

HUMANISTIC AND AESTHETIC THINKING

1. **Comprehend, interpret, and analyze texts/artifacts and explain the distinctive ways in which ideas are communicated within a given discipline and the methodologies and tools used for that communication.**
2. Compare and contrast the numerous factors and institutions that influence individuals, cultures, society, and the natural environment.
3. Discuss relevant aspects of the historical or cultural contexts from which ideas and ways of communicating emerge.

COMMUNICATION

1. **Address a range of audiences effectively; develop and organize focused and coherent messages, and use verbal and visual rhetorical strategies for informing and persuading.**
2. **Acquire a critical disposition to thinking, reading, and writing; understand writing as a process; and increase competence in rhetorical conventions**

For Speech/Oral Communication Requirement (3-8):

3. Identify the variables of the communication process
4. Select appropriate forms of verbal and nonverbal communication and proper channels of communication
5. Explain and use primary variables that affect oral delivery
6. Explain strategies for projecting confidence and decreasing anxiety
7. Identify obstacles to effective listening
8. Discuss issues relating to the ethical responsibilities of communicators

For Writing Requirement (9-11):

As they progress through UB's writing program course sequence students should

9. Acquire a critical disposition to thinking, reading, and writing
 - a. Use writing and reading for inquiry, learning, thinking, and communicating
 - b. Understand a writing assignment as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate sources
 - c. Integrate their own ideas with those of others
10. Understand writing as a process
 - a. Be aware that it usually takes multiple drafts to create and complete a successful text
 - b. Develop strategies for generating, revising, editing, and proofreading texts
 - c. Use a variety of informational and research technologies
11. Increase competence in rhetorical conventions
 - a. Develop knowledge of genre conventions (structure, paragraphing, tone, mechanics)
 - b. Practice appropriate means of citation and documentation
 - c. Control surface features

CRITICAL THINKING AND ETHICAL REASONING

1. **These courses will help students establish and develop critical thinking, analytical skills, and ethical reasoning across disciplines.**
- Ethical Reasoning (2-4)**
2. Explain and apply ethical, economic and legal guidelines for the use of information
 3. Explain and apply ethical models to evaluate the consequences and outcomes of various courses of action
 4. Evaluate ethical frameworks and value systems and compare them to their own
- Critical Thinking (5-9):**
5. Articulate a need for information, evaluate the extent of that need, and identify sources or information required to meet that need
 6. Develop and apply criteria in order to evaluate information and sources thereof.
 7. Evaluate and interpret quantitative data and other structured information using analytical and visualization tools
 8. Integrate key concepts from information collected into an existing body of knowledge
 9. Apply this information to synthesize and present new knowledge

GLOBAL AND INTERCULTURAL KNOWLEDGE

1. **Demonstrate an understanding of global cultures and increased awareness about the relationship between global and local issues, and demonstrate understanding of root causes of social problems.**
 2. **Compare and contrast the numerous factors and institutions that influence individuals, cultures, society, and the natural environment.**
 3. Describe and illustrate appropriate methodologies and questions used to explore social phenomena and to identify and evaluate solutions to personal, cultural, societal, national, and/or global problems.
 4. Discuss relevant aspects of the historical or cultural contexts from which ideas and ways of communicating emerge.
 5. Connect knowledge (facts, theories, etc.) from an academic field/discipline to civic engagement and to one's own participation in civic life, politics, and government
 6. Explain diverse positions, including those of different cultural, economic and geographic interests, on a civic issue.
- For Courses meeting the COMAR Social Science requirement (7-8):**
7. An understanding of the numerous factors and institutions that influence individuals, cultures, society, and the natural environment.
 8. An understanding of the quantitative, qualitative, normative, and abstract models used to analyze past and/or present behavior of individuals, groups, institutions, and societies to identify and evaluate solutions to personal, cultural, societal, national, and/or global problems

PERSONAL AND PROFESSIONAL SKILLS

1. **Develop and practice research skills, technological fluency, teamwork, and financial literacy and understand the importance of these skills for work and life.**

Research Skills (2 & 3)

2. Develop effective search strategies and revise the search strategies as needed
3. Access sources of information and manage the collection of information

Technological Fluency (4-6)

4. Explain the basic principles underlying the function of modern information resources, such as computers, networks, and software tools
5. Explain the process of constant innovation that characterizes information technology, requiring critical evaluation of new developments, adaptation of existing practices, and anticipation of change
6. Create and structure documents with hypertext links and graphics in a range of formats, including conventional page presentation as well as screen presentation using appropriate software

Teamwork (7-9)

7. Develop and practice teamwork skills and collaborate in shared in-person activities as well as activities using the internet and other digital services
8. Develop leadership skills through instruction in group dynamics and participation in a variety of group roles
9. Collaborate with others in developing and implementing an approach to a civic issue, evaluate the strengths and weaknesses of the process, and where applicable, the result

Financial Literacy (10 & 11)

10. Explain and analyze the personal and societal consequences of financial decisions
11. Describe the principles of money management

QUANTITATIVE AND QUALITATIVE THINKING

1. **Discuss major and fundamental concepts, theories, models, and issues within the field of study using scientific inquiry and/or mathematical models.**

For Science Requirement (2-6)

2. Discriminate science from non-science, especially including the attribute of testing of hypotheses about natural phenomena through observation.
3. Technology, data collection, and quantitative methods:
 - a. Name and describe technology and data collection and quantitative methods commonly used in the field of study. [non-laboratory courses]
 - b. Apply technology and data collection and quantitative methods commonly used in the field of study. [laboratory courses]
4. Access scientific information on an assigned topic from specified internet and other sources.
5. Make judgments about conclusions reached from data obtained in peer-reviewed and other scientific investigations of natural phenomena.
6. Define the fundamental terminology and concepts and identify the significant historic figures in the field of study.

For Math Requirement (7-13):

7. Interpret mathematical models given verbally, or by formulas, graphs, tables, or schematics, and draw inferences from them;
8. Represent mathematical concepts verbally, and where appropriate, symbolically, visually, or numerically;
9. Use arithmetic, algebraic, geometric, technological, or statistical methods to solve problems;
10. Use mathematical reasoning to solve problems, to formulate and test conjectures, to judge the validity of arguments, to formulate valid arguments, and to communicate the reasoning and the results
11. Estimate and check answers to mathematical problems in order to determine reasonableness
12. Apply mathematical and statistical tools in solving problems of business, science, or the social sciences.
13. Access existing structured information, and create original data structures using a database system.

For Social Science courses (14-15):

14. An understanding of the numerous factors and institutions that influence individuals, cultures, society, and the natural environment.
15. An understanding of the quantitative, qualitative, normative, and abstract models used to analyze past and/or present behavior of individuals, groups, institutions, and societies to identify and evaluate solutions to personal, cultural, societal, national, and/or global problems.