# EASTERN MAINE COMMUNITY COLLEGE COURSE SYLLABUS <br> 2021-2022 

COURSE NUMBER: MAT 110
title: Technical Mathematics II INSTRUCTOR: Elizabeth Connors
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*The definition of a college credit can be found in the current edition of the online College Catalog.
Required Materials: Pearson MyLab Math access is optional and can be purchased at the EMCC College Store or online from Pearson using the Brightspace portal (see Student Registration Instructions). The ISBN-13 for this version of MyLab Math is 978-0134880402. https://www.pearsonmylabandmastering.com/northamerica/mymathlab/system-requirements/in dex.html

The physical textbook is provided and is titled College Mathematics for Trades and Technologies $10^{\text {th }}$ Edition, with ISBN-13: 978-0134690339. A full electronic version of this text is included within MyLab Math for no additional cost.

There is a 14-day trial available if you need extra time to pay for the program. Given this fact, you should be able to start the course right away. I will email you the "Student Registration Instructions" to help with this startup process.

Course Description: Focuses on mathematics topics relevant to a variety of trades and technical disciplines. Topics include proportions, percentages, measurement, algebra, geometry, and trigonometry. An emphasis is placed on practical, contextual applications. Prerequisite: High school Algebra II or appropriate score on placement test.

This course utilizes the MyLab Math program to complete homework and exams. The course will involve lots of effort to be successful. It is recommended that you try to stay ahead of each assignment deadline to allow for adequate time for questions related to the material.

## Course Objectives:

- Make use of and interpret percentages, ratios, and decimals.
- Convert units within the U.S. customary system, within the metric system, and between these systems.
- Perform operations with measured values, following proper rounding conventions.
- Evaluate the accuracy and precision of values resulting from measurement.
- Make use of and interpret scientific notation.
- Evaluate formulas, simplify algebraic expressions, and solve one-variable linear equations.
- Translate English phrases and sentences into algebraic expressions and equations.
- Solve systems of two linear equations in two variables.
- Make use of geometric relationships involving intersecting lines and triangles, including the Pythagorean Theorem.
- Calculate perimeter, area, surface area, and volume as applicable to two- and three-dimensional objects.
- Make use of angles in radian measure to calculate arc length, sector area, and angular speed.
- Solve right triangles using trigonometric ratios.
- Solve practical problems using one or more of the skills above.


## Accommodations for Students with Disability (ADA Statement):

EMCC provides reasonable accommodations for students with documented disabilities in accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. If you need accommodations due to a disability, please contact the Accessibility Coordinator as soon as possible at access@emcc.edu or by phone at 974-4868. The Accessibility Office is located in Maine Hall, Room 123, across from the Student Success Center.

## Affirmative Action Statement:

Eastern Maine Community College does not discriminate as prescribed by federal and/or state law on the basis of race, color, religion, national origin, sex, sexual orientation, age, disability, marital, parental or veteran status in its programs and activities. Inquiries about the College's compliance with policies and laws that prohibit discrimination on these bases may be directed to: Affirmative Action Officer, Maine Hall, 354 Hogan Road, Bangor, ME, 04401, telephone number (207) 974-4633.

Attendance and Netiquette: Attendance is not required given that the course is asynchronous, but you are responsible to keep pace with the class, and falling behind by more than a week on the homework or missing exams may result in dismissal from the course at the instructor's discretion.

Respectful behavior toward peers and the instructor should be maintained at all times. During any online communication or live meetings, students are expected to be focused, polite, and not disruptive in any way. Violation of these expectations may result in dismissal.

Homework Assignments: Homework is worth 30\% of your overall grade. It is assigned through MyLab Math in the "Assignments" tab and must be completed by the due dates specified on the site. Any late assignments may still be submitted, but there will be a $50 \%$ penalty. See your homework tab, including homework due dates by viewing the Pearson MyLab Math content through Brightspace.

Exams: Exams are worth the remaining 70\% of your overall grade. All 4 exams are completed through MyLab Math under the "Assignments" tab and are weighted equally (70\%/4 $=17.5 \%$ each). One of the exams will be a cumulative final exam at the end of the course.

Grades Will Be Given As Follows:

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


| TENTATIVE COURSE OUTLINE |  |  |
| :--- | :--- | :--- |
| (All homework is completed in MyLab Math) |  |  |
| Date(s) | Topic | Readings/Assignment(s)/Exams |
|  | Chapters 1-3 Review | 1,2, and 3 review homework |
|  | Sections 4.1 - 4.5 | $4.1-4.5$ homework |
|  | Sections 5.1 - 5.6 | $5.1-5.6$ homework |
|  | Review Chapters 4 and 5 | Exam 1 |
|  | Sections 7.1-7.3 | $7.1-7.3$ homework |
|  | Sections 7.4, 7.5, and 8.1 | $7.4,7.5$, and 8.1 homework |
|  | Sections 8.2 - 8.4 | $8.2-8.4$ homework |
|  | Review chapters 7 and 8 | Exam 2 |
|  | Sections 9.1 -9.3 | $9.1-9.3$ homework |
|  | Sections 9.4, 17.1, and 17.2 | $9.4,17.1$, and 17.2 homework |
|  | Sections 17.3 and 17.4 | 17.3 and 17.4 homework |
|  | Review chapters 9 and 17 | Exam 3 |
|  | Sections 18.1 and 18.2 | 18.1 and 18.2 homework |
|  | Sections 18.3 and 18.4 | 18.3 and 18.4 homework |
|  | Sections 19.1 and 19.2 | 19.1 and 19.2 homework |
|  | Review chapters 4, 5, 7, 8, 9, | Final Exam |
|  | 17,18 , and 19 |  |

The mission of Hermon High School is to prepare students for personal success in college, career, and community.

## Summative Assessments Retake

- Summative assessments will count as $70 \%$ of the grade.
- 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 .


## Finals

- An end of course Final Exam will be conducted, making up $10 \%$ of the students overall grade.


## 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.

