MATH 140 - Precalculus: Trigonometry & Analytic Geometry

3 Credits (CRN 61412)
Online, Asynchronous

INSTRUCTOR: Bethany Hopkins
OFFICE: Hale Mana'opono Room 112A
OFFICE HOURS: Monday 9-11am (Zoom), Friday 11:30am-12:30pm (in person), & by appointment
TELEPHONE: (808) 236-9282
EMAIL: hopkinsb@hawaii.edu (Preferred method of communication. Will respond within 24 hours, excluding weekends and holidays)
EFFECTIVE DATE: Fall 2023

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Ko‘olau region of O‘ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

Studies trigonometric functions, analytic geometry, polar coordinates, vectors, and related topics. This course is the second part of the precalculus sequence.

Pre-requisites: Grade of “C” or better in MATH 135 or equivalent, satisfactory math placement test score, or consent of instructor.

STUDENT LEARNING OUTCOMES

As a result of taking this course, students can expect to attain the following outcomes:

1. Employ algebraic and geometric representations of trigonometric functions and other relations.

2. Use appropriate techniques to analyze and solve application problems requiring the use of trigonometry or analytical geometry.

3. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.
Note: All SLO assessments are embedded in class activities, homework, quizzes, or exams.

**STUDENT RESPONSIBILITIES**
- Have access to a reliable high-speed internet connection
- Have adequate computer skills
- Check Laulima daily
- Check school emails regularly
- Be self-motivated
- Set aside adequate study time

**COURSE TASKS AND GRADING**
All grades and course materials will be accessed through Pearson MyLab Math and Laulima. To view your overall grade in the course, login to MyLab Math and click on Gradebook in the left-side menu. The grade breakdown will be as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Exam</td>
<td>15%</td>
</tr>
<tr>
<td>3 Tests</td>
<td>40%</td>
</tr>
<tr>
<td>5 Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>MyLab Math (MLM) Homework</td>
<td>30%</td>
</tr>
<tr>
<td>Forum Posts</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

A letter grade for the course will be assigned according to the level of achievement as provided below:

A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 0%-59%
CR 70% or above of the cumulative points possible
NC Less than 70% of the cumulative points possible
W Official Withdrawal
I Incomplete

Note: CR/NC grades require written instructor consent. Students must apply for CR/NC grading option at the WCC Admissions Office by the posted deadline.

Note: The W grade is given only when the student officially withdraws from the course by the posted deadline.

Note: The I grade is a temporary grade given at the instructor’s discretion when a student has failed to complete a small part of a course because of circumstances beyond his or her control. A student may qualify for the I grade if (a) they are unable to take the final exam and (b) taking the final exam could possibly raise their course grade.

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FOUNDATIONS QUANTITATIVE REASONING HALLMARKS

Math 140 fulfills 3 credits of the General Education requirements (Foundations Quantitative Reasoning) for both an A.A. degree at WCC and a Bachelor’s degree at 4 year UH institutions. Consequently, it meets the following hallmarks of the Quantitative Reasoning requirement:

1. Provide students with theoretical justifications for, and limitations of, mathematical or statistical methods, and the formulas, tools, or approaches used in the course.

2. Include application of abstract or theoretical ideas and information to the solution of practical quantitative reasoning problems arising in pure and applied research in specific disciplines, professional settings, and/or daily and civic life.

3. Provide opportunities for practice and feedback that are designed to help students evaluate and improve quantitative reasoning skills by including a course component at least once per week with a maximum 30:1 student-to-teacher ratio.

4. Be designed so that students will be able to
   a. Identify and convert relevant quantitative information into various forms such as equations, graphs, diagrams, tables, and/or words;
   b. Select appropriate techniques or formulas, and articulate and evaluate assumptions of the selected approaches.
   c. Apply mathematical tools and perform calculations (including correct manipulation of formulas);
   d. Make judgments, create logical arguments, and/or draw appropriate conclusions based on the quantitative analysis of data, the assumptions made, the limitations of the analysis, and/or the reasonableness of results; and
   e. Effectively communicate those results in a variety of appropriate formats.

LEARNING RESOURCES & MATERIALS

REQUIRED MATERIALS:

- **MyLab Math (MLM) via IDAP**
  The MyLab Math (MLM) Online Program comes with the eBook *A Graphical Approach to Precalculus with Limits*, 7th Edition, by Hornsby, Lial & Rockswold. MLM registration will be through IDAP via the VitalSource link in Laulima.

- **Scientific calculator (no graphing calculators may be used on tests)**

*This course will be participating in the Bookstore’s Interactive Digital Access Program (IDAP). Through this program, you will access your course material digitally, and it will be available to you by the first day of class.*

*A charge for the digital course material through IDAP will be added to your MyUH account.*

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You have the option to opt-out of receiving your course material through IDAP. By opting-out, you will lose access to the course material and the charge will be refunded on your MyUH account. If you do not opt-out, the charge will stay on your MyUH account. Any unpaid charges on your MyUH account will turn into a hold. Holds on your account will prevent you from accessing various services within the University.

You may opt-out by visiting your unique Inclusive Access Student Portal, which can be found in your IDAP welcome email (Subject Line: “IMPORTANT: You have enrolled in an IDAP Course”).

For more information regarding IDAP, please contact your campus bookstore.

ADDITIONAL LEARNING RESOURCES:
- Symbolab: [https://www.symbolab.com](https://www.symbolab.com)
- Wolfram Alpha: [http://www.wolframalpha.com](http://www.wolframalpha.com)
- Desmos Graphing Calculator: [https://www.desmos.com](https://www.desmos.com)
- Khan Academy Videos: [http://www.khanacademy.org](http://www.khanacademy.org)
- Tutor.com: [https://windward.hawaii.edu/tutor.com/](https://windward.hawaii.edu/tutor.com/)
- The Math Lab: La‘akea 220 [https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/](https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/)
- TRIO: [https://windward.hawaii.edu/services-for-students/tutoring/trio-sss/](https://windward.hawaii.edu/services-for-students/tutoring/trio-sss/)

ADDITIONAL INFORMATION

Attendance and Class Preparation: This is an online class and students are expected to keep pace with the posted assignments. Students are expected to interact with the instructor and other members of this online class with professionalism. There will be no extra credit work. There will be a 10% grade deduction on any late homework on MLM. All due dates are outlined on MLM.

Final Exam: There will be one cumulative computer-based final exam on MLM. The exam is timed (3 hours). The exam is not proctored and can be taken on any computer. Handwritten work or scrap paper is required to be submitted for the final exam on Laulima. Without such supporting work, the MyMathLab score will be reduced by 50% for the purpose of the course grade calculation. No late final exams will be accepted for a grade. The final exam is due no later than December 15, 2023 at 11:59 PM.

Quizzes: There will be 5 computer-based quizzes through MLM. The quizzes are scheduled on Fridays except for holidays. The quizzes are timed (1 hour). The quizzes are not proctored and can be taken on any computer. You will have 2 attempts for each quiz, and I will take the highest score.

Tests: There will be 3 computer-based tests through MLM. The tests are timed (2 hours). The tests are not proctored and can be taken on any computer. You will have 2 attempts for each test, and I will take the highest score. Handwritten work is required to be submitted for the best attempt on each test on Laulima. Without such supporting work, the MyMathLab score will be reduced by 50% for the purpose of the course grade calculation.

MLM Homework: Computer-based homework is due through the MLM program. There will be a 10% grade deduction for problems submitted after the due date. The final date of submission for late homework is December 15, 2023. You have unlimited attempts at homework problems and your highest score will be saved.

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Forum Posts: There will be 6 forum posts throughout the semester which are located on Laulima’s Discussions page. The posts will open on Mondays and are due on Fridays. The forum posts are not math related, instead they are an opportunity for us to get to know each other. You are expected to post and reply to at least one other student to earn points.

ACADEMIC INTEGRITY

Work submitted by a student must be the student’s own work. You are free to work with each other on homework, however, work on exams must be of your own merit. All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs. WCC Policies: https://windward.hawaii.edu/Policies/

DISABILITIES ACCOMMODATIONS

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Roy Inouye can be reached at (808) 235-7448, rovinouy@hawaii.edu, or you may stop by Hale Kāko’o 106 for more information.

SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

To speak with someone confidentially, or to receive information and support in a confidential setting, please see the resources listed below:

Desrae Kahale, Mental Health Counselor; Confidential Resource  
Phone: (808) 235-7393  
Email: dkahale3@hawaii.edu  
Office: Hale Kāko’o 101

Leslie Cabingabang, UH Confidential Advocacy  
Phone: 808-348-0432  
Email: leslie.cabingabang@hawaii.edu

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University’s Title IX resources and the University’s Policy, Interim EP 1.204, go to https://manoa.hawaii.edu/titleix/

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

• Location: Alaka’i 121

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• Phone: (808) 235-7422

MATH 140 ONLINE – FALL 2023 – SCHEDULE

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<tr>
<th>IMPORTANT DATES</th>
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<tbody>
<tr>
<td>8/29/2023</td>
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<tr>
<td>8/29/2023</td>
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<tr>
<td>9/12/2023</td>
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<tr>
<td>9/12/2023</td>
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<tr>
<td>10/30/2023</td>
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This syllabus is subject to change at any time at the discretion of the instructor. Students are responsible for keeping current with changes made to this syllabus. Be sure to check your school email for class announcements.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates (Monday-Friday)</th>
<th>Assignments to Complete</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>8/21 - 8/25</td>
<td>Laulima: Read syllabus, Forum Post 1, connect to MyLab Math using VitalSource link MyLab Math: 9.1</td>
</tr>
<tr>
<td>2</td>
<td>8/28 - 9/1</td>
<td>MLM: 9.2, Quiz 1</td>
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<tr>
<td>3*</td>
<td>9/5-9/8</td>
<td>Laulima: Forum Post 2 MLM: 9.3, 9.4, Quiz 2</td>
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<tr>
<td>4</td>
<td>9/11 - 9/15</td>
<td>MLM: 9.5, 9.6</td>
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<tr>
<td>6</td>
<td>9/25 - 9/29</td>
<td>MLM: Chapter 9 Review, Test 1</td>
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<tr>
<td>7</td>
<td>10/2 - 10/6</td>
<td>Laulima: Forum Post 4 MLM: 10.1, 10.2, Quiz 3</td>
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<tr>
<td>8</td>
<td>10/9 - 10/13</td>
<td>MLM: 10.3, 10.4</td>
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<tr>
<td>9</td>
<td>10/16 - 10/20</td>
<td>MLM: 10.5, 10.6</td>
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<tr>
<td>10</td>
<td>10/23 - 10/27</td>
<td>MLM: Chapter 10 Review, 11.1, Test 2</td>
</tr>
<tr>
<td>11</td>
<td>10/30 - 11/3</td>
<td>MLM: 11.2, 11.3, Quiz 4</td>
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<tr>
<td>12*</td>
<td>11/6 - 11/9</td>
<td>MLM: 11.6, Chapter 11 Review, Test 3</td>
</tr>
<tr>
<td>14*</td>
<td>11/20 - 11/22</td>
<td>MLM: 8.3, Quiz 5</td>
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<tr>
<td>15</td>
<td>11/27 - 12/1</td>
<td>Laulima: <strong>Forum Post 6</strong>&lt;br&gt;MLM: <strong>8.4</strong></td>
</tr>
<tr>
<td>16</td>
<td>12/4 - 12/7</td>
<td>MLM: <strong>Final Exam Review</strong></td>
</tr>
<tr>
<td>Exam Period</td>
<td>12/9 - 12/15</td>
<td>MLM: <strong>Final Exam</strong>&lt;br&gt;The Final Exam must be completed by December 15th. No late final exams will be accepted for a grade.</td>
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*Holidays:*

- September 4 - Labor Day
- November 10 - Veterans Day
- November 23-24 - Thanksgiving Recess

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