PACING GUIDE

COURSE: i-STEM 1 -- Unit 4 -- Introduction to Machines, Simple & Complex **GRADES:** 9-12

MONTH	UNIT	CTE STEM STANDARDS 9.3 ST-ET	ASSESSMENTS What evidence (formative/summative) is utilized to establish that the content, standards, & skills have been mastered?	CONTENT Topics being covered? What do students need to know? (*nouns*)	ACTIVITIES Integration of Technology & Career Ready Practices
April	4	1, 2	Simple Machines Vocab Quiz, Summative	Machine Terminology	2, 3, 6, 8, 9, 10
May	4	1 -3	Calculating Efficiency Quiz, Summative	IMA, AMA, & Efficiency Calculation Methods	2, 3, 6, 8, 9, 10
May	4	2, 5	Saws & Drill Quiz, Summative	Tool Applications & Safety	2, 3, 6, 8, 9, 10
June	4	2, 5	Complex Machine Performance,, Summative	Complex Machine Prototype Operations	2, 3, 6, 8, 9, 10
June	4	1 -5	Unit: MPA, Summative	Machines & Efficiency (Comprehensive)	2, 3, 6, 8, 9, 10
May-June	4	1-6	Circulatory Machine Presentation, Summative	Design Process Reporting Methods	1-12
April-June	4	1 - 6	Unit: Lab Activities, Formative	Simple & Compex Machine Assembly	1-12
April-June	4	2	Unit: Homework, Formative	Chapter Vocab & Questions	1, 2, 4, 8, 11
April-June	4	1 -6	Unit: Classwork, Formative	Productive use of Lab Time	1, 2, 4, 8, 11
April-June	4	2	Unit: Interpersonal Communication, Formative	Individual & Design Team Consultations	1 -12

9.3.ST-ET.1 Use STEM concepts and processes to solve problems involving design and/or production.
9.3.ST-ET.2 Display and communicate STEM information.
9.3.ST-ET.3 Apply processes and concepts for the use of technological tools in STEM.
9.3.ST-ET.4 Apply the elements of the design process.
9.3.ST-ET.5 Apply the knowledge learned in STEM to solve problems.
9.3.ST-ET.6 Apply the knowledge learned in the study of STEM to provide solutions to human and societal problems in an ethical and legal manner.

CRP 01. Act as a responsible and contributing citizen and employee.
CRP 02. Apply appropriate academic and technical skills.
CRP 04. Communicate clearly and effectively and with reason.
CRP 05. Consider the environmental, social and economic impacts of decisions.
CRP 06. Demonstrate creativity and innovation.
CRP 07. Employ valid and reliable research strategies.
CRP 08. Utilize critical thinking to make sense of problems and persevere in solving them.
CRP 09. Model integrity, ethical leadership and effective management.
CRP 10. Plan education and career paths aligned to personal goals.
CRP 11. Use technology to enhance productivity.
CRP 12. Work productively in teams while using cultural global competence.