

## Center for Aviation Studies College of Engineering

Suite 228 Bolz Hall 2036 Neil Avenue Columbus, Ohio 43210

614-292-2405 Phone 614-247-4521 Fax

aviation.osu.edu

**PROPOSAL:** Removal of AVN 4500: Capstone from the Aviation Management Specialization.

#### **EXPLANATION:**

The Center for Aviation Studies has identified a redundancy in the curriculum for our Aviation Management students that we would like to correct. Currently students are required to complete both AVN 4500 and AVN 5000 as part of their degree plan. Both courses are project based and culminate with the student producing a single capstone style project in order to complete the course.

During our most recent accreditation visit (Fall 2021), our accreditation team suggested that we reassess this curricular requirement and refine the curriculum. We also took some time to speak with students in the Aviation Management specialization, who confirmed that the learning outcomes of the two courses were repetitive.

As a result, we would like to propose dropping AVN 4500 from the curriculum and replacing those three credit hours with AVN 3600: Business and Corporate Aviation Management. This change would offer students an opportunity to learn more about the corporate side of aviation, which is topic that is not currently covered in detail in the curriculum. It would also allow students to engage in a capstone that is more focused on the business management side of aviation, which is fulfilled through AVN: 5000.

This change to the curriculum is both credit neutral and it enables the Center for Aviation Studies to refine the curriculum in ways that would benefit the students of our program. It also addresses feedback that was provided by the Aviation Accreditation Board, Intl, as well as students within the program. We would like to make these changes available to students for the 23-24 academic year.

#### **Implementation Plan:**

All incoming students will operate under the new program plan that is being proposed. Current students will have the option of being grandfathered under the old plan or completing the new proposed changes.

Attached is the old curriculum sheet, a new one indicating the changes, and the syllabi for both AVN:5000 and AVN: 3600. If there are any questions regarding these requested changes, please reach out to Shannon Morrison at Morrison.413@osu.edu

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# Bachelor of Science Major: Business Administration [Specialization: Aviation Management]

Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements <sup>a, b</sup> *These GE Requirements can be fulfilled by business foundation courses listed below		
Requirement	Course Options	Hours
GE Launch Seminar	GENED 1201	1
Foundations: Writing and Information Literacy	Student Choice *	3
Foundations: Mathematical & Quantitative Reasoning/Data Analysis	Student Choice *	3-5
Foundations: Literary, Visual and Performing Arts	Student Choice	3
Foundations: Historical & Cultural Studies	Student Choice	3
Foundations: Natural Science	Student Choice	4-5
Foundations: Social & Behavioral Sciences	Student Choice *	3
Foundations: Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World <sup>b</sup>	Student Choice	4-6
Theme: Student Choice <sup>b</sup>	Student Choice	4-6
GE Reflection	GENED 4001	1
General Education Credit Hours: 32-39		

<sup>c</sup> A grade of C or higher is required in these courses		
Required Non-Major Coursework: Business Foundation Courses		
Requirement	Course Options	Hours
WRITING & INFORMATION LITERACY	ENGLISH 1110 (WIL) °	3
ADVANCED WRITING LITERACY	Choose from list on page 3	3
CALCULUS	MATH 1131/1151 OR EQUIV (MQRDA) $^{\mathrm{c}}$	5
STATISTICS	STAT 1430 (MQRDA)	4
MICROECONOMICS	ECON 2001 (SBS)	3
MACROECONOMICS	ECON 2002 (SBS)	3
COMPUTER SCIENCE	CSE 2111 (MQRDA)	3
FINANCIAL ACCOUNTING	ACCTMIS 2200	3
MANAGERIAL ACCOUNTING	ACCTMIS 2300	3
STATISTICAL TECHNIQUES	BUSOBA 2320	3
BUSINESS ANALYTICS	BUSOBA 2321	1.5
	Credit Hours:	35.5
	With GE Overlap Total Hours:	24.5

Major Coursework		
Course	Title	Hours
Major Core		
BUSMHR 2292	Business Skills & Environment	3
BUSMHR 2000	Introduction to International Business	1.5
BUSFIN 3500	Legal Environment of Business	1.5
BUSML 3380	Logistics Management	1.5
BUSFIN 3220	Business Finance	3
BUSOBA 3230	Introduction to Operations Management	3
BUSML 3250	Marketing Management	3
BUSMHR 3200	Organizational Behavior	3
BUSMHR 4490	Strategic Management	3
	Major Core Credit Hours	22.5
Specialization		
AVIATION 2000***	Introduction to Aviation Industry	3
AVIATION 2100***	Private Pilot Fundamentals	5
AVIATION 2200***	Aviation Organization Analysis and Writing	3
AVIATION 3000	Aviation Management & Marketing	3
AVIATION 3200	Aviation Regulations	3
AVIATION 4000	Air Transportation Analysis I	3
AVIATION 5000	Air Transportation Analysis II	3
AVIATION 4500	Aviation Capstone Course	3
*** Required foundation courses, not included in specialization GPA calculation		
	Specialization Credit Hours:	26
Program Electives		
Program Electives BUSADM 1100	College Survey	1

- <sup>a</sup> Some coursework required by the major or college may satisfy GE requirements. There is no limit to the number of courses that may overlap between the GE Foundations and the rest of the academic program
- b Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes.
- <sup>c</sup>Students must earn a grade of C or higher in these courses
- \* These GE requirements can be fulfilled by business foundation courses
- + These are prerequisite courses to specialization classes

Total Degree Hours:

121



# Bachelor of Science Major: Business Administration [Specialization: Aviation Management]

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General Education Requirements <sup>a, b</sup> *These GE Requirements can be fulfilled by business foundation courses listed below		es listed
Requirement	Course Options	Hours
GE Launch Seminar	GENED 1201	1
Foundations: Writing and Information Literacy	Student Choice *	3
Foundations: Mathematical & Quantitative Reasoning/Data Analysis	Student Choice *	3-5
Foundations: Literary, Visual and Performing Arts	Student Choice	3
Foundations: Historical & Cultural Studies	Student Choice	3
Foundations: Natural Science	Student Choice	4-5
Foundations: Social & Behavioral Sciences	Student Choice *	3
Foundations: Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World <sup>b</sup>	Student Choice	4-6
Theme: Student Choice b	Student Choice	4-6
GE Reflection	GENED 4001	1
General Education Credit Hours: 32-3		

<sup>c</sup> A grade of C or higher is required in these courses		
Required Non-Major Coursework: Business Foundation Courses		
Requirement	Course Options	Hours
WRITING & INFORMATION LITERACY	ENGLISH 1110 (WIL) °	3
ADVANCED WRITING LITERACY	Choose from list on page 3	3
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STATISTICS	STAT 1430 (MQRDA)	4
MICROECONOMICS	ECON 2001 (SBS)	3
MACROECONOMICS	ECON 2002 (SBS)	3
COMPUTER SCIENCE	CSE 2111 (MQRDA)	3
FINANCIAL ACCOUNTING	ACCTMIS 2200	3
MANAGERIAL ACCOUNTING	ACCTMIS 2300	3
STATISTICAL TECHNIQUES	BUSOBA 2320	3
BUSINESS ANALYTICS	BUSOBA 2321	1.5
	Credit Hours:	35.5
	With GE Overlap Total Hours:	24.5

Major Coursework		
Course	Title	Hours
Major Core		
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BUSMHR 2000	Introduction to International Business	1.5
BUSFIN 3500	Legal Environment of Business	1.5
BUSML 3380	Logistics Management	1.5
BUSFIN 3220	Business Finance	3
BUSOBA 3230	Introduction to Operations Management	3
BUSML 3250	Marketing Management	3
BUSMHR 3200	Organizational Behavior	3
BUSMHR 4490	Strategic Management	3
	Major Core Credit Hours	22.5
Specialization		
AVIATION 2000***	Introduction to Aviation Industry	3
AVIATION 2100***	Private Pilot Fundamentals	5
AVIATION 2200***	Aviation Organization Analysis and Writing	3
AVIATION 3000	Aviation Management & Marketing	3
AVIATION 3200	Aviation Regulations	3
AVIATION 3600	Business and Corporate Aviation Management	3
AVIATION 4000	Air Transportation Analysis I	3
AVIATION 5000	Air Transportation Analysis II	3
*** Required foundat	ion courses, not included in specialization GPA calo	culation
	Specialization Credit Hours:	26
Program Electives		
BUSADM 1100	College Survey	1
	Electives	8-15

- <sup>a</sup> Some coursework required by the major or college may satisfy GE requirements. There is no limit to the number of courses that may overlap between the GE Foundations and the rest of the academic program
- b Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes.
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- \* These GE requirements can be fulfilled by business foundation courses
- + These are prerequisite courses to specialization classes

**Total Degree Hours:** 



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## AVN 5000 Air Transportation Analysis II Spring 2021

Instructor: Adam Beckman
Office: 242 Bolz Hall

2036 Neil Avenue

Columbus, OH 43210

Telephone: (614) 688-1333

E-mail: <u>beckman.43@osu.edu</u>

Office Hours: By appointment

Course Location: Online

Class time: Asynchronous/Synchronous

Credit Hours 3

#### **Course Description**

Aviation 5000 is an analysis and discussion of planning and operating an airline network, including route analysis, fleet planning and scheduling. Topics will include network design, data analysis, optimization, and performance measurements. Also topics related to airline mergers, aircraft acquisitions and fractional fleet renewal will be discussed.

#### **Prerequisites**

AVN 5000, Air Transportation Analysis I

#### **Course Goals**

Aviation 5000 is designed to provide the student with a comprehensive insight into the complexities of planning, operating, analyzing, and optimizing a complex airline network, including route analysis, fleet and crew management, and performance measurements. In addition, this course is designed to give the student a working knowledge of publicly available airline operating data and associated analysis tools, as well as the analytical tools to analyze and optimize an airline's route network. Successful companies are those that fully understand how to analyze and optimize their resources over their networks. This course introduces the tools and data available to the industry to meet these challenges.

#### **Course Grading Policy**

#### Academic Honesty

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

#### **Grading Scale:**

• A: 93-100

A-:90-92.9

B+: 87-89.9

• B: 83-86.9

B-: 80-82.9

C+: 77-79.9

C: 73-79

• C-: 70-72.9

• D+: 67-69.9

D: 60-66.9

Failure: 59 and below

#### **Grading Percentages:**

Homework (10): 10 points each

Attendance (15): 2 points each synchronous class

Final Paper: 100 points Total: 230 points

#### **Student Responsibilities**

#### **Disability Services**

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; http://www.ods.ohio-state.edu/

#### **Course Schedule**

Tuesday	Thursday
Week 1 1/12/2021	Week 1
Introduction	Introduction to the Project
Asynchronous – Review Slides	Synchronous 2:20-3:00
Week 2 1/19/2021	Week 2
Airline Review and History	Airline Selection
	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 3 1/26/2021	Week 3
Airline Network Flow Theory and Network Design	Route Analysis
Asynchronous – Review Slides	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 4 2/2/2021	Week 4
Route Structure Review and History	Competition Route Analysis
Asynchronous – Review Slides	Synchronous 2:20-3:00
Asylicinous Review sides	Homework Due Saturday at 11:59p
	Homework Due Suturday at 11.55p
Week 5 2/9/2021	Week 5
Airline Financing	Pricing Analysis
Asynchronous – Review Slides	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 6 2/16/2021	Week 6
Optimization and Crew Scheduling	Competition Pricing Analysis
Asynchronous – Review Slides	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 7 2/23/2021	Week 7
Spring Break	Spring Break
Week 8 3/2/2021	Week 8
Airline Management and Organization	Strengths
Asynchronous - Review Slides	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 9 3/9/2021	Week 9
Impacts of Covid	Weaknesses
Asynchronous – Review Slides	Synchronous 2:20-3:00
7.5yncmonous Neview Shaes	Homework Due Saturday at 11:59p
Week 10 3/16/2021	Week 10
Future of Air Travel	
	Opportunities
Asynchronous – Review Slides	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 11 3/23/2021	Week 11
International Operations	Threats
Asynchronous – Review Slides	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 12 3/30/2021	Week 12
Project Workday	Spring Break
Asynchronous	



Week 13 4/6/2021	Week 13
Network Optimization and Overbooking	Predicted Costs
Asynchronous – Review Slides	Synchronous 2:20-3:00
	Homework Due Saturday at 11:59p
Week 14 4/13/2021	Week 14
Airport Privatization	Predicted Revenue
Asynchronous – Review Slides	Synchronous 2:20-3:00
Wook 15 4/20/2021	Week 15
Week 15 4/20/2021	1
Project Workday	Last Minute Questions
Asynchronous	Synchronous 2:20-3:00



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# AVN 3600 Business and Corporate Aviation Management Autumn 2018

Instructor: Adam Beckman Office: 242 Bolz Hall

2036 Neil Avenue

Columbus, OH 43210

Telephone: (614) 688-1333

E-mail: <u>beckman.43@osu.edu</u>

Office Hours: By appointment Course Location: MacQuigg Lab 159

Class time: Tuesday/Thursday 11:10-12:30

Credit Hours 3

<u>Course Description</u> Analysis and review of the principles and challenges of operating an ondemand air transportation system. Consideration of decision-making strategies and sound operating practices that are needed to define and manage a corporate flight department. Presentation of information via textbook, assigned readings, videos, lecture and guest speakers.

#### **Prerequisites**

None

<u>Course Goals</u> Provide practical knowledge and understanding of the business and corporate aviation model. This will be accomplished through class discussions on the requirements, methods, types, operations, maintenance and safety found in this particular aviation model.

## **Course Materials**

Business and Corporate Aviation Management, John J. Sheehan, McGraw Hill Publishing, 2<sup>nd</sup> Edition.

#### **Course Grading Policy**

#### **Grading Scale:**

A: 93-100

A-:90-92.9

B+: 87-89.9

B: 83-86.9

B-: 80-82.9

• C+: 77-79.9

C: 73-79

C-: 70-72.9

• D+: 67-69.9

• D: 60-66.9

Failure: 59 and below

#### **Grading Percentages:**

Topic Selection: 5%Bibliography: 5%Rough Draft 1: 10%Rough Draft 2: 10%

Paper: 30%Final: 30%

Attendance:10%

#### Academic Honesty

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## **Course Schedule**

Tuesday	Thursday
August 21 Introduction, Paper Discussion, Course Organization, Goals, and Expectations	August 23 Definitions
August 28 Aircraft Characteristics and On-Demand Aviation Methods.	August 30 Determining the Need: Needs, Analysis Methods and Numbers Topic Selection Due (Bring to Class)
<b>September 4</b> Determining the Need: Needs, Analysis Methods and Numbers	September 6 Getting Started: Use Policy, and Owner Flown
September 11 Getting Started: Charter and Fractional	September 13 Getting Started: In-House and Management Bibliography Due (Bring to Class)
September 18 Getting Started: Joint Ownership and CAM	September 20 Running the Business: Planning and Scheduling
September 25 Running the Business: Finance and Administration	September 27 Rough Draft 1 Due (PEER REVIEW IN CLASS)
October 2 Running the Business: Personnel, Performance and Marketing	October 4 Running the Business: CRM and Flight Departments
October 9 Flight Department Management: Theories and Skills	October 11 FALL BREAK
October 16 NO CLASS	October 18 NO CLASS
October 23 Flight Department Management: Communication And Lessons Learned (CPD – TBD)	October 25 Rough Draft 2 Due (PEER REVIEW IN CLASS)
October 30 Operations: Overview, Standards and Operations (LBrands – TBD)	November 1 Maintenance: Contract or In-House
November 6 Maintenance: Organization and Personnel	November 8 Safety: Programs, Culture and Managing Safety
<b>November 13</b> Putting It All Together: Profit, and Loss	November 15 Putting It All Together: Profit, and Loss Paper Due (Bring to Class)
November 20 TBD	November 22 THANKSGIVING
November 27 TBD	November 29 TBD
December 4 Final – Cumulative	