# DEPARTMENT OF MATHEMATICS COURSE INFORMATION FOR MATH 2433–002

Calculus and Analytic Geometry III

Summer 2017

Instructor: Office:	Jieru Zhu PHSC 928
	Wednesday 2 - 3 pm PHSC 928 Thursday 10 - 11 am PHSC 209 (Math Center)
E-mail:	jieru.zhu-1@ou.edu

### Prerequisites: MATH 2423.

**Text:** *Calculus (8th ed)*, by James Stewart, Cengage Learning, 2016, ISBN-13: 9781285740621. **Grading:** The grade is made up of the following categories:

Daily Quizzes	5~%
Homework	10~%
Midterms	55~%
Final	30~%

For daily quizzes, three of the lowest scores will be dropped. For homework assignments, one late homework is allowed without excuses, and is due one week from the original due date (e.g. if the homework is due Friday, then the late homework can be turned it before the next Friday.) The lowest midterm grade will also be dropped. The final exam will be accumulative. The standards for each letter grade will be announced after each exam, based on the difficulty level of the exam. The grade scheme for daily quizzes and homework will be announced in the second half of the semester when there is enough score data to be taken into account.

### Exam dates:

Midterm 1	Monday, June 19th
Midterm 2	Monday, July 3th
Midterm 3	Monday, July 17 th
Final	Tuesday, August 1st

Attendance and make-up exams: Attendance is reflected in the daily quizzes, and will not be counted separately. Make-up exams can be taken with supported documents in the arranged time and date.

Policies on Homework and/or Quizzes: Quizzes are taken daily, over the material covered in the same class period, with focus on definitions and concepts.

Homework assignments are due on Thursdays (with the exception of the first HW.) You

are encouraged to discuss homework problems with your classmates, even though the final write-up should be your independent work, and it is a courtesy to site the persons you have worked with. In addition, you can refer to my office hour or arrange meetings with me to discuss any of the problems, or seek help in the Math Center (PHSC 209.)

Math center: The math center is located in PHSC 209 and the summer hours are 9 am - 1 pm.

## Weekly schedule:

Week	Topics	Sections
Week 1	Sequences	11.1
	Series	11.2
	Integral test	11.3
Week 2	Comparison tests	11.4
	Alternating series	11.5
	Root and ratio tests	11.6
	Strategy for testing series	11.7
Week 3	Power series	11.8
	Functions as power series	11.9
	Taylor and Maclaurin series	11.10
Week 4	Three-dimensional coordinate systems	12.1
	Vectors	12.2
	Vector dot product	12.3
Week 5	Vector cross product	12.4
	Curves defined by parametric equations	10.1
	Calculus with parametric curves	10.2
Week 6	Polar coordinates	10.3
	Areas and lengths in polar coordinates	10.4
Week 7	Equations of lines and planes	12.5
	Cylinders and quadric surfaces	12.6
	Vector functions and space curves	13.1
Week 8	Derivatives and integrals of vector functions	13.2
	Arc length (and, optionally, curvature)	13.3
	Velocity and acceleration	13.4

**Policy on W/I grades:**  $\langle$  Indicate your policies for the assignment of W/I grades here. What follows is some boilerplate language that you may wish to use or modify as you see fit.  $\rangle$ 

Through the end of the sixth week of the semester, students can withdraw from the course with an automatic W. Between the seventh and tenth weeks of the semester, undergraduate students can continue to withdraw with an automatic W, but graduate students must obtain the instructor's signature on the University's "drop form" to withdraw from the course, and along with the signature the instructor must indicate whether the student is passing or failing at the time of the withdrawal. After the tenth week of the semester, all students can only withdraw via petition to the Dean of their college. The petition process also requires the

instructor's signature with a passing-failing indication at the time the petition is filed. Note that a "failing" indication on the petition means that even if the petition is approved the grade in the course will be weighted in the GPA as an F.

The grade of I is not intended to serve as a benign substitute for the grade of F, and is only given if a student has completed the majority of the work in the course at a passing level (for example everything except the final exam), the course work cannot be completed because of compelling and verifiable problem beyond the student's control, and the student expresses a clear intention of making up the missed work as soon as possible. Moreover, current University policies require that instructors and the affected students execute a written "Incomplete Contract" before a grade of I can be given. The contract makes clear: (1) what work is to be made up; (2) when the make-up work must be completed (which cannot be more than one calendar year from the assignment of the I); and (3) what alternative grade will be assigned if the make-up work is not completed. If the make-up work specified in the contract will be entered on the student's transcript. Thus the I grade does not became permanent on the transcript if it is not made up within one year.

Academic misconduct: All cases of suspected academic misconduct will be reported to the Office of Academic Integrity Programs as possible violations of University's Academic Integrity Code. If the violation is confirmed by the Academic Integrity Program's Office, the penalties can be quite severe, so the best advice is **Don't do it!** For more details on the University's policies concerning academic misconduct consult the link

http://integrity.ou.edu/students.html

This link also has information about admonitions (essentially warnings about potential misconduct for fairly minor infractions) and your rights to appeal charges of academic misconduct.

Students are also bound by the provisions of the OU Student Code, which can be found at

### https://www.ou.edu/content/dam/studentlife/documents/AllCampusStudentCode.pdf

Students with disabilities: The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the instructor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course. The Office of Disability Services (405–325–3852, drc@ou.edu) is in the University Community Center, 730 College Avenue, Norman, OK 73019.