

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2014 (*Academic year*)

UNDERGRADUATE PROGRAMS

DEPARTMENT: Aviation **DATE:** May 5, 2015

PROGRAM(S) COVERED IN REVIEW: Aviation—Air Traffic Control (ATC)

COMMITTEE MEMBER(S) CONDUCTING REVIEW: Casey Ozaki & Deborah Worley

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|------------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were goals well-articulated? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Do goals address student learning? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

A bachelors degree in Aerospace can be completed in multiple areas-- Commercial Aviation, Air Traffic Control, Flight Education, Unmanned Aircraft System Operations, and Aviation Technology Management (Airport and Aviation Management are also addressed, but are reviewed elsewhere). Student learning goals/outcomes are identified for each program and further aligned with the overall aviation program objectives, accreditor (AABI) general outcomes, and UND Essential Studies Outcomes (via charts). In general the goals were focused on learning, distinct from one another programmatically, and clear and articulate. In addition, the goals are mapped to course offerings for each program. The assessment plan is currently under revision in response to AABI changes.

In addition to the program goals, please also consider UND's institutional and Essential Studies goals for student learning (shown in alignment within parentheses) and identify which goals are similar to program goals.

- | | | |
|--------------|---|--|
| <u> X </u> | 1 | Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”) |
| <u> X </u> | 2 | Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate) |
| <u> </u> | 3 | Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage) |
| <u> X </u> | 4 | Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”) |
| <u> X </u> | 5 | Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”) |
| <u> X </u> | 6 | Diversity (“demonstrate understanding of diversity and use that understanding...”) |
| <u> X </u> | 7 | Lifelong learning (“commit themselves to lifelong learning”) |
| <u> </u> | 8 | Service/citizenship (“share responsibility both for their communities and for the world”) |

Comments regarding program goals and alignment with institutional and Essential Studies goals:

ES goals are mapped to AABI outcomes, which are mapped to the courses required in the major. It is evident that ES goals are embedded throughout coursework and programs. For simplicity sake, it may be useful to directly show how essential studies goals map onto courses.

2. ASSESSMENT METHODS

- | | | | |
|--|------------------|----------------|---------------------------|
| Were any specific assessment methods referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Were both direct and indirect assessment methods used as components of a “multiple measures” approach? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

The department reported method/ results related to three assessment tasks they undertook in the 2013-14 year:

- 1) *An assessment of the Stage Check Tasks (3 tasks) “unsatisfactory” rates across 5 courses. The 2014 data was compiled and will be compared to the 2015 data the following year. These tasks appear to be required by most if not all programs, but data is presented in aggregate and program-specific data is not provided.*
- 2) *Flight Course completion and incomplete rates across 7 courses—percentage rates are compared across four semester (two before & two after intervention) to demonstrate impact of intervention.*
- 3) *Comparison of final paper in Capstone course to examine writing ability—statistical analysis comparing mean scores across majors (Commercial Aviation, ATC, & UAS) and between 2013 and 2014. While all majors take this course only results reported for aforementioned 3 majors.*
- 4) *Student surveys, focus groups, and Course Annual Reports were also conducted.*

Methods discussed in the assessment plan and reported on the annual reports are varied, indirect and direct, and appear to be appropriate for the specific program outcomes. They reflect systemic and going assessment across the department and focuses on student learning. A chart is available that maps particular assessment techniques to individual program outcomes.

The assessment plan indicates that ATC outcomes are only assessed by one technique (AT Basics Exam), but other areas of the plan and the assessment report indicate otherwise. You may want to re-evaluate that particular chart (Program Outcomes & Assessment Techniques) for ATC.

The focus of assessment appears to be outcome and technique driven (via schedule) and also based on areas that the faculty identify as needing more inquiry, indicating systemic and organic assessment practices. The focus on assessment techniques provides a cross-program assessment of student progress that allows for the identification of patterns that may exist for students throughout their shared curriculum and on particular outcomes/tasks. The drawback to this approach may be a lack of systemic inquiry into program-specific student performance and learning, unless specifically deemed needed (e.g., a choice to focus on the UAS in 2013-14).

3. ASSESSMENT RESULTS

Were any assessment results reported?	YES <u> X </u>	NO <u> </u>	QUALIFIED Y/N <u> </u>
• If so, were the results clear in terms of how they specifically affirm achievement of goals?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• If so, were the results clear in terms of how they indicate need for improvement?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• Were the results tied to goals for student learning?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>

Comments:

It is clear that the department is engaged in relevant and specific ongoing assessment. As mentioned previously, there is a “Techniques schedule” for assessment tasks in addition to ongoing departmental assessment activities (i.e., Course Annual Reports), but it is unclear based on the assessment plan and results if individual programs are assessed regularly or only as needed.

The final Capstone course assignment assessment (of writing) singled out Commercial Aviation, Air Traffic, Control and UAS for analysis. They examined mean scores between programs and for each program from 2013 to 2014. These are the only program-specific results provided in the annual report.

It appears that each of these tasks/courses are required for most, if not all, majors, but because the majority of the results are reported in aggregate, how students from specific programs performed is not identified (apart from Task #3). Therefore, the results reported may apply to ATC students and the information in the plan ties them back to the program outcomes, but this is not as clearly addressed in the discussion of the results.

In addition to program goals, some assessment results may be applicable to institutional and Essential Studies goals. Indicate any goals for which the program presents findings, and, for indicated items, describe findings below.

- ☒ 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
☐ 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
☐ 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
☐ 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)
☐ 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
☐ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
☐ 7 Lifelong learning (“commit themselves to lifelong learning”)
☐ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to program, institutional, and Essential Studies goals:

The annual report indicates that an assessment of student writing for all majors was conducted during this review period. ATC student scores were compared to commercial aviation and UAS and from 2013 to 2014. ATC students appear to be performing relatively consistently.

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?

YES ☒ NO ☐ QUALIFIED Y/N ☐

- If so, do curricular or other improvements/changes arising from assessment results directly address goals for student learning?

YES ☐ NO ☐ QUALIFIED Y/N ☒

Comments:

Actions were reported in regard to assessment across programs, but ATC specific program outcomes were not addressed. Given the aggregate nature of the assessment, changes likely affect ATC students, but this is not explicitly stated.

SUMMARY

Strengths

Areas for Improvement

- ☒ A specific plan for assessment is in place.
☒ Student learning goals are well-articulated.
☒ Assessment methods are clearly described.
☒ Assessment methods are appropriately selected.
☐ Assessment methods are well-implemented.
☐ Direct and indirect methods are implemented.
☐ Results are reported.
☐ Results are tied to closing the loop.
 (Decision-making is tied to evidence.)

- ☐ No specific plan for assessment is in place.
☐ Student learning goals are not well-articulated.
☐ Assessment methods are not clearly described.
☐ Assessment methods are not appropriately selected.
☐ Assessment methods are not well-implemented.
☐ A single type of assessment methods predominates.
☐ No results are reported.
☐ Results are not clearly tied to closing the loop.
 (Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

From the materials provided, it is evident that systemic assessment is in place throughout the department and allows for inquiry into student performance and learning. Because the assessment reviews are conducted at the program-level the aggregated assessment results are difficult to interpret for individual programs (e.g., ATC, Commercial, Flight Education, etc. vs. all Aviation majors). You may want to consider if there is relevance to disaggregating the data at the program level. Is there individual program analysis that might be useful? For example, could it be useful to look at program-specific (e.g., ATC) students stage task performance? Specific to ATC, review the methods aligned with program learning goals for methods appropriate beyond what is currently identified.

MATERIALS REVIEWED

- ☒ Annual assessment report
☒ Annual Report (2012, 2013)
☒ Assessment plan (as posted)(including 2005 plan)

X Previous assessment review
 Other (please describe)

Reviewer(s):	Name	Casey Ozaki	Deborah Worley
	Department	Teaching & Learning	Educational Leadership
	Phone Number	7-4256	7-3140
	e-mail	carolyn.ozaki@und.edu	deborah.worley@und.edu

Section 1: Y Section 2: Y Section 3: Q Section 4: Q

Coding Key:

- Y = yes, this is done appropriately and well (bearing in mind the kind of program(s) reviewed and recognizing that assessment is a cyclical process, i.e., with additional kinds of data to be collected and analyzed in other years)
- Q = qualified yes as action or progress is apparent; however, evidence is lacking that this is completely and appropriately done
- N = no, it is unclear whether it was done at all, or it is not done in relationship to student learning

Revised Sept 24, 2014

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2013-14

GRADUATE PROGRAMS

DEPARTMENT Aviation **DATE** April 28, 2015

PROGRAM(S) COVERED IN REVIEW M.S. in Aviation

COMMITTEE MEMBER(S) CONDUCTING REVIEW Casey Ozaki & Deborah Worley

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|--------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were goals well-articulated? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Do goals address student learning? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

The department assessment plan cites three goals for student learning with several objectives listed for each goal. All goals and objectives are generally well articulated and address student learning. Goal 2, "Develop a student's higher-order thinking abilities and instill a quest for life-long learning," seem to reflect two separate objectives. The program may want to consider separating them. It appears that the assessment plan hasn't been updated since 2006, you may want to re-visit and review the plan in the near future.

2. ASSESSMENT METHODS

- | | | | |
|--|-----------------|----------------|---------------------------|
| Were any specific assessment methods referenced? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES <u> </u> | NO <u> </u> | QUALIFIED Y/N <u>X</u> |
| • Were both direct and indirect assessment methods used as components of a "multiple measures" approach? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

The department utilizes both direct and indirect assessment methods, which are aligned with specific student learning objectives. While seemingly appropriate for the goals & objectives, the plan does not specifically align the methods with the learning goals.

3. ASSESSMENT RESULTS

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|--|-----------------|----------------|---------------------------|
| Were any assessment results reported? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were the results clear in terms of how they specifically affirm achievement of goals? | YES <u> </u> | NO <u> </u> | QUALIFIED Y/N <u>X</u> |
| • If so, were the results clear in terms of how they indicate need for improvement? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Were the results tied to goals for student learning? | YES <u> </u> | NO <u> </u> | QUALIFIED Y/N <u>X</u> |

Comments:

Because of the relatively small number of students in the program, they assess their results every four years. The next review will be in 2015. The assessment results provided are from AY 2007-11, with the review having occurred in 2011. At that time, data from the student evaluations, alumni survey, and thesis/IS assessments were reviewed and areas for improvement identified. In addition, the thesis assessment rubrics from their 2013-14 rubrics were attached. The rubrics were developed to specifically address learning goals. That said, the discussion of the results specific to the learning goals stated were varied, and some connections were more easily seen than others.

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?

YES X _____ NO _____ QUALIFIED Y/N _____

- If so, do curricular or other improvements/ changes arising from assessment results directly address goals for student learning?

YES X _____ NO _____ QUALIFIED Y/N _____

Comments:

Departmental curricular changes were made to improve student learning based on the 2007-11 data analysis. We look forward to your next formal assessment in 2015.

SUMMARY

Strengths

- X A specific plan for assessment is in place.
- X Student learning goals are well-articulated.
- X Assessment methods are clearly described.
- _____ Assessment methods are appropriately selected.
- _____ Assessment methods are well-implemented.
- X Direct and indirect methods are implemented.
- _____ Results are reported.
- X Results are tied to closing the loop.
(Decision-making is tied to evidence.)

Areas for Improvement

- _____ No specific plan for assessment is in place.
- _____ Student learning goals are not well-articulated.
- _____ Assessment methods are not clearly described.
- _____ Assessment methods are not appropriately selected.
- _____ Assessment methods are not well-implemented.
- _____ A single type of assessment methods predominates.
- _____ No results are reported.
- _____ Results are not clearly tied to closing the loop.
(Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

Overall the assessment plan, learning goals, and methods are appropriate and implemented according to plan. Results from the previous review (2007-11) were provided and demonstrate attention and implementation of the assessment process and actions resulting from closing the loop. Given their 4-year review pattern, current assessment of student learning patterns were not available and are scheduled for 2015.

MATERIALS REVIEWED

- X Annual assessment report
- _____ Annual report
- X Assessment plan (as posted)
- X Previous assessment review
- _____ Other (please describe)

Reviewer(s):	Name	Casey Ozaki	Deborah Worley
	Department	Teaching & Learning	Educational Leadership
	Phone Number	7-4256	7-3140
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Section 1: Y _____ Section 2: Y _____ Section 3: Q _____ Section 4: Y _____

Coding Key:

- Y = yes, this is done appropriately and well (bearing in mind the kind of program(s) reviewed and recognizing that assessment is a cyclical process, i.e., with additional kinds of data to be collected in other years)
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Revised Sept 24, 2014

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2014 (*Academic year*)

UNDERGRADUATE PROGRAMS

DEPARTMENT: Aviation **DATE:** May 5, 2015

PROGRAM(S) COVERED IN REVIEW: Aviation—Commercial Aviation (fixed wing & helicopter)

COMMITTEE MEMBER(S) CONDUCTING REVIEW: Casey Ozaki & Deborah Worley

1. STUDENT LEARNING GOALS

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|---------------------------------------|------------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
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Comments:

A bachelors degree in Aerospace can be completed in multiple areas-- Commercial Aviation, Air Traffic Control, Flight Education, Unmanned Aircraft System Operations, and Aviation Technology Management (Airport and Aviation Management are also addressed, but are reviewed elsewhere). Student learning goals/outcomes are identified for each program and further aligned with the overall aviation program objectives, accreditor (AABI) general outcomes, and UND Essential Studies Outcomes (via charts). In general the goals were focused on learning, distinct from one another programmatically, and clear and articulate. In addition, the goals are mapped to course offerings for each program. The assessment plan is currently under revision in response to AABI changes.

In addition to the program goals, please also consider UND's institutional and Essential Studies goals for student learning (shown in alignment within parentheses) and identify which goals are similar to program goals.

- X 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
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 X 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
 X 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
 X 7 Lifelong learning (“commit themselves to lifelong learning”)
 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding program goals and alignment with institutional and Essential Studies goals:

ES goals are mapped to AABI outcomes, which are mapped to the courses required in the major. It is evident that ES goals are embedded throughout coursework and programs. For simplicity sake, it may be useful to directly show how essential studies goals map onto courses.

2. ASSESSMENT METHODS

- | | | | |
|--|------------------|----------------|---------------------------|
| Were any specific assessment methods referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
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| • Were both direct and indirect assessment methods used as components of a “multiple measures” approach? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

The department reported method/ results related to three assessment tasks they undertook in the 2013-14 year:

- 1) *An assessment of the Stage Check Tasks (3 tasks) “unsatisfactory” rates across 5 courses. The 2014 data was compiled and will be compared to the 2015 data the following year. These tasks appear to be required by most if not all programs, but data is presented in aggregate and program-specific data is not provided.*
- 2) *Flight Course completion and incomplete rates across 7 courses—percentage rates are compared across four semester (two before & two after intervention) to demonstrate impact of intervention.*
- 3) *Comparison of final paper in Capstone course to examine writing ability—statistical analysis comparing mean scores across majors (Commercial Aviation, ATC, & UAS) and between 2013 and 2014. While all majors take this course only results reported for aforementioned 3 majors.*
- 4) *Student surveys, focus groups, and Course Annual Reports were also conducted.*

Methods discussed in the assessment plan and reported on the annual reports are varied, indirect and direct, and appear to be appropriate for the specific program outcomes. They reflect systemic and going assessment across the department and focuses on student learning. A chart is available that maps particular assessment techniques to individual program outcomes.

The assessment plan indicates that Commercial Aviation outcomes are assessed by multiple techniques and this is implied in the annual report as well.

The focus of assessment appears to be outcome and technique driven (via schedule) and also based on areas that the faculty identify as needing more inquiry, indicating systemic and organic assessment practices. The focus on assessment techniques provides a cross-program assessment of student progress that allows for the identification of patterns that may exist for students throughout their shared curriculum and on particular outcomes/tasks. The drawback to this approach may be a lack of systemic inquiry into program-specific student performance and learning, unless specifically deemed needed (e.g., a choice to focus on the UAS in 2013-14).

3. ASSESSMENT RESULTS

Were any assessment results reported?	YES <u> X </u>	NO <u> </u>	QUALIFIED Y/N <u> </u>
• If so, were the results clear in terms of how they specifically affirm achievement of goals?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• If so, were the results clear in terms of how they indicate need for improvement?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• Were the results tied to goals for student learning?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>

Comments:

It is clear that the department is engaged in relevant and specific ongoing assessment. As mentioned previously, there is a “Techniques schedule” for assessment tasks in addition to ongoing departmental assessment activities (i.e., Course Annual Reports), but it is unclear based on the assessment plan and results if individual programs are assessed regularly or only as needed.

The final Capstone course assignment assessment (of writing) singled out Commercial Aviation, Air Traffic, Control and UAS for analysis. They examined mean scores between programs and for each program from 2013 to 2014. The annual reports also stated that the focus groups focused on the helicopter program (in addition to the living learning & UAS programs), but the results were not reported.

It appears that each of these tasks/courses are required for most, if not all, majors, but because the majority of the results are reported in aggregate, how students from specific programs performed is not identified (apart from Task #3). Therefore, the results reported may apply to Commercial Aviation students and the information in the plan ties them back to the program outcomes, but this is not as clearly addressed in the discussion of the results.

In addition to program goals, some assessment results may be applicable to institutional and Essential Studies goals. Indicate any goals for which the program presents findings, and, for indicated items, describe findings below.

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☐ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
☐ 7 Lifelong learning (“commit themselves to lifelong learning”)
☐ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to program, institutional, and Essential Studies goals:

The annual report indicates that an assessment of student writing for all majors was conducted during this review period. Commercial Aviation student scores were compared to commercial aviation and UAS and from 2013 to 2014. Commercial Aviation showed a significant increase in mean scores between years.

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?

YES ☒ NO ☐ QUALIFIED Y/N ☐

- If so, do curricular or other improvements/changes arising from assessment results directly address goals for student learning?

YES ☐ NO ☐ QUALIFIED Y/N ☒

Comments:

Actions were reported in regard to assessment across programs, but Commercial Aviation specific program outcomes were not addressed. Given the aggregate nature of the assessment, changes likely affect these students, but this is not explicitly stated.

SUMMARY

Strengths

Areas for Improvement

- ☒ A specific plan for assessment is in place.
☒ Student learning goals are well-articulated.
☒ Assessment methods are clearly described.
☒ Assessment methods are appropriately selected.
☐ Assessment methods are well-implemented.
☐ Direct and indirect methods are implemented.
☐ Results are reported.
☐ Results are tied to closing the loop.
 (Decision-making is tied to evidence.)

- ☐ No specific plan for assessment is in place.
☐ Student learning goals are not well-articulated.
☐ Assessment methods are not clearly described.
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☐ A single type of assessment methods predominates.
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OVERALL SUMMARY AND RECOMMENDATIONS:

From the materials provided, it is evident that systemic assessment is in place throughout the department and allows for inquiry into student performance and learning. Because the assessment reviews are conducted at the program-level the aggregated assessment results are difficult to interpret for individual programs (e.g., ATC, Commercial, Flight Education, etc. vs. all Aviation majors). You may want to consider if there is relevance to disaggregating the data at the program level. Is there individual program analysis that might be useful? For example, could it be useful to look at program-specific (e.g., ATC) students stage task performance?

MATERIALS REVIEWED

- ☒ Annual assessment report
☒ Annual Report (2012, 2013)
☒ Assessment plan (as posted)(including 2005 plan)
☒ Previous assessment review

_____ Other (please describe)

Reviewer(s):	Name	Casey Ozaki	Deborah Worley
	Department	Teaching & Learning	Educational Leadership
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Section 1: Y Section 2: Y Section 3: Q Section 4: Q

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Revised Sept 24, 2014

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2014 *(Academic year)*

UNDERGRADUATE PROGRAMS

DEPARTMENT: Aviation **DATE:** May 5, 2015

PROGRAM(S) COVERED IN REVIEW: Aviation—Flight Education

COMMITTEE MEMBER(S) CONDUCTING REVIEW: Casey Ozaki & Deborah Worley

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|------------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
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Comments:

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| <u> X </u> | 7 | Lifelong learning (“commit themselves to lifelong learning”) |
| <u> </u> | 8 | Service/citizenship (“share responsibility both for their communities and for the world”) |

Comments regarding program goals and alignment with institutional and Essential Studies goals:

ES goals are mapped to AABI outcomes, which are mapped to the courses required in the major. It is evident that ES goals are embedded throughout coursework and programs. For simplicity sake, it may be useful to directly show how essential studies goals map onto courses.

2. ASSESSMENT METHODS

- | | | | |
|--|------------------|----------------|---------------------------|
| Were any specific assessment methods referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Were both direct and indirect assessment methods used as components of a “multiple measures” approach? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

The department reported method/ results related to three assessment tasks they undertook in the 2013-14 year:

- 1) *An assessment of the Stage Check Tasks (3 tasks) “unsatisfactory” rates across 5 courses. The 2014 data was compiled and will be compared to the 2015 data the following year. These tasks appear to be required by most if not all programs, but data is presented in aggregate and program-specific data is not provided.*
- 2) *Flight Course completion and incomplete rates across 7 courses—percentage rates are compared across four semester (two before & two after intervention) to demonstrate impact of intervention.*
- 3) *Comparison of final paper in Capstone course to examine writing ability—statistical analysis comparing mean scores across majors (Commercial Aviation, ATC, & UAS) and between 2013 and 2014. While all majors take this course only results reported for aforementioned 3 majors.*
- 4) *Student surveys, focus groups, and Course Annual Reports were also conducted.*

Methods discussed in the assessment plan and reported on the annual reports are varied, indirect and direct, and appear to be appropriate for the specific program outcomes. They reflect systemic and going assessment across the department and focuses on student learning. A chart is available that maps particular assessment techniques to individual program outcomes.

The assessment plan indicates that Flight Education outcomes are assessed by multiple techniques and this appears to be implied in the annual report as well.

The focus of assessment appears to be outcome and technique driven (via schedule) and also based on areas that the faculty identify as needing more inquiry, indicating systemic and organic assessment practices. The focus on assessment techniques provides a cross-program assessment of student progress that allows for the identification of patterns that may exist for students throughout their shared curriculum and on particular outcomes/tasks. The drawback to this approach may be a lack of systemic inquiry into program-specific student performance and learning, unless specifically deemed needed (e.g., a choice to focus on the UAS in 2013-14).

3. ASSESSMENT RESULTS

Were any assessment results reported?	YES <u>X</u>	NO <u> </u>	QUALIFIED Y/N <u> </u>
• If so, were the results clear in terms of how they specifically affirm achievement of goals?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• If so, were the results clear in terms of how they indicate need for improvement?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• Were the results tied to goals for student learning?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>

Comments:

It is clear that the department is engaged in relevant and specific ongoing assessment. As mentioned previously, there is a “Techniques schedule” for assessment tasks in addition to ongoing departmental assessment activities (i.e., Course Annual Reports), but it is unclear based on the assessment plan and results if individual programs are assessed regularly or only as needed.

It appears that each of these tasks/courses are required for most, if not all, majors, but because the majority of the results are reported in aggregate, how students from specific programs performed is not identified (apart from Task #3). Therefore, the results reported may apply to Flight Education students and the information in the plan ties them back to the program outcomes, but this is not as clearly addressed in the discussion of the results..

In addition to program goals, some assessment results may be applicable to institutional and Essential Studies goals. Indicate any goals for which the program presents findings, and, for indicated items, describe findings below.

- X 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
- 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
- 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
- 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)

- _____ 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
 _____ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
 _____ 7 Lifelong learning (“commit themselves to lifelong learning”)
 _____ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to program, institutional, and Essential Studies goals:

The annual report indicates that an assessment of student writing for all majors was conducted during this review period, but results for Flight Education students were not reported.

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?

YES X NO QUALIFIED Y/N

- If so, do curricular or other improvements/ changes arising from assessment results directly address goals for student learning?

YES NO QUALIFIED Y/N X

Comments:

Actions were reported in regard to assessment across programs, but Flight Education specific program outcomes were not addressed. Given the aggregate nature of the assessment, changes likely affect these students, but this is not explicitly stated.

SUMMARY

Strengths

Areas for Improvement

- X A specific plan for assessment is in place.
 X Student learning goals are well-articulated.
 X Assessment methods are clearly described.
 X Assessment methods are appropriately selected.
 Assessment methods are well-implemented.
 Direct and indirect methods are implemented.
 Results are reported.
 Results are tied to closing the loop.
 (Decision-making is tied to evidence.)

- No specific plan for assessment is in place.
 Student learning goals are not well-articulated.
 Assessment methods are not clearly described.
 Assessment methods are not appropriately selected.
 Assessment methods are not well-implemented.
 A single type of assessment methods predominates.
 No results are reported.
 Results are not clearly tied to closing the loop.
 (Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

From the materials provided, it is evident that systemic assessment is in place throughout the department and allows for inquiry into student performance and learning. Because the assessment reviews are conducted at the program-level the aggregated assessment results are difficult to interpret for individual programs (e.g., ATC, Commercial, Flight Education, etc. vs. all Aviation majors). You may want to consider if there is relevance to disaggregating the data at the program level. Is there individual program analysis that might be useful? For example, could it be useful to look at program-specific (e.g., ATC) students stage task performance?

MATERIALS REVIEWED

- X Annual assessment report
 X Annual Report (2012, 2013)
 X Assessment plan (as posted)(including 2005 plan)
 X Previous assessment review
 Other (please describe)

Reviewer(s):	Name	Casey Ozaki	Deborah Worley
	Department	Teaching & Learning	Educational Leadership
	Phone Number	7-4256	7-3140
	e-mail	carolyn.ozaki@und.edu	deborah.worley@und.edu

Section 1: Y Section 2: Y Section 3: Q Section 4: Q

Coding Key:

- Y = yes, this is done appropriately and well (bearing in mind the kind of program(s) reviewed and recognizing that assessment is a cyclical process, i.e., with additional kinds of data to be collected and analyzed in other years)
- Q = qualified yes as action or progress is apparent; however, evidence is lacking that this is completely and appropriately done
- N = no, it is unclear whether it was done at all, or it is not done in relationship to student learning

Revised Sept 24, 2014

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2014 (*Academic year*)

UNDERGRADUATE PROGRAMS

DEPARTMENT: Joint CoBPA & JDOSAS

DATE: April 21, 2015

PROGRAM(S) COVERED IN REVIEW: Aviation Management

COMMITTEE MEMBER(S) CONDUCTING REVIEW: Bradley Myers & Devon Hansen

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|--------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were goals well-articulated? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Do goals address student learning? | YES <u>X</u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

The degree in Aviation Management is offered as a joint program by the College of Business and Public Administration and the Odegard School of Aerospace Studies. A singular assessment plan exists for both the Airport Management and Aviation Management majors with 3 common learning goals and one separate learning goal for each major. The plan identifies seven common learning objectives and 3 learning objectives for the Aviation Management major. The plan contains an extensive list of courses and assessment methods that should be used to gather information on specific learning objectives

Although the plan purports to provide a system that will allocate to the obligation for assessment to the colleges through the use of an “assessment team,” it does not appear as if that plan has been followed in this regard. Each of the last three annual reports made by the Management department of the CoBPA reports that “Aviation-related data. . .[sic] were collected in the Odegard School and are being used there,” but no such assessment is reported by any of the departments in that college.

In addition to the program goals, please also consider UND’s institutional and Essential Studies goals for student learning (shown in alignment within parentheses) and identify which goals are similar to program goals.

- | | | |
|--------------|---|--|
| <u> </u> | 1 | Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”) |
| <u> </u> | 2 | Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate) |
| <u> </u> | 3 | Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage) |
| <u> </u> | 4 | Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”) |
| <u> X </u> | 5 | Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”) |
| <u> </u> | 6 | Diversity (“demonstrate understanding of diversity and use that understanding...”) |
| <u> </u> | 7 | Lifelong learning (“commit themselves to lifelong learning”) |
| <u> </u> | 8 | Service/citizenship (“share responsibility both for their communities and for the world”) |

Comments regarding program goals and alignment with institutional and Essential Studies goals:

Both critical and creative thinking also appear to be necessary to achieve some of the objectives identified, but those skills have not been specifically identified as learning objectives.

2. ASSESSMENT METHODS

- | | | | |
|--|-----------------|-------------|---------------------------|
| Were any specific assessment methods referenced? | YES <u> </u> | NO <u>X</u> | QUALIFIED Y/N <u> </u> |
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES <u> </u> | NO <u>X</u> | QUALIFIED Y/N <u> </u> |
| • Were both direct and indirect assessment methods used as components of a “multiple measures” approach? | YES <u> </u> | NO <u>X</u> | QUALIFIED Y/N <u> </u> |

Comments:

Although the plan identifies potential assessment methods that could be used in specifically identified course, it does not appear that any of the methods have been conducted in recent years. The Management department reports that it administered the Survey of Student Perception of Skills Improved, but says that the number of respondents from the major were “too small to be useful in drawing inferences.

3. ASSESSMENT RESULTS

Were any assessment results reported?	YES_____	NO <u>X</u>	QUALIFIED Y/N _____
• If so, were the results clear in terms of how they specifically affirm achievement of goals?	YES_____	NO <u>X</u>	QUALIFIED Y/N _____
• If so, were the results clear in terms of how they indicate need for improvement?	YES_____	NO <u>X</u>	QUALIFIED Y/N _____
• Were the results tied to goals for student learning?	YES_____	NO <u>X</u>	QUALIFIED Y/N _____

Comments:

In addition to program goals, some assessment results may be applicable to institutional and Essential Studies goals. Indicate any goals for which the program presents findings, and, for indicated items, describe findings below.

- _____ 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
- _____ 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
- _____ 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
- _____ 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)
- _____ 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
- _____ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
- _____ 7 Lifelong learning (“commit themselves to lifelong learning”)
- _____ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to program, institutional, and Essential Studies goals:

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?	YES_____	NO <u>X</u>	QUALIFIED Y/N _____
• If so, do curricular or other improvements/changes arising from assessment results directly address goals for student learning?	YES_____	NO_____	QUALIFIED Y/N _____

Comments:

SUMMARY

Strengths

- X A specific plan for assessment is in place.
- _____ Student learning goals are well-articulated.
- _____ Assessment methods are clearly described.
- _____ Assessment methods are appropriately selected.
- _____ Assessment methods are well-implemented.
- _____ Direct and indirect methods are implemented.
- _____ Results are reported.
- _____ Results are tied to closing the loop.
- _____ (Decision-making is tied to evidence.)

Areas for Improvement

- _____ No specific plan for assessment is in place.
- _____ Student learning goals are not well-articulated.
- _____ Assessment methods are not clearly described.
- _____ Assessment methods are not appropriately selected.
- _____ Assessment methods are not well-implemented.
- _____ A single type of assessment methods predominates.
- _____ No results are reported.
- _____ Results are not clearly tied to closing the loop.
- _____ (Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

It appears that assessment of student learning in the department has fallen through the cracks. The most likely explanation for this is that fact that no one department has sole responsibility for assessing student learning. While the vision of the plan that the Management Department and the Odegard School would take responsibility for assessing the learning objectives tied to their disciplines appears sound, it is apparent that a single party should have the obligation to collect, evaluate report the assessment results.

MATERIALS REVIEWED

☒ Annual assessment report
☒ Annual Report (2012, 2013)
☒ Assessment plan (as posted)(including 2005 plan)
☐ Previous assessment review
☐ Other (please describe)

Reviewer(s):	Name	Bradley Myers	Devon Hansen
	Department	Law School	Geography
	Phone Number	7-2228	7-4587
	e-mail	myers@law.und.edu	devon.hansen@und.edu

Section 1: Y Section 2: Q Section 3: N Section 4: N

Coding Key:

- Y = yes, this is done appropriately and well (bearing in mind the kind of program(s) reviewed and recognizing that assessment is a cyclical process, i.e., with additional kinds of data to be collected and analyzed in other years)
- Q = qualified yes as action or progress is apparent; however, evidence is lacking that this is completely and appropriately done
- N = no, it is unclear whether it was done at all, or it is not done in relationship to student learning

Revised Sept 24, 2014

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2014 *(Academic year)*

UNDERGRADUATE PROGRAMS

DEPARTMENT: Aviation **DATE:** May 5, 2015

PROGRAM(S) COVERED IN REVIEW: Aviation—Unmanned Aircraft Systems (UAS)

COMMITTEE MEMBER(S) CONDUCTING REVIEW: Casey Ozaki & Deborah Worley

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|------------------|----------------|---------------------------|
| • Were any goals referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were goals well-articulated? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Do goals address student learning? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

A bachelors degree in Aerospace can be completed in multiple areas-- Commercial Aviation, Air Traffic Control, Flight Education, Unmanned Aircraft System Operations, and Aviation Technology Management (Airport and Aviation Management are also addressed, but are reviewed elsewhere). Student learning goals/outcomes are identified for each program and further aligned with the overall aviation program objectives, accreditor (AABI) general outcomes, and UND Essential Studies Outcomes (via charts). In general the goals were focused on learning, distinct from one another programmatically, and clear and articulate. In addition, the goals are mapped to course offerings for each program. The assessment plan is currently under revision in response to AABI changes.

In addition to the program goals, please also consider UND's institutional and Essential Studies goals for student learning (shown in alignment within parentheses) and identify which goals are similar to program goals.

- X 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
 X 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
 X 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)
 X 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
 X 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
 X 7 Lifelong learning (“commit themselves to lifelong learning”)
 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding program goals and alignment with institutional and Essential Studies goals:

ES goals are mapped to AABI outcomes, which are mapped to the courses required in the major. It is evident that ES goals are embedded throughout coursework and programs. For simplicity sake, it may be useful to directly show how essential studies goals map onto courses.

2. ASSESSMENT METHODS

- | | | | |
|--|------------------|----------------|---------------------------|
| Were any specific assessment methods referenced? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |
| • Were both direct and indirect assessment methods used as components of a “multiple measures” approach? | YES <u> X </u> | NO <u> </u> | QUALIFIED Y/N <u> </u> |

Comments:

The department reported method/ results related to three assessment tasks they undertook in the 2013-14 year:

- 1) *An assessment of the Stage Check Tasks (3 tasks) “unsatisfactory” rates across 5 courses. The 2014 data was compiled and will be compared to the 2015 data the following year. These tasks appear to be required by most if not all programs, but data is presented in aggregate and program-specific data is not provided.*
- 2) *Flight Course completion and incomplete rates across 7 courses—percentage rates are compared across four semester (two before & two after intervention) to demonstrate impact of intervention.*
- 3) *Comparison of final paper in Capstone course to examine writing ability—statistical analysis comparing mean scores across majors (Commercial Aviation, ATC, & UAS) and between 2013 and 2014. While all majors take this course only results reported for aforementioned 3 majors.*
- 4) *Student surveys, focus groups, and Course Annual Reports were also conducted.*

Methods discussed in the assessment plan and reported on the annual reports are varied, indirect and direct, and appear to be appropriate for the specific program outcomes. They reflect systemic and going assessment across the department and focuses on student learning. A chart is available that maps particular assessment techniques to individual program outcomes.

The assessment plan indicates that UAS outcomes are assessed by multiple techniques and this is implied in the annual report as well.

The focus of assessment appears to be outcome and technique driven (via schedule) and also based on areas that the faculty identify as needing more inquiry, indicating systemic and organic assessment practices. The focus on assessment techniques provides a cross-program assessment of student progress that allows for the identification of patterns that may exist for students throughout their shared curriculum and on particular outcomes/tasks. The drawback to this approach may be a lack of systemic inquiry into program-specific student performance and learning, unless specifically deemed needed (e.g., a choice to focus on the UAS in 2013-14).

3. ASSESSMENT RESULTS

Were any assessment results reported?	YES <u> X </u>	NO <u> </u>	QUALIFIED Y/N <u> </u>
• If so, were the results clear in terms of how they specifically affirm achievement of goals?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• If so, were the results clear in terms of how they indicate need for improvement?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>
• Were the results tied to goals for student learning?	YES <u> </u>	NO <u> </u>	QUALIFIED Y/N <u> X </u>

Comments:

It is clear that the department is engaged in relevant and specific ongoing assessment. As mentioned previously, there is a “Techniques schedule” for assessment tasks in addition to ongoing departmental assessment activities (i.e., Course Annual Reports), but it is unclear based on the assessment plan and results if individual programs are assessed regularly or only as needed.

The final Capstone course assignment assessment (of writing) singled out Commercial Aviation, Air Traffic, Control and UAS for analysis. They examined mean scores between programs and for each program from 2013 to 2014.

It appears that each of these tasks/courses are required for most, if not all, majors, but because the majority of the results are reported in aggregate, how students from specific programs performed is not identified (apart from Task #3). Therefore, the results reported may apply to Commercial Aviation students and the information in the plan ties them back to the program outcomes, but this is not as clearly addressed in the discussion of the results.

In addition to program goals, some assessment results may be applicable to institutional and Essential Studies goals. Indicate any goals for which the program presents findings, and, for indicated items, describe findings below.

- ☒ 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
☐ 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
☐ 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
☐ 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)
☐ 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
☐ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
☐ 7 Lifelong learning (“commit themselves to lifelong learning”)
☐ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to program, institutional, and Essential Studies goals:

The annual report indicates that an assessment of student writing for all majors was conducted during this review period. Commercial Aviation student scores were compared to Commercial Aviation and UAS and from 2013 to 2014. UAS mean scores dipped in the second year, but due to low numbers the program indicated that they will conduct follow-up in 2014-15.

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?

YES ☒ NO ☐ QUALIFIED Y/N ☐

- If so, do curricular or other improvements/changes arising from assessment results directly address goals for student learning?

YES ☐ NO ☐ QUALIFIED Y/N ☒

Comments:

Actions were reported in regard to assessment across programs, but UAS specific program outcomes were not addressed. Given the aggregate nature of the assessment, changes likely affect these students, but this is not explicitly stated. In addition, the bi-annual student surveys and focus groups were administered and a review of the results led the faculty to determine that an extensive UAS program review was needed and is being conducted in the 2014-15 year.

SUMMARY

Strengths

- ☒ A specific plan for assessment is in place.
☒ Student learning goals are well-articulated.
☒ Assessment methods are clearly described.
☒ Assessment methods are appropriately selected.
☐ Assessment methods are well-implemented.
☐ Direct and indirect methods are implemented.
☐ Results are reported.
☐ Results are tied to closing the loop.
☐ (Decision-making is tied to evidence.)

Areas for Improvement

- ☐ No specific plan for assessment is in place.
☐ Student learning goals are not well-articulated.
☐ Assessment methods are not clearly described.
☐ Assessment methods are not appropriately selected.
☐ Assessment methods are not well-implemented.
☐ A single type of assessment methods predominates.
☐ No results are reported.
☐ Results are not clearly tied to closing the loop.
☐ (Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

From the materials provided, it is evident that systemic assessment is in place throughout the department and allows for inquiry into student performance and learning. Because the assessment reviews are conducted at the program-level the aggregated assessment results are difficult to interpret for individual programs (e.g., ATC, Commercial, Flight Education, etc. vs. all Aviation majors). You may want to consider if there is relevance to disaggregating the data at the program level. Is there individual program analysis that might be useful? For example, could it be useful to look at program-specific (e.g., ATC) students stage task performance?

MATERIALS REVIEWED

- ☒ Annual assessment report
☒ Annual Report (2012, 2013)

X Assessment plan (as posted)(including 2005 plan)
 X Previous assessment review
 Other (please describe)

Reviewer(s):	Name	Casey Ozaki	Deborah Worley
	Department	Teaching & Learning	Educational Leadership
	Phone Number	7-4256	7-3140
	e-mail	carolyn.ozaki@und.edu	deborah.worley@und.edu

Section 1: Y Section 2: Y Section 3: Q Section 4: Q

Coding Key:

- Y = yes, this is done appropriately and well (bearing in mind the kind of program(s) reviewed and recognizing that assessment is a cyclical process, i.e., with additional kinds of data to be collected and analyzed in other years)
- Q = qualified yes as action or progress is apparent; however, evidence is lacking that this is completely and appropriately done
- N = no, it is unclear whether it was done at all, or it is not done in relationship to student learning

Revised Sept 24, 2014

UNIVERSITY ASSESSMENT COMMITTEE
Feedback to Academic Departments on Assessment Activities Reported in 2014 *(Academic year)*

UNDERGRADUATE PROGRAMS

DEPARTMENT: Aviation **DATE:** May 5, 2015

PROGRAM(S) COVERED IN REVIEW: Aviation--Aviation Technology Management (ATM)

COMMITTEE MEMBER(S) CONDUCTING REVIEW: Casey Ozaki & Deborah Worley

1. STUDENT LEARNING GOALS

- | | | | |
|---------------------------------------|--------|-------|-----------------------|
| • Were any goals referenced? | YES___ | NO___ | QUALIFIED Y/N ___X___ |
| • If so, were goals well-articulated? | YES___ | NO___ | QUALIFIED Y/N ___X___ |
| • Do goals address student learning? | YES___ | NO___ | QUALIFIED Y/N ___X___ |

Comments:

A bachelors degree in Aerospace can be completed in multiple areas-- Commercial Aviation, Air Traffic Control, Flight Education, Unmanned Aircraft System Operations, and Aviation Technology Management (Airport and Aviation Management are also addressed, but are reviewed elsewhere). Student learning goals/outcomes are identified for each program and further aligned with the overall aviation program objectives, accreditor (AABI) general outcomes, and UND Essential Studies Outcomes (via charts). In general the goals were focused on learning, distinct from one another programmatically, and clear and articulate. In addition, the goals are mapped to course offerings for each program.

The previous review (2012) noted that the Aviation Technology Management and UAS programs did not have learning goals or assessment plans. Since that time the assessment plan has been updated (2013) and specific goals/objectives still need to be developed for the Aviation Technology Program (note: that is one outcome listed on a singular chart in the plan, but it does not appear elsewhere). The assessment plan is currently under revision in response to AABI changes.

In addition to the program goals, please also consider UND's institutional and Essential Studies goals for student learning (shown in alignment within parentheses) and identify which goals are similar to program goals.

- _____ 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
- _____ 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
- _____ 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
- _____ 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)
- _____ 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
- _____ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
- _____ 7 Lifelong learning (“commit themselves to lifelong learning”)
- _____ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding program goals and alignment with institutional and Essential Studies goals:

Currently there is no consistent outcomes related to this program—the one outcomes appears to be focused on knowledge acquisition.

2. ASSESSMENT METHODS

- | | | | |
|---|------------|-------|-----------------------|
| Were any specific assessment methods referenced? | YES___X___ | NO___ | QUALIFIED Y/N ___ |
| • If so, were specifically chosen assessment methods appropriately aligned with individual goals? | YES___ | NO___ | QUALIFIED Y/N ___X___ |

- Were both direct and indirect assessment methods used as components of a “multiple measures” approach? YES____ NO__ QUALIFIED Y/N __X__

Comments:

The department reported method/ results related to three assessment tasks they undertook in the 2013-14 year:

- 1) *An assessment of the Stage Check Tasks (3 tasks) “unsatisfactory” rates across 5 courses. The 2014 data was compiled and will be compared to the 2015 data the following year. These tasks appear to be required by most if not all programs, but data is presented in aggregate and program-specific data is not provided.*
- 2) *Flight Course completion and incomplete rates across 7 courses—percentage rates are compared across four semester (two before & two after intervention) to demonstrate impact of intervention.*
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- 4) *Student surveys, focus groups, and Course Annual Reports were also conducted.*

Methods discussed in the assessment plan and reported on the annual reports are varied, indirect and direct, and appear to be appropriate for the specific program outcomes. They reflect systemic and going assessment across the department and focuses on student learning. A chart is available that maps particular assessment techniques to individual program outcomes.

The focus of assessment appears to be outcome and technique driven (via schedule) and also based on areas that the faculty identify as needing more inquiry, indicating systemic and organic assessment practices. The focus on assessment techniques provides a cross-program assessment of student progress that allows for the identification of patterns that may exist for students throughout their shared curriculum and on particular outcomes/tasks. The drawback to this approach may be a lack of systemic inquiry into program-specific student performance and learning, unless specifically deemed needed (e.g., a choice to focus on the UAS in 2013-14).

There is 1 outcome listed for ATM and mapped to assessment techniques. While the broader description of assessment activities in the assessment plan and annual report suggest that varied assessment is occurring for students, it is not clearly reported for ATM students and needs further development.

3. ASSESSMENT RESULTS

- Were any assessment results reported? YES____ NO__ QUALIFIED Y/N __X__
- If so, were the results clear in terms of how they specifically affirm achievement of goals? YES____ NO X QUALIFIED Y/N ____
 - If so, were the results clear in terms of how they indicate need for improvement? YES____ NO X QUALIFIED Y/N ____
 - Were the results tied to goals for student learning? YES____ NO X QUALIFIED Y/N ____

Comments:

It is clear that the department is engaged in relevant and specific ongoing assessment. As mentioned previously, there is a “Techniques schedule” for assessment tasks in addition to ongoing departmental assessment activities (i.e., Course Annual Reports), but it is unclear based on the assessment plan and results if individual programs are assessed regularly or only as needed.

It appears that each of these tasks/courses are required for most, if not all, majors, but because the majority of the results are reported in aggregate, how students from specific programs performed is not identified (apart from Task #3). Therefore, the results reported likely apply to Aviation Technology Management students and the information in the plan ties them back to the outcomes, but this is not as clearly addressed in the discussion of the results. Given the lack of information about ATM outcomes, the relationship to learning and areas of improvement specific to the program is not clear.

In addition to program goals, some assessment results may be applicable to institutional and Essential Studies goals. Indicate any goals for which the program presents findings, and, for indicated items, describe findings below.

- ☒ 1 Communication – written or oral (“able to write and speak in various settings with a sense of purpose/audience”)
☐ 2 Thinking and reasoning – critical thinking (or “be intellectually curious”; analyze, synthesize, evaluate)
☐ 3 Thinking and reasoning – creative thinking (or “be intellectually creative”; explore, discover, engage)
☐ 4 Thinking and reasoning – quantitative reasoning (“apply empirical data...analyze graphical information”)
☐ 5 Information literacy (“be able to access and evaluate...for effective, efficient, and ethical use”)
☐ 6 Diversity (“demonstrate understanding of diversity and use that understanding...”)
☐ 7 Lifelong learning (“commit themselves to lifelong learning”)
☐ 8 Service/citizenship (“share responsibility both for their communities and for the world”)

Comments regarding results and the application of results to program, institutional, and Essential Studies goals:

The annual report indicates that an assessment of student writing for all majors was conducted during this review period, but results for ATM students were not reported.

4. CLOSING THE LOOP

Were any actions taken on the basis of assessment results reported?

YES _____ NO _____ QUALIFIED Y/N ☒ X _____

- If so, do curricular or other improvements/changes arising from assessment results directly address goals for student learning?

YES _____ NO _____ QUALIFIED Y/N ☒ X _____

Comments:

Actions were reported in regard to assessment across programs, but not specific to the ATM program. Given the aggregate nature of the assessment, changes likely affect ATM students, but this is unclear.

SUMMARY

Strengths

Areas for Improvement

- ☒ A specific plan for assessment is in place.
☐ Student learning goals are well-articulated.
☐ Assessment methods are clearly described.
☐ Assessment methods are appropriately selected.
☐ Assessment methods are well-implemented.
☐ Direct and indirect methods are implemented.
☐ Results are reported.
☐ Results are tied to closing the loop.
 (Decision-making is tied to evidence.)

- ☐ No specific plan for assessment is in place.
☒ Student learning goals are not well-articulated.
☒ Assessment methods are not clearly described.
☐ Assessment methods are not appropriately selected.
☐ Assessment methods are not well-implemented.
☐ A single type of assessment methods predominates.
☐ No results are reported.
☐ Results are not clearly tied to closing the loop.
 (Decision-making is not directly tied to evidence.)

OVERALL SUMMARY AND RECOMMENDATIONS:

From the materials provided, it is evident that systemic assessment is in place throughout the department and allows for inquiry into student performance and learning. Because the assessment reviews are conducted at the program-level the aggregated assessment results are difficult to interpret for individual programs (e.g., ATC, Commercial, Flight Education, etc. vs. all Aviation majors). You may want to consider if there is relevance to disaggregating the data at the program level. Is there individual program analysis that might be useful? For example, could it be useful to look at program-specific (e.g., ATC) students stage task performance?

Specific to the ATM program, more learning outcomes need to be developed and implemented throughout the assessment plan.

MATERIALS REVIEWED

- ☒ Annual assessment report
☒ Annual Report (2012, 2013)
☒ Assessment plan (as posted)(including 2005 plan)

X Previous assessment review
 Other (please describe)

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Section 1: Q Section 2: Q Section 3: Q Section 4: Q

Coding Key:

- Y = yes, this is done appropriately and well (bearing in mind the kind of program(s) reviewed and recognizing that assessment is a cyclical process, i.e., with additional kinds of data to be collected and analyzed in other years)
- Q = qualified yes as action or progress is apparent; however, evidence is lacking that this is completely and appropriately done
- N = no, it is unclear whether it was done at all, or it is not done in relationship to student learning

Revised Sept 24, 2014