

Learning Tip:

Using GenAI for Learning

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- ▶ When used well, generative AI (GenAI) can enhance learning — especially for explanations, practice, and feedback.
- ▶ High-value prompt types (better than “give me the answer”):
 1. **Metaphors & analogies:** “Explain *[topic]* using an analogy.”, “Use an analogy from *[domain I know well]*.”
 2. **Options and perspectives:** “Give me three approaches to *[problem]*, compare/contrast, and when each is best.”
 3. **Questions (not answers):** “What are 3 questions I should ask to deepen my understanding of *[topic]*?”
 4. **Practice generation:** “Create 3 practice problems on *[topic]* with increasing difficulty (no solutions yet).”
 5. **Debugging your thinking:** “Show a common wrong solution and explain why it fails.”
- ▶ Include context to get a more relevant response (e.g., “I’m a first-year *[program]* student taking *[course title]*, just starting *[topic]*.”)

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- ▶ Use GenAI to **inspire and structure your thinking** — not to replace it.
- ▶ A good workflow:
 1. **Try first:** attempt the problem or write your current understanding.
 2. **Ask for guidance:** analogies, hints, checks, or practice questions.
 3. **Do the work:** solve it yourself and write the final solution in your own words.
 4. **Verify:** use GenAI to check for gaps, edge cases, or alternative approaches.
- ▶ Reality check: GenAI can sound convincing while being wrong. Verify with notes, textbook, and course definitions.
- ▶ Follow institution and course rules on GenAI use; when in doubt, ask.
- ▶ GenAI makes shortcuts tempting — but deep learning still requires effortful practice.
- ▶ **Takeaway:** Use AI tools for **ideas**, not as a substitute for your brain doing the work.