COLLEGE OF THE MARSHALL ISLANDS
COURSE OUTLINE COVER SHEET

CIP No. 46.0201
VCARP 104 Footing and Foundation
Alpha Number
Course Title

Course Description
Provides students with a working knowledge of different types of footing and foundation construction. Includes site preparation and layout of structures, use of builder's levels, and erection of batter boards. Covers materials, planning, reinforcement, and construction of footing and foundation.

Course prepared by: Diane Myazoe-deBrum

Vocational & Continuing Education

<table>
<thead>
<tr>
<th>Hours per Week</th>
<th>Number of Weeks</th>
<th>Total Hours</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>1</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Laboratory</td>
<td>6</td>
<td>16</td>
<td>96</td>
</tr>
<tr>
<td>Clinical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seminar</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Credit Hours 3

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

Prerequisite(s)

Signature, Curriculum Committee Chairperson

Signature, Dean of Academic Affairs

Vice President of Academic and Student Affairs

Last date reviewed or revised: October 2013
I. Footing and Foundation

II. Course Outcomes

A. General Outcomes

The student will:
1. Identify the different types of footings and foundation construction (VCARP 1, 3, 5, 6)
2. Measure and layout for footings and foundations (VCARP 1, 3, 5, 6)
3. Construct foundations and footings (VCARP 3, 5, 6)

B. Student Learning Outcomes

Upon completion of this course, the student will be able to:
1. Recognize the different types of footings and foundation construction
2. Prepare the site, place stakes, erect batter boards and layout building lines
3. Use applications to construct footings and foundations

III. Course Content

Students will be provided with an introduction to the fundamentals of footing and foundation construction.

1. Types of drawing & specifications
2. Plot plan
3. Site preparation
4. Layout building lines
5. Instruments
6. Footing types and designs
7. Footing layout and excavation
8. Reinforcement and forms
9. Concrete mix
10. Types of foundation walls
11. Waterproofing

IV. Methods of Instruction

1. Lecture
2. Discussion
3. Demonstration
4. Laboratory work
5. Field trips (site observation)
6. Apprenticeship

V. Equipment and Materials

1. Hand tools
2. LCD projector
3. Shop equipment
4. Power tools
5. TV & DVD
VI. Suggested Methods of Evaluation

1. Tests
2. Quizzes
3. Homework
4. Labs
5. Projects

Letter grades will be assigned per CMI Grading System.