Prompting Principles & Industry Examples

The S.T.U.D.E.N.T. Framework for Academic Prompting

S - Specify Your Level

Always tell AI your academic context for appropriate responses

Examples:

- "I'm a sophomore taking introductory biology..."

- "As a graduate student researching..."

- "I'm in high school AP Literature and need help with..."

- "For my senior capstone project in..."

T - Target Your Goal

Be clear about what you want to accomplish

Instead of: "Help with my essay" Try: "Help me develop a thesis statement for my 5-page argumentative essay on climate policy"

U - Use Your Assignment Details

Include relevant assignment requirements and constraints

Template: "I have a [length] [type of assignment] due [timeframe] for my [course]. The requirements are: [list key requirements]. I need help with [specific aspect]."

D - Define Your Audience

Specify who will read/evaluate your work

Examples:

- "Writing for my professor who values critical thinking..."

- "Presenting to classmates who aren't familiar with this topic..."

- "Creating materials for high school students..."

E - Explain Your Current Understanding

Share what you already know to get appropriate guidance

Template: "I understand [what you know], but I'm confused about [what you don't understand]."

N - Name Your Next Steps

Clarify how you'll use the AI's response

Examples:

- "I'll use this to create an outline..."

- "This will help me prepare for tomorrow's discussion..."

- "I need this to start my research process..."

T - Tell AI What NOT to Do

Set boundaries to ensure you're learning, not cheating

Examples:

- "Don't write the essay for me, just help me organize my ideas"

- "I want to understand the concept, not just get the answer"

- "Help me develop my own arguments, don't provide yours"

Academic Success Prompting Templates

Understanding Complex Concepts:

"I'm studying [topic] in my [course level] [subject] class. I understand [basic concept], but I'm struggling with [specific difficulty]. Can you explain [complex concept] using analogies or examples that connect to [something familiar to you]? Then ask me questions to check if I really understand it."

Essay Development:

"I'm writing a [length] [type] essay on [topic] for my [course]. My thesis is: [your thesis]. Help me: 1) Evaluate if my thesis is strong and specific, 2) Brainstorm evidence that supports my argument, 3) Identify potential counterarguments I should address, 4) Suggest an organizational structure that flows logically."

Research Guidance:

"I'm researching [topic] for my [assignment type] in [course]. I've found these sources: [list sources]. Help me: 1) Identify gaps in my research, 2) Suggest additional search terms or databases, 3) Evaluate the credibility of my sources, 4) Generate research questions I haven't considered."

Problem-Solving Approach:

"I'm working on [type of problem] in [subject]. Here's the problem: [state problem]. I think the approach is [your approach], but I'm not sure. Can you guide me through the problem-solving process step by step without giving me the answer directly?"

Study Preparation:

"I have a [exam type] in [subject] covering [topics]. I learn best through [your learning style]. Can you help me create a study plan that includes: active recall exercises, practice questions, concept connections, and a review schedule for [timeframe before exam]?"

Writing Support Strategies

Brainstorming and Ideation:

"I need to write about [general topic] but I'm stuck on ideas. I'm interested in [your interests] and my course focuses on [course themes]. Help me brainstorm 10 specific angles or arguments I could explore, then help me evaluate which ones have the best evidence and are most interesting."

Structure and Organization:

"I have all these ideas for my paper: [list ideas]. Help me organize them into a logical structure. What should be my introduction, main points, and conclusion? Which ideas support each other and which are digressions I should cut?"

Clarity and Flow:

"Here's a paragraph from my paper: [paste paragraph]. Help me improve it for clarity, flow, and academic tone. Point out specific words or sentences that could be clearer and suggest revisions."

Citation and Research Integration:

"I want to incorporate this source: [source information] into my paper about [topic]. Help me: 1) Identify the key points relevant to my argument, 2) Practice paraphrasing vs. direct quoting, 3) Create smooth transitions that integrate the source with my ideas."

Learning and Comprehension Strategies

Active Learning Techniques:

"I just read about [concept] but I need to really understand it. Create a series of questions that test my understanding at different levels - from basic recall to application to analysis. After I answer each question, give me feedback and follow-up questions."

Making Connections:

"Help me connect [new concept] to things I already understand. I have background in [your experience/knowledge]. What analogies, examples, or connections can help me grasp this new idea and remember it long-term?"

Teaching to Learn:

"I'm trying to understand [concept]. Let me explain it to you as if you don't know anything about it: [your explanation]. Point out what I got right, what I missed, and what I misunderstood. Then help me improve my explanation."

Application and Transfer:

"I understand [concept] in theory, but how do I apply it? Give me realistic scenarios where I would use this knowledge and walk me through how to approach each situation."

Project Management and Organization

Project Planning:

"I have [assignment] due in [timeframe]. It requires: [list requirements]. Help me create a realistic timeline that breaks this into manageable tasks with deadlines, considering that I also have [other commitments]."

Progress Check-ins:

"I'm working on [project] and here's what I've completed so far: [list progress]. Here's what I'm struggling with: [specific challenges]. Help me assess my progress, adjust my timeline if needed, and solve these specific problems."

Resource Management:

"For my project on [topic], I need to find: [types of resources needed]. I have access to [library/database resources]. Help me create a search strategy and suggest specific databases, keywords, or types of sources that would be most valuable."

Study and Test Preparation

Creating Study Materials:

"Turn this information into study materials for me: [paste content]. Create: flashcards for key terms, practice questions at different difficulty levels, and a concept map showing how ideas connect. Format them so I can use them for active recall practice."

Practice Testing:

"I'm studying for [exam type] on [topics]. Create a practice test that mimics the format and difficulty of the real exam. Include a mix of [question types]. After I complete it, explain the answers and help me understand my mistakes."

Review and Synthesis:

"I've been studying these topics: [list topics]. Help me create a comprehensive review that shows how everything connects. What are the overarching themes, key relationships, and most important concepts I need to master?"

Common Student Mistakes to Avoid

Mistake 1: Being Too Vague

Wrong: "Help me with my homework" Better: "Help me understand how to approach this calculus optimization problem for my homework"

Mistake 2: Asking AI to Do the Work

Wrong: "Write my essay conclusion" Better: "Help me brainstorm ideas for my essay conclusion and evaluate which ending would be strongest"

Mistake 3: Not Providing Context

Wrong: "What does this mean?" [with complex passage] Better: "I'm reading this passage for my American Literature class. Based on what we've studied about [context], what does this passage mean?"

Mistake 4: Accepting First Responses

Wrong: Taking the first answer without follow-up Better: "Can you explain that differently?" or "What if I approached it this way instead?"

Advanced Student Prompting Techniques

Socratic Method:

"I want to understand [concept] deeply. Instead of explaining it to me, ask me a series of questions that guide me to discover the answer myself. Start with basic questions and gradually make them more complex."

Multiple Perspectives:

"Help me understand [controversial topic] from multiple viewpoints. Present the strongest arguments from [different sides], then help me evaluate the evidence and develop my own informed opinion."

Iterative Improvement:

"Here's my first attempt at [assignment]: [your work]. Don't rewrite it, but give me specific feedback on what to improve and how. Then I'll revise and we can repeat the process."

Metacognitive Development:

"After helping me with [task], ask me to reflect on: What strategies worked best for me? What would I do differently next time? How can I apply this learning approach to other subjects?"

Building Your Personal Prompt Library

Categories to Develop:

- Understanding: Templates for grasping new concepts

- Writing: Frameworks for different types of academic writing

- Research: Strategies for finding and evaluating sources

- Problem-Solving: Approaches for different types of academic problems

- Study Skills: Methods for retention and test preparation

Customization Tips:

- Adapt templates to your learning style

- Include your field-specific terminology

- Build on prompts that work well for you

- Share and learn from classmates' effective prompts

Remember: The goal is to enhance your learning and understanding, not to have AI do the work for you. The best student prompts help you think more deeply, understand more clearly, and develop stronger academic skills.

STUDENT EXAMPLES

Doctorate of Nurse Practice (DNP) Students:

Evidence-Based Practice Project: "Help me design an EBP project addressing [clinical problem] in [healthcare setting]. Structure this as: PICOT question formulation, systematic literature review methodology, quality improvement framework selection (Plan-Do-Study-Act, Lean, etc.), outcome measures and data collection methods, stakeholder engagement strategies, and sustainability planning for practice change implementation."

Quality Improvement Leadership: "Develop a comprehensive QI initiative for [specific clinical issue: medication errors, patient falls, infection rates]. Include: root cause analysis methodology, interdisciplinary team development strategies, change management approaches for clinical

staff, measurement and monitoring systems, cost-benefit analysis, and methods for spreading successful interventions across the organization."

Advanced Clinical Decision-Making: "Help me develop a clinical practice guideline for [complex patient population/condition]. Address: evidence synthesis from high-quality research, clinical expertise integration, patient preference considerations, implementation barriers and facilitators, outcome metrics for guideline effectiveness, and strategies for keeping guidelines current with evolving evidence."

<mark>Education Students:</mark>

Lesson Plan Development: "Create a comprehensive lesson plan for [subject] targeting [grade level] students learning about [topic]. Include: standards alignment and learning objectives, differentiation strategies for diverse learners, formative and summative assessment methods, engagement techniques appropriate for this age group, technology integration opportunities, and extension activities for advanced learners."

Classroom Management Strategy: "Help me develop a proactive classroom management system for [grade level/setting]. Address: positive behavior support strategies, clear procedures and expectations, culturally responsive approaches, conflict resolution techniques, parent communication protocols, and data collection methods to track behavioral interventions and their effectiveness."

Educational Assessment Design: "Design an authentic assessment for [subject/topic] that measures [specific skills/knowledge]. Include: performance criteria and rubrics, accommodation strategies for students with different needs, feedback mechanisms that promote learning, alignment with curriculum standards, and methods for using assessment data to inform future instruction and student support."

<mark>English Students:</mark>

Literary Analysis Development: "Help me develop a sophisticated analysis of [literary work] focusing on [theme/technique]. Structure this as: close reading of specific textual evidence, historical and cultural context integration, theoretical framework application (feminist, postcolonial, psychoanalytic, etc.), comparison with other works from the period or genre, and original thesis development that contributes new insights to existing scholarship."

Research Paper Construction: "Guide me in developing a research argument about [literary topic/author]. Help me: formulate a debatable thesis that addresses a gap in current scholarship, identify and evaluate both primary and secondary sources, organize evidence hierarchically from strongest to supporting points, address counterarguments from other critical perspectives, and conclude with implications for broader literary understanding."

Creative Writing Workshop: "Help me workshop my [genre: short story, poem, novel chapter] focusing on [specific element: character development, narrative voice, imagery, structure].

Provide: detailed analysis of what's working well, specific suggestions for revision with examples, questions to guide further development, comparison to published works that handle similar elements effectively, and strategies for maintaining consistency throughout the piece."

Exercise Science Students:

Research Design: "Help me design a research study investigating [exercise/health topic]. Include: specific research question and hypothesis, appropriate methodology for this population, key variables to measure and control, ethical considerations for human subjects, and potential limitations that might affect interpretation of results."

Program Development: "Create an exercise program for [specific population: elderly, post-injury, athletes] with [specific goals]. Structure as: initial assessment protocols, progression guidelines, safety considerations, modification strategies for different fitness levels, and outcome measures to track effectiveness."

Evidence Synthesis: "Help me analyze conflicting research findings about [exercise science topic]. Compare methodologies, sample sizes, and conclusions from different studies. Identify possible reasons for conflicting results and provide evidence-based recommendations for practitioners based on the current state of research."

Fashion Merchandising Students:

Market Analysis: "Analyze the current fashion market for [specific demographic/category]. Structure your analysis as: Consumer behavior trends, competitive landscape, price point analysis, seasonal patterns, and emerging opportunities. Include recommendations for product positioning and retail strategy based on this analysis."

Trend Forecasting: "Help me develop a trend forecast for [season/year] in [fashion category]. Consider: current cultural influences, economic factors affecting consumer spending, sustainability concerns, technology impacts on fashion, and historical trend cycles. Provide specific predictions with supporting rationale."

Brand Strategy Development: "I'm developing a fashion brand targeting [specific market]. Help me create: brand positioning statement, target customer persona with psychographic details, competitive differentiation strategy, pricing strategy rationale, and key marketing messages that resonate with this audience while reflecting current market trends."

Fine Arts Students:

Artistic Concept Development: "Help me develop and articulate the conceptual framework for my [medium: painting, sculpture, installation] series exploring [theme]. Structure this as: core concept and artistic statement, visual research and influences analysis, material and technique rationale, cultural/historical context connections, and potential viewer interpretation considerations."

Critique Preparation: "Prepare me for an art critique of my work on [project/theme]. Help me: articulate my artistic decisions and process, anticipate questions about technique and concept, develop responses to potential criticisms, identify the strongest aspects to highlight, and prepare thoughtful questions about peers' work that demonstrate engagement with their artistic choices."

Portfolio Curation: "Guide me in curating a cohesive portfolio for [purpose: graduate school, exhibition, residency application]. Help me: select pieces that demonstrate artistic growth and technical proficiency, arrange works to create visual and conceptual dialogue, write artist statements that connect individual pieces to overarching themes, and present my artistic evolution and future direction compellingly."

Healthcare Economics Analysis: "Analyze the financial and operational impact of [healthcare policy/technology/trend] on [specific healthcare setting: hospital system, clinic, insurance provider]. Structure your analysis as: cost-benefit evaluation, stakeholder impact assessment, implementation challenges and timeline, regulatory compliance considerations, and ROI projections with risk factors."

Strategic Planning: "Help me develop a strategic plan for [healthcare organization] to address [challenge: patient satisfaction, operational efficiency, market competition]. Include: situational analysis using healthcare-specific frameworks, strategic objectives aligned with patient outcomes and financial sustainability, implementation roadmap with key performance indicators, and change management strategies for healthcare professionals."

Quality Improvement Project: "Design a quality improvement initiative for [specific healthcare process/outcome]. Apply: Lean Six Sigma or other QI methodologies, patient safety and satisfaction metrics, interdisciplinary team coordination strategies, evidence-based best practices integration, and measurement systems that track both clinical and financial outcomes."

Research & Analysis: "Help me analyze the causes of [historical event] by examining primary sources from different perspectives. Structure your analysis as: Economic factors, Political motivations, Social tensions, and Cultural influences. For each factor, identify key evidence and explain how historians with different interpretations might view this evidence."

Essay Development: "I'm writing a paper arguing that [historical thesis]. Help me develop a counterargument section by identifying the strongest opposing viewpoints, the evidence they would cite, and how I should address their criticisms while strengthening my own argument."

Source Evaluation: "Evaluate these three historical sources about [topic]: [paste sources]. Analyze each source's credibility, potential bias, historical context, and usefulness for understanding [specific aspect]. Help me understand what each source reveals about the time

period it was created versus the time period it describes."

Case Brief Analysis: "Help me brief [case name] for [legal subject]. Structure this as: procedural history and key facts, legal issues identified, holding and reasoning, rule of law established, concurring and dissenting opinions analysis, and implications for future cases or legal practice in this area."

Legal Memorandum Construction: "Guide me in writing a legal memorandum addressing [legal question] for [client situation]. Include: objective issue statement, brief answer, facts statement with legally significant details, rule synthesis from relevant statutes and case law, application of law to facts with analogical reasoning, counterargument analysis, and conclusion with practical recommendations."

Oral Argument Preparation: "Help me prepare for oral argument on [legal issue]. Develop: core argument structure with strongest points first, anticipated questions from the bench and strategic responses, key cases and statutes to reference, concessions I can make strategically, rebuttal points for opposing counsel's likely arguments, and opening and closing statements that frame the issue favorably."

For Medical Students:

Clinical Reasoning Development: "Walk me through the clinical reasoning process for a patient presenting with [symptoms]. Structure this as: differential diagnosis generation using pattern recognition and analytical reasoning, diagnostic test selection with pre-test probability considerations, interpretation of results with likelihood ratios, treatment decision-making with risk-benefit analysis, and prognosis discussion with patient communication strategies."

Pathophysiology Integration: "Help me connect the pathophysiology of [disease/condition] to its clinical presentation and treatment. Explain: underlying molecular and cellular mechanisms, progression from normal to pathologic state, how pathophysiology explains signs and symptoms, rationale for diagnostic testing, therapeutic targets and mechanisms of action, and potential complications based on disease progression."

Clinical Skills Application: "Guide me in approaching [clinical skill: history-taking, physical exam, procedure]. Include: systematic approach and key components, techniques for building patient rapport and trust, red flags and critical findings to recognize, documentation requirements and medical-legal considerations, patient safety protocols, and integration with clinical decision-making process."

Case Presentation Structure: "Help me prepare a comprehensive case presentation for [clinical scenario]. Organize as: concise history of present illness with pertinent positives and negatives, relevant past medical history and social factors, focused physical exam findings, assessment and differential diagnosis with reasoning, diagnostic and therapeutic plan with rationale, and learning points for the medical team."

Character Development: "Help me develop a systematic character analysis process for [specific medium: theater, film, musical theater]. Include: script analysis techniques, research methods for historical/cultural context, physical and vocal character development, emotional preparation strategies, and rehearsal techniques for maintaining character consistency."

Audition Strategy: "Create a comprehensive audition preparation system covering: material selection criteria for different types of auditions, presentation techniques that showcase range and personality, professional behavior and etiquette, handling rejection and feedback constructively, and building a sustainable audition practice routine."

Creative Collaboration: "Design a framework for effective creative collaboration in [specific context: ensemble work, director-actor relationships, interdisciplinary projects]. Address: communication strategies, conflict resolution, giving and receiving artistic feedback, maintaining individual artistic integrity within group projects, and building professional networks in the arts."

For Pharmacy Students:

Clinical Case Analysis: "Help me work through this pharmacy case: [patient scenario with medications, medical history, and presenting symptoms]. Guide me through: medication therapy problem identification, drug-drug and drug-disease interaction assessment, therapeutic alternative evaluation, dosing optimization considerations, monitoring parameter establishment, and patient counseling points for safety and efficacy."

Drug Information Response: "Structure a comprehensive drug information response to this clinical question: [specific pharmacy question]. Include: systematic literature search strategy, critical appraisal of evidence quality, clinical significance assessment, patient-specific considerations, regulatory and formulary factors, and clear recommendation with rationale for the requesting healthcare provider."

Pharmaceutical Care Plan: "Help me develop a pharmaceutical care plan for [patient scenario]. Address: medication reconciliation and accuracy, therapeutic goal identification, evidence-based treatment recommendations, monitoring plan for efficacy and toxicity, patient education strategy, collaboration with other healthcare providers, and documentation requirements for continuity of care."

Physics Students:

Problem-Solving Framework: "Help me develop a systematic approach to solving [type of physics problem: mechanics, thermodynamics, quantum]. Guide me through: identifying given information and unknowns, selecting relevant physical principles and equations, setting up the

mathematical framework, checking units and reasonableness, and interpreting results in physical context with error analysis."

Experimental Design: "Design an experiment to investigate [physics phenomenon] using available laboratory equipment. Include: hypothesis formulation based on theoretical predictions, experimental procedure with controlled variables, data collection and analysis methods, uncertainty calculation and error propagation, and discussion of how results support or challenge theoretical expectations."

Concept Connection: "Help me understand the deeper connections between [specific physics concepts] and their applications. Explain: underlying mathematical relationships, physical intuition and visualization techniques, real-world applications and technological implementations, connections to other areas of physics, and common misconceptions students have about these concepts."

Public Health Students:

Community Assessment: "Guide me through conducting a community health assessment for [specific community/issue]. Include: data collection methods, key stakeholders to engage, health indicators to measure, social determinants to consider, and strategies for ensuring community input throughout the process."

Policy Analysis: "Help me analyze the potential public health impact of [specific policy]. Evaluate: target population effects, unintended consequences, implementation challenges, cost-benefit considerations, and equity implications. Provide recommendations for policy modifications to maximize positive health outcomes."

Intervention Design: "Design a culturally appropriate health intervention for [specific population] addressing [health issue]. Include: theoretical framework, community engagement strategies, intervention components, implementation timeline, evaluation methods, and sustainability planning beyond initial funding."