1. **COURSE TITLE\*: Technical Math Corequisite**
2. **CATALOG – PREFIX/COURSE NUMBER/COURSE SECTION\*: MATH 1020**
3. **PREREQUISITE(S)\*:**

A student must meet one of the following criteria to register for this course:

-          Two High school STEM or Core Math courses with grades of C or higher

-          Accuplacer QAS with a score of 225 – 252

**COREQUISITE(S)\*: MATH 1120 OR MATH 1128**

1. **COURSE TIME/LOCATION/MODALITY: (*Course Syllabus – Individual Instructor Specific*)**
2. **CREDIT HOURS\*: 1 LECTURE HOURS\*: 1**

 **LABORATORY HOURS\*: 0 OBSERVATION HOURS\*: 0**

1. **FACULTY CONTACT INFORMATION: *(Course Syllabus – Individual Instructor Specific)***
2. **COURSE DESCRIPTION\*:** This course complements the development and use of mathematical skills necessary for the successful completion of Aviation Tech Math and Technical Mathematics. Students must be enrolled in MATH 1120 OR MATH 1128 as a co-requisite for this course and will receive instruction and help with their courses via small group settings and individualized instruction. This course follows closely the topics taught in Aviation Tech Math and Technical Mathematics and will include, as necessary, review topics from the appropriate class. Where MATH 1120 and MATH 1128 differ, students will have tailored and separate assignments to meet the specific needs of their co-requisite courses.
3. **LEARNING OUTCOMES\*:**
4. **Students will demonstrate adequate understanding of the Pythagorean Theorem and basic trigonometry functions to solve triangles**
5. **Students will demonstrate adequate understanding of vectors**
6. **Students will demonstrate understanding of graphing techniques**
7. **Students will demonstrate understanding in using word problems**
8. **Students will demonstrate understanding in computing using formulas**
9. **Students will demonstrate mathematical operations**
10. **Students will demonstrate understanding of ratios, proportions, integers, rational numbers and rounding.**
11. **ADOPTED TEXT(S)\*:**

*Contemporary Mathematics*

First Edition

Kirk, Donna et. al.

Download for free at <https://openstax.org/details/books/contemporary-mathematics>

*Algebra and Trigonometry*

2nd Edition

Abramson, Jay et. al.

Download for free at <https://openstax.org/details/books/algebra-and-trigonometry-2e>

1. **OTHER REQUIRED MATERIALS: (SEE APPENDIX C FOR TECHNOLOGY REQUEST FORM.)\*\***

Scientific calculator encouraged.

1. **GRADING SCALE\*\*\*:**

Grading will follow the policy in the catalog. The scale is as follows:

A: 90 – 100

 B: 80 – 89

 C: 70 – 79

 D: 60 – 69

 F: 0 – 59

1. **GRADING PROCEDURES OR ASSESSMENTS: (*Course Syllabus – Individual Instructor Specific)***

|  |  |  |
| --- | --- | --- |
| *Category* | ***EXAMPLE ONLY****Total Points* | *% of Grade* |
| Chapter Assignments (10x30) | 300 | 30% |
| Quizzes (10x20) | 200 | 20% |
| Unit Exams (3x100) | 300 | 30% |
| Assignments (5x10) | 50 | 5% |
| Annual Report Project (100) | 100 | 10% |
| Attendance | 50 | 5% |
| Total | 1000 | 100% |

1. **COURSE METHODOLOGY: *(Course Syllabus – Individual Instructor Specific)***

The course design provides instruction and materials to support the course objectives.  Classes may consist of a variety of means to accomplish this including but not limiting to: lectures, class discussions, small group projects, supplemental materials, and outside assignments.  Practice is an important part of the learning process.  For every one hour of class time, two additional hours of study time should be expected.

**14. COURSE OUTLINE: *(Course Syllabus – Individual Instructor Specific)***

***(Insert sample course outline with learning outcomes tied to assignments / topics.)***

**Week 1: Integers, rational numbers and rounding (LO 7)**

**Week 2: Ratios, proportions (LO 7)**

**Week 3: Equations (Basic, Exponential, Logarithmic) (LO 4, 5)**

**Week 4: Word problems (LO 4)**

**Week 5: Formulas (LO 5)**

**Week 6: Triangles (LO 1)**

**Week 7: Trigonometry (LO 1)**

**Week 8: Graphing (LO 3)**

**Week 9: Graphing (LO 3)**

**Week 10: Radians, vectors (LO 2)**

**Week 11: Trig Ratios (LO 7)**

**Week 12: Inverse Trig (LO 6, 7)**

**Week 13: graphing/vectors (LO 2)**

**Week 14: complex numbers/compression ratio (LO 6)**

**Week 15: torque/powers/roots (LO 7)**

**Week 16: FINALS**

**15. SPECIFIC MANAGEMENT REQUIREMENTS\*\*\*:**

Students will have their class embedded within Canvas. The course is asynchronous; however, students will be expected to meet with the instructor and classmates in person or via Zoom.

**16. FERPA: \***

Students need to understand that their work may be seen by others. Others may see students’ work when being distributed, during group project work, or if it is chosen for demonstration purposes. Students also need to know that there is a strong possibility that their work may be submitted to other entities for the purpose of plagiarism checks.

**17. ACCOMMODATIONS: \***

Students requesting accommodations may contact Ryan Hall, Accessibility Coordinator at rhall21@sscc.edu or 937-393-3431, X 2604.

Students seeking a religious accommodation for absences permitted under Ohio’s Testing Your Faith Act must provide the instructor and the Academic Affairs office with written notice of the specific dates for which the student requires an accommodation and must do so no later than fourteen (14) days after the first day of instruction or fourteen (14) days before the dates of absence, whichever comes first. For more information about Religious Accommodations, contact Ryan Hall, Accessibility Coordinator at rhall21@sscc.edu or 937-393-3431 X 2604.

**18. OTHER INFORMATION\*\*\*:**

**SYLLABUS TEMPLATE KEY**

**\*** Item cannot be altered from that which is included in the master syllabus approved by the Curriculum Committee.

**\*\*** Any alteration or addition must be approved by the Curriculum Committee

**\*\*\*** Item should begin with language as approved in the master syllabus but may be added to at the discretion of the faculty member.