

**Division of Communications
& Social Sciences**

General Education Learning Outcomes

Annual Report

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Included here are pp11-14 from the original document.

GELO: Apply critical thinking through problem-solving

Like communication, critical thinking is a highly variegated and complex concept. If any of the GELOs has an overarching character, encompassing many or all of the others, it is critical thinking, since it involves a high level of linguistic competence, mathematical ability, an understanding of scientific methodology, heightened metacognitive awareness, and a fairly sophisticated knowledge of core subject areas such as history, literature, political science, psychology, and sociology (thinking is influenced by the conclusions and assumptions of these and other disciplines).

The overlap between the critical thinking GELO, the Common Core Standards specified for K-12, and the workforce skills identified for key industries is not a coincidence. Given the highly adaptive nature of critical thinking, every educational endeavor and industry values critical reasoning as an outcome; it is the product of a thorough and well-balanced education (presupposing, of course, some level of innate capacity) and it is as central to the professional success of worker as it is to political liberty and the possibility of self-governance. Critical thinking is the essence of good thinking, and good thinking is needed everywhere.

The critical thinking outcome below is broken down into four key areas: Language use and analysis, probability and implication, application and problem solving, and metacognition. Each of these areas is central to critical thinking, making the current analysis a fairly comprehensive framework for understanding the core abilities at the heart of good thinking generally.

Key:

Course 1 = _____ Course 2=

Course 3 = _____ Course 4=

Course 5 = _____ Course 6=

Course 7 = _____ Course 8=

Courses

GELO Standards: Critical Thinking	1	2	3	4	5	6	7
CT 1: Language Use and Analysis							
<ul style="list-style-type: none"> Distinguish different types of assertions, such as arguments, explanations, reports, and commands. 							
<ul style="list-style-type: none"> Use language in ways that are cohesive and clarifies the relationships between claims and reasons, between reasons and evidence and between claims and counterclaims.(WHST 11-12.1) 							
<ul style="list-style-type: none"> Present information clearly and accurately through the effective selection, organization, and analysis of content. (W.11-12.2) 							
<ul style="list-style-type: none"> In problem solving or presenting information, identify the most significant and relevant facts, definitions, and concrete details for the purpose at hand. (W.11-12.2) 							
<ul style="list-style-type: none"> Recognize how different linguistic/conceptual contexts influence standards of evidence, objectives, and methods of 							

thinking and communicating.							
<ul style="list-style-type: none"> Determine the central ideas or conclusions of a text or speech; summarize complex concepts, processes, or information by paraphrasing them in simpler but still accurate terms. RST. 11-12.2 							
CT 2: Probability and Implication							
<ul style="list-style-type: none"> Identify and evaluate hypotheses and be able to analyze data and conclusions in a scientific or technical context, verifying the data when possible and corroborating or challenging conclusions with other sources of information. RST.11-12.8 							
<ul style="list-style-type: none"> Synthesize information from a range of sources into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. RST. 11-12.8 							
<ul style="list-style-type: none"> Use inductive inference patterns such as generalization, reasoning by analogy, causal and predictive reasoning. 							
<ul style="list-style-type: none"> Derive a conclusion from a set of premises by means of a gapless, step-by-step thought process, and be able to articulate this process to others. 							
<ul style="list-style-type: none"> Identify and analyze instances of deductive inferences and explain the difference between deduction and induction. 							
CT 3: Application and problem solving							
<ul style="list-style-type: none"> Evaluate patterns in solutions to problems, identify objectives and resources, and apply strategies in new contexts. 							

<ul style="list-style-type: none"> Identify key assumptions in the interpretation of a problem or issue, gaps in one's understanding, and evaluate the impact of these assumptions and gaps on the adopted problem-solving strategies. 							
<ul style="list-style-type: none"> Describe and explain the concept of a <i>model</i> and its role in explanations of different phenomena (e.g., weather models, models of cognitive processes, etc.). 							
CT 4: Metacognition (Self-monitored thinking)							
<ul style="list-style-type: none"> Identify the psychological impediments to thinking and problem solving, such as egocentric and wishful thinking, bias, and intellectual laziness. 							
<ul style="list-style-type: none"> Formulate the appropriate questions by which to evaluate gaps in the reasoning/problem-solving process, and make the necessary adjustments to increase the likelihood of a favorable outcome. 							
<ul style="list-style-type: none"> Identify informal fallacies such as Hasty Generalization, the Ad Hominem fallacy, and False Cause in patterns of reasoning (their own as well as that of others). 							

* Standard WHST 11-12.1, CCR

¥ Standard W.11-12.2, CCR