

COURSE SYLLABUS - FALL 2016

MATH 165 CALCULUS 1 Sections 23–28 (4 credits)

Lectures: 12:10pm - 1:00pm MWF, 0001 Carver

Recitation 23: 12:10–1:00pm R, 0004 Carver

Recitation 24: 12:10–1:00pm R, 0282 Carver

Recitation 25: 1:10–2:00pm R, 0108 Curtis

Recitation 26: 1:10–2:00pm R, 1026 Black

Recitation 27: 2:10–3:00pm R, 1246 Howe

Recitation 28: 2:10–3:00pm R, 1012 Coover

Final Exam: **Sometime during final's week**

Instructor: Bernard Lidický, 422 Carver Hall, lidicky@iastate.edu

Web page: <http://orion.math.iastate.edu/lidicky/165/>

Office hours: 1-2pm T and 1:30pm-2:30pm W

Teaching Assistant for sections 23, 25, 27:

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Brief description of goals and objectives: The objective of this course is to master the materials related to single variable calculus, including limits, differentiation, optimization, an integration. A more comprehensive list of **objectives** can be found in the departmental syllabus for the course. In particular, the departmental final will test on some subset of these objectives.

Prerequisites:

Students taking this course should have a working knowledge of basic arithmetic, algebra, and trigonometry which can be exhibited by coursework or satisfactory performance on a placement exam. It is also helpful to be open to new ideas and a willingness to be a beginner.

If this is your first mathematics class at ISU, then you should have taken the ALEKS placement assessment. If you scored less than 70% on the ALEKS assessment then (as research has shown) you have a 50% chance of earning a passing grade (C or higher) in this course. If your ALEKS assessment score was less than 70%, then it is *required* that you drop this class and enroll in a precalculus class. If you are in this class, it is assumed that your algebra and trigonometry skills are very good and that you can manipulate algebraic and trigonometric expressions smoothly, efficiently and accurately. If your algebra and/or trigonometric skills are weak, then it is unlikely that you will succeed in this class. Take the result of ALEKS placement test seriously.

Textbook:

Thomas' Calculus, Early Transcendentals, 12th Edition, by George Thomas, Jr., Maurice D. Weir and Joel Hass. We will cover material from chapters 2, 3, 4, 5, and 7 this semester. More precise information about which material will be covered when is available in the [course calendar](#).

You have to have MyMathLab access in addition to the textbook.

Online resources: The class has a webpage <http://orion.math.iastate.edu/lidicky/165/> and a page in Blackboard. The webpage contains basic information about the class and class log, which serves as a tentative schedule of the course as well as list of what was done in class. The Blackboard contains grades as well as a forum where you can seek help. Additional resources can be obtained from Dr. Butler <http://orion.math.iastate.edu/butler/2016/fall/165/>, who's sections will be similar to these sections

Homework assignments (10% of grade): The assignments will be given weekly. They will be always due Friday MIDNIGHT including the Friday of the dead week. Homework will be administered by MyMathLab on BlackBoard. Six lowest homework scores will be dropped. The policy is generous to accommodate equipment failures (i.e. not working Internet at Friday midnight).

The homework assignment does not cover all exercises in the chapters in the book. You are strongly encouraged to read all the exercises in the book and try to solve them. You will get the most knowledge if you try to solve as many exercises as possible. No late assignments will be accepted. You will have nearly two weeks for every homework assignment.

Exams (70% of grade): There will be four in-class exams during the semester. Lowest score will be dropped. In addition, department will administer one midterm and one final exam.

The in-class tests are on September 9, September 30, October 28, and November 18.

The departmental midterm is on October 6 from 8:15pm–9:45pm, the location will be announced close to the exam.

The departmental final is during finals week, the time and location will be announced a few weeks before the end of the semester. Do not make any travel plans that cannot be changed before the exam time has been announced.

All exams are closed books and closed notes.

There will be no make-up exam unless you have “excusable absence”. Please check http://catalog.iastate.edu/academic_conduct/ for the university policy on “excusable absences”. The only possible excuses are medical excuse, extra curricular activities as a representative of Iowa State University, armed forces deployment, or officially mandated court appearances, including jury duty. Official documentation is required in ALL cases (if you feel sick, go to a doctor). **TEN** days notice is required if possible.

Quizzes (20% of grade): Thirteen quizzes will be given in sections as per the course calendar; the quiz will be at the end of the recitation section and students will have 15 minutes to finish the quiz. Each quiz will consist of two random questions coming directly from the quiz problem sheets of Dr. Butler. Quiz questions will be posted online. Hints and answers will be posted on paper in Carver Hall. Note you need to present solution including all steps, not just the posted answers. The two lowest quiz scores will be dropped. Requests for makeup quizzes due to excusable absences can be made to TA prior to the date that the quiz will occur; any requests after the quiz has occurred will be turned away.

All quizzes are closed books and closed notes.

Extra credits (5% extra of grade): There will be five extra projects. You can get one extra % for each of them.

Grading policy: Conditional on passing the departmental final, the course grade will be determined by the cumulative percentage of scores at the end of the quarter. This is calculated by weighting the scores in the following manner:

- 30% – scores on the best three out of the four in-class tests
- 20% – departmental midterm
- 20% – departmental final
- 20% – quizzes
- 10% – homework

- 5% – extra projects

Grades thresholds are 90% for A-, 80% for B-, 70% for C- and 60% for D-. Below 60% is F.

Any issues about grading for tests, midterms, quizzes, etc. must be addressed within two weeks of the date it was administered. After that time no score changes will be allowed.

Because of this absolute standard, you are not in competition with your classmates nor does their performance influence positively or negatively your performance. You are encouraged to form study/problem groups with your classmates; things not clear to you may become obvious when you try to explain them to others or when you hear other points of view. Sometimes just verbalizing your mathematical thoughts can deepen your understanding.

As already mentioned, if you may discuss with others the exercises (but NOT during exams and quiz times), each person should write up her/his own version of the solution.

Topics to be covered: Math 165 will cover most of chapters Chapters 2–7. See <http://orion.math.iastate.edu/dept/calculus/obj/Math%20165%20Objectives.pdf> for a very detailed outline and <http://orion.math.iastate.edu/lidicky/165/log.html> for calendar.

Calculators: Only "low-level" calculators may be used for quizzes and/or in-class exams. In particular graphing calculators, calculators in smart-phones, etc. are NOT allowed. Please note that all quiz and in-class test questions can be done without the aid of a calculator. For the departmental midterm and departmental final a calculator is allowed for a portion of the exam as long as it is also not a communication device.

SI: Supplemental Instruction (SI) will be available for this course. This is one tool to develop mastery in this subject and is not meant to replace attending class, reading the book, and other course assignments. Information about the SI available for our course is available online: <http://www.asc.dso.iastate.edu/supplemental/>

Dead week: There will be a homework assignment due Friday of the dead week.

Study habits: This course does require considerable work. You should be devoting time to reading the book, thinking about the ideas, concepts, and techniques, talking with some of your classmates about them, doing all the assigned homework problems. It is expected that you will read the book - not everything you should learn and know will be discussed in class. Regular attendance and participation in class activities are the prerequisites for success. Class attendance is required.

Mathematics, as many other disciplines, is better learned by doing than by listening.

Classroom etiquette: Communication devices (phones, tables, laptops, . . .) must remain

switched off and stored away during the class periods and exams. Laptops or iPads are allowed only for textbook reading or taking notes.

Attendance: Although attendance will not be taken, it is required. Office hours are for those of you who need additional help beyond that given in the class; they are not substitutes for class.

Academic dishonesty: The class will follow Iowa State University's policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office. <http://www.dso.iastate.edu/ja/academic/misconduct.html> The cheating policy is very strict. Things considered cheating are copying your work from the Internet or your peers, having unapproved items on the desk during exams (even when not using them, already having them is considered a violation). Committing academic dishonesty may result in grade F from the whole course without regard to any other credits earned before or after the occurrence of the academic dishonesty.

Disability accommodation: Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact instructor to set up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with the instructor, you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email disabilityresources@iastate.edu. Retroactive requests for accommodations will not be honored.

Math 165 Fall 2016

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	Aug 22 Syllabus 2.1	Aug 23	Aug 24 2.2	Aug 25 (23-28) Quiz 1	Aug 26 2.3
2	Aug 29 2.4	Aug 30	Aug 31 2.5	Sep 1 (23-28) Quiz 2	Sep 2 2.6 HW 1 due
3	Sep 5 Labor Day	Sep 6	Sep 7 3.1	Sep 8 (23-28) Quiz 3	Sep 9 Test 1 HW 2 due
4	Sep 12 3.2	Sep 13	Sep 14 3.3	Sep 15 (23-28) Quiz 4	Sep 16 3.4 HW 3 due
5	Sep 19 3.5	Sep 20	Sep 21 3.6	Sep 22 (23-28) Quiz 5	Sep 23 3.7 HW 4 due
6	Sep 26 3.8	Sep 27	Sep 28 3.9	Sep 29 (23-28) Quiz 6	Sep 30 Test 2 HW 5 due
7	Oct 3 3.10	Oct 4	Oct 5 Review	Oct 6 (23-28) Review MIDTERM	Oct 7 No class HW 6 due
8	Oct 10 3.11	Oct 11	Oct 12 4.1	Oct 13 (23-28) Quiz 7	Oct 14 4.2 HW 7 due
9	Oct 17 4.3	Oct 18	Oct 19 4.4	Oct 20 (23-28) Quiz 8	Oct 21 4.6 HW 8 due
10	Oct 24 4.7	Oct 25	Oct 26 4.8	Oct 27 (23-28) Quiz 9	Oct 28 Test 3 HW 9 due
11	Oct 31 5.1	Nov 1	Nov 2 5.2	Nov 3 (23-28) Quiz 10	Nov 4 5.3 HW 10 due
12	Nov 7 5.4	Nov 8	Nov 9 5.5	Nov 10 (23-28) Quiz 11	Nov 11 5.6 HW 11 due
13	Nov 14 7.2	Nov 15	Nov 16 4.5	Nov 17 (23-28) Quiz 12	Nov 18 Test 4 HW 12 due
	Nov 21 No School	Nov 22 No School	Nov 23 No School	Nov 24 No School	Nov 25 No School
14	Nov 28 7.1	Nov 29	Nov 30 7.3	Dec 1 (23-28) Quiz 13	Dec 2 7.4 HW 13 due
15	Dec 5 Review	Dec 6	Dec 7 Review	Dec 8 (23-28) Review	Dec 9 Review HW 14 due
	Dec 12 F	Dec 13 I	Dec 14 N	Dec 15 A	Dec 16 L