

ASSESSMENT REPORT 2020-2021

Software Systems Design
(Instructional Degree Program)

BSSD
(Degree Level)

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:

BSSD 3520 JavaScript. 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:	5	Number of Students Not Meeting Criterion:	0
Total Number of Students Assessed:	5	Percent of Students Meeting Criterion:	100%

Second Means of Assessment for Outcome 1:

BSSD 3410 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: Not Offered this term

Interpretation of Results for Outcome 1:

Students were able to meet the expected requirements, but extra foundational material had to be included with this group. This was the first group that had people coming in with only the Algebra prerequisite, so that prereq may need to be amended to include a second foundational class or more advanced material from this class incorporated into the Interfaces class and additional foundational material incorporated permanently into this course.

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:

BSSD 3520 JavaScript. 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:	5	Number of Students Not Meeting Criterion:	0
Total Number of Students Assessed:	5	Percent of Students Meeting Criterion:	100%

Interpretation of Results for Outcome 2:

We changed this a bit to incorporate a project and a presentation of that project to the class over zoom. This worked well and was assigned to the students both at midterms and finals so that they could receive feedback on the first presentation and incorporate feedback in the second. The writing component became two smaller pieces. One is a project proposal with incorporated research proving the project is doable and using current technology and the second is a less formal results piece which complimented the presentation and ensured the material to be presented with the project was accurate and comprehensive.

Student Learning Outcome 3:

Students will demonstrate mastery in their area of emphasis.

NMHU Traits Specifically Linked to Student Learning Outcome 3

- Mastery of Content Knowledge and Skills

First Means of Assessment for Outcome 3:

BSSD 3340 Practicum I and BSSD 4340 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:	2	Number of Students Not Meeting Criterion:	0
Total Number of Students Assessed:	2	Percent of Students Meeting Criterion:	100%

Interpretation of Results for Outcome 3:

This was much more difficult over zoom than when meeting in person. We ended up incorporating a time tracking website so that I could assign tasks to the students and they could check them off. This seemed helpful in getting the students back on track. We continue to incorporate software check-ins as determined a few years ago so that we do not lose projects if students disappear.