Time and Place Tu–W–F 10 am -12 pm, B261 East Hall.

Professor Michael Cap Khoury
Contact info: 3823 East Hall `mjkhoury@umich.edu`
Office Hours: M 10 am–12 pm; TuWF 1 pm–2 pm.

Lab Instructor Patrick Rooney
Contact info: 4068 East Hall `dprooney@umich.edu`
Office Hours: Th 1 pm–3 pm.

Sense of humor Math 215 uses technology rather intensively. Servers will break, systems will fail, software will hang, people will screw up. Everyone — students, GSIs, instructors — needs to have a sense of humor about this.

Textbook CALCULUS or MULTIVARIABLE CALCULUS by *James Stewart*, Sixth Edition, *Brooks/Cole, 2008.*

(Use of other editions of the textbook is strictly at your own risk.)

Course Outline Vectors and parametric curves (§§13.1 – 14.4), differential calculus of two and three variable functions (Chapter 15), multiple integrals (Chapter 16), and introduction to vector calculus (Chapter 17).

Course Grade The final course grade is determined according to the following scheme (all dates subject to change):

First Exam	Fri,, 17 Jul, 10:00 am–12:00 pm	15%
Second Exam	Fri., 31 Jul, 10:00 am–12:00 pm	20%
Final Exam	Mon., 17 Aug, 4:00 pm–6:00 pm	25%
Web Homework		20%
Regular Homework		20%

Web Pages
Course Page: `www.math.lsa.umich.edu/courses/215/` //
Web Homework: `instruct.math.lsa.umich.edu/classes/215/webhw/`

More important than the course page for us will be the CTools site, which contains the written homework and other resources.

Exam Policies

- Calculators and note cards are not allowed on the exams.
- You can reschedule an exam only due to a **serious** conflict, illness, or family emergency. If possible, you should discuss any such conflict with your instructor well in advance of the exam date.
- If you need any special arrangements for the exams, it is your responsibility let your instructor know during the first two weeks of the semester.

Class Policies To help everyone, please adhere to the following policy:

- **Cell phone use is strictly prohibited. Please turn off your cell phones.**
- **Newspaper reading after 10:10 is equally prohibited.**
- **Use of portable electronic devices for any purpose other than taking notes is prohibited.**
- **Please be as quiet as possible during class or if you come in late or have to leave early.**

Thank you for your help!

Maple Laboratory The geometry underlying multivariable calculus is three-dimensional. In this course we use workstations and the Computer Algebra System **Maple** to create graphs of curves and surfaces in space that are otherwise very difficult to visualize. The only role of the computer in this course is as a visualization tool. You will never be tested on **Maple**.

Web Homework There are eleven on-line problem sets (including "Set 0", an introductory set explaining how to use the system, which is also graded). Do not hesitate to ask questions if you feel that you are stuck. Note, however, that any questions asked the day the assignment is due are not guaranteed to be answered, and any questions asked after 5pm that day *will not* be answered. You are allowed six attempts for each problem, you can get partial credit on multiple part problems.

Regular Homework In all cases, regular homework is due at the beginning of lab of the week it is "due". The lowest homework score will be dropped.

Gateway There will be an integration Gateway exam for this course. Failure to pass the Gateway exam will result in a full letter grade deduction on your final grade.

1. There will be three in class (Lab session) Gateway quizzes, 16 July, 23 July, and 30 July.. After that, there will be three more extra chances of passing the Gateway in my office (EH 3823) at 2 pm on 3 August, 5 August, and 7 August.
2. The "in-class" Gateways are for "free" ,i.e. passing the gateway in any of this two trials won't affect your grade in any negative way. If you fail both in-class Gateways but pass the exam the first time you take it in my office, there is again no negative consequence. However, there is a penalty of one-third of a letter grade for each time you *fail* the exam in my office. Not passing the gateway at all will automatically drop your grade by one full letter. This is not what you want.
3. The Gateway for this course is the Integral Gateway, which measures your skills for finding antiderivatives and compute integrals for the "basic calculus functions". You can *and should* take practice Gateway tests at

   https://instruct.math.lsa.umich.edu/webwork2/ma116-demo/

   Use guest login and then choose PracticeIntegralGWTest. The Gateway test is 30 min long and it is made of 7 questions. There is no partial credit, and your work will not be considered. Please be careful and clear when writing your final answer. Six correct answers is passing, five is failing.

Homework In addition to web homework and regular homework (both of which are graded), it is strongly recommended that you work on the problems in the textbook as the class goes through the corresponding section of the book.

Last but not least! Some words of advice:

- **We strongly recommend that you attend all lectures. Experience shows that students that attend class perform significantly better in the course.**
- Start all assignments early –ask questions early. **We cannot guarantee that we will be able to answer last-minute questions.**
- **The professor and the GSI are here to help you.** *Please do not hesitate to contact us, earlier rather than later.* We sincerely hope you'll find this course interesting and that you'll have a good experience with it.
- If I catch you cheating, you will fail. Please do not cheat.

Have a great term!