

Syllabus for ECON 471-DL, Airline Economics Class – Spring 2024

Instructor: B. Ben Baldanza
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Virtual Student Hours: On request



Fun facts: Likes to play board games, plays the trombone, has traveled to much of the world, has two small dogs, married to another professor, has a 16-year old, violin-playing son, and all are NY Giants fans

Course Description: This course outlines the economic underpinnings of the commercial airline business. Running a successful airline often means dealing with fundamental economic concepts that drive many decisions: where to fly, when to fly, with what airplanes, at what price, with what labor, within what regulations, who to partner with, and within a competitive framework are among a few. The airline industry lends itself well to the direct application of economic theory, and participants will gain an appreciation for the complexity and economic basis for most key airline decisions. The course is dual-listed at the undergraduate and graduate levels.

The class is applied economics. We cover material that corresponds to the decisions made by an airline's CEO, Chief Commercial Officer, Chief Operating Officer, Chief Financial Officer, and General Counsel.

Teaching Philosophy: I believe that everyone can learn how airlines really work. Learning to think about the business in creative and economic ways is what is important – memorizing a lot of facts isn't. Tests in the class are all open-note. I like to maintain engaged and inclusive classrooms. I do not knowingly schedule classes or work due on religious holidays. If I do by accident, please ask me to change and I will. In general, if you talk with me about your situation, I will work with you.

What To Expect: The class has weekly assignments and two exams. Staying on top of things means keeping up with the lecture videos, the readings, and the graded homework. In the class, I like it when you ask questions. If I use terms or language that you don't understand, please raise your hand or send me a note so I can explain. If you submit all the graded work, you likely will earn a very good grade in this class.

How the Class Will Work: For the Spring 2023 session, the class will be held live online. Classes will use the following schedule:

1. A **lecture video** will be uploaded to Blackboard on Thursdays.
2. We will **meet online** on Mondays at 4:30, for about 1 hour. This time is not to re-teach what is in the lecture video. When we meet, I will answer any questions about the lecture video received the prior Thursday. We will also use this time to clarify the homework, give hints if needed, and to share stories from our own experiences related to the week's lecture.
3. Most weeks, there will be **homework** comprised of an assignment (problem set or business case) and a reading or a video to watch.
4. There will be a **mid-term exam** in week six, covering the materials from the first five weeks of the class. A **final exam** will be given in the exam week following

the last class. I will offer an optional, on-line open Q&A before the final. Both exams will be uploaded to Blackboard, and you will have several days to complete them and submit.

What You will Learn: During this course, you will learn the ways that economics drive key airline decisions and demonstrate this in multiple ways. Specifically:

Week	Topic	What You Will Learn	How You and I Will Know You've Learned
1	Industry Background	<ul style="list-style-type: none"> History of industry Economic basis of industry Big themes 	<ul style="list-style-type: none"> Class engagement Problem Set 1
2	Airline Metrics	<ul style="list-style-type: none"> "Language" of airlines Definition of key metrics Biases in metrics 	<ul style="list-style-type: none"> Class engagement Problem Set 2
3	Airline Pricing	<ul style="list-style-type: none"> Pricing strategy Pricing process Issues in airline pricing 	<ul style="list-style-type: none"> Class engagement Problem Set 3
4	Revenue Management	<ul style="list-style-type: none"> Definition of Revenue Management Goals of revenue management Revenue Opportunity Model 	<ul style="list-style-type: none"> Class engagement Problem Set 4
5	Scheduling and Planning	<ul style="list-style-type: none"> Difference between planning and scheduling Tools planner use Constraints schedulers must accommodate 	<ul style="list-style-type: none"> Class engagement First business case
6	Customer Service and Loyalty	<ul style="list-style-type: none"> Basis of airline customer service How frequent flier programs work 	<ul style="list-style-type: none"> Class engagement
7	Mid-term exam	<ul style="list-style-type: none"> Covers all material 	<ul style="list-style-type: none"> Exam
8	Airport Economics	<ul style="list-style-type: none"> Relationship between airlines and airports How airports make money Constraints at airports 	<ul style="list-style-type: none"> Class engagement Problem Set 5
9	International Flying and Alliances	<ul style="list-style-type: none"> How airlines can fly internationally How airline alliances work 	<ul style="list-style-type: none"> Class engagement Problem Set 6
10	Airline Labor	<ul style="list-style-type: none"> Railway Labor Act application Leverage in negotiations Recent trends 	<ul style="list-style-type: none"> Class engagement Second business case
11	Airline Regulation	<ul style="list-style-type: none"> How airlines are regulated Impact of regulation 	<ul style="list-style-type: none"> Class engagement

Week	Topic	• What You Will Learn	• How You and I Will Know You've Learned
12	Fleet Planning	<ul style="list-style-type: none"> • How airlines choose aircraft • How airlines finance aircraft • Role of aircraft lessors 	<ul style="list-style-type: none"> • Class engagement • Problem Set 7
13	Airline Costs and Measuring Profits	<ul style="list-style-type: none"> • How airlines manage costs • How profits are measured 	<ul style="list-style-type: none"> • Class engagement
14	Final Exam	<ul style="list-style-type: none"> • Everything covered 	<ul style="list-style-type: none"> • Exam

Prerequisites: You should have an understanding of the concepts taught in initial courses in Micro and Macro Economics, and basic Statistics. Alternatively, those in the Engineering or Business programs with a strong interest in aviation are prepared. Graduate students, by nature of their admission into that program, are also all eligible for the class.

Required Reading: There is no single text that adequately covers the topics addressed in this course. Readings will be distributed throughout the course and understanding the content of these is expected. At times, we will read the materials together in the class and/or have discussion groups to discuss an assigned reading. Readings in this class are not make-work; readings are meant to augment and further develop ideas we discuss in the class. I also will supply some readings as optional only for those with a special interest in the topic or for reference that could be helpful in class assignments. All readings will be posted on Blackboard or handed out in hard copy.

Some Details on The Class Structure

- **Video lectures** are offered in advance of class. These videos are 30-45 minutes long each, and I post a hard copy of the slides used on Blackboard. This allows us to use class time discussing materials, rather than me lecturing.
- **Problem Sets** consist of questions to research and answer, and projects for you to complete individually outside of class. Sometimes the problem sets ask you for your opinion, explaining why you believe what you say.
- **Guest Speakers**, prominent people in the airline industry today, will be asked to visit the class when possible, to share their expertise.
- **Case Studies** are real airline situations, giving you the ability to decide how to react. These are simplified "Harvard Business School" style cases, with specific issues and data given. You will prepare your approach to solving the issue presented, using data given and outside research. Cases will be worked on individually and those that show exceptional preparation and thought will earn bonus credit. Business cases have no right and wrong answers, but do have stronger arguments and weaker arguments.

- **Readings** will reinforce topics discussed in the lectures and add additional application and context. I will not ask you to read things that don't directly apply to material that we are learning. If you have a particular interest, let me know and I can offer supplementary materials.
- You may be asked to **share insights** on your own airline experiences.
- As part of the materials distributed for each class, **a set of notes** covering the major topics of the class will be posted. Collectively, these notes make a great study guide for the exams.

Grading: You can earn up to 105% credit in the class. This also means you can miss some things and still end with a strong grade:

Feature	Undergraduate Value	Total Value
Problem Sets (7)	8% each	56%
Business Cases (2)	10% each	20%
Case bonus (2)	2% each	4%
Mid-term Exam	10%	10%
Final Exam	15%	15%
Total		105%

Late Work: Problem sets are due by the start of the class the following week they are assigned. Business cases have two weeks to complete. Late submissions can earn partial credit.

Use of Online Resources: You are encouraged to use online resources to better develop case results and problem sets. Referring to earlier class session problem sets or cases (on sites such as Chegg), however, will likely result in weakened attempts as the problem sets and cases change each session.

Relationship to SYST 461/660: The Engineering School offers a class on Air Transportation Systems Engineering. The ECON Airline Economics class is nicely synergistic with the Engineering class, in that some of the topics are similar but the approach is different. This ECON class is focused on the economics, finance, and business aspects for managing an airline rather than the engineering concepts for designing an air transportation system. Those who want a more complete understanding of the commercial air transportation system should consider taking both courses.

Other Important School Information:

To Access Blackboard:

- Go to <http://mymason.gmu.edu>.
- Login using your NETID and password.
- Click on the 'Courses' tab.
- Double-click on ECON 471 or ECON 695 under the course listings

Technical Help: If you have difficulty with accessing Blackboard, please contact the ITU Support Center at 703.993.8870 or support@gmu.edu.

Honor Code: You are expected to know and follow the George Mason University Honor Code.

The George Mason University Honor Code states: “Cheating and attempted cheating, plagiarism, lying, and stealing of academic work and related materials constitute Honor Code violations. To maintain an academic community according to these standards, students and faculty members must report all alleged violations to the Honor Committee.” Students are encouraged to read the full Honor Code:

<https://oai.gmu.edu/mason-honor-code/> and to remain vigilant against any violation of the Code in their own work. Any cases of academic dishonesty in this course will be pursued according to the guidelines detailed in the University Catalog.

Time Conflict: George Mason University is committed to creating a welcoming, respectful and inclusive educational environment that values diversity. You should review the syllabus at the beginning of the term to determine if there are any conflicts between class time and religious observance. Please let me know if I have unknowingly created a religious conflict and I will fix it. Here is where George Mason tracks religious holidays:<http://ulife.gmu.edu/calendar/religious-holiday-calendar/>

If You Have a Disability: Those with disabilities who seek accommodations in a course can register with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [Visit <https://ds.gmu.edu/>] I will work with anyone to ensure accommodation.

Counseling and Psychological Services: The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (individual and group counseling, workshops and outreach programs) to enhance your personal experience and academic performance [See <http://caps.gmu.edu>].

Notice of Mandatory Reporting of Sexual Assault, Sexual Harassment, Interpersonal Violence, and Stalking: As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-993-3686 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason’s Title IX Coordinator by calling 703-993-8730, or [emailing titleix@gmu.edu](mailto:emailingtitleix@gmu.edu).

The Office for Diversity, Equity, and Inclusion monitors and supports Mason’s commitments, as well as affirms a culture of integrity that values shared responsibility, as critical elements of an inclusive and diverse academic community.

Mason is committed to excellence and integrity in all its endeavors. The university’s reputation is one of its most valuable assets, and members of the community should not place personal interests above the best interests of the university; even the appearance of impropriety must be avoided.

As a member of Mason Nation, you are expected to behave with diligence and professionalism and to comply with the highest standards of honesty, integrity, and fairness by being respectful of the rights of others, as well as protecting the privacy of confidential information, and complying with laws, rules, and regulations.

Read more at: <https://diversity.gmu.edu/about/principles-policies-and-confidentiality>

Email: GMU uses only Mason email accounts to communicate between you and faculty. You must activate your Mason email account, use it to communicate with your department and other administrative units, and check it regularly for important university information including messages related to this class. My Mason email is bbaldanz@gmu.edu. **University Catalog:** <http://catalog.gmu.edu>, is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at <http://universitypolicy.gmu.edu/>. All members of the university community are responsible for knowing and following established policies. **Syllabus and Course Changes:** The syllabus is a general plan for the course. Deviations may be necessary and will be announced by me.

I hope to see you in the class!