

**ASSESSMENT REPORT  
2016-2017**

**Software Systems Design BS**

**BSSD**

**Program Mission:**

The general mission of the SSD Program in the Department of Media Arts & Technology is to educate students in the technical skills, theoretical underpinnings, and the sociocultural context for the field of software development. SSD seeks to inspire students to work creatively and collaboratively towards the goal of contributing to our own communities and to innovate and excel in the software landscape. Collaboration, experimentation and a drive to push the boundaries of current technology platforms.

**Student Learning Outcome 1:**

Students will demonstrate the ability to write object oriented code and a basic knowledge of how computer memory and architecture work in relation with their written software.

**NMHU Traits Specifically Linked to Student Learning Outcome 1**

- Effective Use of Technology

**First Means of Assessment for Outcome 1:**

SSD 340 Programming & Logic. 80% of students should be able to attain a grade of C or better on the final written exam and final programming project.

**Summary of Data:**

Number of Students Meeting Criterion:	1	Number of Students Not Meeting Criterion:	0
Total Number of Students Assessed:	1	Percent of Students Meeting Criterion:	100%

**Second Means of Assessment for Outcome 1:**

SSD 341 Applied Algorithms and Architecture. 80% of students should be able to attain a grade of C or better on the final written exam and final hardware project

**Summary of Data:**

Number of Students Meeting Criterion:	4	Number of Students Not Meeting Criterion:	2
Total Number of Students Assessed:	6	Percent of Students Meeting Criterion:	66%

### **Interpretation of Results for Outcome 1:**

Undergraduate SSD students are performing well in both courses comprising this assessment, however we did not meet the program's criterion for success (80%). Two students suffered from attendance issues, and though advised to drop the course, did not do so before the deadline. Together these courses test student proficiencies in technology across both software and hardware.

### **Student Learning Outcome 2:**

Students will demonstrate effective essay writing and presentation skills.

### **NMHU Traits Specifically Linked to Student Learning Outcome 2**

- Effective Communication Skills

### **First Means of Assessment for Outcome 2:**

SSD 340 Programming & Logic. Students will write a research paper on an emerging concept in the field of software. 80% of students should be able to attain a grade of C or better.

### **Summary of Data**

Number of Students Meeting Criterion:	1	Number of Students Not Meeting Criterion:	0
Total Number of Students Assessed:	1	Percent of Students Meeting Criterion:	100%

### **Interpretation of Results for Outcome 2:**

Due to the large number of transfer students this semester, only one student needed to take our introductory course. This student effectively demonstrated the ability to disseminate the required technological information through a paper and presentation of the paper's material.

### **Student Learning Outcome 3:**

Students will demonstrate mastery in their area of emphasis.

### **NMHU Traits Specifically Linked to Student Learning Outcome 3**

### **First Means of Assessment for Outcome 3:**

SSD 334 Practicum I and SSD 434 Practicum II. Students will create a project for a client and meet deadlines as agreed upon with client, demonstrating mastery of their emphasis

area. 80% of students should be able to attain a grade of B or better.

### **Summary of Data**

Number of Students Meeting Criterion:	4	Number of Students Not Meeting Criterion:	0
Total Number of Students Assessed:	4	Percent of Students Meeting Criterion:	100%

### **Interpretation of Results for Outcome 3:**

Students were able to effectively communicate with their respective clients and deliver a project which satisfied their client. One student stopped participating and attending due to their work obligations and was not able to meet their deadlines. In future offerings of the course, students will be required to submit a written timetable so that they see how much of a time commitment the course is before undertaking their project.

### **Utilization of Results:**

We will continue to use these criteria to assess the skills of SSD majors. The department will continue to raise the bar on critical thinking, writing skills, time management and professional output in conjunction with Media Arts' efforts.

### **Changes to Program Based on Results:**

We are considering changes to outcomes involving SSD 340, since most undergraduates are transfers from CNM and have already fulfilled this course. We have cross listed this course with the CS department at NMHU to still allow us to provide support for incoming students to build a foundation, but no student coming into the program this year needed SSD 340. We are currently reviewing which other course(s) would best assess the outcomes currently using SSD 340 and plan to change these by the end of the Fall semester.

### **Retention Strategies:**

We did not face a retention issue until this semester. The students who failed to meet the outcomes above, stopped showing up for class shortly after midterms. Early alert had passed, and though told via emails to withdraw from the course due to their poor attendance, they did not, and they were unresponsive to communications until it was too late.