This course supports the Precalculus performance assessment and objective exam. It covers 6 competencies.

Introduction

Precalculus covers the understanding and skills necessary to apply trigonometry, complex numbers, systems of equations and matrices, and sequence and series to model and solve real-life problems. Candidates should have successfully completed a course in College Algebra before engaging this course.

- **Competency 2008.1.1: Trigonometry of Angles**
  The graduate applies trigonometric ratios and triangle formulas to model and solve real-life problems.

- **Competency 2008.1.2: Trigonometry of Real Numbers**
  The graduate uses a unit circle to define trigonometric functions and applies these functions to model and solve real-life problems.

- **Competency 2008.1.3: Analytic Trigonometry**
  The graduate proves trigonometric identities and solves trigonometric equations.

- **Competency 2008.1.4: Complex Numbers**
  The graduate applies various representations of complex numbers to solve problems.

- **Competency 2008.1.5: Systems of Equations & Inequalities**
  The graduate uses systems of equations, systems of inequalities, and matrices to model and solve real-life problems.

- **Competency 2008.1.6: Sequences**
  The graduate explores arithmetic and geometric sequences and uses them to model and solve real-life problems.

Study Plan

**Using the Interactive Textbook**
The table below outlines the sections that you need to study for this course. For each section, read the section indicated in the Study Plan below and use the interactive links to supplement your learning. Then access the Homework problems for that section. If you’re stuck, use show me an example and then help me solve this. Then access the Quiz for that section. It is a short but timed experience: take it without notes or readings. When you’ve finished a quiz, you can either Review Results for that quiz or use the Study Plan to work on learning objectives that you’ve missed. You should consider yourself competent when you are regularly scoring above 70% on all quizzes.

**Using other essential materials**
The Study Plan below indicates some topics for which you need to use other materials. It is essential that you interact with those materials, even when the textbook supports that topic, because you need more knowledge and ability than the textbook alone can provide.

**Seek help when you need it.**
Work with your Course Instructor and call the Helpline.
### Pacing Guide and Study Plan

<table>
<thead>
<tr>
<th>Wk</th>
<th>Topic</th>
<th>MyMathLab Sections</th>
<th>Assessment Information and Other Essential Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self-evaluation</td>
<td>-</td>
<td>Take the <a href="#">Competence in Precalculus</a> quiz. If your score is above 70%, skip to Week 6 and fill in the gaps to prepare for the preassessment instead of going through the course linearly.</td>
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**Angles and Arcs**

- 5.1 Textbook
- Homework
- Quiz
- Review Results

**Triangles**

- 5.2 & 5.3 Textbook
- Homework
- Quiz
- Review Results

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<tr>
<td>2</td>
<td>Trigonometric Functions</td>
<td>5.4, 5.5, &amp; 5.6</td>
<td>Take the <a href="#">Competence in Trig of Real Numbers</a> quiz. Use Review Results for that quiz. Use the Study Plan to focus on trouble spots.</td>
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**Inverse, Composite, and Harmonic Functions**

- 5.7 & 5.8 Textbook
- Homework
- Quiz
- Review Results

**PERFORMANCE ASSESSMENT**

**COMPETENCY:** Trigonometry of Real Numbers

**Trigonometric Identities**

- 6.1 Textbook
- Homework
- Quiz
- Review Results

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<tr>
<td>3</td>
<td>Solving Trigonometric Equations</td>
<td>6.2, 6.3, &amp; 6.5</td>
<td>On the objective exam, you will be able to use a reference sheet with sum, difference, and half-angle formulas. In 6.3, don’t study power-reducing formulas.</td>
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**COMPETENCY:** Analytic Trigonometry

- Take the [Competence in Analytic Trigonometry](#) quiz. Use Review Results for that quiz.
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<td>Trigonometry of Angles</td>
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<td>Rectangular Form of Complex Numbers</td>
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<td>Polar Form of Complex Numbers</td>
<td>7.3 &amp; 7.5</td>
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<td>Systems of Equations</td>
<td>8.1, 8.2, 8.4, &amp; 8.5</td>
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<td>and Systems of Inequalities</td>
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<td>Arithmetic Sequences</td>
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<td>Geometric Sequences</td>
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COMPETENCY: Sequences

Take the Competence in Sequences quiz. Use Review Results for that quiz. Use the Study Plan to focus on trouble spots.

Prepare for Preassessment

Take the Competence in Precalculus test. Use Review Results for that test. Use the Study Plan to focus on trouble spots.

6 Preassessment

Take the Preassessment. See the Assessment tab for more information. Review the scoring report, which will show topics on which you need more practice. Review the sections of the Study Plan associated with those topics.

Objective Exam

Take the objective assessment. See the Assessment tab for more information.

If you do not pass, meet with a Course Instructor. Review the scoring report, which will show topics on which you need more practice. Review the sections of the Study Plan associated with those topics.

Give Course Feedback

WGU values your input! If you have comments, concerns, or suggestions for the improvement of this course, please submit your feedback.

Support

Course Support

Access the WGU Library 24 hours a day, 7 days a week:

WGU Library

Visit the Student Success Center to access a variety of topics that will help you succeed at WGU:

Student Success Center

Contact the Center for Writing Excellence (CWE) for help with any part of the writing or revision process:
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- Policies and Procedures for Students with Disabilities