

2022 ANNUAL ACADEMIC ASSESSMENT REPORT FORM
(Due October 15 to the dean)**PROGRAM SECTION (Due to the dean on October 15)****Submission date:** 10/7/2022**Submitted by:** Joel Condon, Chair – Architectural & Engineering Technology, jcondon1@alaska.edu**Program(s) covered in this report:** Architectural & Engineering Technology AAS

If you selected “Other” above, please identify. (100 characters or less)

College: Community and Technical College**Campuses where the program(s) is delivered:** ☒ Anchorage ☐ KOD ☐ KPC ☐ MSC ☐ PWSC**Specialized accrediting agency (if applicable):** N/A**If explanation is necessary, such as only some of the certificates and degrees are covered by the specialized accreditation, briefly describe:****INSTITUTIONAL STUDENT LEARNING CORE COMPETENCIES**

In 2020, UAA launched a consensus-based, deliberative process to identify the key skillsets that help students achieve academic and post-graduation success. After a year-long process that included students, faculty, staff, administrators, alumni, and employers, the UAA community identified four core competencies at the heart of a quality UAA education. Students develop mastery of these competencies through curricular (e.g., courses), co-curricular (e.g., internships, conferences), and extra-curricular (e.g., student clubs) learning experiences.

After the stakeholder-based process in AY20, UAA is phasing in the integration of the core competencies into ongoing processes, including program student learning outcomes assessment. Personal, Professional, and Community Responsibility (PPCR) was integrated into the AY21 Annual Academic Assessment Report. The AY22 Annual Academic Assessment Report now also integrates Effective Communication.

Question #1 below is designed to engage program faculty in thinking about how they can or already do promote student learning in these two core competencies.

1. **A. *Personal, Professional, and Community Responsibility: The knowledge and skills necessary to promote personal flourishing, professional excellence, and community engagement.***

- **If last year you provided your program's current or planned example of an intentionally designed course, assignment, or activity that develops and showcases the student learning in this core competency, please discuss that implementation and any observations you have regarding how well it is working. (500 characters or less)**

The AET Design Project class engaged in a Community Engaged studio assignment that entailed working with the Anchorage homeless community to develop design initiatives that were responsive to the wants and needs of that community. Students developed their personal creative design thinking skills, their Building Information Modeling skills which are used extensively in professional practice, and created affordable housing designs for the homeless community.

- **If last year you *did not* identify a current or planned example of an intentionally designed course, assignment, or activity that provides students the opportunity to develop and showcase this core competency, please identify one now. (500 characters or less)**

B. *Effective Communication: The knowledge and skills necessary to engage in effective communication in diverse contexts and formats.*

- **What would you hope a student would say if asked where in your program or support service they had the opportunity to develop proficiency in this core competency? (500 characters or less)**

Working with the homeless community developed skill in communicating with a population outside the academic arena. Oral communication skill and visual communication skill through renderings was required to communicate design intentions. Final results were presented to members of the Anchorage Planning Department, the Anchorage Housing, Homeless, and Neighborhood Development Commission, members of the professional design community, and members of the Alaska Home Builders Association.

- **Provide your program's current or planned example(s) of an intentionally designed course, assignment, or activity that showcases the student learning in this core competency. (500 characters or less)**

AET is conducting two design studios during the current academic year. There are nine design projects. Students are required to present their projects in class. They are assessed using a rubric that assigns 40% of the grade based on how effective they are in communicating, through graphic images, their solution to the design problem. 20% of the grade is based on the effectiveness of their oral presentation in articulating the intentions and results of their design initiative.

PROGRAM STUDENT LEARNING OUTCOMES

2. Please list the Program Student Learning Outcomes your program assessed in AY22. For each outcome, indicate one of the following: Exceeded faculty expectations, Met faculty expectations, or Did not meet faculty expectations.

Example: Communicate effectively in a variety of contexts and formats – Exceeded faculty expectations.

Demonstrate skill and proficiency in computer-aided drafting and design (CADD) and 3-D modeling - Exceeded faculty expectations.

Demonstrate knowledge of drawing conventions including symbols, line types, line weights, and dimension styles as applicable to the design discipline. - Met faculty expectations.

Visualize and translate drawing information to actual physical objects and completed construction components. - Met faculty expectations.

Demonstrate an understanding of the elements of the construction document set and the role of construction documents as communication tools for the construction contract. - Met faculty expectations.

Demonstrate an understanding of the construction process from the transformation of an idea or need into a completed project. - Met faculty expectations.

Demonstrate communication skills to be successful in the employment environment. - Exceeded faculty expectations.

Demonstrate critical thinking and problem-solving skills in the employment environment. - Met faculty expectations.

3. Describe your assessment process in AY22 for these Program Student Learning Outcomes, including the collection of data, analysis of data, and faculty (and other, e.g., advisory board) conversations around the findings. (750 characters or less)

The AET assessment process identifies courses that have content addressing program student learning outcomes. Specific assessment measures such as assignments, tests, quizzes, or questions are identified by the course instructor as relevant to the student learning outcome. The specific assessment measures are documented, scores received by each student on the assessment measure are collated, and examples of student work are collected. The results are entered into a Quality Tracking and Assessment Matrix. The matrix reveals which assessment measures exceed, meet, or fail to meet faculty expectations. Results are reviewed by faculty and potential changes are discussed.

4. What are the findings and what do they tell the faculty about student learning in your program? (750 characters or less)

An analysis of the Quality Tracking and Assessment Matrix reveals that students are scoring at or above 80% on the specific assessment measures. Scores between 70% and 80% indicate that SLOs are marginally met and that changes may be considered if appropriate. Scores below 70% indicate student learning weakness and changes need to be made to improve student performance. At 80% and above, it is clear that students are performing well and program changes are not necessary.

5. Based on the findings, did the faculty make any recommendations for changes to improve student achievement of the Program Student Learning Outcomes? Please describe the recommended action, what improvement in student learning the program hopes to see with this change, the proposed timeline, and how the program will know if the change has worked. If no recommendations for changes were made, please explain that decision. (750 Characters or less)

Although the Quality Tracking and Assessment Matrix indicates that students are performing well, the volume of assessment data collected in the matrix makes concise and precise evaluation of student achievement unnecessarily burdensome. It has been proposed that specific courses be designated as the single, on-going source of assessment data for each Program Student Learning Outcome. This will reduce the quantity of data collected and provide a consistent yearly assessment metric. By making the evaluation process more efficient, it is hoped that faculty will be better able to accurately target class activities that could be improved for the enhancement of student achievement.

PROGRAM IMPROVEMENTS AND ASSESSING IMPACT ON STUDENT LEARNING

6. In the past academic year, how did your program use the results of previous assessment cycles to make changes intended to improve student achievement of the Program Student Learning Outcomes? Please check all that apply.

- ☐ Course curriculum changes
- ☒ Course prerequisite changes
- ☐ Changes in teaching methods
- ☐ Changes in advising
- ☐ Degree requirement changes
- ☐ Degree course sequencing
- ☒ Course enrollment changes (e.g., course capacity, grading structure [pass/fail, A-F])
- ☐ Changes in program policies/procedures
- ☐ Changes to Program Student Learning Outcomes (PSLOs)
- ☒ College-wide initiatives (e.g., High-Impact Practices)
- ☐ Faculty, staff, student development
- ☐ Other
- ☐ No changes were implemented in AY22.

If you checked "Other" above, please describe. (100 characters or less)

7. Do you have any information about how well these or other past improvements are working? Are they achieving their intended goals? Please include any data or assessment results that help you demonstrate this. (750 characters or less)

Temporary course prerequisite changes have allowed students to reestablish the sequence of courses leading to graduation. Due to low enrollment during a previous semester, a class was cancelled thereby derailing the path to timely graduation. By allowing students to simultaneously take the class while taking the class that required it, students were able to stay on track towards timely graduation.

The High-Impact Learning Practice of undergraduate research has demonstrated beneficial results. A Spring 2022 student, researching wind generation in Alaska, parlayed their interviews with wind generation companies into a summer internship which led to a long-term employment contract.

8. PROGRAMS ARE NOT REQUIRED TO RESPOND TO QUESTION #8 FOR THEIR REPORT DUE ON OCTOBER 15, 2022. IT IS HERE JUST FOR THEIR REFERENCE.

9. Do you have any examples of post-graduate success you want to highlight? For example, major scholarships, the percent of students who pass licensure examinations, the percent of students accepted to graduate programs, the percent in post-graduation employment in the field or a related field. (750 characters or less)

The first student to graduate from the revised AET program landed a job with a construction company as the lead architectural designer for the firm. They have subsequently been accepted into the NAAB-accredited architecture program at Arizona State University.

DEAN SECTION (Due to the program on January 15)

1. Based on the program's responses above, what guidance and support do you have for the program moving forward? (750 characters or less)

The AET program has seen a lot of changes lately. It is recommended that the faculty continue to work toward connecting the program to an Architecture program of some form. Also continue the large amount of community engagement.

2. What is the program doing particularly well in terms of its processes for the assessment and improvement of student learning, for example, the achievement of the Program Student Learning Outcomes, the closing of equity gaps, or addressing the core competencies? (750 characters or less)

The AET faculty have continued to expand CTC's community engagement, leading to a number of different community projects. This was especially true with their recent homeless shelter design project in their capstone courses. Their program was developed to integrate with different architect



programs across the country, possibly giving students an option to receive further education leading to Architect certification. They should be commended on their hard work.

Dean's signature:

A handwritten signature in blue ink, appearing to read 'Randy White', is written over a light blue rectangular background.

Date: 2/3/2023