A.S. in NETWORK AND SYSTEM ADMINISTRATION
MAJOR FIELD ASSESSMENT

Introduction:

The Associate of Science degree program in Network and System Administration covers topics ranging from network protocols to the design and administration of systems and networks. The degree program is intended to provide graduates with a strong background in computer networking theory, Microsoft Windows-based networks, UNIX/Linux network operating systems, mission-critical applications (e.g., electronic mail systems), and computer and network security. Graduates will have the skills necessary to manage the information technology infrastructure required to operate a modern business, with job titles that include as system administrator, network system engineer, systems analyst, network analyst, network application developer, and technical consultants. In addition, these DSU graduates will have a solid business management background, which enables them to effectively communicate with and support the various operational units within a business organization. The employment outlook for networking professionals is strong as companies continue to build up and update their network infrastructure.

Student’s mastery in individual courses will be assessed by one or more of the following: appropriate written/oral examinations and assignments. Students who do not demonstrate mastery will be required to remediate any deficiencies by an appropriate method -- most often, repeating the course and earning a passing grade. Students who do not successfully remediate deficiencies or otherwise fail to meet academic expectations will be dismissed from the program. All DSU students also complete a major-field exit exam prior to graduation.

Student Knowledge and Competencies:

1. Students will develop advanced knowledge in networking technologies for a career in networking.
2. Students will develop advanced knowledge in system administration technologies for a career in networking.
3. Students will develop an understanding of programming concepts with an advanced knowledge in scripting for a career in networking.
4. Students will develop the interpersonal skills that foster professional responsibility, leadership, and team work.

To assess how well we are achieving these objectives, this assessment plan outlines variety of activities to measure how well the program equips students to take on information assurance and computer security issues in industry and government.

Assessment Plan:

Goal 1: Graduates of the program will be able to apply cognitive learning to networking technologies, system administration and programming.

Student Outcome:
1. Students will develop advanced knowledge in networking concepts for a career in networking and system administration

Assessment Criteria:

a. Assessment Exam: 75% of graduates will successfully complete the portions of the exit exam related to networking technologies with a 60% or higher.
b. Course Grades: 75% of students will successfully complete CIS 383 and CIS 385 with a grade of B or higher.
c. Employer Survey: 85% of employers will indicate that DSU students need less than the usual training in technology.
d. Alumni Survey: 70% of graduates will indicate they are satisfied or very satisfied with their ability to learn on the job.

Student Outcome:

2. Students will develop advanced knowledge in programming for a career in networking and system administration.

Assessment Criteria:

a. Technology Exam: 75% of graduates will successfully complete the portions of the general education technology exam related to programming with a 60% or higher.
b. Employer Survey: 85% of employers will indicate that DSU graduates exceed their expectations in their ability to select and apply appropriate technology.
c. Alumni Survey: 85% of graduates will indicate that they are satisfied or very satisfied with their ability to select and apply appropriate technology.

Goal 2: Graduates will be able think logically, analytically, and objectively, while demonstrating the appropriate soft skills for a successful career in networking and system administration.

Student Outcome:

1. Students will develop the interpersonal skills that foster professional responsibility, leadership, and team work.

Assessment Criteria:

a. Employer Survey: 85% of employers will rate DSU graduates’ oral communication skills as good or very good.
b. Employer Survey: 85% of employers will indicate that DSU graduates’ interpersonal skills (e.g. working in a team setting) exceed their expectations.
c. Alumni Survey: 70% of graduates will indicate they are satisfied or very satisfied with their oral communication skills.
d. Alumni Survey: 70% of graduates will indicate that DSU contributed to their verbal communication skills.

**Student Outcome:**

2. Students will effectively communicate with peers of other business units outside the realm of IT.

**Assessment Criteria:**

a. Employer Survey: 85% of employers will rate DSU graduates’ oral communication skills as good or very good.

b. Alumni Survey: 70% of graduates will indicate they are satisfied or very satisfied with their oral communication skills.

c. Alumni Survey: 70% of graduates will indicate that DSU contributed to their verbal communication skills.

**Goal 3:** Students will be well-prepared academically for an entry-level position in the career field.

**Student Outcome:**

1. Graduates will find ready employment in the field.

**Assessment Criteria:**

a. Placement Results: 85% of the NSA graduates registered with the DSU Placement Office will find employment in the field or be accepted for graduate programs within four months of graduation.

b. Employer Survey: 85% of employers will indicate that DSU students need less than the usual additional job-related training.

c. Employer Survey: 85% of employers will rate DSU graduates’ ability to learn on the job as good or very good.

d. Alumni Survey: 70% of graduates will indicate they are satisfied or very satisfied with their ability to learn on the job.

e. Alumni Survey: 70% of graduates will indicate DSU contributed to their ability to learn on the job.

**Goal 4:** Graduates will be able to adapt to the ever-changing field of information technology

**Student Outcome:**

1. Students will have the ability to quickly and effectively learn and demonstrate skill and understanding with new or previously unknown technologies.
Assessment Criteria:

a. Employer Survey: 85% of employers will rate DSU graduates’ ability to adapt to changes in computing environment as exceeding expectations.
b. Employer Survey: 85% of employers will rate DSU graduates’ ability to select and apply appropriate technology as exceeding expectations.

Student Outcome:

2. Students will increase understanding of IT systems already in place within an organization in which the student has not previously been exposed.

Assessment Criteria:

a. Employer Survey: 85% of employers will rate DSU graduates’ ability to learn on the job as exceeding expectations.
b. Employer Survey: 85% of employers will rate DSU graduates’ need for additional training in technology skills as less than usual.

Student Outcome:

3. Students will show a desire to increase understanding and grow professionally to better serve the needs of the business environment.

Assessment Criteria:

a. Employer Survey: 85% of employers will rate DSU graduates’ ability to seek out opportunities for professional growth as exceeding expectations.
b. Employer Survey: 85% of employers will rate DSU graduates’ ability to learn on the job as exceeding expectations.