# Program Plans: Outcomes and Assessment Methods

# Program (CEAT) - ARCH - Architectural Engineering (BEN) - 020

**Program Mission Statement:** The School of Architecture and Architectural Engineering prepares future architects and architectural engineers to make vital contributions to humanity through the creation of architecture. The School focuses its unique combination of accredited programs in architecture and architectural engineering to prepare and inspire students for the professional leadership roles and responsibilities required to shape the physical environment and to have a positive impact on the social, economic and cultural qualities of life in Oklahoma and the entire international context.

The School of Architecture endeavors to instill in each individual a sensitivity to human needs, a genuine concern for quality, integrity and high ideals, a positive attitude for life-long learning, and an appreciation for one's own self-esteem.

The "concept" for our school and the focus of our studios is to mirror the societal responsibilities of our profession and to promote a thoughtfully designed response to the environmental needs of our culture.

The range of design concerns, from the scale and needs of a single individual to the collective interaction of thousands, are studied and responded to in a project to project sequence throughout the five year undergraduate program.

An emphasis on providing a service to the university and the public enhances the design studio experience, and provides an opportunity for each student to make a contribution to their community, their state and nation.

# **Program Information**

2018 - 2019

**Program Information** 

**Assessment Coordinator's Name:** Tom Spector

Assessment Coordinator's E-mail Address: tom.spector@okstate.edu

Number of Students Enrolled in the Program: 92 Total Number of Students Graduated: 11

Number of Student Graduates from Stillwater Campus: 11

Were university assessment funds used by the department/program for assessment activities?: Yes

If yes, describe how funds were used and the contribution the funds had on the assessment process: Assessment funds were used to pay visiting professional jurors in comprehensive design studio a per diem for their travel to Stillwater.

### **Annual Executive Summaries**

2018 - 2019

**Program Assessment Coordinator:** Tom Spector

**Plan Review and Approval** 

Date Current Plan Was Reviewed and Approved: 01/08/2019 Date of Future Plan Review and Approval: 05/05/2020

**Summary of Assessment Findings** 

**Describe overall assessment findings and faculty members' interpretation of the assessment results:** The assessment committee finds no areas of concern or of action to bring to the general faculty indicated by this assessment.

#### **Dissemination of Findings**

Describe the individual(s) or committee responsible for reviewing and interpreting assessment data: Tom Spector, Committee Chair, Professor, Architecture. John Phillips Associate Professor, Architectural Engineering. Jeanne Homer, Associate Professor, Architecture. Khaled Mansy, Professor, Architecture. Christina McCoy, Assistant Professor, Architectural Engineering. Professor Suzanne Bilbeisi, School Head.

Describe the process for sharing and discussing assessment findings with program faculty: Assessment results, possible areas

of concern and discussion of new forms of assessment are discussed with school faculty at an annual faculty meeting.

#### **Program Improvements Based on Assessment**

Based on data collected this year, what changes are being considered or planned for the program?: There are no planned program changes based on the assessment

Based on this year's findings, what (if any) changes are planned for the assessment process?: The assessment committee is still gathering several years of data on alumni performance on the Fundamentals of Engineering (FE) Exam for possible inclusion in assessment. Due to the small number of graduates taking the exam in any given year, meaningful data will take several years to accumulate. The committee will assess the growing body of data for using this possible source of assessment.

**Describe the process for implementing these changes/planned program improvements:** Assessment committee can collect published results annually and compare them against results from peer institutions. Before implementing changes, the committee reports to and seeks the direction from the entire school faculty.

Program Improvements Made in the Last Year: Curriculum Improvements

**Goals for the Coming Year:** The assessment committee will consult with the AE faculty to determine if any assessment changes are needed based on planned curriculum changes.

Is this Summary Report Complete?: Yes

List all individuals associated with this report preparation: Tom Spector

# **Outcome: Creative Problem Solving**

Ability to solve engineering problems (creative problem solving)

Outcome Status: Active

Planned Assessment Year: 2016 - 2017, 2017 - 2018, 2018 - 2019

Start Date: 09/03/2018 Outcome Type: Skills

#### Assessment Methods

**Capstone Assignment** - An invited jury of practicing professionals assessed the fifth year students in Arch 5226 on two occasions during the semester: at schematic design juries in February and again at the Design Development juries in April. They review and assess the entire class's work. The professionals were asked to assess student proficiency at Learning Outcome 1. Three questions which go into making a composite score for this learning outcome were:

- The student revealed an understanding of relevant structural system issues.
- The student revealed the ability to develop a structural system.
- The student revealed the ability to use tools necessary for engineering practice. (Active)
- \* Learning Outcome Goal/Benchmark: We consider a composite average of 3.5 or better to indicate adequate performance for the students as a whole. A score of 3 3.5 merits concern. A score less than 3.0 merits action.

**Timeline for Assessment:** twice during the spring semester every year.

#### Related Items

Oklahoma State University Strategic Plan

**Core Goal 1: Academic Excellence -** C. Effectively assess student learning and provide resources for improving outcomes at the undergraduate, graduate, and professional levels

### **Outcome: Communication**

Ability to communicate ideas effectively

Outcome Status: Active

Planned Assessment Year: 2016 - 2017, 2017 - 2018, 2018 - 2019

Start Date: 09/03/2018 Outcome Type: Skills

#### Assessment Methods

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**Course Project -** A jury of invited professionals fills out an assessment form on each student. (Active)

\* Learning Outcome Goal/Benchmark: A score of 3.5 is considered by the assessment committee to be satisfactory. A score of 3-3.5 merits concern and a score below 3 merits action.

Timeline for Assessment: Yearly

#### Related Items

Oklahoma State University Strategic Plan

**Core Goal 1: Academic Excellence -** C. Effectively assess student learning and provide resources for improving outcomes at the undergraduate, graduate, and professional levels

# **Outcome: Design Process**

Understanding the overall engineering design process

Outcome Status: Active

Planned Assessment Year: 2016 - 2017, 2017 - 2018, 2018 - 2019

Start Date: 09/03/2018 Outcome Type: Knowledge

#### Assessment Methods

**Course Project -** invited professional jurors evaluate each 5th year engineering student's work in the capstone Comprehensive Design Studio. (Active)

\* Learning Outcome Goal/Benchmark: We regard an overall score of 3.5 or greater to be evidence of satisfactory learning outcomes. A score of 3.0-3.5 is an area of concern, and a score below 3.0 is an area requiring action.

Timeline for Assessment: Yearly

#### Related Items

Oklahoma State University Strategic Plan

**Core Goal 1: Academic Excellence -** C. Effectively assess student learning and provide resources for improving outcomes at the undergraduate, graduate, and professional levels