</td>
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* Plus and minus will be assigned at the discretion of the instructor.

**Disabilities and Accommodations**

Students with disabilities requesting accommodations and services at Drexel University need to present a current accommodation verification letter (AVL) to faculty before accommodations can be made. AVL’s are issued by the Office of Disability Resources (ODR). For additional information, contact ODR:

www.drexel.edu/odr
3201 Arch St., Street, Suite 210
Philadelphia, PA 19104
215.895.1401 (V)
215.895.2299 (TTY).
Academic Honesty

Cheating and other forms of academic misconduct are serious offenses and are dealt with harshly, e.g. at the very least a 0 on an exam and a letter sent to the Office of Student Conduct. Students should be familiar with the following policies:

http://www.drexel.edu/provost/policies/academic_dishonesty.asp

Course Drop & Withdrawal Policies

Students should be familiar with the following policies:

http://www.drexel.edu/provost/policies/course_drop.asp

Course Schedule and Important Dates

<table>
<thead>
<tr>
<th>Week</th>
<th>Material</th>
<th>Chapters</th>
<th>Announcements</th>
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</table>
| 1    | Rectangular Coordinates, Spheres, & Cylindrical Surfaces  
      | Vectors  
      | Dot Product & Projections | 11.1  
      | 11.2  
      | 11.3 |
| 2    | Cross Product  
      | Parametric Equations of Lines  
      | Planes in Space | 11.4  
      | 11.5  
      | 11.6 |
| 3    | Vector Valued Functions  
      | Calculus of Vector Valued Functions | 12.1  
      | 12.2 |
| 4    | Quadric Surfaces  
      | Functions of Several Variables  
      | Partial Derivatives | 11.7  
      | 13.1  
      | 13.3 |
| 5    | Chain Rule  
      | Directional Derivatives | 13.5  
      | 13.6 |
| 6    | Tangent Planes & Normal Lines  
      | Local Linear Approximation  
      | Relative & Absolute Extrema | 13.7  
      | 13.4  
      | 13.8 |
| 7    | Relative & Absolute Extrema  
      | Double Integrals over Rectangular Regions  
      | Double Integrals over General Regions | 14.1  
      | 14.2 |
| 8    | Double Integrals in Polar Coordinates  
      | Cylindrical & Spherical Coordinates | 14.3  
      | 11.8 |
| 9    | Triple Integrals in Rectangular Coordinates  
      | Triple Integrals in Cylindrical & Spherical Coordinates | 14.5  
      | 14.6 |
| 10   | Change of Variables & Jacobians | 14.7 |

Exam 1 (5/2, 8 am)  
Last Day to Withdraw (5/16, 5 pm)  
Exam 2 (5/30, 8 am)  
LAST DAY OF CLASS IS MONDAY 6/9/14

The Date & Time Of The Math 200 Final Exam Will Be Announced By The Registrar.  
Do Not Make Travel Plans Until After The Announcement Of The Exam.  
The Final Exam Is Cumulative.