

**Program Educational Goals**  
**Air Transport Administration Concentration**  
(AABI Criterion 3.2)

**Program Educational Goals**

The air transport administration concentration prepares students for a variety of aviation career paths including airport administration, airport planning, airline management, private jet management, corporate aviation, and air traffic control. We seek to ensure that what we are teaching and how well the students are learning is guided by the needs of relevant firms and agencies in the aviation industry. We have involved stakeholders from government and industry in the evaluation of our curriculum in a variety of formal and informal ways.

Consistent with the mission of university, graduates of the University of Nebraska at Omaha Aviation Institute's Bachelor of Science in Aviation, with a concentration in Air Transport Administration will be able to accomplish the following:

Assessment of progress towards our program goals and the improvement of student learning outcomes led to the development of an iterative process for the development the research proposals in AVN 3700 and research reports in AVN 4990. This approach ensures that we meet our stated goal of at least 80% of students demonstrating proficiency or excellence for each of our program goals since students are given considerable feedback during the step of these processes.

**Goal A**

**Think critically about issues confronting the air transport industry**

Progress towards goal will be measured by the percentage of students demonstrating the ability to think critically in the development (AVN 3700) and the execution (AVN 4990) of their capstone projects in the Air Transport Administration concentration.

## **Assessment of Goal A**

In general, students demonstrate the ability to think critically by identifying timely and relevant topics for their research proposals. In that regard, we meet the 80% goal for proficiency or better. Students have more difficulty turning their topics into research questions. The SMART research question exercise in AVN 3700 pushes them to make sure their questions are specific, measurable, attainable, relevant, and time bound. Students are also challenged to answer the “so what question” which forces them to consider who in aviation would be interested in their research. These elements of the proposal development process reinforce the need to think critically about their topics and questions. The research report developed in AVN 4990 also demonstrates critical thinking as the students translate the findings from their empirical analysis into conclusions and recommendations for decision makers in industry.

The iterative process and exercises throughout the two-semester sequence (AVN 3700 and AVN 4990) help produce good results in the area of critical thinking.

Evidence of student work from AVN 3700 and AVN 4990 will be made available to the visiting team. Examples of how the iterative process works will be evidenced by examples of how sample student projects evolved from initial topic statements, through the development of research questions, the collection and analysis of data, and ultimately the development of a research report.

## **Goal B**

### **Analyze empirical data for informed business and policy decision-making**

Progress towards the goal will be measured by the percentage of students demonstrating the ability to analyze data in the development (AVN 3700) and the execution (AVN 4990) of their capstone projects in the Air Transport Administration concentration.

## **Assessment of Goal B**

While our goal that 80% of students will either be proficient or exceptional in this area has been met each year (2018 – 2021), that conclusion comes with a significant caveat. Our assessment of the research proposals in AVN 3700 and research reports in AVN 4990 demonstrates that our students often lack the data skills and experience necessary to conduct the analysis best suited for their research questions. In other words, we have found that students are constrained by a lack of preparation in this area. As a result, proposals and projects must be scaled back or redefined to align better with the students' limited empirical skills and experience. This allows us to meet, if not exceed, our goal of 80% proficiency each year, but this is an unsatisfactory outcome.

In response to the deficiencies identified throughout assessment process and conversations with industry, we identified the development of an aviation specific data analytics course as a priority. This course was initially piloted in Spring 2021 and was offered again in Fall 2021. We are in the process now to make the necessary formal catalog changes that would eliminate the incumbent statistics course and add AVN – Data Analytics for Aviation as the required course. Recognizing that one course will likely not produce the improvements we seek, we are working to introduce more data analysis in lower-level courses.

## **Goal C**

### **Effectively and efficiently communicate orally and in writing for a variety of audiences**

Progress towards goal will be measured by the percentage of students demonstrating the ability to communicate effectively and efficiently in the development (AVN 3700) and the execution (AVN 4990) of their capstone projects in the Air Transport Administration concentration.

## Assessment of Goal C

We meet or exceed the 80% proficient or exceptional goal in each year of our assessment of the proposal documents and presentations in AVN 3700 and the capstone report documents and presentations in AVN 4990.

Several important lessons have been learned from our assessment of the written work and oral presentations in these courses.

Written communication remains a struggle for many of our students. We can get most of them to a level of proficiency but doing so requires more effort and resources than we would hope to have to expend for seniors in our program. We have revisited how AVN – 3060 – Writing in Aviation as well as some of our other courses where writing is a key component might be enhanced to improve student performance in this fundamental skill. We continue to monitor progress in this area as we explore course and curricular revisions.

Oral communication is less of a concern than written communication. Students seem to do much better in informal oral communications, such as class discussions, but continue to struggle with more formal presentations. As a result of our assessment efforts, we have implemented a ladder approach to oral presentations in AVN 3700 and AVN 4990 so that students begin with short (2-3 minute) presentations of their topics, research questions, and logic models before they get to the more substantial formal presentations of their research proposals and their capstone project results, which are typically presented to a panel of faculty reviewers. The ladder approach helps students build confidence, become more adept at articulating their ideas, and better prepare for questions and criticism. Another area of concern is the appropriate use of presentation software. Our assessment of the presentations in 3700 and 4990 suggest the need for additional training in this area. We are exploring how this might be integrated into our curriculum.

## **Goal D**

### **Engage with the air transport industry in professionally appropriate ways**

Progress towards goal will be measured by the percentage of students demonstrating the ability to engage with industry through their internship experience in the Air Transport Administration concentration.

### **Assessment of Goal D**

Internship providers complete an evaluation of each student intern. The evaluation addresses various aspects of professionalism. Our assessment of these provider evaluations shows that over 80% of student interns are proficient or better in this area. We will provide specific evidence from these evaluations to the visiting team.

## **Goal E**

### **Understand the trends that shaped the past and present of the air transport industry to better prepare themselves for the future of aviation**

Progress towards goal will be measured by the percentage of students demonstrating the ability to understand trends that shape the air transport industry through the field examination administered in AVN 4990 in the Air Transport Administration concentration.

### **Assessment of Goal E**

We meet the 80% proficient or exceptional goal in each year of our assessment, but we have also identified areas for improvement and have implemented curricular revisions. For example, we identified through assessment of the field exams that our students were not as well informed about some of what our faculty consider the most compelling contemporary trends in the industry. Our discussion led the revision of AVN 1000 – Introduction to Aviation and AVN 1040 – History of Aviation, to focus on more recent history, especially commercial aviation history, and more contemporary trends in policy,

technology, and business models. We also adopted a “hot topics” exercise in AVN 4990 to address this specific area of concern.

\*\*\*\*\*

UNO's mission statement, vision statement, and core values are published in university's strategic plan as well as on the university's website at <http://www.unomaha.edu/strategic-plan/index.php>.

### **UNO's Mission**

As both a Metropolitan University of distinction and a Carnegie Doctoral Research institution, the University of Nebraska at Omaha (UNO) transforms and improves the quality of life locally, nationally, and globally.

### **UNO's Vision**

The University of Nebraska at Omaha is recognized as the premier Metropolitan University throughout the United States and the world.

### **UNO's Values**

- Excellence: focusing on exceptional education, groundbreaking research, and the life-long success of our students and alumni.
- Engagement: strengthening our community through the transformative power of shared resources, dynamic collaboration, and sustained partnerships.
- Inclusion: creating an environment that is welcoming, open, and diverse; committing to the accessibility of our campus and academic programs; and ensuring a respectful and safe campus environment.
- Discovery: fostering a culture of critical thinking and creativity, and upholding the rigorous pursuit and exchange of knowledge.
- Integrity: embodying the highest of professional and ethical standards.
- Maverick Spirit: exemplifying strength, resilience, curiosity, independent thinking, and entrepreneurship in our everyday deeds and collective endeavors.

### **College Mission and Vision**

The mission and vision statements for the College of Public Affairs and Community Service (CPACS), which can be found on-line at <https://www.unomaha.edu/college-of-public-affairs-and-communityservice/about-us/mission-and-vision.php> are as follows:

### **CPACS Mission**

- Foster a learning environment in which undergraduate students, graduate students, adult learners and both traditional and nontraditional students can gain a comprehensive and quality education helpful in preparing for careers in their respective fields
- Conduct research, especially as it relates to concerns of our local and statewide constituencies; and
- Offer professional services to the community, including continuing education opportunities, designed to further personal, professional, organizational, and community improvement goals.

### **CPACS Vision**

- The College of Public Affairs and Community Service will continue to be a nationally recognized college of inspirational teaching, innovative research and transformative service striving to create an equitable and just society.

### **School of Public Administration (SPA) Mission and Vision**

The mission and vision statements of the School of Public Administration can be found at and the College of Public Affairs and Community service are available at:

<https://www.unomaha.edu/college-of-public-affairs-and-communityservice/public-administration/index.php>

### **Aviation Institute**

The Institute's mission, as noted below and published on the Institute's website at [ai.unomaha.edu](http://ai.unomaha.edu), clearly complements and contributes to the mission of our college and the broader campus.

### **Institute Mission**

The mission of the Aviation Institute is to:



- Provide an environment where students are supported and challenged as they develop the skills, knowledge, and experiences that prepare them for personally and professionally rewarding careers in aviation and transportation
- Conduct research that enhances the safety, security, efficiency, reliability, and sustainability of aviation and transportation services; and improves mobility and quality of life for the citizens of the State of Nebraska.
- Engage the community through partnerships and other collaborative initiatives that improve the lives of the citizens of the State of Nebraska and others through innovative education, training, research, and service projects.
- Maintain the highest standards of integrity and transparency in the conduct of the Institute's business and the management and stewardship of its resources

### **Institute Vision**

Our vision is to lead collegiate aviation in ways that measurably enhance the lives of our students and others we serve through our instructional, research, and service programs.

1. List published educational goals, explain the process by which they are established, state how they are measured, and describe how they are consistent with the institution's and the aviation unit's missions.

The educational goals for our program are published on the Institute's website. These goals were established in consultation with faculty who teach in the program and with industry and agency stakeholders through formal and informal discussions. These core educational goals are consistent with the missions of the university, our college, and the Institute. Just as important, these goals are well connected to the student learning objectives in our new assessment plan.