COLLEGE OF THE MARSHALL ISLANDS
COURSE OUTLINE COVER SHEET

CIP No.46.0000
VCARP 061
Alpha Number

Math for Construction II
Course Title

Course Description
Enables students to apply the mathematical knowledge and skills they have learned in Math for Construction I to construction applications.

Course prepared by: Vocational Education January/2013

<table>
<thead>
<tr>
<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Lecture</td>
<td>4</td>
<td>16</td>
<td>64</td>
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<tr>
<td>Laboratory</td>
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<tr>
<td>Clinical</td>
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<tr>
<td>Seminar</td>
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Total Credit Hours 4

Purpose of Course:
- Degree Requirement
- Degree Elective
- General Education
- Certification X
- Developmental
- Other

Prerequisite(s)
VCARP 060

Signature, Curriculum and Assessment Committee Chairperson Date

Signature, Dean of Academic Affairs Date

Signature, Vice President for Academic and Student Affairs Date

Last date reviewed or revised: October 2013

Approved by CAC 11/04/2013
I. Math for Construction II

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II. Course Outcomes

A. General Learning Outcomes

The student will:
1. Use algebraic applications for estimating and planning for the construction of floors, walls, ceilings, interior finishing and cabinet making (VCARP 1, 2, 3, 5 )
2. Estimate and plan the number of materials for building roof framing and exterior framing (VCARP1, 2, 3, 5)

B. Student Learning Outcomes

Upon completion of this course, the student will be able to:
1. Plan and estimate using algebra the amount of materials for the construction of floors, walls, ceilings, interior finishing and cabinet making
2. Plan and estimate materials for roof and exterior framing

III. Course Content

This course teaches the mathematics used in estimating and planning a construction project.

1. Measurement application
2. Concrete block walls
3. Concrete flatwork/foundation slab
4. Floor sill plates, lumber joists, frame openings
5. Wall sheathing & Layouts
6. Roof and Ceiling frame
7. Roof framing materials
8. Roof sheathing panels
9. Stairway Materials and Labor
10. Molding and Trim
11. Cabinetry
12. Sheet Paneling
13. Board Paneling
14. Exterior and Interior Paintings
15. Flooring materials and Labor

IV. Methods of Instruction

1. Lecture
2. Discussion
3. Projects
4. Practical application in estimation and planning

V. Equipment and Materials

1. Chalk/white board
2. Overhead projector

Approved by CAC 11/04/2013
3. Pencils and paper
4. Tape Measure
5. Combination and rafter square
6. Speed square
7. Chalk line
8. Level
9. Hammers and hand saws
10. Nails assorted sizes and types
11. Lumber

VI. Suggested Methods of Evaluation

1. Classwork
2. Class participation
3. Homework
4. Quizzes
5. Tests
6. Projects

Letter grades will be assigned per CMI Grading system.