

## **DMACC General Education Competencies**

General Education integrates curricula in all degree and diploma programs at DMACC. It focuses on the knowledge and skills necessary for the understanding and effective application of many fields which include written/oral communications, pure/applied science, mathematics, social/behavioral science and humanities. The essential importance of general education remains a central principle in curriculum development at Des Moines Area Community College.

Students will acquire skills for lifelong learning by:

### **1. Understanding and demonstrating effective communication.**

- a. Write organized, clear and grammatically correct English, appropriate to purpose and audience
- b. Read a document and demonstrate an understanding of its content, such as by drawing inferences and distinguishing between major ideas and supporting detail and between fact and opinion.
- c. Present an organized oral message, appropriate to purpose and audience using correctly spoken English.
- d. Listen attentively, respectfully and sensitively to a message and demonstrate an understanding of the message.
- e. Work collaboratively.
- f. Use technical communication effectively.

### **2. Understanding and demonstrating logical and critical thinking.**

- a. Develop reasoned and thorough arguments.
- b. Analyze the arguments of others, distinguishing fact from opinion and identifying assumptions and inferences.
- c. Recognize and value the existence of different points of view.
- d. Analyze the conditions of a given problem and design solutions to it.
- e. Develop research techniques and acquire knowledge of bibliographic citation.

### **3. Developing an understanding of fundamental scientific principles and their application.**

- a. Demonstrate an understanding of basic scientific principles.
- b. Apply scientific principles to analyze and solve problems in nature, culture and society.
- c. Make informed decisions, as citizens, on matters of public policy related to science.

### **4. Developing an understanding of fundamental mathematical principles and their application.**

- a. Obtain correct mathematical results with or without technological assistance.
- b. Develop logical thinking skills that permit the selection of models appropriate to problems.
- c. Express models numerically, graphically and symbolically.
- d. Identify, interpret and manipulate relevant data.

### **5. Developing an understanding of human society and cross-cultural variation and perspective.**

- a. Demonstrate an understanding of social and behavioral sciences and their application to the study of cultural diversity.
- b. Demonstrate an understanding of social and behavioral sciences and their application to the study of global cultures.

### **6. Developing knowledge of and appreciation for the human condition as expressed in works of human imagination and thought.**

- a. Demonstrate a fundamental knowledge of history, philosophy, literature, or the arts.
- b. Demonstrate an understanding of the impact of human expression on culture and of culture on human expression.
- c. Recognize the significance of historical context to culture and human expression.