



Central
North
South
SVI

MATH112 - Applied Mathematics II

Document Type: District Master Course Outline

Proposal Type: Revision

Requester(s): Ted Coskey Mindy Ursino

College: South

Origination Approved: 06/11/2014 - 10:26 AM

BASIC INFORMATION

Requester(s): Ted Coskey
Mindy Ursino

College: South Seattle Community College

Division/Dept: Academic Programs

Dean: Laura Kingston

Peer Reviewer(s): Rick A Downs

COURSE INFORMATION

Proposed Course Number:

Prefix: **MATH** Number: **112**

Request a new Prefix

This will be a common course

Full Title: Applied Mathematics II

Abbreviated Title: Applied Mathematics II

Catalog Course Description:

Primarily for students requiring a second quarter of math for a trades program. Topics may include: trigonometry, algebra, plane geometry, drawings, fundamental physics, and applications of math in society. The concepts are reinforced through trade-specific projects. To be taken in conjunction with a related trades program.

Prerequisite: Math 111 with a 2.0 or higher, or by Permission of Instructor.

Course Length: 11 Weeks

Request an Exception

Course Prerequisite(s):

Prerequisite: Math 111 with a 2.0 or higher, or by Permission of Instructor.

Topical Outline:

Topics May Include:

1. Geometry
2. Trigonometry

- | | |
|----|--|
| 3. | Algebra: First and Second Order Equations |
| 4. | Physics |
| 5. | Drawings: Isometric, Orthographic, Blue Print Drawings |
| 6. | Applications of Math in Society |

COURSE CODING

Funding Source: 1.....State

Institutional Intent: 21.....Vocational Preparatory

This Course is a requirement for the following program(s):

Program Title

ENGINEERING TECH (642)

COMPOSITE MATERIAL (801A)

My Course Proposal is a requirement for a program not on this list

Will this course transfer to a 4-year university? **No**

Is this course designed for Limited English Proficiency? **No**

Is this course designed for Academic Disadvantaged? **No**

Does this course have a Workplace Training component? **No**

CIP Code: 27.9998 Request Specific CIP Code

EPC Code: 892 Request Specific EPC Code

Credits:

**Will this course be offered as Variable Credit? No
No**

List Course Contact Hours

Lecture (11 Contact Hours : 1 Credit)	55
Lab (22 Contact Hours : 1 Credit)	0
Clinical Work (33 Contact Hours : 1 Credit)	0
Other (55 Contact Hours : 1 Credit)	0
 Total Contact Hours	 55
Total Credits	5

COLLEGE SUPPLEMENTAL

Proposed Quarter of Implementation: Winter 2015

Request Provisional Exception

Class Capacity: 27

Modes of Delivery: (Check all that apply)

Fully On Campus

Fully Online

Hybrid

Other Explanation:

Class Schedule Description:

Primarily for students in a trades program requiring a second quarter of math. Concepts are chosen relevant to the specific trade program. Topics may include: geometry, trigonometry, algebra concepts, fundamental physics, drawings, and applications of math in society. To be taken in conjunction with a related trades course. Prerequisite: Math 111 with a 2.0 or higher, or by Permission of Instructor.

Student Learning Outcomes:

Communication

Read and listen actively to learn and communicate

Computation

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

Apply quantitative skills for academic and career purposes

Human Relations

Use social interactive skills to work in groups effectively

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

Personal Responsibility

Uphold the highest standard of academic honesty and integrity

Respect the rights of others in the classroom, online and in all other school activities

Attend class regularly, complete assignments on time and effectively participate in classroom and online discussions, group work and other class-related projects and activities

Abide by appropriate safety rules in laboratories, shops and classroom

Program Outcomes:

Included in Course Objective Number	Included in Course Objective Number	
SLO 1.1	2	Communication - communicate.
SLO 1.2		Communication - career purpose
SLO 2.1	1	Computation - operations as I
SLO 2.2	1	Computation - purposes.
SLO 3.1	2	Human Relatio
SLO 3.2		Human Relatio represented in
SLO 4.1	1, 3, 4, 5	Critical Thinkin problems, and
SLO 5.1	4	Technology - S personal, acad
SLO 6.1	1 - 5	Personal Respo honesty and in
SLO 6.2	1 - 5	Personal Respo classroom, onl
SLO 6.3	1 - 5	Personal Respo assignments o online discussi and activities.
SLO 6.4	4	Personal Respo laboratories, sl
SLO 7.1		Information Lit information fr
SLO 7.2		Information Lit

		issues related
SLO 7.3		Information Lit a specific purp

Course Outcomes / Objectives:

Course Outcomes

By the end of the course, a student will be able to

1. Apply numeracy skills and other math concepts to solve problems related to their field of study. These concepts may include topics in algebra, geometry, trigonometry, and physics.
2. Demonstrate their ability to work effectively with others on group projects.
3. Demonstrate basic mechanical drawing skills, which may include: orthographic, isometric, and reading blue prints.
4. Demonstrate proper use of the tools and the technology needed in their field of study. This may include reading sine bars and producing output graphs.
5. Apply their math skills to everyday math. This may include calculating their wages, learning how mortgages are calculated, and more.

Explain the student demand for the course and potential enrollment:

The class has repeatedly enrolled successfully due to our trade partnerships. The enrollment should fall between 15 - 25 depending on the quarter.

Explain why this course is being revised:

The course is being revised to fill the need for professional technical programs that require two five-credit math classes for program completion.

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

The challenge is allowing the course to be adaptable to the specific trade. This course will satisfy the math requirements for the

Engineering Design Technology program, Composite Technician program, and other trade programs.

If the course is offered in the hybrid mode, computer lab time will be scheduled.

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:

Ted Coskey

Print Name

Ted Coskey

Signature

6/6/2014

Date

Mindy Ursino

Print Name

Mindy Ursino

Signature

6/6/2014

Date

Dean:

Gayla Shoemake

Print Name

Gayla Shoemake

Signature

3/11/2014

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