Syllabus for MA 114 – Calculus II, Spring 2015

Web site:

The home page for this course is at

http://www.ms.uky.edu/~heidegl/MA114S15/MA114S15.html

It is designed to help you and provide information. This syllabus, the course calendar, information about the online homework system, and all handouts and solutions to exams and quizzes will be posted on this web site.

Class Schedule:

- Lectures: MWF, time and place according to your section (see also web page)
- Recitations: Time and place according to your section (see also web page)
- Exams: There are three uniform midterm exams and one final exam. The final exam will be cumulative though with an emphasis on the material covered since the third exam. Exam rooms will be announced later.

Exam 1: Tue, Feb. 10, 5:00 – 7:00 pm

Exam 2: Tue, Mar. 10, 5:00 – 7:00 pm

Exam 3: Tue, Apr. 14, 5:00 – 7:00 pm

Final exam: Mon, May 4, 8:30 - 10:30 pm

Work Load:

Class time consists of 150 minutes lectures and 150 minutes recitations per week. This makes 5 full hours of class time. The general rule of thumb for college studying says that students should spend approximately 2-3 hours of study time for each hour they spend in class. Thus

You are expected to spend 10-15 hours of study time on MA 114 outside of class!

See the sections on web homework and study advice for how you should spend the time.

Textbook:

Calculus (2nd edition), by Jon Rogawski, ISBN 978-1-4641-3302-2 (paperback published for UK); 978-1-4292-0838-3 (hardback).

Students are expected to read the textbook prior to class. The reading assignment is listed in the course calendar.

Recitation Worksheets:

These worksheets are required for the course and can be downloaded from the web page. You are responsible for bringing the recitation worksheets to recitation (see the course calendar for the schedule). Failure to bring the worksheets may be considered as an unexcused absence in the session.

MA 194:

In addition to the 4 hours of credit for MA 114, the department offers one additional hour of credit as MA 194 on a pass/fail basis. You will pass MA 194 if you have at most 3 unexcused

absences during MA 114 recitations and you pass MA 114. This means if you fail MA 114 you will automatically fail MA 194. If you pass MA 114 but have 4 or more unexcused absences in recitations you also fail MA194.

Your section number for MA 194 has to equal your section number for MA 114. If you drop or change sections of MA 114, please make sure to also drop or change sections of MA 194. It is your responsibility to take care of this if you change sections; otherwise you risk a failing grade for MA 194 because you are not on the proper class roll.

Grading:

You can earn up to 500 points in the course based on the following activities:

3 exams	300 (100 points each)
Final exam	100
Homework component	100
Total	500

Depending on the development of the course, small adjustments to the grading policy may be made.

The 100 points for the homework component are broken down as follows:

Web homework	120 points
Quizzes	40 points (4 points each)
Attendance of the lectures	40 points
Total divided by 2	100 points

Your course grade will be based on the number of points you earn according to the following scheme:

Total earned course points	450-500	400-449	350-399	300-349	0-299
Final course grade	A	В	С	D	Е

Using the Web-based Homework System WeBWorK:

Please consult the document *Introduction to WeBWorK for Students* for full instructions. It can be found on the course web page through the link Intro to WebWork.

In order to access WeBWorK do the following steps (Students who registered near the beginning of the semester should wait 24 hours after they registered for MA 114):

- Use a web browser Internet Explorer 8.0, Firefox, Chrome, Safari or other browser.
- Use the link Login to WebWork on the course web page or go directly to https://courses1.webwork.maa.org/webwork2/uky-ma114/
- Log in using your campus active directory account login id (LinkBlue) in ALL CAPS. Your initial password is your UKID number without the leading 9.
- Follow the instructions in the *Introduction to WeBWorK* to reset your password.

WebWork Homework:

Homework will be completed using the web-based homework system WeBWorK, that grades your solutions and records your scores. You find it at

https://courses1.webwork.maa.org/webwork2/uky-ma114/.

Each homework set comes as a personal version. When entering answers to the personal version, the system tells you whether your answer is correct or not and, in the case there are multiple

components of the answer, indicates the first part of the answer that is incorrect. Only correct solutions to your personal version of the homework assignment give you credit!

Notice that for each web-based homework problem you may resubmit your answer up to fifteen (15) times before midnight of the due date! There are some exceptions to this rule, which are clearly indicated.

The homework is graded by problem. You do not have to resubmit the entire set each time you work a problem. You can, at any time, find your current WeBWorK score by clicking Grades in the main menu on the left of most pages. There is a button, Preview Answers, on each problem page which will allow you to see your answer before you submit it. There is also a button, Check Answers, with which you can check your answers. You will find a button, Email instructor, that causes an email to be sent to your TA and your instructor which mainly serves to tell them that you have a question. Keep in mind that it is not cheating to give or receive help on web homework.

We recommend to approach the web-based homework assignments via the following rules.

- a) Start to work on an assignment as soon as the corresponding material is discussed in class.
- b) Print out copies of your personal and of the common version (it is free in the Mathskeller, the student staff will show you how to do so) and put them in a notebook.
- c) Get together with classmates to work on the problems via the printouts. The best approach is to work together on the common version. Write down the solutions in your notebook and only thereafter enter your solutions on the webpage. Check your answers by entering them into the system, and, if necessary, rework the problem.
- d) Thereafter work on the problems of your personal version and remember: only correct solutions to your personal version will earn you credit.
- e) Bring the notebook with you when you go to office hours.
- f) You are encouraged to discuss homework problems and the course material with each other. However, when it comes time for you to write up or enter the solutions, you are expected to do this completely on your own. It would be the best for your understanding if you put aside your notes from the discussions with your classmates and wrote up the solutions entirely from scratch.
- g) If necessary, you may take the common version of the homework set with you to recitation and seek help.
- h) If you feel you have worked a problem correctly and WebWork marks it incorrect, please contact your teaching assistant or lecturer using the Email Instructor button on the web page with the problem.

Late Homework:

No late submissions of web homework will be accepted. If an emergency or illness takes you away from school, please discuss your situation with your professor and ask to be excused from an assignment, if appropriate. If you have a scheduled absence (travel or authorized university absence) you must still submit the web homework by the deadline. Please understand that the computer is a harsh task-master. When it says it is midnight, it is midnight.

Quizzes:

There are 10 quizzes given randomly throughout the semester, starting from the second week. The quizzes are given in recitation classes. Each quiz consists of one or two problems and takes up to 15 minute. The problems will be similar to exam problems and help you to prepare for

the exams. The graded quiz will be returned in the next recitation class. The grade counts toward your MA 114 grade.

Calculators and Laptop Computers:

Students may use a graphing calculator on exams and homework. You may **not use** any machine (carbon-based life form or silicon-based) that has symbolic manipulation capabilities of any sort on any exam. This precludes the use of TI-89, TI-Nspire CAS, HP 48, TI 92, Voyage 200, Casio Classpad or laptop computers. Also, you may **not use** your cell phone, iPhone, or Blackberry on any exam – even if you forget your regular calculator. If it runs Windows, UNIX, Linux, Ubuntu, MacOS, PalmOS, or any derivatives or associates thereof, you cannot use it on the exams.

Please talk to your lecturer if you have any questions as to whether a particular machine may be used on a test. We may clear the memory of calculators before or during an examination. Except when explicitly permitted by your instructor, computers (including laptops, notebooks, iPads, etc.) may not be used during lectures.

Attendance:

You are expected and strongly advised to attend all lectures and recitations. Attendance means that you come to class on time, stay until dismissed and work on the assigned tasks.

Instructors will take attendance beginning January 23. Your attendance score is based on the percentage of lectures you attend. You will receive full credit (40 points, see above) if you have at most 2 unexcused absences.

Attendance in recitation is required for a passing grade for MA 194 (see above), and is strongly recommended for everybody. Beyond unexcused absence, excessive tardiness to or disruptive behavior in a recitation session will be treated as non-participation in the session. Recitations are the place where you have a chance to actively engage, work problems under guidance, seek assistance, and communicate with your peers and the instructor.

Missed Classes:

- Students must notify the instructor of their absence prior to the absence or within one week after the absence. They must submit any written documentation supporting their excused absence within one week after the absence.
- Senate Rule 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit reasonable cause for nonattendance by the professor. Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request appropriate verification when students claim an excused absence because of illness or death in the family. UHS Tier 1 explanatory statements will be accepted at most twice for lecture and twice for recitation per student for the entire semester. They are not accepted for missed exams. Appropriate notification of absences due to university-related trips is required prior to the absence.
- Absences for major religious holidays require advance written notification no later than the last day in the semester to add a class.
- \bullet Per university policy, students are expected to withdraw from the class if more than 20 % of the classes scheduled for the semester are missed (excused or unexcused).

Study Advice and Getting Help:

It is essentially impossible to passively teach mathematics; it must be actively learned. To understand what this means, consider the impossibility of learning to play tennis by listening to someone describe how to play tennis or by watching some world-class player. You will not learn the material in this course by just listening to the lectures, and thinking to yourself—"Yes, I understand that". You must work the problems and go through the difficulties before you will begin to learn. The instructor's task is that of an assistant to help you learn as much of the material as you desire.

This being said, form good study skills from the start!

- Do not miss class! Systematic class attendance and participation are critical to success in mathematics classes. Beyond that, class attendance counts 4% of the grade.
- Read the text prior to the lecture. The reading assignment is listed in the course calendar. There are links in every web homework assignment to the text and to the chapters and sections referenced by the problems in the assignment.
- Take notes in class.
- Find classmates to study with. Studying math is for most people much more productive when done in collaboration.
- Read the text and your notes after lecture. Go through them thoroughly to check if you really understand the concepts and ideas. This is a slow process that needs to be learned and practiced! Do not just rush through the homework but try to understand the main story. Always ask yourself whether you can connect the dots and understand the "why" and the "how". Close your books and notes and check whether you can write down the main results of the section. Do all this in your study group and challenge each other. Also, explaining material to somebody else is extremely helpful for your own learning process.
- Do the homework. Remember that the homework counts 12% of the course grade.
- Work hard not to fall behind. It is very difficult to catch up in a math class after falling behind. One of the best ways to avoid doing so is to systematically do the homework. One of the simplest ways to do this is to regularly go to the Mathskeller (see below) at some open time in your schedule. Math faculty, graduate students, and advanced undergraduate students are there to offer assistance.
- Use the old exams on www.math.uky.edu/~ma114/exams/ to take practice tests by yourself in an exam-like situation. Do this well before the exam. Compare your solutions with those provided by the answer key.

If you are having trouble, then seek help without delay. Your instructor and TA have office hours and will make appointments to work with you at other times. If you are having trouble with an online homework problem, you can use the feedback system in WebWork to direct questions about specific problems to your TA and instructor. Try to provide as much information as possible in your help request. For example, you should at least describe how you attempted the problem and at least guess where you might be going wrong.

If you need more help than what can be provided by the online help, you should take one or more of the following steps:

- Talk to your instructors before or after class or send them an email, if necessary. Let them know what problems you are having, if any. They will be happy to help!
- Go to the office hours of your instructors.
- You can also seek help in the **Mathskeller**, located in room CB 063 in the basement of the classroom building. Many instructors and teaching assistants from the Department of

Mathematics will hold office hours in the Mathskeller. In addition, limited drop-in tutoring is available. You can seek help from any of the instructors or teaching assistants – not just your own. The Mathskeller is open from 9 am to 5 pm Monday through Friday (except academic holidays) during the semester.

• Furthermore, you can seek help in **The Study**, located on the 3rd floor of the Commons, South Campus, and in **The Study North**, located in Champions Court 1 across from the student center. Academic Enhancement provides drop-in peer tutoring by experienced undergraduate students who have successfully navigated the courses for which they tutor. A regular schedule of all tutoring is available on www.uky.edu/AE. You can also call 257-1356.

You can find more detailed suggestions of how to study for the course on the handout www.math.uky.edu/~heidegl/Ma114S15/HowToSucceed.pdf, which is linked from the course web page.

Policies:

- Attend lectures and recitations regularly. Be on time and remain until dismissed. Do not leave in the middle of class. Instructors have the right to take off attendance points for coming late or leaving early.
 - If you cannot come to lecture or recitation and would like to request an excused absence let the instructor know about it next time in class (see also the section on attendance).
- Unless otherwise instructed by your professor, classes are cell phone-free zones! Cell phones may not be used during class. In particular, texting, "tweeting", etc. are forbidden. Unless specifically permitted by your instructor laptops must be off and out of sight for the entire class period (see also the section on calculators and laptop computers). Instructors have the right to deduct attendance points for using cell phones or laptops during class. The same applies to reading newspapers or other activities unrelated to the course.
- To earn top grade on exam problems it is not enough to have the correct answer, but you must also show the correct reasoning.
- Classes do meet as usual on the days after an exam. Attendance rules apply as usual.
- In order to be fair to all students, dates for exams and homework assignments are firm. It is very important to take each exam on schedule. Missed work may be made up only due to illness with medical documentation or for other unusual (and documented) circumstances. If you have a university-excused absence or a university-scheduled class conflict with uniform examinations please contact your lecturer as soon as possible, at least 10 days before the exam, so that an alternate exam can be arranged for you.
- Study Groups and Academic Honesty: Students are encouraged to work together to understand a problem and to develop a solution. However, the solution you submit for credit must be your own work. Copying on exams and usage of books, notes, or communication devices during examinations is not allowed. For cheating and plagiarism see the next item..
- Academic Integrity: Per university policy, students shall not plagiarize, cheat, or falsify or misuse academic records. Students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed.

Plagiarism and cheating are serious breaches of academic conduct. Each student is advised to become familiar with the various forms of academic dishonesty as explained in the *Code of Student Rights and Responsibilities*. Complete information can be found at the website:

www.uky.edu/Ombud. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of Student Rights and Responsibilities (www.uky.edu/StudentAffairs/Code/part2. html) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission.

When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone elses work, whether it be a published article, chapter of a book, a paper from a friend or some file, or something similar to this. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work which a student submits as his/her own, whoever that other person may be.