North Seattle Community College

Business, Engineering & Information Technologies

Course Establishment Form
Outline

Effective date: Winter 2010:

Division:	Business, Engineering & Information Technology	**Program/Dept:**	Architecture Engineer & Sustainable Design
Course Number:	TDR 101	**Credits:** 5	**Variable:**
Course Title:	**Intermediate BIM for Design and Construction**		
Inst. Intent:	21 Vocational Preparatory	**CIP:**	
	Fee: Yes x **No**	**Type** CL - Computer Lab Fee	

Degree/Certificate Requirement: **Yes** X **No:**

Name of Degree/Certificate: Architecture Engineer & Sustainable Design Associate of Applied Science Degree

Distribution Requirement for AA/AS: Yes

Transfer Status to 4-year institution: **Yes** **No:** X

If yes, please describe:

Course length: 11 weeks **Class Size:** 24

Course Contact Hours: Based on 11 wks/qtr.

Lecture: 55 **Lab:** **Clinical:** **Other:** System:

Prerequisite: **Yes:** X **No:**

If yes, please describe:

TDR 100 Basic BIM for Design and Construction

Required Placement Tests: **Yes** **No** X

If yes, please describe:

Comments:

Course Description:

Course continuation of TDR 100. Focus will be on whole building creation, creation of details, drag and drop construction drawings, building management and plotting as it relates to construction/design and sustainable applications, use of green analysis software. Prerequisite: TDR100 or instructor's permission. Open lab. Computer lab fee.

NSCC General Education Outcomes and/or Related Instructional Outcomes Met by Course:
1. Apply computer competency appropriate to general education and occupational goals.
2. Work and communicate effectively in groups.

Course Outcomes/Learning Objectives:
1. To develop a basic understanding of computer hardware and software that promotes sustainability.
2. To develop skills in the use of BIM software.
3. To learn to model quality drawings with accepted conventions and standards using BIM.

Topical Outline and/or Major Divisions:

I Introduction to TDR 100
- A. Course contents
- B. Class procedures
- C. Course objectives

II Introduction to Equipment

III. Introduction to Software
- A. Building Information Management/Modeling programs
- B. The BIM program - an overview

IV. Introduction to Intermediate BIM topics as they relate to sustainable design
- A. Effectively using BIM programs with focus on Revit
- B. Advantages of BIM over CAD and traditional drafting
- C. BIM philosophy and intermediate modeling concepts
- D. Design Development
- E. Introducing analysis applications for sustainable design
- F. Details
- G. Plotting
- H. Creating effective presentations

V. Intermediate Design Modeling Project - Residence

VI. Evaluations

Course Requirements (Expectations of Students)
Attendance, assignments, and quizzes as specified by the instructor.

Students will be expected to demonstrate the ability to perform specific competencies listed under "Course Outcomes/Learning Objectives."

Methods of Assessment/Evaluation:
To be determined by instructor.
Final grades are assigned according to published grading standards for course.

Required Text(s) and/or Materials:
As required by instructor.
Recommended: Residential Design Using Revit Architecture 2010, Daniel Stine, Schroff ISBN 978-1585035076

Supplemental Text(s) and/or Materials:
As required by instructor.

Outline Developed by: Stephen Simmons **Date:** 7/09

Outline Revised by: Stephen Simmons **Date:** 7/09