

Passed by the Council on Core Curriculum
10-4-13

Courses to meet the Area of Mathematics:

Courses in this area focus on teaching students the concepts and methodologies, findings, and applications of mathematics while developing their inquiry and analysis skills. All courses in this area also address quantitative reasoning, critical thinking, problem solving, and a commitment to ethical behavior.

Curriculum area	EDUCATIONAL GOALS	LEARNING OUTCOMES Students will . . .
Mathematics	Knowledge 1 – Concepts, Methodologies, Findings, and Applications of Mathematics and the Social and Natural Sciences, Engineering, and Technology	<ol style="list-style-type: none"> 1. understand mathematical relationships among quantities; 2. understand fundamental mathematic/algebraic operations;
	Skills 1 - Communication	<ol style="list-style-type: none"> 1. use basic mathematical formulas and terminology; 2. explain orally and in writing the mathematical “reasonableness” of a statement that is presented as being implied by data; 3. communicate about math precisely orally and in writing;
	Skills 2: Critical Thinking, Quantitative Reasoning, and Solving Problems Individually and Collaboratively	<ol style="list-style-type: none"> 1. interpret, analyze, and identify appropriate applied math models, data and graphs; 2. develop abstract and quantitative reasoning ability;

Skills 3 – Information Technology	<ol style="list-style-type: none"> 1. make appropriate decisions regarding the use of technology when solving problems, recognizing both the insight to be gained and the limitation; 2. use information resources like the internet reflectively for inquiry, exploration, and communication;
Values 1 – Ethical Behavior and Personal Responsibility	<ol style="list-style-type: none"> 1. take responsibility for completing assignments in an ethical manner, working on their own when required and acknowledging resources when used; 2. understand the duty to be precise and accurate with data;
Values 3 – Global and Cultural Knowledge	<ol style="list-style-type: none"> 1. analyze “real world” implications and develop mathematical models that aid in the understanding of current global issues.