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

Dimitri Papadopoulos  dp399@drexel.edu  215-895-1957  Korman 236
Hwan Yong Lee  hlee@math.drexel.edu  215-571-3583  Korman 255

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:

- Perform basic calculations with vectors, including: addition, scalar multiplication, dot product, and cross product.
- Describe lines, planes, spheres, and quadric surfaces in 3-space.
- Evaluate limits, derivatives, and integrals of vector valued functions.
- Compute level curves for functions of two variables and level surfaces for functions of three variables.
- Compute and interpret partial derivatives.
- Use differential calculus to solve application problems, including: computing a tangent plane to a surface at a specified point, finding critical points, and finding extrema.
- Work in the cylindrical and spherical coordinate systems.
- Use an iterated integral to compute a specified area or volume.
- Evaluate double integrals in rectangular coordinates or polar coordinates (where appropriate).
- Evaluate triple integrals in rectangular coordinates, cylindrical coordinates, or spherical coordinates (where appropriate).
- Perform 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.

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

Assigned Practice Problems

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:


In-Class Quizzes

There will be 7 in-class quizzes, worth 10 points each. Your in-class quiz grade will be the total number of points obtained (70 possible) divided by 60. As a result, you can earn over 100% for 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:** Wednesday 4/27, 8-8:50 am  
**Exam 2:** Wednesday 5/25, 8-8:50 am

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.

<table>
<thead>
<tr>
<th></th>
<th>Option 1</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Lower Midterm</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>Higher Midterm</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
<td>35%</td>
</tr>
</tbody>
</table>

NOTE: Other than the extra credit that is already included in the quiz average, we do not offer any extra credit opportunities.

Grade Cutoffs

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>90 - 100%</td>
<td>80 - 89%</td>
<td>70 - 79%</td>
<td>60 - 69%</td>
<td>0 - 59%</td>
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</tbody>
</table>

* 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>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3/28/16</td>
<td>Rectangular Coordinates, Spheres, &amp; Cylindrical Surfaces, Vectors, Dot Product &amp; Projections</td>
<td>11.1, 11.2, 11.3</td>
</tr>
<tr>
<td>3</td>
<td>4/11/16</td>
<td>Vector Valued Functions, Calculus of Vector Valued Functions, Quadric Surfaces</td>
<td>12.1, 12.2, 11.7</td>
</tr>
<tr>
<td>4</td>
<td>4/18/16</td>
<td>Functions of Several Variables, Partial Derivatives</td>
<td>13.1, 13.3</td>
</tr>
<tr>
<td>5</td>
<td>4/25/16</td>
<td>Chain Rule, Directional Derivatives, Tangent Planes &amp; Normal Lines</td>
<td>13.5, 13.6, 13.7</td>
</tr>
<tr>
<td>6</td>
<td>5/2/16</td>
<td>Local Linear Approximation, Relative &amp; Absolute Extrema</td>
<td>13.4, 13.8</td>
</tr>
<tr>
<td>7</td>
<td>5/9/16</td>
<td>Double Integrals over Rectangular Regions, Double Integrals over General Regions</td>
<td>14.1, 14.2</td>
</tr>
<tr>
<td>8</td>
<td>5/16/16</td>
<td>Double Integrals in Polar Coordinates, Cylindrical &amp; Spherical Coordinates</td>
<td>14.3, 11.8</td>
</tr>
<tr>
<td>9</td>
<td>5/23/16</td>
<td>Triple Integrals in Rectangular Coordinates, Triple Integrals in Cylindrical &amp; Spherical Coordinates</td>
<td>14.5, 14.6</td>
</tr>
<tr>
<td>10</td>
<td>5/30/16</td>
<td>Change of Variables &amp; Jacobians</td>
<td>14.7</td>
</tr>
<tr>
<td>Final’s Week</td>
<td>6/6/16</td>
<td>The Date &amp; 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.</td>
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</table>

The Final Exam Date and Time are announced by the Registrar. Do not make travel plans until after the announcement of the exam. The final exam is cumulative.