Senior Math Applications

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This course is designed for fourth year students who do not plan to study a math/science/technical field beyond high school. The course will focus on the topics of real life math such as banking, apartment costs, car costs, budgeting, loans, and various day to day scenarios. Applications (especially understanding word problems) will be emphasized.

Graduation Standards

- **Standard 1** Reason and model quantitatively, using units and number systems to solve problems.
- **Standard 2** Interpret, represent, create and solve algebraic expressions.
- **Standard 3** Interpret, analyze, construct, and solve linear, quadratic, and trigonometric functions.

Unit 1	Real Life Math/Budgeting
Summary	Students will explore the following: Career exploration Living at home vs. renting an apartment Cost, leasing and apartment applications Bill paying Car loans and purchasing a car Banking - checking accounts, debit cards, withdrawals, deposits Credit cards Bankruptcy Contracts College costs Identity theft Income tax
Performance Indicators Assessed in Unit	 S1C – Reason quantitatively and use units to solve problems. S1F – Compute within the real number system. S2H – Understand solving equations as a process of reasoning and explain the reasoning.

**Disclaimer:

Throughout the entirety of the course, students may take Accuplacer, ASVAB or SAT sample questions at any time to review/test skills. Students attending EMCC will be required to take the Accuplacer exam to obtain a baseline score. The writing/ELA piece of the Accuplacer will not be addressed in this class.

Accuplacer Testing Score Sheet:

ACCUPLACER SCORES	Arithmetic & Elementary Algebra		
	AR < 75	AR ≥ 75 EA < 75	$AR \ge 75$ $EA \ge 75$
Programs Requiring Technical Math:			
Automotive Technology			
Building Construction Technology			
Computer Aided Drafting & Design			
Computer Repair Technology (MAT 113 or			
MAT 119 required)	LAM 008	MATL 113	MAT 113
Diesel, Truck, & Heavy Equipment			
Electricians Technology*			
Fine Woodworking & Cabinetmaking			
Fire Science Technology			

Refrigeration, Air Conditioning, & Heating* Welding Technology* Programs Requiring Any Level Math: Career Studies Culinary Arts Digital Graphic Design Early Childhood Education (MAT 107 or MAT 108 recommended) Education (107 or 108 recommended) Emergency Medical Services Health Information Technology (MAT 113 or MAT 119 required) Hospitality & Tourism Management Liberal Studies Medical Assistant (MAS 131 required) Medical Office Technology	LAM 008	LAM 009 or MATL 113	MAT 101
Outdoor Recreation & Tourism Restaurant & Food Service Management Trade & Technical Occupations			MAS 131
Programs Requiring an Algebra Pathway: Business Management* Civil Engineering Technology* (MAT 119 or MAT 123 required) Computer Systems Technology Criminal Justice Electrical & Automation Technology* Medical Radiography*	LAM 008	LAM 009	MAT 119

Students are encouraged to enroll in the highest level math courses for which they are qualified.

AR = Arithmetic Score EA = Elementary Algebra Score

<u>Courses appearing in red</u> are considered preparatory courses and do not count toward graduation requirements and do not qualify for financial aid.

ASVAB Minimum Scores:

The minimum score requirements of the different branches of the U.S. Armed Services are listed below:

AIR FORCE AFQT SCORE REQUIREMENTS

Minimum AFQT Score (with High School Diploma): 36

ARMY AFQT SCORE REQUIREMENTS

Minimum AFQT Score (with High School Diploma): 31

COAST GUARD AFOT SCORE REQUIREMENTS

Minimum AFQT Score (with High School Diploma): 40

MARINE CORPS AFQT SCORE REQUIREMENTS

Minimum AFQT Score (with High School Diploma): 32

NAVY AFOT SCORE REQUIREMENTS

Minimum AFQT Score (with High School Diploma): 31

SAT Minimum Scores:

Students are considered college- and career-ready when their SAT section scores meet both the Math and the Evidence-Based Reading and Writing benchmarks. It is important to note that college readiness is a continuum — students scoring below the SAT benchmarks can still be successful in college, especially with additional preparation and perseverance.

Benchmark Values and Section Score Ranges:

SAT College and Career Readiness Benchmarks

- Evidence-Based Reading and Writing: 480
- Math: 530

11th Grade Benchmarks

- Evidence-Based Reading and Writing: 460
- *Math: 510*

10th Grade Benchmarks

- Evidence-Based Reading and Writing: 430
- Math: 480

9th Grade Benchmarks

- Evidence-Based Reading and Writing: 410
- Math: 450

Summative Assessments Retake

- Students have the opportunity to retake summative assessments.
- The student must submit a retake form to the teacher within five (5) school days of the date that the summative assessment score is reported to the student.
- The highest score a student can receive on a retake or late assessment is a 75.
- The score achieved on a retake will replace the current score (even if the score is lower).
- If a student is making up a test from an absence, that assessment will be graded up to 100.

Make-up Work

Upon their return to school from an absence, it is the student's responsibility to secure make-up work from their teacher. The due date of the missed work will be one additional class period for each day of absence from that class or at the discretion of the teacher.

Grading of Formative Assessments

- Formative assessments will count as 30% of the grade.
- Formative assessments may be scored on either a 0-100 scale or a 0-4 scale.
- The 0-4 scale will be represented in Power School as 4=100, 3=87, 2=77, and 1=67.
- The method of scoring of formative assessments will be determined by assignment.