Math, Physical Science & Pre-Engineering Course Map

MPSPE Program	Semester: Fall/Spring/Summer	Required Courses in Major							
Level of Instruction Criteria	**Program Outcomes**	**MATH 1513**	**MATH 1613**	**CHEM 1115**	**CHEM 1215**	**MATH 2265**	**PHYS 1114/ PHYS 2014**	**MATH 2275**	**PHYS 1214/ PHYS 2114**
(I) **Introduced** At the collegiate level, students ***are not expected*** *to be familiar* with the content or skill. Instruction and learning activities focus on basic knowledge, skills, and/or entry-level complexity.	**PO 1** Apply the Pythagorean Theorem 1. Solve for various components 2. Recognize relationships between variables 3. Interpret graphical information	I	R			R	R	A	A
(R) **Reinforced** At the collegiate level, students ***are expected*** to possess a *basic level* of knowledge and familiarity with the content or skills. Instruction and learning concentrate on enhancing and strengthening previous collegiate knowledge/skills and complexity	**PO 2** Apply problem solving strategies. 1. Apply appropriate equation to the problem 2. Choose the correct value for each variable 3. Solve the mathematical equation	I	R	R	R	R	R	A	A
(A) **Advanced** At the collegiate level, students ***are expected*** to possess a *strong foundation* in the knowledge, skill or competency. Instruction and learning activities continue to build upon previous competencies with increased complexity and application of use.	**PO 3** Perform safe and appropriate laboratory techniques. 1. Apply appropriate personal protective equipment 2. Demonstrate proper laboratory hygiene 3. Demonstrate proper laboratory safety			I	R		I		R