



February 2014

DISCIPLINES ARE CLOSING THE LOOP

Texas General Education Core Objectives

- Critical Thinking
- Communication
- Empirical and Quantitative Skills
- Teamwork
- Personal Responsibility
- Social Responsibility

Foundational Component Areas

(with credit hours)

- American History (6)
- Communication (6)
- Creative Arts (3)
- Government / Political Science (6)
- Language, Philosophy & Culture (3)
- Life and Physical Sciences (6)
- Mathematics (3)
- Social and Behavioral Sciences (3)
- Component Area Option [distributed across the components] (6)

COAT analysis of the most recent Critical Thinking assessment found that Collin College students most needed more opportunity to improve Presentation and Conclusion (see rubric on CougarWeb under Institutional Effectiveness/COAT).

Each discipline documented its participation by sending action plans to COAT. Take a look at some of the creative ideas being implemented in Collin College courses.

Core Discipline	Critical Thinking Initiative
Anthropology	Short writing assignments in which students explain (a) what they found interesting, disturbing or confusing in the reading (b) why they found this portion of the reading interesting, disturbing or confusing (c) how they connected this element of the reading to one or another of the concepts being developed in class.
Art	Present a work of art not shown in class and ask the students to identify the artist based on a comparison of subject, content, media, style and purpose.
Biology	Laboratory Report Guidelines were posted on the BIOL 1406/1408 lab web site with a template students can use when writing their reports. The guidelines emphasize the desired Critical Thinking traits, especially Presentation and Conclusion.
Chemistry, Environmental Science & Physics	Structured lab experiments focus on presentation and multiple ways to reach conclusions while applying the scientific method. Students see the rubric before beginning the lab experiments. Explanations of methods and evidence require supported conclusions.
Communication	Peer critique assignments requiring substantive suggestions/recommendations to improve at least one speech. Professors using this kind of activity subsequently saw improved critical thinking skills applied by students to their own speeches.
Dance, Physical Education, and Theater	Student Learning Outcomes (SLOs) were rewritten to emphasize critical thinking, and these SLOs are identified on all assignments. Faculty introduce the appropriate SLOs and expectations during each learning event, heightening student awareness.
Economics & Geology	Provocative questions are posed, and students “think out loud” to voice their thoughts about alternatives/solutions/options. Follow-up asks them for sources to back up their solutions. This often develops into a dialogue and discussion involving more than two people, highlighting pertinent and critical points about various economic or geologic issues in a causal reasoning/causal deepening approach. Students are asked what additional information is needed to increase certainty of the solution or relationship. Grade participation as 10% of total grade.
Government	With the class divided into two teams, students prepare for both sides of a debate. The day of the instructor-moderated debate, a coin toss decides each team’s side.
History & Humanities	Written assignments of many types focus on analysis of primary and secondary sources, requiring students to address targeted critical skills involving the use of external support or evidence for their thesis and conclusions.
Mathematics	Written assessments of applications that have multiple approaches to the solutions are used. The assessments culminate in logical conclusions supported by mathematical principles.
Psychology	A critical thinking addendum was identified and added to the student text bundle at minimal cost to infuse direct material on critical thinking into PSYC 2301 classes.