SBOE GEM Competencies Mapped to University Learning Objectives

Written Communication
Upon completion of a course in this category, students are able to demonstrate the following competencies:

- Use flexible writing process strategies to generate, develop, revise, edit, Proofread, and edit texts. (Communicate)
- Adopt strategies and genre appropriate to the rhetorical situation. (Learn & Integrate)
- Use inquiry-based strategies to conduct research that explores multiple and diverse ideas and perspectives, appropriate to the rhetorical context. (Think & Create)
- Use rhetorically appropriate strategies to evaluate, represent, and respond to the ideas and research of others. (Think & Create)
- Address readers’ biases and assumptions with well-developed evidence-based reasoning. (Think & Create)
- Use appropriate conventions for integrating, citing, and documenting source material. (Learn & Integrate)
- Read, interpret, and communicate key concepts in writing and rhetoric. (Learn & Integrate) + (Communicate)

Oral Communication
Upon completion of a course in this category, students are able to demonstrate the following competencies:

- Research, discover, and develop information resources and structure spoken messages to increase knowledge and understanding. (Learn & Integrate)
- Research, discover, and develop evidence-based reasoning and persuasive appeals for ethically influencing attitudes, values, beliefs, or behaviors. (Think & Create)
- Adapt spoken messages to the diverse personal, ideological, and emotional needs of individuals, groups, or contexts. (Communicate)
- Employ effective spoken and nonverbal behaviors that support communication goals and illustrate self-efficacy. (Communicate)
- Listen in order to effectively and critically evaluate the reasoning, evidence, and communication strategies of self and others. (Communicate)
- Demonstrate Knowledge of key theories, perspectives, principles, and concepts in the Communication discipline, as applied to oral communication. (Learn & Integrate)

Mathematical Ways of Knowing
Upon completion of a course in this category, a student is able to demonstrate the following competencies:

- Interpret mathematical concepts. (Learn & Integrate)
- Represent information/data. (Learn & Integrate)
- Use appropriate strategies/procedures when solving mathematical problems. (Think & Create)
- Draw and support appropriate conclusions. (Think & Create)
Scientific Ways of Knowing
Upon completion of a non-lab course in this category, a student is able to demonstrate The first four competencies. A student is able to demonstrate all five competencies upon completion of a lab course:

- Apply foundational knowledge and models of a discipline in the physical or natural sciences to analyze and/or predict phenomena. (Learn & Integrate)
- Apply scientific reasoning to critically evaluate assertions. (Learn & Integrate)
- Interpret and communicate scientific information via written, spoken and/or visual representations. (Think & Create) + (Communicate)
- Describe the relevance of specific scientific principles to the human experience. (Think & Create)
- Test a hypothesis in the laboratory or field using discipline-specific tools and techniques for observation, data collection and analysis to form a defensible solution. (Think & Create)

Humanistic and Artistic Ways of Knowing
Upon completion of a course in this category, students are able to demonstrate at least five (5) of the following competencies:

- Recognize and describe humanistic, historical, or artistic works within problems and patterns of the human experience. (Learn & Integrate)
- Distinguish and apply methodologies, approaches or traditions specific to the discipline. (Learn & Integrate)
- Differentiate formal, conceptual, and technical elements specific to the discipline. (Learn & Integrate)
- Analyze, evaluate, and interpret texts, objects, events, or ideas in their cultural, intellectual or historical contexts. (Think & Create)
- Interpret artistic or humanistic works through the creation of art, language, or performance. (Communicate)
- Develop critical perspectives or arguments about the subject matter, grounded in evidence-based analysis. (Create Purpose & Perspective)
- Demonstrate self-reflection, widened perspective, and respect for diverse viewpoints. (Create Purpose & Perspective)

Social and Behavioral Ways of Knowing
Upon completion of a course in this category, students are able to demonstrate all five (5) of the following competencies.

- Demonstrate knowledge of the theoretical and conceptual frameworks of a particular Social Science discipline. (Learn & Integrate)
- Describe self and the world by examining the dynamic interaction of individuals, groups, and societies as they shape and are shaped by history, culture, institutions, and ideas. (Think & Create)
- Utilize Social Science approaches, such as research methods, inquiry, or problem solving, to examine the variety of perspectives about human experiences. (Think & Create)
- Evaluate how reasoning, history, or culture informs and guides individual, civic, or global decisions. (Think & Create) + (Create Purpose & Perspective)
- Identify the impact of the similarities and differences among and between individuals, cultures, or societies across space and time. (Create Purpose & Perspective)