



Central  
North  
South  
SVI

## MATH&142 - Precalculus II

Document Type: Master Course Outline Supplemental

Proposal Type: Revision

Requester(s): Rick A Downs

College: South

Origination Approved: 06/11/2014 - 10:29 AM

### BASIC INFORMATION

**Requester(s):** Rick A Downs

**College:** South Seattle Community College

**Division/Dept:** Academic Programs

**Dean:** Laura Kingston

**Peer Reviewer(s):** Ted Coskey  
Bryan Johns

### COLLEGE SUPPLEMENTAL

**Proposed Quarter of Implementation:**

Request Provisional Exception

**Class Capacity:** 35

**Modes of Delivery:** (Check all that apply)

Fully On Campus

Fully Online

Hybrid

Other Explanation:

**Select the Special Designation(s) this course will satisfy, if applicable:**

(No Special Designations Selected)

#### **Class Schedule Description:**

Covers trigonometric and inverse trigonometric functions; right triangle and oblique triangle trigonometry; related trigonometry applications; and topics in analytic geometry. Fulfills the QSR requirement for A.A. degree. Prereq: Math& 141 with a 2.0 or higher or Placement test. Section 70 online fee, read <https://sites.google.com/a/southseattle.edu/online/welcome-letter> and contact the course instructor.

#### **Student Learning Outcomes:**

##### **Computation**

Use arithmetic and other basic mathematical operations as required by program of study

Apply quantitative skills for academic and career purposes

##### **Critical Thinking and Problem-Solving**

Think critically in evaluating information, solving problems, and making decisions

### **Technology**

Select and use appropriate technological tools for academic and career tasks

### **Program Outcomes:**

<b>SLO #</b>	<b>Included in Course Objective Number</b>	<b>SSCC Student Learning Outcomes</b>
SLO 1.1		Communication - Read and listen actively to learn and comm
SLO 1.2		Communication - Speak and write effectively for academic and purposes.
SLO 2.1	1 - 9	Computation - Use arithmetic and other basic mathematical required by program of study.
SLO 2.2	1 - 9	Computation - Apply quantitative skills for academic and career
SLO 3.1		Human Relations - Use social skills to work in groups effectively
SLO 3.2		Human Relations – Have knowledge of the diverse cultures in our multicultural society.
SLO 4.1	1 - 9	Critical Thinking—Think critically in evaluating information, solving problems, and making decisions.
SLO 5.1	1 - 9	Technology - Select and use appropriate technological tools for academic and career tasks.
SLO 6.1		Personal Responsibility – Uphold the highest standards of academic honesty and integrity.
SLO 6.2		Personal Responsibility – Respect the rights of others in the online, and in all other school activities.
SLO 6.3		Personal Responsibility – Attend class regularly, complete assignments on time, and effectively participate in classroom and online discussion work, and other class-related projects and activities.
SLO 6.4		Personal Responsibility – Abide by appropriate safety rules in labs, shops, and classrooms.
SLO 7.1		Information Literacy—Independently access, evaluate, and use information from a variety of appropriate sources.
SLO 7.2		Information Literacy – Have knowledge about legal and ethical issues related to the use of information
SLO 7.3		Information Literacy - Use information effectively and ethically for a specific purpose.

### **Course Outcomes / Objectives:**

Upon successful completion of this course the student will be expected to:

1. Compute the values of the six trigonometric functions for key angles measured in both degrees and radians.

2. Graph all six trigonometric functions and their transformations.
  3. Use the basic trigonometric identities to verify other trigonometric identities.
  4. Solve trigonometric equations.
  5. Solve right and oblique triangles.
  6. Plot points and graph equations in the Polar Coordinate system.
  7. Graph pairs of parametric equations.
  8. Use the concepts of trigonometry to solve applied problems.
  9. Perform basic vector operations graphically and algebraically in both rectangular and polar coordinates.
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**Explain the student demand for the course and potential enrollment:**

Six classes are offered of this course each year.

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**Explain why this course is being revised:**

This is not a new course, it is updating the outline of an existing course.

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**What challenges, if any, do you foresee in offering this course:**

None.

**This is to certify that the above criteria have all been met and all statements are accurate to the best of my knowledge.**

Faculty involved in originating this program:

Rick A Downs  
Print Name

*Rick A Downs*  
Signature

6/5/2014  
Date

Dean:

Laura Kingston  
Print Name

*Laura Kingston*  
Signature

6/4/2014  
Date

**Results of SSCC Curriculum Coordinating Council Findings**

**Participating Faculty Response and Remarks**

- Recommended for approval
- Not recommended for approval

Chairman, Curriculum Coordinating Council:

Diane Schmidt  
Print Name

*Diane Schmidt*  
Signature

6/10/2014  
Date

Vice President for Instruction:

Donna Miller-Parker  
Print Name

*Donna Miller-Parker*  
Signature

6/11/2014  
Date