5-Year Plan for Assessment of Program Learning Outcomes

AAS Degree

| 1. Program Information |
|---|
| Division: |
| Science, Engineering and Mathematics |
| Name of Program: |
| AAS Engineering Technology |
| |
| Certificates Embedded in Program: |
| None |
| Assessment Plan for Following Five Years: |
| FY 2020 – FY 2024 (July 1, 2019 – June 30, 2024) |
| Faculty Who Prepared Plan: Program Chair: Dr. Max Simmons |
| Faculty: |
| |
| Date Submitted by Faculty: |
| November 16, 2018 – first version submitted for Academic Outcomes Assessment Committee April 19, 2019 – revised version submitted to division dean for review |
| |
| Division Dean: |
| Dr. Max Simmons |
| |
| Date Submitted by Dean: |
| May 3, 2019 |
| |
| II. Institutional Mission or End Statement Reference: |
| Institutional Mission: |

OCCC provides broad access to learning that empowers students to complete a certificate or degree and that enriches the lives of everyone in our community.

ENDS

- Access: Our community has broad access to valuable certificate and degree programs, and non-credit educational opportunities and events.
- Student Success: Our students successfully complete their academic courses, persist in college and earn certificates or degrees at OCCC or another institution.
- Workforce Development: Our graduates earn higher-level degrees or are successful in technical and professional careers.
- Community Development: Our community's quality of life is enriched through our educational, artistic and recreational programs and events.

III. Program Learning Outcomes:

List all program learning outcomes for the program designated above. There should be 5-10 program learning outcomes total.

Under each outcome, list the measures. There should be at least 1 measure per outcome, but there can be up to 3 measures per outcome.

Indicate which outcome(s) will be assessed in each year of this plan. Only 1-3 outcome(s) should be assessed in a particular year.

All learning outcomes for this program will be assessed over the five-year cycle of this plan. Annual reports will evaluate only the outcome(s) designated for that year. The program review (or accreditation process for programs with external accreditation) will report on all program learning outcomes.

Outcome 1 (required):

Critical Thinking: Students will demonstrate the ability to think critically: to analyze, critique, and draw reasoned conclusions.

| Measure 1 (required): General Education Assessment Results for Critical Thinking | ⊠Direct □Indirect (required) | Anticipated Target (required): The goal for General Education Assessment of Critical Thinking is that 70% of artifacts submitted for the category of Critical Thinking are rated as competent by a team of faculty | | |
|--|------------------------------|--|--|--|
| | | reviewers. Competence is measured by a score of 3 or better on the Critical Thinking Scoring Rubric. | | |
| Measure 2: | □Direct □Indirect | Anticipated Target: | | |
| Measure 3: | □Direct □Indirect | Anticipated Target: | | |
| Year Outcome 1 will be assessed (required): | | | | |
| Outcome 1 will be measured annually since | | | | |
| General Education results are measured annually. | | | | |
| Outcome 2 (required): | | | | |
| Mathematical Methods: Students will demonstrate analytical reasoning and logic skills by using mathematical methods and tools. | | | | |

| Measure 1 (required): General Education Assessment Results for Mathematical Methods | ⊠Direct □Indirect (required) | Anticipated Target (required): The goal for General Education Assessment of Mathematical Methods is that 70% of artifacts submitted for the category of Mathematical Methods are rated as competent by a team of faculty reviewers. Competence is measured by a score of "competent" on mathematical properties, application of properties/calculations, and conclusion/evaluation. |
|---|------------------------------|---|
| Measure 2: | □Direct □Indirect | Anticipated Target: |
| Measure 3: | □Direct □Indirect | Anticipated Target: |

Year Outcome 2 will be assessed (required):

Outcome
2 will be
measured
annually
since
General
Education
results
are
measured
annually.

Outcome 3 (required):

| Human Heritage, Culture, and Institutions: Students will demonstrate an understanding of the ideas, events, and values that have helped shape global communities. | | | |
|---|-----------------------|---|--|
| Measure 1 (required): General | ⊠Direct | Anticipated Target (required): The goal for | |
| Education Assessment Results | □ Indirect (required) | General Education Assessment of Human Heritage, Culture, and Institutions is that 70% artifacts submitted for this category are rated as competent by a team of faculty reviewers. Competence is measured by a score of 1 or better on the relevant categories on the Human Heritage, Culture, and Institutions Rubric. | |
| Measure 2: | □Direct □Indirect | Anticipated Target: | |
| Measure 3: | □Direct □Indirect | Anticipated Target: | |

Year Outcome 3 will be assessed (required):

Outcome
3 will be
measured
annually
since
General
Education
results
are
measured
annually.

Outcome 4 (required):

| Writing: Students will demonstrate effective writing skills. | | | |
|---|------------------------------|--|--|
| Measure 1 (required): General Education Assessment Results | ⊠Direct □Indirect (required) | Anticipated Target (required): The goal for General Education Assessment of Writing is that 70% of artifacts submitted for this category are rated as competent by a team of faculty reviewers. Competence is measured by a score of 1 or better for all categories on the Writing Rubric. | |
| Measure 2: | □Direct □Indirect | Anticipated Target: | |
| Measure 3: | □Direct □Indirect | Anticipated Target: | |

Year Outcome 4 will be assessed (required):

Outcome
4 will be
measured
annually
since
General
Education
results
are

| measured |
|-----------|
| annually. |

Outcome 5 (required):

| Public Speaking: Students will demon | strate effectiv | ve public speaking skills. |
|---|------------------------------|---|
| Measure 1 (required): General Education Assessment Results | ⊠Direct □Indirect (required) | Anticipated Target (required): The goal for General Education Assessment of Public Speaking is that 70% of artifacts submitted for this category are rated as competent by a team of faculty reviewers. Competence is measured by a total score of 18 points or higher on the Public Speaking rubric. |
| Measure 2: | □Direct □Indirect | Anticipated Target: |
| Measure 3: | □Direct □Indirect | Anticipated Target: |

Year Outcome 5 will be assessed (required):

Outcome 5 will be measured annually since General

| Education |
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| results |
| are |
| measured |
| annually. |

(Only 5 outcomes are required. Additional outcomes from 6 through 10 are available if needed.)

Students will complete the national FAA (Federal Aviation Administration) Airframe and

Outcome 6:

Measure 3:

| Technology degree. | | | |
|---|------------------------------|---|--|
| Measure 1 (required): Number of graduates from the degree program | ⊠Direct □Indirect (required) | Anticipated Target (required): All students who graduate with an AAS Engineering Technology degree will complete the national FAA (Federal Aviation Administration) Airframe and Powerplant certification. *Note: Students who do not complete the certification process are not eligible for receiving PLA credit, and are therefore ineligible for graduation. | |
| Measure 2: | □Direct □Indirect | Anticipated Target: | |

☐Direct☐Indirect

Anticipated Target:

| Year Outcome 6 will be assessed (requ | ired): | |
|---------------------------------------|------------|--------------------------------|
| Outcome | | |
| 6 will be measured | | |
| annually | | |
| since | | |
| graduates | | |
| are measured | | |
| annually. | | |
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| Outcome 7: | | |
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| Measure 1 (required): | □Direct | Anticipated Target (required): |
| | □Indirect | |
| | (required) | |
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| | | |
| Measure 2: | □Direct | Anticipated Target: |
| | □Indirect | |
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| | | |
| Measure 3: | □Direct | Anticipated Target: |
| | □Indirect | |
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Year Outcome 7 will be assessed (required):

| Outcome 8: | | | |
|---------------------------------------|------------------------------|--------------------------------|--|
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| Measure 1 (required): | □Direct □Indirect (required) | Anticipated Target (required): | |
| Measure 2: | □Direct □Indirect | Anticipated Target: | |
| Measure 3: | □Direct | Anticipated Target: | |
| Wedsure 3. | □Indirect | Amticipated Target. | |
| | | | |
| Year Outcome 8 will be assessed (requ | ired): | | |
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| Outcome 9: | | | |
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| Measure 1 (required): | □Direct □Indirect (required) | Anticipated Target (required): | | |
|--|------------------------------|--------------------------------|--|--|
| Measure 2: | □Direct □Indirect | Anticipated Target: | | |
| Measure 3: | □Direct □Indirect | Anticipated Target: | | |
| Year Outcome 9 will be assessed (required): Outcome 10: | | | | |
| | | | | |
| Measure 1 (required): | □Direct □Indirect (required) | | | |

| Measure 2: | □ Direct □ Indirect | Anticipated Target: |
|---------------------------------------|---------------------|---------------------|
| Measure 3: | □Direct □Indirect | Anticipated Target: |
| Year Outcome 10 will be assessed (req | uired): | |

IV. Program Learning Outcomes and Courses

Please check the program learning outcome associated with the courses in the program.

All core courses must address at least 1 program learning outcome.

Support courses should address outcomes. Some support courses are required by a university for transfer. Please list and check any support courses applicable to the outcome.

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|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Program | 01 | O 2 | 03 | O 4 | O 5 | 06 | O 7 | O 8 | 09 | O 10 |
| Learning | | | | | | | | | | |
| Outcomes: | | | | | | | | | | |
| Core Courses: | | | | | | | | | | |
| CAT 1043 | X | | | | | | | | | |
| CAT 1214 | X | | | | | | | | | |
| ENGR 1113 | X | X | | | | | | | | |
| MATH 1513 | X | X | | | | | | | | |
| OR MATH | | | | | | | | | | |
| 1533 | | | | | | | | | | |
| MATH 1613 | X | X | | | | | | | | |
| ENGL 1113 | X | | | X | | | | | | |
| ENGL 1213 OR | X | | | X | X | | | | | |
| ENGL 1233 | | | | | | | | | | |
| POLSC 1113 | X | | X | | | | | | | |
| HIST 1483 OR | X | | X | | | | | | | |
| HIST 1493 | | | | | | | | | | |
| PSY 1113 | X | | X | | | | | | | |
| CS 1103 | X | X | | | | | | | | |

| Gen Ed Elective (Outcome dependent on chosen course.) | | | | | |
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| Support Courses: | | | | | |
| (Support courses are obtained through successful completion of the FAA (Federal Aviation Administration) Airframe and Powerplant certification for Prior Learning Assessment and thus all relate to Outcome 6. | | | X | | |
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