Student Learning Outcomes Assessment Policy and Procedures

PURPOSE:
The purpose of this initiative is to provide guidance for:
1. The development of appropriate student learning outcomes for all aspects of the college.
2. Assessing the degree to which students are achieving appropriate learning.
3. Developing a system for measuring and reporting student learning.
4. Assuring that the results of student learning outcomes measurement are used to improve subsequent teaching and learning activities.
5. Assuring that all campus activities and units are utilizing outcome assessment procedures to drive decision making.

INSTITUTIONAL OVERSIGHT:
The NCTA Assessment Committee is responsible for decisions regarding the development, support and implementation of the institutional assessment system and the monitoring of the quality of assessment activity of academic and co-curricular programs. The NCTA Assessment Chair is responsible for coordinating all aspects of campus assessment, including efforts associated with institutional learning outcomes and curricular programs. The chair assists units, as needed, with planning, designing, implementing, analyzing, reporting and disseminating assessment results. The chair promotes best practices in assessment and delivers regular assessment training for campus stakeholders.

PROCEDURES:
These are the general steps to be used for the development and assessment of student learning outcomes at NCTA:

1. Develop program level student learning outcomes. Program level student learning outcomes are the knowledge, skills and values that students graduating from this program should possess. Generally, faculty meets with an advisory group to develop program level student learning outcomes. The advisory group consists of disciplinary experts, industry leaders, external faculty, and others with knowledge of the field. In disciplines with disciplinary accreditation, such as veterinary technology, the accrediting body determines what the student learning outcomes will be. Programs generally have 15 to 20 program level student learning outcomes, although this can be variable. The process used to develop program level student learning outcomes should be documented and the results should be reevaluated on a regular basis. The Academic Program Review Policy establishes the standards and procedures for review of program learning outcomes.

2. Assign program level student learning outcomes to specific courses at the college. A curriculum map or matrix has been developed to clearly document courses that are utilized to assess program level student learning outcomes, which is provided in Appendix 1.

3. Faculty teaching individual courses are responsible for the student learning outcomes that have been assigned to their courses. Faculty may decide to add additional student learning outcomes at their discretion. Each course should generally have two student learning outcomes per credit (for example, a three credit course would have six student learning outcomes) although this may be variable, based on instructor needs. Course level student learning outcomes should be listed in the syllabus for each course.

4. Faculty is responsible for selecting activities and facilitating an environment that results in student attainment of the student learning outcomes. Often, this involves activities such as lectures, assigned readings, laboratory activities, appropriate demonstrations, course discussions, student projects, guest lecturers, etc.

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5. Faculty identify one objective, direct measure for each student learning outcome and a benchmark of success for each outcome. Often faculty use rubrics to assess student learning outcomes. A rubric is defined as a document that articulates the expectations for an assignment by listing the criteria, or what counts, and describing levels of quality from excellent to poor.

6. An indirect measure of each student learning outcome will be determined by asking for student feedback on student learning outcomes attainment as part of the course evaluation process. A report is generated each semester summarizing the results of this indirect assessment of student learning outcomes. Division chairs will meet with faculty and discuss intervention strategies for those student learning outcomes with an average indirect measure below 3.0 on a five-point scale.

7. Each semester, faculty report student learning outcomes assessment. The report conforms to the college template (Appendix 2) and contains:
   a. The list of student learning outcomes by course
   b. The assessment measure used for each student-learning outcome
   c. Assessment results – student progress towards achieving the student learning outcome
   d. An explanation of how the results are used to improve student learning in subsequent semesters.

8. SLO reports are due by January 15 for fall semester courses and by June 1 for spring semester courses. All assessment plans and summary reports are available on the NCTA assessment webpage - [http://ncta.unl.edu/assessment](http://ncta.unl.edu/assessment)

9. The course reports are compiled and submitted to the division chair as part of the faculty member's annual evaluation process.

10. Division chairs evaluate student learning outcomes results and assist faculty in improving outcomes, if necessary. Division chairs may direct faculty to the NCTA Assessment Committee for additional assistance.

11. The NCTA Assessment Committee will be responsible for developing an annual report which documents the number of SLO's assessed and the percentage of courses which were assessed for SLO's. This document will be maintained on the assessment webpage.

12. NCTA academic divisions will provide a summary report describing assessment procedures, summaries documenting success of student achievement of program learning outcomes, and recommendations to improve student learning by July 15 of each year. (see Appendix 3 – NCTA Annual Assessment Timeline)

**GENERAL EDUCATION**

NCTA will maintain a General Education program that aligns with the college’s mission and follows guidance described by the Higher Learning Commission and other accrediting organizations. Curriculum development and assessment will utilize the following mission and philosophy for guidance.

**Mission** - The mission of the General Education Division is to provide broad intellectual knowledge, awareness, and critical thinking skills in the liberal arts, humanities, and natural and social sciences directed toward the successful pursuit of students’ personal and career goals as citizens and leaders in agriculture enterprises.

**Philosophy** - General education is part of the academic experience that builds students’ growth as citizens and professionals. General education instruction engages students in independent, critical, and creative thinking; promotes open-mindedness and understanding; gives confidence and inquisitiveness.
to challenge assumptions and explore ideas and values; promotes the passing of sound judgment; encourages the consideration of ethical and practical consequences of actions; and facilitates wisdom.

**Assessment of General Education**
All general education courses and curriculum will be assessed utilizing the procedures described in this policy. The General Education Division chair will oversee program assessment and provide an annual assessment report utilizing the same framework as other academic divisions. Industry advisory councils utilized by other academic divisions will also be a tool for assessing and enhancing student learning in general education.

**COURSE SYLLABI AND SLO’S**
All course syllabi must clearly state the Student Learning Outcomes of the course. In addition, the following items will be included in all course syllabi in order to clearly communicate the course’s role in assessing program and/or general education outcomes. NCTA’s Classroom/Course Policy provides full syllabi templates.

1. **General Education Courses**
   a. Provide the General Education mission statement.
   b. Provide the General Education learning outcomes that are assessed in the course.

2. **Academic Program Courses**
   a. Provide the mission statement of the academic division.
   b. Provide the program level outcomes that the course supports. Clearly indicate if the course is used for assessing the program outcome or if the course only provides the opportunity for students to learn the outcome.
   c. Provide any General Education outcomes that the course supports

**DISTANCE LEARNING**
Distance learning includes online, dual credit, and concurrent enrollment courses in which the primary method of instruction utilizes methods that do not include face-to-face interaction between instructors and students. All distance learning courses must comply with the assessment procedures outlined in this policy. Additional procedures and requirements for distance learning course development and faculty training are described fully in the Distance Learning Policy.

**CO-CURRICULAR ACTIVITY ASSESSMENT**
Co-curricular activities are defined by the Higher Learning Commission as learning activities, programs and experiences that reinforce the institution’s mission and values and complement the formal curriculum. Examples may include student-faculty research experiences, study abroad, service learning, clubs or organizations, competing teams, honor societies, career services, etc. NCTA will annually assess these activities utilizing the principles outlined in this policy. All teams have courses and will continue to utilize the existing course SLO reporting structure. Guidance for developing student learning outcome statements and assessment procedures is available from the Assessment Committee Chair.

Faculty that advise clubs and competitive teams will annually report learning outcome statements and assessment results to the Assessment Committee Chairperson. The Assessment Committee Chairperson will then generate an annual Co-Curricular Activity Assessment Report. Clubs and teams closely align to academic programs; thus, data will be transparent and available to assist overall program level assessment. A potential survey for assessment is provided in Appendix 4.

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Co-curricular activities that provide services to students such as intramurals, career services, student life, library, food services, etc. will report learning outcome statements and assessment results to the Associate Dean of Student Services to be included in the Student Services annual assessment report.

Implementation of these co-curricular activity assessment procedures will be the following:

1) Learning outcome statements for all clubs and teams will be provided to the Assessment Committee Chairperson prior to January 2021.
2) Assessment procedures and results included will be initially provided to the Assessment Committee Chairperson by June 15, 2021.
3) A Co-curricular Activity Summary Assessment Report will be generated annually by the Assessment Committee Chairperson by August 1.

ADVISORY COUNCILS

Each academic division at NCTA will utilize advisory councils to assist with student learning outcome development and assessment of student learning. Advisory councils are essential to developing and sustaining educational programs that meet the needs of the community and the industry employers in the state of Nebraska. Divisions should annually utilize advisory councils to assist with developing appropriate student learning outcomes and assessment procedures. The “Program Advisory Council Handbook” provides guidance and ideas for developing an effective advisory council structure. Minimal advisory council requirements are as follows:

1) Review of academic programs and program-level outcomes
2) Review of assessment results and proposed changes
3) Review of one core course each year that is used for program level assessment

ANNUAL DIVISION SUMMARY REPORTS

Division summary reports are due to the Assessment Committee Chair July 15 each year. The primary objective of the report is to clearly document assessment procedures and results of program level outcomes. Components of the annual division report should include the following:

1) Clearly describe program level outcomes and assessment procedures
2) Present and discuss assessments results. Results should clearly indicate level of student achievement of program outcomes
   a. Examples including results from courses, internships, advisory councils, exit exams, etc.
3) Describe any changes in curriculum, budgeting, or resource needs that will be proposed based on assessment results
4) Report division level enrollment, retention rates, transfer rates, and graduation rates
5) Update and include as an appendix the “Program Outcome – Course Matrix”

COLLEGE WIDE ASSESSMENT PROTOCOL

NCTA’s strategic plan provides college wide guidance in creating a learning-focused environment where faculty, administrators, and staff work actively to help students learn. Goals are developed to achieve excellence in areas such as: academic quality; student services, infrastructure, budget and finances, public relations and enrollment.

The Assessment Committee will annually measure attainment of college-wide goals identified in the college strategic plan utilizing a scorecard that includes the following structure:

1. Lists assessment tools, approaches and reports utilized for obtaining the goal.
2. Rate achievement of the goal on a scale of 1 to 10, where 10 = done.
3. Provides a summary that clearly demonstrates the reason for the rating.

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Appendix 1 – Course and Program Outcomes Matrix Template

Provide Degree or Certificate Name
Course and Program Experience and Outcomes Matrix

Student Learning Outcomes

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4. 
5. 

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th>SLO1</th>
<th>SLO2</th>
<th>SLO3</th>
<th>SLO4</th>
<th>SLO5</th>
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“X” for courses or experiences in which students have the opportunity to learn the outcome.
“A” for courses or experiences in which student performance is used for program level assessment of the outcome.
Appendix 2 – Course SLO Report Template and Example

Template

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Semester</th>
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</table>

| Course: | | Current Results | | Previous Results | |
|---------|----------|-----------------|----------|-----------------|
| Student Learning Outcome | Assessment Tool | # tested | # passed | # tested | # passed |
| 1. Students will gain a working knowledge of global positioning systems (GPS) including factors influencing accuracy and potential uses/applications. | Exam/Rubric | 21 | 19 | 19 | 19 |
| 2. Students will be able to effectively utilize geographic information systems (GIS) including a working knowledge of GIS map interpretation. | Exam/Rubric | 21 | 19 | 19 | 12 |
| 3. Students will identify yield monitor components and interpret yield maps for adjusting crop management inputs. | Exam/Rubric | 21 | 20 | 19 | 19 |
| 4. Students will gain a working knowledge of precision soil sampling techniques and technology and be able to utilize precise soil data for fertility and crop management. | Exam/Rubric | 21 | 17 | 19 | 19 |
| 5. Students will understand the potential of using ground-based, satellite or aircraft-based remote sensing for crop management. | Exam/Rubric | 21 | 16 | 19 | 18 |
| 6. Students will understand the potential uses of variable-rate applicators and have a working knowledge of operating variable-rate application equipment. | Exam/Rubric | 21 | 16 | 19 | 15 |

Summarize changes you plan to make to improve student achievement of SLO’s (new methods of instruction, new assessment tools, etc.)

Describe the impacts of changes you made based on the previous assessment for the course.

Describe any funds needed to improve student learning.

Example

Instructor: Brad Ramsdale | Semester: Spring 2017

| Course: AEQ 2323 Precision Farming | | Current Results | | Previous Results | |
|-----------------------------------|----------|-----------------|----------|-----------------|
| Student Learning Outcome | Assessment Tool | # tested | # passed | # tested | # passed |
| 1. Students will gain a working knowledge of global positioning systems (GPS) including factors influencing accuracy and potential uses/applications. | Exam/Rubric | 21 | 19 | 19 | 19 |
| 2. Students will be able to effectively utilize geographic information systems (GIS) including a working knowledge of GIS map interpretation. | Exam/Rubric | 21 | 19 | 19 | 12 |
| 3. Students will identify yield monitor components and interpret yield maps for adjusting crop management inputs. | Exam/Rubric | 21 | 20 | 19 | 19 |
| 4. Students will gain a working knowledge of precision soil sampling techniques and technology and be able to utilize precise soil data for fertility and crop management. | Exam/Rubric | 21 | 17 | 19 | 19 |
| 5. Students will understand the potential of using ground-based, satellite or aircraft-based remote sensing for crop management. | Exam/Rubric | 21 | 16 | 19 | 18 |
| 6. Students will understand the potential uses of variable-rate applicators and have a working knowledge of operating variable-rate application equipment. | Exam/Rubric | 21 | 16 | 19 | 15 |

Summarize changes you plan to make to improve student achievement of SLO’s (new methods of instruction, new assessment tools, etc.)

Will develop new learning outcomes and assessments to focus on very specific learning objectives. Linking specific knowledge details to a general application of that knowledge is a struggle for some students.

Describe the impacts of changes you made based on the previous assessment for the course.

SMS Advanced Software classroom time and exercises improved student learning compared to past semesters in outcome 2.

Describe any funds needed to improve student learning.

$2000 annually to continue software license.
Appendix 3 – Annual Assessment Timeline

**NCTA Campus-wide Annual Assessment Timeline**

1) Student Learning Outcomes Assessment Data Collection
   a) SLO Course Reports (faculty reports to division heads; division heads to assessment committee chair by the following deadlines)
      i) Summer Session – September 15
      ii) Fall Semester – January 15
      iii) Spring Semester – June 1
   b) Internship Survey Results
      i) Divisions collect and summarize data, results summarized in annual division report
   c) Annual Advisory Council Meetings – date set by division
      i) Meeting agenda’s and minutes posted to common drive
   d) Faculty and Staff Evaluations – completed by April 15
   e) Student Opinion Survey – End of spring semester by graduating students
      i) Results summarized by Assessment Committee and distributed to appropriate divisions/units

2) Division Summary Report of Program-Level SLO Assessment – July 15
   a) Report structure and requirements described previously

3) Division Budget Requests based on Assessment – Fall Semester
   a) Operating Budget Requests
   b) Capital Equipment Improvement Requests
   c) IT Requests

4) Curriculum Changes based on Assessment
   a) Approved through Academic Council during Fall semester
   b) Catalog Changes due by January 1

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Student Services Assessment Timeline
1) Data Collection – August to May
   a) Recruiting
      i) Number of schools visited
      ii) Number of conferences attended
      iii) Paid applications
      iv) Registered students
      v) Enrollment - 6 day count
   b) Retention
      i) Fall to Spring
      ii) 1st to 2nd year
      iii) Transfer students
   c) Employee training/personal development
   d) Student Opinion Survey - end of spring semester
      i) Financial aid, student services
   e) Staff Evaluations- 2Xyear
2) Unit Summary Report – July 15
3) Unit Budget Requests based on Assessment
4) Student Handbook and Catalog Changes – January 1

Campus Facilities Assessment Timeline
1) Data Collection – August to May
   a) Work orders
      i) Number of Work orders
      ii) Completion rate
      iii) Average time of completion
   b) Human Capital report
      i) How much time is spent
   c) Utilities using staff time
      i) Boiler Usage-Efficiency collection
      ii) Daily time spent on boilers
   d) Paid Invoice/P Card transactions
      i) % paid on time
   e) Internal and external deadlines
      i) % of on-time completion
   f) Training
      i) % of each department trained in required areas
   g) Preventative Maintenance schedule and reports on percentage completed in a timely manner annually
   h) Student Opinion Survey – end of spring semester
      i) Staff Evaluations- 2Xyear
2) Unit Summary Report – July 15
3) Unit Budget Requests based on Assessment
4) Staff Handbook Changes – January 1
### Appendix 4 – Assessment Survey Example for Clubs and Teams

**Collegiate Farm Bureau Assessment Survey**

Student Learning Outcomes (Goals)

1. Students will understand important issues facing agriculture in Nebraska and the U.S.
2. Students will gain an understanding of Farm Bureau’s policy development procedures and lobbying efforts at the local, state and national levels.

Above are the two primary goals for Collegiate Farm Bureau. Please rate the following Collegiate Farm Bureau activities based on how well the activity supported the goal. Place an X in the appropriate box.

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<tr>
<th>Activity</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
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<td>Lincoln County Farm Bureau Meeting</td>
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<td>Policy Development Meeting with Jay Ferris of Nebraska Farm Bureau</td>
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<td>Field trip to Kingsley Dam and Roric Paulman Farm</td>
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<td>Nebraska Farm Bureau State Convention</td>
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<td>State Capitol: meeting with Farm Bureau lobbyists and Senators</td>
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