



University
of Vermont

MASTER YOUR MAJOR!

Learn how to apply evidence-based
strategies to excel in your courses.

STRATEGY	DEFINITION
 Retrieval Practice	Actively recall information from memory to strengthen understanding and improve long-term retention.
 Dual Coding	Integrate verbal and visual information, such as combining text with diagrams or illustrations, to enhance comprehension and memory.
 Interleaving	Alternate between different topics or concepts during study sessions to deepen understanding and improve application across contexts.
 Concrete Examples	Apply specific, relatable examples to clarify and solidify abstract or complex concepts.
 Elaboration	Expand ideas by connecting them to existing knowledge and providing detailed explanations and descriptions.
 Spaced Practice	Distribute study sessions over time to reinforce learning and combat forgetting, leading to better retention.

MAJOR: Mathematics

EXAMPLE TOPIC: Derivatives



Write down derivative rules from memory and solve problems without examples.



Sketch a graph showing a curve's slope and its derivative values in a table.



Alternate derivative and integration problems to see their connections.



Differentiate $f(x) = 3x^2$ and relate it to real-world scenarios like velocity.



Explain derivatives as rates of change and apply them to contexts like maximizing revenue.



Review derivative concepts for 20 minutes every two days, including limits and continuity.