Math 165: Calculus I
Course Information Sheet and Syllabus
Fall 2014

Instructor: Dr. Susan Cooper

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    Office Hours: Mondays & Fridays 11:00 a.m. – 11:50 a.m.; Wednesdays 9:00 a.m. – 9:50 a.m.;
                                      or by appointment

    Correspondence: The most reliable way to contact me is via email.

Teaching Assistants:

Name	E-Mail Address	Office
Joseph Bernstein	`joseph.bernstein@my.ndsu.edu`	Minard Hall, Room 408E30
Dylan Heuer	`dylan.k.heuer@ndsu.edu`	Minard Hall, Room 408E30
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Megan Nygaard	`megan.nygaard@ndsu.edu`	Minard Hall, Room 408E36

Class Times and Location: MWF 8:00 a.m. – 8:50 a.m., Ladd Hall – Room 107

Prerequisites: Math 105, 107, or Mathematics Placement Test

Credit Hours: 4

Course Web-Page: We will use *Blackboard* which can be found at `https://bb.ndsu.nodak.edu/`.

Textbook: *Calculus: Early Transcendentals*, Second Edition, by J. Rogawski

Course Description: Topics include limits, continuity, differentiation, Mean Value Theorem, integration, Fundamental Theorem of Calculus and applications.

Course Objectives: We will explore a branch of mathematics called *Calculus* which is loosely defined as the study of change. We will closely investigate functions and their properties. We will be covering most of Chapters 2 through 5 of your textbook.

    Why study Calculus? One of the great advantages of studying mathematics is that it helps one develop the ability to handle abstract ideas. The branch of Calculus is used in many real-world applications such as economics and engineering. As such, it is crucial that we try to deeply understand the material. After completion of the course, students will be able to understand and use algebraic, symbolic, graphical, and numeric descriptions of the topics of the course. Through practice, students will both be able to apply Calculus to solve problems and develop the ability to reason mathematically.

General Education: This course develops student capabilities related to several of NDSU's General Education Objectives, including: the ability to communicate effectively in a variety of contexts and formats; comprehension of concepts and perspectives needed to function in society; and integration of knowledge and ideas in a coherent and meaningful manner.

Recitation: You will meet in a recitation section twice a week. This is a valuable time to gain clarity on problems and a deeper understanding of the material. In particular, you will be given an opportunity to ask questions on homework questions. Thus, in order to maximize your benefit from the recitation, it is highly encouraged that you attempt your homework *prior* to attending the following recitation. In addition, during some recitations you will be asked to work in small groups on supplemental lab activities. These activities will greatly aid your understanding and foreshadow topics to come. You are expected to participate fully in these activities.

Excel Section: Attached to this course is a designated *Excel Recitation*. This is a small section that meets for an additional 50-minutes each recitation and covers concepts in greater depth. There is an additional one credit for students in this section and it is based on a grade of "pass/fail". Interested students should contact the instructor during the first week of classes in order to be registered for this special section.

Homework: The best way to learn mathematics is by doing mathematics. Thus, it is crucial that you master your skills through practice. Exercises will be assigned daily from the textbook. Your solutions to these exercises will not be collected, but quiz questions will be based on exercises from this list. Doing these exercises will help you master the material.

Quizzes: Quizzes will be given in recitation every week that there is not a scheduled exam. The schedule can be found in the handout "Tentative Schedule". Books, notes, and calculators will not be permitted during the in-class quizzes. Quizzes will be graded for correctness and clarity. Feedback will be provided to *improve* your mathematical solutions and communication. There will be one take-home syllabus quiz in addition to eleven in-class quizzes throughout the semester. The lowest quiz score will be dropped in calculating your final course grade. Note: since individual quizzes count for less than 1.7% of your course grade, the Dead Week policy does not apply to quizzes (see `http://www.ndsu.edu/fileadmin/policy/336.pdf`).

Exams: There will be four 50-minute midterm exams and one cumulative 2-hour final examination. The schedule is:

Exam	Date	Time and Location
Exam 1	Thursday, September 25	In Recitation
Exam 2	Thursday, October 16	In Recitation
Exam 3	Thursday, November 13	In Recitation
Exam 4	Thursday, December 4	In Recitation
Final Exam	Tuesday, December 16	1:00 p.m. – 3:00 p.m., Ladd Hall – Room 107

Books, notes, and calculators will not be permitted on exams.

Blue Books: Each student will provide four blank blue books to his/her TA by the beginning of recitation on Tuesday, September 9. These will be used for exams. Failure to submit blue books on time will result in a quiz grade of 0 for Quiz 2.

Missed Work Policies: Make-up quizzes and exams will only be granted for unavoidable, documented circumstances as described below:

Circumstance	Required documentation
Illness or other medical situation	Official note from clinic, hospital, doctor, nurse, or other health care provider
Military service	Official military activation orders
Funeral or other family emergency	Official documentation from newspaper, funeral, or medical official
Sports or other official NDSU activity	Official documentation from NDSU athletics or activity's faculty adviser

Please note that recreational activities do not qualify for make-ups. If you have a pre-existing conflict with an exam or quiz date, you are expected to make alternative arrangements *beforehand*.

Course Grades: Final course grades will be determined as follows:

Task	Percentage of Grade
Quizzes	20%
Midterm Exams	15% each
Final Exam	20%

Percentage Grade	Grade Earned
90% – 100%	A
80% – 89%	B
70% – 79%	C
60% – 69%	D
0% – 59%	F

Attendance: Your understanding of the course material will be greatly aided with your regular attendance and engagement in lecture and recitations. Although you are expected to attend every class meeting, attendance will only be taken on the first two meetings of the class. You are responsible for any missed material when absent. Veterans and student service members with special circumstances or who are activated are encouraged to notify the instructor as soon as possible and are encouraged to provide Activation Orders.

Course Schedule: Please see the handout titled "Tentative Schedule" for important dates and an overall outline of the course.

Other Resources: Please note the following:

- *Notes:* It is important to prepare clear and thorough notes – these will provide you with clarifying examples and reasoning behind the theory seen in class.
- *Calculators:* Graphing calculators are not required for this course. However, you may find one useful when working through homework problems. No calculators will be permitted for quizzes or exams.
- *Email Announcements:* At times, course announcements will be sent to you via Blackboard. It is your responsibility to set your email address with Blackboard and check this email address regularly.
- *Tutorial Center:* The Department of Mathematics facilitates a tutor room where you can obtain further assistance. See `http://math.ndsu.nodak.edu/tutorial/` for more information.

Special Needs: Any students with disabilities or other special needs, who need special accommodations in this course are invited to share these concerns or requests with the instructor and contact the Disability Services Office as soon as possible. For more information, see `http://www.ndsu.edu/disabilityservices/`.

Academic Honesty: The academic community is operated on the basis of honesty, integrity, and fair play. NDSU Policy 335: Code of Academic Responsibility and Conduct applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of Registration and Records. Informational resources about academic honesty for students and instructional staff members can be found at `www.ndsu.edu/academichonesty`.

Any student found guilty of academic dishonesty will receive a grade of 0 for the quiz or exam in question. In addition, every such student will be reported to the Chair of Mathematics, the Dean of their major college, the Dean of the College of Science and Mathematics, the Provost, and the Registrar. The Registrar will add any such student to NDSU's Student Academic Misconduct Database. (Multiple entries in this database may result in additional sanctions from NDSU.) Students found guilty of a second offense of academic dishonesty in this class will receive a course grade of F, and will not be allowed to drop or withdraw from the course.

Classroom Atmosphere: A part of learning is making mistakes. We want to establish a classroom atmosphere where the inevitable false starts and mistakes become an opportunity to improve – not an opportunity for embarrassment. Please be constructive and polite in questioning your colleagues in class.

Expectations and Tips for Success: I ask that you have a well-defined sense of professionalism, that you always put forth your best effort, and that you develop a sense of responsibility to your educational community. I ask that you exhibit a persistent desire to learn. In return I will provide you with significant support. Also:

- Be positive, open, and responsive to feedback.
- Be an active participant - mathematics is learned by doing; this includes participating fully in classroom activities (please, turn your cell phones off during class), reading the relevant sections from the textbook before class (this will help you follow during class even if you do not understand everything), critically thinking about the mathematics during and outside of class. *In order for this class to be successful, it is imperative that you commit to coming to class regularly, that you commit to coming to class prepared, and that you commit to participating in class!*
- Be committed, take pride in your work, and take your work seriously.
- Be patient with yourself - it takes time to master newly learned things.
- Starting with the first class, study in-depth and regularly. This means, for example, that you should do the assigned exercises *before* the next class period.
- Do not rely on solution manuals! These are readily available and it is tempting to just copy the solutions. However, struggling through the exercises on your own is an important phase of the learning process.
- Get help as soon as you need it: ask questions in class and office hours; form a study group with your classmates; consider getting a tutor, etc.
- For exam preparation, practice exercises that have not been assigned.
- Everyone wants you to succeed. Please speak with me regarding any concerns you may have.
- Relax and have fun with the course!