MATH 222 Analytic Geometry–Calculus II, 2025 Summer Syllabus
Section 411: Mon–Fri 08:15–09:30, CAS 140

Mr. Jonathan Hafner, CAS 246, jhafner@uakron.edu
Website: https://www.hafner.us/ua/
Office hours: Mon–Fri 09:45–?, or by appointment

Prerequisites: MATH 221 Analytic Geometry–Calculus I with a grade of C– or better, or placement. If you do not meet the prerequisites, you may be withdrawn from the course without refund.

Course Objectives/Learning Outcomes: Students will be expected to be able to:

- Communicate mathematical results through the proper use of mathematical notation and words
- Use basic integration techniques, including substitution, integration by parts, trigonometric integrals, trigonometric substitution, and partial fraction decomposition
- Apply integration techniques to solve problems regarding volume, surface area, length of a curve, and other applications
- Understand sequences and series, including tests for convergence and divergence of a series
- Work with power series and Taylor series and their basic properties
- Understand parameterized curves and polar coördinates

Text: *Calculus: Early Transcendentals*, 9th Edition, James Stewart et al., Cengage Learning. If you are registered for the class and the "ALL-IN Book Bundle", you should have access to a digital version of the textbook through WebAssign. See https://www.uakron.edu/bookbundle/ for more information.

Calculator: The following is the Department policy on calculators:

> Following the ACT Calculator Policy, graphing calculators without computer algebra capabilities are allowed on all homework, quizzes and exams. Examples of approved calculators include the TI-83, TI-84+, TI-Nspire non-CAS, Casio fx-9750GIII, and Casio Prizm fx-CG50, but any downloadable computer algebra module must be deleted.
>
> Graphing calculators with built-in computer algebra functionality are not allowed; examples include the Texas Instruments models TI-89, TI-92, TI-Nspire CAS; HP models Prime, 48GII, 40G, 49G, 50; and Casio models fx-CP400, ClassPad 300 or 330, Algebra fx 2.0, CFX-9970G.
>
> If you are uncertain as to whether or not your calculator is acceptable, check with your instructor at the beginning of the course.

That said, my own in-class tests will not require the use of a calculator, unless announced otherwise in advance. Some out-of-class assignments and exercises will require the use of a calculator or computer, but there are plenty of free online tools that are sufficient for this purpose. Contact me if you have questions about where to find the necessary resources.

Homework and Quizzes: Regular homework assignments and quizzes will be due in WebAssign; for more information, see my webpage for this course. No extensions will be given without documentation of a valid excuse. Instead, a modest number of points will be omitted from the total "possible", so you can miss an assignment or two without it hurting your grade. (If you do not miss any assignments, that adjustment will essentially convert a portion of your total into bonus points.)

Tests: We will have eight short tests in class, one at the end of each week, unless something unexpected forces a change to that schedule. If you must miss a test, contact me as soon as possible to discuss our options.

All tests are equally weighted. Points are used solely as a bookkeeping device for grading within a test; the point total of one test has no relationship with the point total of another.

Grades: Your course grade will be based on the weighted average of your scores on assignments and assessments, with your WebAssign total worth 15% of your grade and your test average worth 85%. From that, your *minimum* grade in the course is shown in the table below. (I reserve the right to make small upward adjustments at my discretion.)

Percent:	<60	60+	63+	67+	70+	73+	77+	80+	83+	87+	90+	93+
Grade:	F	D–	D	D+	C–	C	C+	B–	B	B+	A–	A

Communication: Aside from face-to-face discussion, the best way to contact me is by email. While lengthy or detailed discussion is best handled in person, I encourage you to ask me brief questions about course material—including homework—by email if it is feasible to do so. Aside from the convenience for you, it also makes it easier for me to send hints or clarifications to the entire class if I feel they are of general interest. Email is also the best way to schedule a meeting outside of class time or handle other administrative matters.

I will sometimes send important information or announcements to the class as a whole, or attempt to contact you directly if the need arises, using your UA email address. Make sure you check this account regularly.

My use of Brightspace is very limited; instead, information relevant to the course will be posted to my website, which you should check frequently. **Do not** attempt to contact me via the internal messaging systems of Brightspace or WebAssign, as I do not check those sites frequently—use regular email instead.

"What students need to know": See https://www.uakron.edu/oaa/faculty-affairs/What-Students-Need-To-Know for important information on various topics, including

- The Student Code of Conduct and academic misconduct
- Statement about the ethical use of ChatGPT and other AI tools
- Add, drop, withdrawal and refund policies
- Inclusive excellence
- Title IX
- Sexual harassment and sexual violence
- Students with disabilities

- Religious Accommodations for Students
- ZipAssist

All students are responsible for this information.

Additionally, note that free tutoring is available in the University's tutoring centers: https://www.uakron.edu/tutoring/