

### Introductory SLOs: Critical Thinking

| Course                    | Learning Outcome Relevant to Critical Thinking  |
|---------------------------|---|
| Anthropology 101          | Students will be able to critically apply concepts central to cultural anthropology in analyzing cultural phenomena, such as ethnocentrism, cultural relativism, and the cultural construction of race. |
| Art 100                   | Students will be able to demonstrate the ability to engage in, comprehend and benefit from critiques [constructive criticism] providing, integrating, and applying critical and analytical information. |
| Chemical Engineering 102  | Students will have an ability to identify, formulate, and solve engineering problems.   |
| Chemistry 100             | Students will be able to apply the scientific method by stating a question, performing experiments and/or analyzing a data presentation.  |
| Communication Studies 101 | Students will be able to organize evidence appropriate for speech type with outline to prepare informative and persuasive public speeches.  |
| Environmental Science 101 | Students will be able to interpret basic environmental science graphs and data and distinguish between scientific and non-scientific information for informed decision-making.                          |
| Math 120                  | Students will be able to determine and implement an appropriate method of solution for financial problems.  |
| Philosophy 135            | Students will be able to explain and interpret the ideas associated with some major ethical theories, and analyze the issues and controversies to which they give rise.                                 |

### Mid-Curricular SLOs: Critical Thinking

| Course                                | Learning Outcome Relevant to Critical Thinking   |
|---------------------------------------|--|
| Art 260                               | Students will be able to deduce well-supported positions that thoroughly and respectfully consider alternative viewpoints in written examinations and class discussion.  |
| Art 260                               | Students will be able to identify and apply a wide range of Art Historical methodologies that impact the way we study, receive, and ultimately understand a work of art. |
| Biology 224                           | Students will be able to apply analytical thinking and critical synthesis of knowledge related to physiological function.  |
| Civil & Environmental Engineering 325 | Students will be able to design and conduct experiments, as well as to analyze and interpret data  |

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| Chemistry 201                 | Students will be able to formulate hypotheses based on scientific laws and theories, collect data/evidence relevant to these hypotheses, reach conclusions based on the collected evidence, and defend those conclusions.   |
| Community Health Sciences 211 | Students will be able to synthesize health sciences literature in an appropriately written review that includes paraphrasing, comparison, and assessment.   |
| Communication Studies 205     | Students will be able to prepare and present strategies of refutation and persuasion in competitive speeches and intercollegiate speech and debate events.  |
| Criminal Justice 340          | Students will be able to articulate and apply evidentiary rules that govern the admission of evidence in a mock trial setting including identifying and applying common objections and defenses to those objections.  |
| English 261                   | Students will be able to articulate the relationship between poems and their historical, artistic, and literary contexts.   |
| History 215                   | Students will be able to explain and critically apply the concept of the intersectional analysis of sexuality.  |
| Information Systems 301       | Students will be able to use information systems to analyze the business potential of technical solutions and explain the implications of new and innovative technologies and their impact on modern business and society.  |
| Journalism 361                | Students will be able to explain how strategic writing solves problems faced by a variety of organization types ranging from non-profits, to small businesses, to government entities.  |
| Japanese 221                  | Students will be able to demonstrate how local and global contexts of ideas or events result in nuanced or conflicting understandings of contemporary and/or historical ideas, events, or experiences.  |
| Music 342                     | Students will be able to analyze scores from a historical perspective.  |
| Natural Resources 210         | Students will be able to compare different energy sources utilized by societies, identifying the potential benefits and drawbacks associated with each and taking into account our future energy needs.   |
| Nutrition 325                 | Students will be able to evaluate how cultures are similar, different, and unique, through foods and food choices around the world.   |
| Philosophy 245                | Students will be able to state a thesis about a contemporary moral issue, and provide evidence and philosophical argument (including replies to counter-arguments) in defense of an equitable course of action related to that thesis.  |
| Political Science 211         | Students will be able to identify the salient debates in comparative politics, utilize relevant concepts and approaches to systematize their analysis of domestic, as well as international political trends, and, thusly, examine a wide range of political outcomes including an inquiry to human problems. |
| Psychology 410                | Students will be able to identify factors that determine how we design experiments, how to identify dependent and independent variables, determine what scale of measurement applies to the dependent variable, and how research data is described, presented, and organized.                                 |
| Sociology 369                 | Students will be able to analyze major court cases that apply to basic human freedoms and discern if they are applied across various diverse racial, ethnic, and religious minorities in a fair and ethical way.  |

## Senior-Level SLOs: Critical Thinking

| <b>Course</b>                 | <b>Learning Outcome Relevant to Critical Thinking</b>   |
|-------------------------------|---|
| Agricultural Science 415      | Students will be able to integrate the discussion of science, ethics, and political philosophy to formulate arguments for or against specific applications of biotechnology.  |
| Anthropology 455              | Students will be able to develop a synthetic argument explaining one of the long-running and vexing archaeological questions regarding the evolution of human behavior from the perspective of one or more archaeological paradigms and/or theoretical perspectives             |
| Basque Studies 448            | Students will be able to reflect critically on their learning and life experiences in comparative, global context and analyze different viewpoints on the relationships between art, contemporary politics, and identity formation in the Basque Country.                       |
| Chemistry 421                 | Students will be able to derive relationships among physical and chemical properties using thermodynamics concepts and the laws of thermodynamics.  |
| Community Health Sciences 440 | Students will be able to analyze injuries and violence as preventable public health issues by synthesizing information on historical, cultural, systemic, structural, and other deterministic root causes.  |
| Communication Studies 404     | Students will be able to compare persuasion strategies specific to mediated contexts (television, internet, print) including strategies related to propaganda contexts.   |
| Economics 493                 | Students will be able to gather empirical data and apply appropriate statistical and quantitative methods to analyze economic problems.   |
| Geography 422                 | Students will be able to analyze different proposed societal, scientific, and technological solutions (climate solutions) in terms of their benefits, costs, ethical considerations, and other societal challenges.   |
| History 480                   | Students will be able to explain a scientific development or technological innovation in lay terms, and analyze different (and perhaps incompatible) cultural implications or policy responses.   |
| Journalism 401                | Students will be able to demonstrate comprehension of major cases that have shaped our understanding of communication law by analyzing a contemporary or hypothetical legal case and applying relevant legal precedent.   |
| Natural Resources 482         | Students will be able to apply the scientific method to study hydrological response to disturbance by quantifying water, solute, and energy fluxes using analytical methods and communicating those results effectively through written and verbal parts of the course project. |