# LMC'S GENERAL EDUCATION PROGRAM

# GE STUDENT LEARNING OUTCOMES (formerly criteria)

At the completion of the LMC general education program, a student will:

- 1. Read critically and communicate effectively as a writer and speaker.
- 2. Understand connections among disciplines and apply interdisciplinary approaches to problem solving.
- 3. Think critically and creatively.
- 4. Consider the ethical implications inherent in knowledge, decision-making and action.
- 5. Possess a worldview informed by diverse social, multicultural and global perspectives.

# ASSESSMENT CRITERIA

Each of LMC's General Education Program Goals has a written explanation with illustrations and examples of its application within courses, as well as specific Assessment Criteria.

# **GE STUDENT LEARNING OUTCOME 1:** READING, WRITING AND SPEAKING

At the completion of the LMC general education program, a student will read critically and communicate effectively as a writer and speaker.

# Explanation

General Education courses demand analysis and synthesis, and require students to comprehend relationships and establish new ones. To help students organize facts and ideas into a meaningful framework and integrate them with personal experience, a GE course should require a significant amount of reading, writing and speaking appropriate to the discipline.

Reading should be viewed as a primary source of information for students and should constitute a substantial portion of course assignments. Students should be asked to analyze, synthesize and evaluate concepts derived from reading, going beyond skills required for literal comprehension of text.

Writing should be used to develop thinking and promote learning, as well as serving as an evaluation instrument to measure student progress. Students should be asked to write with frequency and depth to explore ideas and relationships, and should demonstrate the clarity and command of conventional grammar expected of college level writing.

Courses should provide regular opportunities for students to explore ideas and communicate orally. Students should demonstrate the ability to speak effectively both in small groups and whole class presentations.

## Proposed assessment criteria

A student who reads critically and communicates effectively as a writer and speaker will demonstrate the ability to:

- a. Analyze, synthesize and evaluate concepts derived from reading, going beyond skills required for literal comprehension of text.
- b. Comprehend relationships and establish new ones in written text that is characterized by clarity, depth and command of conventional grammar.
- c. Engage in small group discussions, synthesizing facts and ideas into a meaningful framework that is integrated with experience.
- d. Make oral presentations that clearly communicate ideas to a wider audience.

#### Illustrations and examples for integration of the goal into courses

Students should view class reading assignments as integral rather than supplementary to in-class discussions. For example, students may be quizzed orally or in writing prior to a lecture on assigned reading material, and asked to respond to questions that require further analysis or synthesis following classroom lecture/discussion.

In addition to papers and lab reports, students should learn to use writing as a way to solve problems, come up with new ideas and record insights or areas of misunderstanding for themselves as well as their instructors. This can be done through journals, logs and in-class writing periods, as well as through more traditional writing assignments.

A variety of classroom strategies may be used to encourage all students to speak, including partner brainstorming, small group discussion and panels or presentations for the entire class. Students should be encouraged to view speaking as a collaborative activity which helps not only themselves, but others in the engagement of learning.

# **GE STUDENT LEARNING OUTCOME 2:** INTERDISCIPLINARY

At the completion of the LMC general education program, a student will understand connections among disciplines and apply interdisciplinary approaches to problem solving.

# Explanation

Students should see connections between the content taught in different disciplines so that they develop a more sophisticated and subtle understanding of issues significant in today's world. All disciplines have modes of inquiry, that is, ways of generating and testing knowledge and solving problems. Students should be able to analyze problems using modes of inquiry from a variety of disciplines and should understand the implications of decisions and actions in a multi-faceted way that reflects knowledge of content in a variety of disciplines.

An interdisciplinary course should investigate how the mode of inquiry or the problem-solving process in the course's discipline is similar to and differs from such processes in other disciplines. This interdisciplinary comparison should underscore the limitations of the problem-solving process utilized in the discipline of study and at the same time highlight potential for application of the process to other disciplines. In this way, studying problem-solving in an interdisciplinary context motivates "out of the box" thinking and creative problem-solving.

## Proposed assessment criteria

A student who understands connections among disciplines and applies interdisciplinary approaches to problem solving will demonstrate the ability to:

- a. Describe the stages of investigative problem solving within the subject discipline.
- b. Illustrate these stages in a discipline-specific problem.
- c. Compare and contrast the application of this approach with that of other disciplines.
- d. Apply modes of inquiry from a variety of disciplines to solve problems or make informed decisions.
- e. Assess the implications of decisions and actions from a variety of disciplinary perspectives.
- f. Defend solutions or decisions.

## Illustrations and examples for integration of the goal into courses

Students analyze the economic, political, and biological implications of solutions to environmental problems.

In a literature course students use techniques of literary analysis to formulate a thesis about a novel. In an interdisciplinary literature course these techniques could be augmented by modes of inquiry from history or sociology to glean a different understanding of the novel. Likewise, the analytical processes from literature may be applied to a painting, a work of architecture.

In a science course students use the scientific method to design an experiment to investigate a cause and effect relationship. In an interdisciplinary science course data from the experiment could be analyzed using statistical inference procedures. A discussion of cause and effect versus statistical correlation could deepen the student's understanding of the meaning of scientific "proof."

# **GE STUDENT LEARNING OUTCOME 3:** CRITICAL & CREATIVE THINKING

At the completion of the LMC general education program, a student will think critically and creatively.

# Explanation

Critical and creative thinking involves the ability of individuals to take charge of their own thinking; they develop sound criteria and standards of analyzing and assessing their thinking to improve its quality. Critical thinking, sometimes referred to as "reasonable and reflective thinking," therefore, requires a high degree of continual self-reflection and intellectual discipline. As the standards and discipline of critical thinking become internalized, students should develop intellectually and affectively-based traits — intellectual autonomy, intellectual civility, intellectual integrity, intellectual perseverance, etc.

Critical thinking is not something additional to content, but rather integral to it; something that defines the manner, in which the content is organized, conceptualized and applied. Content should not be presented as fragmented bits and pieces of information, but as a system with a definite set of logical relationships; an organized structure of concepts, principles and understandings; a system which requires the asking and answering of a certain set of questions and problems; and, ultimately, a disciplined mode of thinking.

Creative thinking processes involve novel ways of defining the problems, and generating and evaluating innovative solutions.

## Proposed assessment criteria

A student who thinks critically will demonstrate the ability to:

- a. Analyze, synthesize and evaluate information
- b. Solve problems by asking and answering relevant questions using appropriate criteria
- c. Challenge personal assumptions and recognize the limitations of knowledge
- d. Analyze own thinking process to identify its strengths and weaknesses

A student who thinks creatively will demonstrate the ability to:

- e. Analyze and articulate innovative solutions to problems
- f. Generate innovative solutions to problems

#### Illustrations and examples for integration of the goal into courses

While all degree-applicable courses generally require critical thinking (Title V), general education offerings must clearly demonstrate that students are expected to think critically, are instructed how to do so, and are held accountable for their performance.

Course objectives should clearly require active higher cognitive processes which analyze, synthesize and/or evaluate information — in contrast to more passive activities such as recognizing, describing or understanding information. It is not sufficient for such higher skills to be simply listed in the objectives — the outline must demonstrate that students are taught how to acquire these skills and must master them to pass the class. In other words, the critical thinking objectives must be integrated into the methods of instruction and evaluation process.

# **GE STUDENT LEARNING OUTCOME 4:** ETHICS OF KNOWLEDGE

At the completion of the LMC general education program, a student will consider the ethical implications inherent in knowledge, decision-making and action

## Explanation

The knowledge within a discipline embodies values and poses ethical questions which suggest possible consequences for the future. By directly addressing the obligations which can arise from that knowledge, students will learn there are always issues of "what should be (or should have been) done?" in any field of study. Considering these aspects will lend to the students' understanding of the significance and impact of knowledge on present and future societies.

## Proposed assessment criteria

A student who considers the ethical implications inherent in knowledge, decision-making and action will demonstrate the ability to:

- a. Identify the ethical implications of issues within a particular discipline.
- b. Explain the moral and ethical implications of various actions in response to an issue.
- c. Articulate and analyze conflicting moral values and ethical implications within an issue and a particular course of action.

## Illustrations and examples for integration of the goal into courses

A literature course focusing on the work of Charles Dickens might explore the moral dilemmas raised when writing child labor laws or vagrancy laws.

A political science course might look at the values and ideals held by various sides involved in the controversy over constructing racially balanced voting districts.

An art course might discuss the obligations which arise when addressing government funding of the arts.

# **GE STUDENT LEARNING OUTCOME 5:** Social Diversity & Global perspective

At the completion of the LMC general education program, a student will possess a worldview informed by diverse social, multicultural and global perspectives.

# Explanation

General education courses should include any social group within the United States that has bearing on the subject matter. Distinctions of race, class, ethnicity, gender, religion, age, disability, sexual orientation and political persuasion are common referents in modern societal debates and need specific treatment where applicable.

Much instruction at LMC is routinely taught within a narrowly American purview. Such national centrism should give way to a more inclusive consideration of the international developments, patterns and trends that conjoin Americans with other peoples around the globe.

## Proposed assessment criteria

A student who possesses a worldview informed by diverse social, multicultural and global perspectives will demonstrate the ability to:

- a. Identify and explain contrasting experiences and divergent viewpoints among social and cultural groups.
- b. Analyze and evaluate the implications of social and cultural diversity.
- c. Explain and illustrate global interdependency and its implications.

## Illustrations and examples for integration of the goal into courses

A comparative religion course might research one religious practice or belief (e.g. prayer) across several religious traditions showing cultural contrasts.

A political science or history course might compare bills of enumerated rights in various constitutional systems to show the "human rights" consciousness of world peoples.

A literature course might analyze the artistic structure and social function of major epic poems from several cultural traditions to understand their lasting human influence.

A physical science course might look at the particular scientific problems deemed "high priority" for research and resolution (thus worthy of major financial, governmental and educational backing) on a nation-by-nation basis, or within the United States itself.