CORE 42 FRAMEWORK AND KNOWLEDGE AREA COMPETENCIES

The framework for Missouri's Core 42 is designed for students to obtain the basic competencies of *Valuing*, *Managing Information*, *Communicating*, and *Higher-Order Thinking* through the completion of at least 42-semester hours distributed across the broad Knowledge Areas of Communications, Humanities & Fine Arts, Natural & Mathematical Sciences, and Social & Behavioral Sciences.

CORE 42 FRAMEWORK COMPETENCIES

Valuing
Valuing is the ability to understand the moral and ethical values of a diverse society, and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should recognize how values develop, how value judgments influence actions, and how informed decision-making can be improved through the consideration of personal values as well as the values of others. They should be able to make informed decisions through the identification of personal values and the values of others and through an understanding how such values develop. They should be able to analyze the ethical implications of choices made on the basis of these values.

After completing the CORE 42, students shall demonstrate the ability to
- develop an understand the moral and ethical values of a diverse society;
- develop the ability to analyze the ethical implications of actions and decisions;
- compare and contrast historical and cultural ethical perspectives and belief systems.
- utilize cultural, behavioral, and historical knowledge to clarify and articulate a personal value system.
- recognize the ramifications of one's value decisions on self and others.
- recognize conflicts within and between value systems and recognize and analyze ethical issues as they arise in a variety of contexts.
- consider multiple perspectives, recognize biases, deal with ambiguity, and take a reasonable position.

Managing Information
Managing Information is ability to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions. Through the effective management of information, students should be able to design, evaluate, and implement a strategy to answer an open-ended question or achieve a desired goal.

After completing the CORE 42, students shall demonstrate the ability to
- locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.
- access and generate information from a variety of sources, including the most contemporary technological information services.
- evaluate information for its currency, usefulness, truthfulness, and accuracy.
- organize, store, and retrieve information efficiently.
- reorganize information for an intended purpose, such as research projects.
- present information clearly and concisely, using traditional and contemporary technologies.

Communicating
Communicating is the development of students' ability to communicate effectively through oral, written, and digital channels using the English language, quantitative, and other symbolic systems. Students should be able to write and speak with thoughtfulness, clarity, coherence, and persuasiveness; read and listen critically; and select channels appropriate to the audience and message.

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors. Oral communication takes many forms.

After completing the CORE 42, students shall demonstrate the ability to
- analyze and evaluate their own and others' speaking and writing.
- conceive of writing as a recursive process that involves many strategies, including generating material, evaluating sources when used, drafting, revising, and editing.
- make formal written and oral presentations employing correct diction, syntax, usage, grammar, and mechanics.
- focus on a purpose (e.g., explaining, problem solving, argument) and vary approaches to writing and speaking based on that purpose.
- respond to the needs of different venues and audiences and choose words for appropriateness and effect.
- communicate effectively in groups by listening, reflecting, and responding appropriately and in context.
- use mathematical and statistical models, standard quantitative symbols, and various graphical tactics to present information with clarity, accuracy, and precision.

Higher Order Thinking
Higher Order Thinking is the development of students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; to solve problems by applying evaluative standards; and demonstrate the ability to reflect upon and refine those problem-solving skills. This involves creative thinking, critical thinking, and quantitative literacy.

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking. Creative thinking, as it is fostered within higher education, must be distinguished from less focused types of creativity such as, for example, the creativity exhibited by a small child's drawing, which stems not from an understanding of connections, but from an ignorance of boundaries. While demonstrating solid knowledge of the domain's parameters, the creative thinker, at the highest levels of performance, pushes beyond those boundaries in new, unique, or atypical recombinations, uncovering or critically perceiving new syntheses and using or recognizing creative risk-taking to achieve a solution.

Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion. Critical thinking is

transdisciplinary, and success in all disciplines requires habits of inquiry and analysis that share common attributes. Successful critical thinkers from all disciplines increasingly need to be able to apply those habits in various and changing situations encountered in all walks of life.

Quantitative Literacy (QL) is a "habit of mind" competency and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

After completing the CORE 42, students shall demonstrate the ability to
- recognize the problematic elements of presentations of information and argument and to formulate diagnostic questions for resolving issues and solving problems.
- use linguistic, mathematical or other symbolic approaches to describe problems, identify alternative solutions, and make reasoned choices among those solutions.
- analyze and synthesize information from a variety of sources and apply the results to resolving complex situations and problems.
- defend conclusions using relevant evidence and reasoned argument.
- reflect on and evaluate their critical-thinking processes.

CORE 42 KNOWLEDGE AREA GOALS AND COMPETENCIES

Social & Behavioral Sciences Knowledge Area
State-level Goal:
To develop students' understanding of themselves and the world around them through study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain, and predict human behavior and social systems. Students acquire an understanding of the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others. As a part of this goal, institutions of higher education include a course of instruction in the Constitution of the United States and of the state of Missouri and in American history and institutions (Missouri Revised Statute 170.011.1).

Students will demonstrate the ability to
- explain social institutions, structures, and processes across a range of historical periods and cultures.
- develop and communicate hypothetical explanations for individual human behavior within the large-scale historical and social context.
- draw on history and the social sciences to evaluate contemporary problems.
- describe and analytically compare social, cultural, and historical settings and processes other than one's own.
- articulate the interconnectedness of people and places around the globe.
- describe and explain the constitutions of the United States and Missouri.

Communications Knowledge Area

Written Communications State-level Goal:

To prepare students to communicate effectively with writing that exhibits solid construction resulting from satisfactory planning, discourse, and review. Students will understand the importance of proficient writing for success in the classroom and the workforce.

Students will demonstrate the ability to
- Demonstrate critical and analytical thinking for reading, writing, and speaking.
- Compose sound and effective sentences.
- Compose unified, coherent and developed paragraphs.
- Understand and use a recursive writing process to develop strategies for generating, revising, editing and proofreading texts.
- Produce rhetorically effective discourse for subject, audience, and purpose.
- Demonstrate effective research and information literacy skills

Oral Communications State-level Goal:

To prepare students to communicate effectively with oral presentations that demonstrate appropriate planning and expressive skills. Students will understand the role of public speaking for success in the classroom and society.

Students will demonstrate the ability to
- Use productive imagination for the discovery and evaluation of appropriate arguments relating to a chosen topic through effective research.
- Understand the basic process of audience analysis.
- Use, identify, and create speeches for different types of speaking purposes.
- Demonstrate effective preparation skills in the organization of speeches into three appropriate sections and preparing each section using the appropriate information and transitions between information and sections.
- Utilize and understand the patterns of organization to structure information for each specific type of speech. Students will use parallel ideas and information on different levels of abstraction in these patterns.
- Demonstrate effective skill at composing and developing arguments with appropriate support that is unified, coherent and fully developed utilizing the tenets of good writing and research.
- Understand the complex issue of good delivery and show improved personal confidence and the ability to manage communication apprehension.
- Demonstrate effective listening skills as it relates to critical understanding of speech topics and critique of that speaking.
- Demonstrate that they understand and take part in ethical speaking and listening during presentations.
- Understand communication ethics for both speech preparation and critiquing of peer speeches by utilizing responsible research and citing sources, preparing speeches with integrity when dealing with information and sources, and using emotional and logical appeals responsibly.
- Understand the role of public speaking in citizenry and how public speaking can contribute to success in the classroom and society.

Natural Sciences Knowledge Area

State-level Goal:

To develop students' understanding of the principles and laboratory procedures of the natural sciences (Life and Physical) and to cultivate their abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations, and shapes human history. Students should also understand that science is shaped by historical and social contexts.

Students will demonstrate the ability to

- Explain how to use the scientific method and how to develop and test hypotheses in order to draw defensible conclusions.
- Evaluate scientific evidence and argument.
- Describe the basic principles of the natural world.
- Describe concepts of the nature, organization, and evolution of living systems.
- Explain how human interaction(s) affect living systems and the environment.

Mathematical Sciences Knowledge Area

State-level Goal:

To develop students' understanding of fundamental mathematical concepts and their applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning.

Students will demonstrate the ability to

- Describe contributions to society from the discipline of mathematics.
- Recognize and use connections within mathematics and between mathematics and other disciplines.
- Read, interpret, analyze, and synthesize quantitative data (e.g., graphs, tables, statistics, survey data) and make reasoned estimates.
- Formulate and use generalizations based upon pattern recognition.
- Apply and use mathematical models (e.g., algebraic, geometric, statistical) to solve problems.

Humanities and Fine Arts

State-level Goal:

To develop students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances; and to appreciate the world of the creative imagination as a form of knowledge.

Students will demonstrate the ability to

- Describe the scope and variety of works in the humanities and fine arts (e.g., fine and performing arts, literature, speculative thought).
- Explain the historical, cultural, and social contexts of the humanities and fine arts.
- Identify the aesthetic standards used to make critical judgments in various artistic fields.
- Develop a plausible understanding of the differences and relationships between formal and popular culture.
- Articulate a response based upon aesthetic standards to observance of works in the humanities and fine arts.