Math 121 Calculus I Syllabus Fall 2011-2012

http:www.math.drexel.edu/classes/math121/201115/ Check this website frequently. Any changes to the course syllabus, course announcements or other important information will be communicated here.

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 questions.

1. Prerequisites: It is assumed that students entering MATH 121 will typically have completed four years of college preparatory mathematics including Algebra I and II, Geometry and Trigonometry. Any questions concerning your readiness for the course should be resolved immediately.

2. Course Coordinators:
   Andrew Hicks ahicks@math.drexel.edu Korman 206
   Ron Perline Ronald.k.perline@drexel.edu 215-895-6623 Korman 272
   Judy Smith jts47@drexel.edu Korman 252
   A list of other instructors with their office hours and contact information is available on the course website. All instructor’s mailboxes are in Korman 206.


4. Course Format: Depending on your scheduling, your calculus class will meet either two or four times a week. During class your instructor will be presenting lectures on the course material and engaging the class in discussion and problem sessions. There will be a short quiz each week.

5. Attendance: Regular attendance is essential for success in Math 121. You are responsible for everything that goes on in class. The quarter moves quickly – if you don’t do your work regularly, it is easy to fall behind.

6. Assigned Problems: The assigned problems listed on the course syllabus have been chosen to illustrate the concepts and techniques that you are expected to master. It is your responsibility to do all the work on the assigned problems. By doing the problems yourself you will acquire the skills needed to perform well in the course. Re-reading the textbook and reviewing your class notes are good ways to determine the solution to a homework question that may be giving you some issues.

7. Extra Help: In addition to your instructor’s office hours, you can receive extra assistance in the Math Resource Center (Korman 247). The Resource Center is open Monday through Thursday 10:00 a.m. to 7 p.m. and Friday 10:00 a.m. to 4:00 p.m. Students who visit the MRC regularly often raise their grades by at least one letter grade.
8. **Quizzes:** Each week 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 110 possible quiz points for the term. Your final in-class quiz grade will be the total number of points obtained divided by 100 – any final quiz grade over 100 will be considered extra credit. **There are no-make-up quizzes. You must be present in your scheduled class to take the quiz.**

9. **Exams:** There will be 3 exams during the quarter: October 5, October 19, and November 2. These exams will be common exams (all students taking Math 121 taking the exam at the same time) given during the 8:00-8:50 a.m. exam period. There will be a single make-up exam for anyone who misses one of the three regularly scheduled exams. It will be given during week 9 and will be comprehensive for the material covered on exams 1, 2, 3.

10. **You must bring your University ID card to all three exams and the final exam. YOU MUST KNOW YOUR SECTION NUMBER FOR ALL EXAMS.** Five points will be deducted from your exam grade if you do not write down your correct section number on your exam. All exams are closed book and closed notes. No calculators or other electronic devices are permitted for any of the exams or quizzes.

11. **Final Exam:** There will be a two-hour comprehensive final exam scheduled during the final exam week at the end of the quarter.

12. **Course Grades:** At the end of the quarter you will have six grades. (Final exam counts twice)

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<thead>
<tr>
<th>Exam 1</th>
<th>20%</th>
<th>Quiz Average</th>
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<tbody>
<tr>
<td>Exam 2</td>
<td>20%</td>
<td>Final Exam</td>
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<tr>
<td>Exam 3</td>
<td>20%</td>
<td>Final Exam</td>
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Of the five grades (not the quiz average), the lowest will be dropped and a letter grade assigned as follows:

- 90-100 A  Plus and minus will be assigned at the discretion of the instructor.
- 80-89 B
- 70-79 C  Note: The instructional staff of Math 121 reserves the right to modify the grading criteria as needed in individual cases.
- 60-69 D

13. **Disabilities and Accommodations:** Students with disabilities may request accommodations (e.g. extended time on exams). Students must provide the instructor with an Accommodation Verification Letter before any accommodations are granted. Details and procedures can be found at [http://www.drexel.edu/ods/](http://www.drexel.edu/ods/).

14. **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. The Academic Honesty policy of Drexel University is
Outcomes List for Math 121 Calculus I

Fall 2010 - 2011

General Information:
The purpose of this Outcomes List is to give you a concrete summary of the material you should know, and the skills you should acquire, by the end of this course. If you understand all of the concepts summarized on this Outcomes List, review all of the assigned problems listed on the syllabus, and review all of the additional problems listed below, then you should be adequately prepared for the exams. Understand though that the problems below are representative; there is no guarantee that the problems on the exam will look exactly like these.

The following information is for reviewing the material for Exam 1:

Exam 1 will cover Chapters 0.1, 0.2, 0.4, 0.5, Appendix B, 1.1 and 1.2

0.1 Know the definition of a function. Determine if a curve in the xy-plane represents the graph of a function y = f(x). Evaluate functions at specific values. Determine the domain and range of a function. Understand how algebraic operations affect the domain of functions. Write formulas for functions in the context of a word problem.

In addition to reviewing the assigned problems from 0.1, look at: Examples (within the chapter): 7, 8; Regular problems (exercises at the end of the chapter): 9, 32

0.2 Given two functions f and g, define (and find the domains) of the arithmetic combinations f+g, f-g, fg, f/g and the composition f  g. Understand the geometric effects of performing operations on the graphs of functions, i.e. know the basic graph transformations (translations, reflections, stretches, and compressions).

In addition to reviewing the assigned problems from 0.2, look at Regular problems 30, 32

0.4 Given a function, determine if it has an inverse, and if so, determine what the inverse is. Relate the domain and range of a function with the domain and range of its inverse. Relate the graph of a function to the graph of its inverse. Understand inverse trigonometric functions (specifically arcsin, arccos, and arctan), and in particular the angle restrictions for each.

In addition to reviewing the assigned problems from 0.4, look at: Example 6; Quick Check exercise 4, 5; Regular problems 19, 38