Nichols Career Center
Tech Math – Year 1 and 2

Syllabus

Instructor: David Robuck (david.robuck@jcschools.us)

Office Hours: Before and after school (check for meetings)

Course Description:

Pre-requisite: Acceptance into one of the listed Nichols Career Courses

Year 1: Duration: 36-Weeks	Grades: 10-12	Credit: 0.5
Year 2: Duration: 36-Weeks	Grades: 11-12	Credit: 0.5

A. Relevant Mathematics:

This portion of the course presents informational methods of contextual mathematical instruction directly related to the corresponding 3-hour career course. Students will review per-existing concepts and learn new concepts that are specific to their chosen trade. Relevant mathematics will prepare students for higher education or provide them with the knowledge necessary to enter directly into a trade. Students will complete various assignments including but not limited to projects, problem solving activities, lab participation, and job site applications.

B. ACCUPLACER Test-Prep:

This portion of the course is an on-line curriculum that reviews many of the mathematical concepts students will need to know in order to perform well on the ACCUPLACER test. The curriculum is divided into three units: Arithmetic, Geometry, and Elementary Algebra. Students must master each topic at a minimum of 70% before advancing in the program.

Course Goals: The goals for the integration of mathematics in the CTE program include:

- Add rigor and relevance to the CTE programs.
- Provide students the opportunity to earn as many credits as other students.
- Reduce the number of CTE students who have to take remedial math classes while continuing their education at local community colleges.

Student Evaluation: The final grade will be a composite of an evaluation of the student's performance for the relevant math content, Accuplacer test-prep content, and term quizzes.

Weighting Scale:

- 5% of every trade course grading period will be reserved for Tech Math (ACCUPLACER and Relevant Math, worksheets, projects, tests, exams).
    - *Example*: 5% Tech Math
      5% Tech English
      70% Trade Summative Assessments (Tests/Projects/Job Readiness Skills)
      10% Trade Formative Assessments (Practicing Standards)
      10% Trade Comprehensive Term Exam
      100%
- At the end of the school year, the average of the four trade term grades will be your Tech Math grade worth .5 math credit.

Grading Scale:

93-100 A	80-82 B-	67-69 D+
90-92 A-	77-79 C+	63-66 D
87-89 B+	73-76 C	60-62 D-
83-86 B	70-72 C-	0-59 F

Conduct: The Jefferson City School District and Nichols Career Center conduct code will be followed in this class, including the attendance policy.

Attendance Policy: Attendance is mandatory and will work to the student's advantage, since most material will be completed in class. Attendance will be taken at the beginning of each class. Attendance will be dealt with according to school policy. Tardies will be dealt with according to school policy. Students who miss class are responsible for reading and/or completing assignments as indicated. The instructor is not responsible for repeating any missed lectures and/or presentations. It is the student's responsibility to arrange in advance for class notes, handouts, and other relevant materials to be used for the missed class period. It is the student's responsibility to prepare for missed class material that may be included on respective exams.

Assignments: All assignments must be turned in as scheduled by the instructor. These assignments are crucial for students to expand their understanding, and will give both of us an opportunity to check their comprehension of material before moving on.

Academic Dishonesty: All acts of dishonesty in any work constitute academic misconduct. This includes, but is not limited to, cheating, plagiarism, fabrication of information, and abetting any of the above. Academic misconduct represents unethical behavior. Therefore, there is no tolerance of such behavior. Academic misconduct will be dealt with according to school policy.

Textbook(s): *(Course specific)*
Course Objectives: Each program of study will have different mathematical concepts embedded specifically for that program's curriculum. Topics may include but will not be limited to:

- Basic Operations of Whole Numbers, Decimals, and Fractions
- Ratios, Proportions, and Percents
- Measurement Conversions
- Direct Measurement (Linear and Angular)
- 2-D Geometry (perimeter, area, circumference)
- 3-D Geometry (volume and surface area)
- Basic Algebra with Formulas
- Powers and Roots
- ACCUPLACER Test-Prep: Arithmetic, Geometry, and Elementary Algebra Topics