## Mathematics 147, Fall 2017 (Section #23923) Calculus III – Honors (4 credits)

Meeting time: MTWRF 2:00–2:50pm, Snow 152

Instructor: Prof. Jeremy Martin, jlmartin@ku.edu (you can call me "Prof. Martin" or "Jeremy") Office: 618 Snow Hall Office hours: Wednesdays, 11am-12pm and 3pm-4pm, or by appointment

**Graduate TA:** Bennet Goeckner, bennet@ku.edu Office: 647 Snow Hall Office hours: Thursdays, 11am-12pm and 3pm-4pm, or by appointment

**Textbook:** Calculus: Early Transcendentals, 3rd edn., by Rogawski and Adams. Available at the KU Bookstore. We will cover most of Chapters 13–17, as well as some additional topics not in the textbook (I will provide lecture notes). You do not need a WebAssign access code, as the class will not use WebAssign.

**Prerequisites:** Math 126/146 (Calculus II). You should be comfortable with the material in chapters 1-8 and 10-12 of the textbook.

**Blackboard:** All students should be automatically enrolled in Blackboard. Contact Prof. Martin if you are not able to access the Blackboard site. You are responsible for all information posted on Blackboard, including announcements and homework assignments.

**Calculator:** A handheld calculator is not required (and will not be that helpful). However, many homework problems and projects will require the ability to plot geometric objects such as planes, curves, and surfaces in 3-dimensional space.

For some homework problems, you will need to be able to draw plots in 3-D. Free options include Desmos and WolframAlpha (good for quick calculations) and Sage (a more powerful programming language). You can also use a commercial package such as Maple, Matlab or Mathematica, but you shouldn't have to spend money on this.

## Grading scale:

- Homework: 200 points
- Honors problems: 100 points
- Projects: 100 points
- Midterm #1: 150 points
- Midterm #2: 150 points
- Final exam: 300 points
- Total: 1000 points

Scoring 900 points guarantees you an A, scoring 800 guarantees you at least a B, etc. I may lower these requirements and/or use +/- grades at my discretion.

**Homework:** Homework is due in class every Friday (with some exceptions), starting August 25. Each assignment will be posted on Blackboard at least one week before the due date. There will be 12 homework assignments, each worth 20 points. Your two lowest scores will be dropped, including any missed assignments. If you know you will not be in class on a due date, you can turn in your homework in advance to my mailbox in the Math Department office, 405 Snow, or to my office, 618 Snow. Your homework should be as neat and legible as if it were typed, and all sheets should be stapled together. *Late homework will not be accepted.* 

**Honors Problems:** Each week's assignment will include a few more challenging "honors problems," which are to be turned in separately from the regular homework. The total value of the honors problems will be over 100 points, so you will have some choice about which problems to do. You can keep any points over 100 as extra credit.

**Projects:** There will be two writing projects in which you will use techniques developed in the class to solve a simulated real-world problem, working in small groups. The tentative due dates are **Friday**, **October 13** and **Friday**, **November 17**, although this may change. Each assignment will be available at least three weeks before the due date.

**Exams:** The midterm exams will be **Tuesday, October 3** and **Tuesday, November 7**, from **5:15–7:15pm**. The final exam is scheduled for **Wednesday, December 13, 4:30–7:00pm**. The final will be cumulative, but will focus on material covered after the second midterm (probably chapters 16–17). All exams will be held in the regular classroom, Snow 152.

Aids permitted on tests: You will be provided with a standard formula sheet; no other notes or books will be permitted. You may use a scientific calculator; a graphing calculator is not required and will not be necessary. Two students may not share a calculator on a test. Cell phones and any devices with Internet connections must be turned off during tests.

**Makeup exams:** If for some legitimate and unavoidable reason you are unable to attend a scheduled midterm or final exam, it is your responsibility to notify me *beforehand* to arrange a makeup exam. KU policy is that no student is required to take more than two final exams on a single day; check the exam schedule well in advance.

**Approximate time commitment:** This is a 4-credit course, so you should expect to spend at least 8 hours per week outside of class to get a decent grade. In addition to spending time on homework problems, you should get into the habit of reading a section or two ahead in the book, so as to be better prepared for lecture.

**Incompletes:** A grade of I is a rare occurrence and is reserved for cases in which a student has completed most of the course work at an acceptable level, but is prevented from completing the course due to extraordinary nonacademic circumstances. If an emergency arises and you think an incomplete may be warranted, you must consult the instructor *before* the final exam.

Academic misconduct: KU policy defines academic misconduct as follows: "Academic misconduct by a student shall include, but not be limited to, disruption of classes; threatening an instructor or fellow student in an academic setting; giving or receiving of unauthorized aid on examinations or in the preparation of notebooks, themes, reports or other assignments; knowingly misrepresenting the source of any academic work; unauthorized changing of grades; unauthorized use of University approvals or forging of signatures; falsification of research results; plagiarizing of another's work; violation of regulations or ethical codes for the treatment of human and animal subjects; or otherwise acting dishonestly in research."

In particular, while collaboration on the homework assignments is encouraged, you must write up your own homework solutions by yourself and acknowledge all collaborators and sources. It is a violation of academic integrity to copy another student's solutions and submit them as your own; to let someone else copy yours; or to copy solutions verbatim from external sources, including websites. If you are unsure how to use or cite sources properly, check with me before submitting work.

Students with disabilities: Student Access Services (22 Strong Hall, 864-4064; achieve@ku.edu) coordinates accommodations and services for all students who are eligible. If you have a disability for which you wish to request accommodations, please contact SAS as soon as possible. Please also contact Prof. Martin privately in regard to your needs in this course.

**Religious holidays:** If you plan to observe a religious holiday which conflicts in any way with the course schedule or requirements, contact Prof. Martin at the beginning of the semester to discuss alternative accommodations.

**Policy on intellectual property:** All course materials prepared by the instructor(s), together with the content of all lectures and review sessions, are the intellectual property of the instructor(s). Video and audio recording of lectures and review sessions without the consent of the instructor(s) is prohibited. Upon reasonable request, the instructor(s) will usually grant permission to record lectures, on the condition that such recording is used only as a study aid by the student making the recording, and is not modified or distributed in any way. Course materials posted online are exclusively for the use of students in Math 147, and must not be redistributed without the instructor's consent.

**Policy on commercial note-taking ventures:** Pursuant to KU's Policy on Commercial Note-Taking Ventures, commercial note-taking is not permitted in Math 147. Lecture notes and course materials may be taken for personal use, for the purpose of mastering the course material, and may not be sold to any person or entity in any form. Any student engaged in or contributing to the commercial exchange of notes or course materials will be subject to discipline, including academic misconduct charges, in accordance with University policy. Note-taking provided by a student volunteer for a student with a disability, as a reasonable accommodation under the ADA, is *not* the same as commercial note-taking and is not covered under this policy.

**Policy on weapons:** Individuals who choose to carry concealed handguns are solely responsible for doing so in a safe and secure manner and in strict conformity with state and federal laws and KU weapons policy. Safety measures outlined in the KU weapons policy specify that a concealed handgun:

- Must be under the constant control of the carrier.
- Must be out of view, concealed either on the body of the carrier, or backpack, purse, or bag that remains under the carrier's custody and control.
- Must be in a holster that covers the trigger area and secures any external hammer in an un-cocked position
- Must have the safety on, and have no round in the chamber.

Last update: Sat Mon 8/21/17