

MATH 251, SPRING 2025: APPROXIMATE COURSE SCHEDULE

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This schedule is *approximate*, and is subject to change. Some material on infinite limits will be postponed from where it appears in this schedule.

I hope to put at least one optimization problem already in Week 3.

Week 1	2.1–2.4	Limits and continuity.
Week 2	3.1–3.4	Intro to derivatives, differentiation rules except the chain rule, and first look at the
Week 3	4.3, 4.7	Higher derivatives, Maximization and minimization, first look at optimization prob
Week 4	3.5, 3.6	Derivatives of trigonometric functions, chain rule.
Week 5	3.8, 3.7	Implicit differentiation, derivatives of inverse functions (including arcsin, arctan, et
Week 6	3.9, 4.1, 2.4	Derivatives of exponential and logarithmic functions. Related rates. More on limits
Week 7	4.6, 4.7	Limits at infinity, more optimization.
Week 8	4.5, 4.2, 3.4	Shapes of graphs,, linear approximation, more on the meanings of the derivative.
Week 9	4.8, 2.4, 4.4	L'Hopital's Rule, Intermediate Value Theorem, Mean Value Theorem.
Week 10		Catch up, review (if time).