

# LGAV 3140 Air Passenger Planning & Control (3 credit hours)

Spring 2018

Term

#### Spring 2018

Schedule

Tuesdays, 18:30-21:20 (6:30 p.m.-9:20 p.m.) Meeting in BLB 075

### Catalog Description

Management of air passenger operations in the aviation industry including fleet operations and passenger and crew scheduling. Topics include optimizing flight routing, flight networks and fleet diversity; scheduling air/ ground crew assignments and gate assignments; understanding the impact of hub and spoke systems and maintenance locations on air passenger operations; and analytical tools used to effectively manage air passenger operations.

Professor

Dr. Tim Kincaid, Ed.D, MBA-Aviation Management Email: <a href="mailto:timothy.kincaid@unt.edu">timothy.kincaid@unt.edu</a> (Please use this as the primary way of connecting with me between classes.)

Office Hours

By appointment, before or after class.

#### Required Texts

- 1. Peter Belobaba, Amedeo Odoni, and Cynthia Barnhart, eds. (2015). *The Global Airline Industry*. 2<sup>nd</sup> Edition. John Wiley & Sons, Ltd. Chichester, West Sussex, U.K. ISBN: 978-0470740774
- 2. Mark Holt and Phillip Poyner (2016). *Air Carrier Operations*. 2<sup>nd</sup> *Edition*. ASA: Newcastle, WA. ISBN: 1619543176.

#### Required Course Materials

- 1. Airline Simulation: Each student will receive an email from Interpretive Simulations first week of class, with link to register http://interpretive.com Students pay directly via website. Cost: \$39.
- 2. StrengthsFinder online personal assessment: Student pays directly via website. Cost: \$15.00, which includes online assessment and StrengthsFinder 2.0 e-book, and other materials. This is the url: https://www.gallunstrengthscenter.com/Purchase/en-US/Product?Path=Clifton StrengthsFinder

**BLACKBOARD:** Course materials, slide presentations, assignments, quizzes, and outside readings will be available on course web page via Blackboard. **Students should refer to Blackboard often throughout the course to remain current.** Students can access the course web page through the UNT course management system. The site is password protected. You can learn more about Blackboard by reviewing the on-line student manuals. **NOTE:** I use Blackboard frequently to post announcements, which also automatically sends an email to your UNT email address (the default) or to another email address of your choosing (you must make that change on Blackboard yourself). **If you don't regularly check your UNT email account, go on Blackboard ASAP and add an email address that you check most often.** 

**OUTSIDE READING:** Additional readings will be assigned throughout the course. Case studies, reports, articles, and other topical issues may be provided from academic journals, governmental sources and other current business sources. Additionally, students will be required to cite sources of information

independently using Internet- and library-based resources. Outside readings are posted on Blackboard.

### Learning Outcomes

This course is designed to accomplish the following students learning outcomes. At the successful completion of this course, students will be able to:

#### Think like a strategic airline leader.

- Demonstrate an understanding of the complexity, breadth, and interrelatedness of the highly network-centric global airline industry.
- Critically examine current global air transportation issues, economic trends and future challenges through current news articles and papers, course textbooks, academic journal articles, and classroom exercises and discussion.
- Understand meanings and uses of common operational, performance, and economic metrics and acronyms used in running an airline, including ASM, RPM, A14, RASM, CASM, OOOI, ETOPS.

### Critically analyze the complex dynamics and connections between the historical, economic, regulatory, and legislative foundations of the global passenger airline industry.

- Describe the impact on commercial aviation today of Open Skies agreements, economic deregulation, global alliances, and airport and airspace constraints, and safety, security, and environmental concerns.
- Distinguish between U.S. airline operations under FAR Part 121 vs. FAR Part 91 regulations, including required management positions, and federal regulations related to roles, responsibilities, and limitations for maintaining a safe, professional operation.
- Describe roles, responsibilities, limitations, and interrelationships of major governmental and industry organization regulatory, investigative, certification, enforcement, and trade groups.
   Organization examples include ICAO, IATA, A4A, FAA, NTSB, RAA, NBAA, EASA, and TSA.

### Distinguish between various types of air carriers, operating strategies, and aircraft categories involved in modern passenger airline operations.

- Compare relative strengths and disadvantages of various types of airline, including mainline carriers, low cost carriers (LCC), ultra-low cost carriers (ULCC), hybrid LCCs, regional carriers, commuters, and charter/fractional ownership.
- Compare relative operational and economic advantages and disadvantages of "hub-and-spoke" vs. "point-to-point" network configurations.
- Compare relative operational and economic characteristics and limitations between mainline (single-aisle/"narrow-body" and twin-aisle/"wide-body") aircraft, regional jets (RJs) and turboprops, and commuter aircraft.

## Understand common methods of optimizing passenger airline operations, including route network, pricing, capacity, fleet diversity, flight routing, air crew/ground staff assignments, and airport facilities.

- Understand decision making approaches and tools airlines use to balance between efficiently maximizing the use of capital intensive assets. Also, understand dynamic constraints in air space capacity, pricing, market demand, competition, facilities, and staffing.
- Understand technological and philosophical approaches airline management uses to mitigate and recover from disruptions due to irregular operations due to weather, air traffic control, etc.
- Understand airline pricing strategies and tactics, including market demand projections, competition, pricing, yield management, revenue management, frequent flyer program awards, and technology use to optimize mix of fare types by flight and market.

#### Understand the complex relationships an airline has with its many stakeholders.

Identify the many internal and external audiences impacted by an airline including shareholders/owners, employees, management team, customers, communities served, airport managers, vendors, regulators, media, labor unions, and environmentalists, airport neighborhood groups, and social cause activists.

 Understand the historically challenging labor relations and human resource management unique to the heavily-unionized airline industry, including contentious issues like outsourcing, labor contract negotiations, and compensation and work rules.

#### Increase student self-awareness to develop personal leadership capacity and effectiveness.

- Discover their own Top 5 Strengths through online *StrengthsFinder* individual self-assessment, and learn ways to leverage each. Recognize the differences and similarities in personal strengths of others can be both a challenge and an important strategic asset for collaboration.
- Explore a variety of career paths and opportunities within the airline and related industries, through coursework, readings, and industry guest speaker presentations. Learn requirements for various industry positions and roles, and how to prepare for and pursue them.
- Through multiple-week airline simulation team project, develop and apply skills for establishing and sustaining an effective and high-functioning team. This is done by creating and adhering to consensual team norms to ensure equitable workload distribution. This maximizes learning for all by application of course theory to actual practice in an online business simulation. Two peer evaluations will occur during the simulation, providing confidential insight to the instructor on individual team mate contributions and workload distribution.

#### Course Format

This course will be conducted through a combination of lectures, in-class discussion, guest speakers, homework, team projects, quizzes, personal assessments, and exams. The lectures will cover foundational material for each assigned topic, but often will not cover all the material as presented in the text and outside readings. You are expected to attend all classes and to be prepared to discuss and/or apply all assigned readings. Students will be called upon to discuss the topics/concepts in class.

### Graded Elements

Your performance in this course will be based on the following graded elements:

GRADED ELEMENTS	POINTS
Quizzes: Weekly (12 @ 20 pts each)	240
Exams: Mid-term & Final (2 @ 100 pts each)	200
Simulation: HW1 Name Your Airline/Set Airline Strategy	50
Simulation: HW2 Annual Report	100
Simulation: HW3 Airline Management Presentation to Stakeholders	100
Simulation: Peer Evaluations (2 @ 10 pts each)	20
Professional Development (PD): Primary (2 @ 10 pts each)	20
Exercise: Airline Pricing	20
StrengthsFinder Assessment	15
Total Possible Points	765
PD Supplemental Extra Credit (up to 3 @ 5 pts each; added to total points)	

#### Grade Scale

To calculate your final grade: Take the total number of points you have earned for all assignments (this information is available in your grade book in Blackboard in the Total Points column) and divide it by 765. Compare the resulting percentage with the matrix below. For example, if your total points earned are 639, the calculation is 639/765 = 0.84 which is equal to a letter grade of B.

Grade	% Range
Α	90-100
В	80-89
С	70-79
D	60-69
F	0-59

Assignment Due Dates & Lateness Policy A separate course schedule with due dates will be provided early in course. Assignments are due on the date identified in the course schedule. Some are to be submitted to Blackboard by 17:00 (5 p.m.) of due date, unless otherwise indicated. If <a href="mailto:hard copies">hard copies</a> are required, they must be turned it in <a href="mailto:at the beginning of class">at the beginning of class</a>. Any assignment may be turned in early. In some instances, I will also accept homework that is uploaded via email <a href="mailto:timothy.kincaid@unt.edu">timothy.kincaid@unt.edu</a>. Late assignments will be penalized one letter grade per day past due date. There will be no make-ups for missed quizzes or exams without a valid reason and prior approval from the professor. Correct spelling, grammar, and punctuation are expected on all graded material (including Blackboard postings). All assignments must be typed.

Team Airline Simulation Project Students will be randomly assigned to teams of up to four (4) students for an online Airline Simulation project that will run throughout the semester. This interesting, educational simulation gives students the experience of creating, operating, and expanding an airline. More details will be provided in class and via announcements at our first class meeting. You will receive an email from Interpretive.com (makers of simulation) with a link to register. The cost per student will be \$39, payable directly to the simulation provider (see syllabus page 1). **Until every member of each team registers/purchases simulation, that team cannot begin.** Every week, each team will collectively make decisions and move their airline ahead in the simulation.

There are five (5) graded assignments associated with the Airline Simulation:

- 1. Team paper reporting on their airline's name and strategy;
- 2. Annual Report
- 3. Peer Evaluation #1
- 4. Team Presentation to Stakeholders during final class meetings
- 5. Peer Evaluation #2

Each team member will submit two peer evaluations via simulation website, to help me understand distribution of workload. Overall simulation grade for each student will be influenced by peer evaluations; it is important for each to participate fully (i.e. no "freeloading") to receive full credit for simulation.

Professional Development "PD" A great form of enrichment in learning about a practical discipline is to participate in activities categorized as Professional Development (PD). PD includes activities of service or learning with members of the profession. Suitable activities include attending meetings of professional organizations, attending presentations by industry leaders, working on practical projects within the scope of the discipline, and participating in other industry/profession focused learning events. There are two categories of Professional Development to be considered: Primary PD and Supplemental PD.

Primary PD consists of attendance at a scheduled College of Business Distinguished Speaker, Center for Logistics Education and Research Speaker Series, Onboarding events, or attendance at one of the DFW-area professional association meetings. These are the only activities that qualify for the Primary PD credit. Each student is expected to PARTICIPATE IN AT LEAST TWO PRIMARY PD CATEGORY EVENTS during the semester (each event earns 10 points, for a total of 20 points). The specific "pre-approved" Primary PD events will be communicated via email and posted on Blackboard. To ensure you receive credit for attending an event, register online for the executive lecture series or onboarding lecture. Space should not be an issue, but we still require RSVPs to attend. It's a good professional practice for the students to learn and helpful to us to assess audience size. Occasionally our presenters will bring handouts, gifts, or prizes, and like to know how many students to expect. The UNT Professional Program in Logistics is very proud of its close relationship with industry and our emphasis on professionalism. This semester the Logistics Executive Lecture Series has planned at least six Friday 12:00-13:00 sessions allowing students to meet and actively interchange with logistics executives and

at least four on-boarding sessions. Attendance at the same event to fulfill a requirement for another course or program will <u>not</u> be counted (i.e. no "double-dippling."). You will not receive credit if you have not RSVP'd. If you RSVP and fail to attend, two (2) points will be deducted from your final grade. If you cannot attend these events due to work or class schedule conflicts, you may find an alternative such as an evening professional meeting. Note: For students in this course, our guest speakers in LGAV 3140 <u>cannot</u> be counted for PD.

**Supplemental PD** category of events is somewhat broader. You can get credit for up to three (3) Supplemental PD activities, worth up to five (5) points each.

There are four (4) ways to earn Supplemental PD:

- 1. Supplemental PD may include attending an additional Primary PD event over the two (2) required.
- 2. Attendance at the UNT student organization chapter when an industry speaker or a tour of industry operations are planned. The student organization chapters include:
  - American Association of Airport Executives (AAAE)
  - Alpha Eta Rho
  - Logistics Student Association (LogSA)
  - Institute for Supply Management (ISM)
     You may also earn supplementary credit for any leadership positions held in one of the student organizations related to aviation logistics. This would include either an elected position or heading up an event committee.
- 3. Visit one of two DFW-area aviation museums:
  - American Airlines C.R. Smith Museum (near DFW Airport) or
  - Frontiers of Flight Museum (Dallas Love Field).
     If you attend a museum, scan and submit your paid admission ticket in the Supplement PD folder on Blackboard to confirm the visit.
- 4. Attending a local meeting of "Toastmasters," an international organization that provides attendees the opportunity to collaboratively improve public speaking and communication skills. Check <a href="https://www.toastmasters.org">www.toastmasters.org</a> for convenient meeting times and locations.

If you have other activities that you believe qualify for consideration for supplemental professional development credit (e.g., interviewing/shadowing an industry professional at their workplace) please seek approval from the instructor AHEAD OF TIME or your event might not qualify for credit.

#### Post each Primary PD and Supplemental PD in the appropriate file folders on Blackboard, to include:

- Name of the speaker, event host and organization, plus the date and location of event;
- Summarize in two-to-five sentences topics discussed, and what your biggest take-aways were
  (i.e. what did you learn/like/didn't like about the presentation). Spelling and grammar count;
  poor writing costs points.

If you find that you will have difficulties in getting at least two PDs this semester due to schedule, courseload, etc., let the instructor know as soon as possible. There may be other options available.

## Participation & Class Environment

I believe in "learning together" through collaboration. Participation in class not only helps you understand the material but also makes the class more enjoyable for all. Preparation for class, frequency of participation, quality of participation, organization, and conciseness all demonstrate the level of commitment and engagement. Make sure that you are making your presence known through positive class contributions!

To help prepare for your career, classroom norms will be consistent with what you can expect as an employee in industry. You are expected behave in a manner consistent with an aviation professional in the workplace. It is particularly important to treat everyone the professor, fellow classmates, and

guests with respect (keyword: Golden Rule). Failure to be prepared, attend class regularly, and actively participate in the class discussion will diminish your experience of LGAV 3140. And it also will adversely impact your grade.

Students engaging in unacceptable behavior will be directed to leave the classroom. The instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at <a href="https://www.dos.unt.edu/conduct">www.dos.unt.edu/conduct</a> .

#### Current Events

As extension of class participation, class each week will begin with a quick review of recent events from media concerning the airlines and related topics. So, watch news media of all types for airline news and be prepared to discuss in class. Media sources can include print, online, TV, and radio. The UNT Library is a great resource. Extra credit points are given for "good" current events. To be considered a "good" current event, it must be from a reputable news source. The student must provide a coherent and accurate brief description of the event, including why it's interesting or relevant to the course.

#### Recommended sources for free online airline news updates:

- Airlines for America (A4A) daily "smart brief" email, <a href="http://airlines.org">http://airlines.org</a>
- Air Transport World online, <a href="http://atwonline.com">http://atwonline.com</a>
- Aviation International News alerts, <a href="http://www.ainonline.com/">http://www.ainonline.com/</a>
- The Cranky Flier blog, <a href="http://crankyflier.com/">http://crankyflier.com/</a>
- FlightAware daily news brief email, <a href="http://flightaware.com/">http://flightaware.com/</a>
- AvWeb daily news brief email, https://www.avweb.com/

#### Quizzes

This course includes numerous quizzes and you can expect a quiz nearly every week, after our class meets. Quizzes will cover the material assigned and covered in class for that week. This makes preparation, attendance, and class participation even more critical! Exceptions to the weekly quiz will be noted in the syllabus or announced in class and/or on Blackboard. All assigned material (text, lecture slides, outside reading, guest speaker presentations) and classroom discussions are "fair game" for each quiz. Quizzes are "open notes/open book," but individual effort.

Quizzes will typically be administered via Blackboard and are timed. Once you begin taking the quiz on Blackboard you will have a limited time with which to complete. Therefore, you should be familiar with the material prior to attempting the quiz, rather than strictly relying on your notes or the course textbook. You will have a second opportunity to take each quiz, with highest score counting. The quizzes are designed to prepare you for the two (2) course exams. Deadline for regular weekly quiz completion is 23:30 (11:30 p.m., Central) each Monday. Each guiz is worth up to 20 points each. There also may be an in-class "pop" quiz, providing those who are present with the opportunity to earn bonus points. (You must be present to win!)

#### **Examinations**

This course will include two (2) exams which may be either in-class or via Blackboard. The exams will consist of questions drawn from the text, outside readings, lectures, discussions, and out-of-class assignments. You are responsible for the material even if is not emphasized or covered during the lecture. The final exam will be comprehensive in nature. Exams will include a combination of multiplechoice, true/false, and short answer. There will be no makeup exams except in extraordinary situations that are approved by me prior to the scheduled exam. EXAM PREPARATION: Students perform better on the exams who keep up with the reading, attend and participate in class, and study for/take the quizzes, so that you do not have to refer to your book/notes. I will post weekly objectives and some version of the PowerPoint lecture notes on Blackboard to coincide with the lecture and readings.

Writing | The written requirements in this course consist of team reports, and any short answer/essay questions

on the exams. Your written assignments and exam responses should be neat, clear, and concise. Proper college level English grammar, spelling, and punctuation are expected (including *all* Blackboard postings). Electronic files of your assignments are preferred in Microsoft Word or PDF format. All assignments must be typed unless otherwise expressly noted. The oral communication requirements of this course include an in-class presentation and daily class discussion/participation. Students are expected to provide well-reasoned and concise discussions or arguments.

Software for Class

You will need Internet access and a web browser. Course materials, assignments, some quizzes, and exams will be available online via Blackboard. You will be responsible for accessing Blackboard to obtain all course materials. Much of the printed materials for this course will be in PDF format (Adobe Acrobat), which requires Adobe Acrobat Reader to read (available free at <a href="www.adobe.com">www.adobe.com</a>.) All assignments should be typed and saved as an MS Office file or a PDF file. If you do not have Microsoft Office, contact me to ensure your file can be opened and read for grading purposes.

Personal Technology Use in Classroom Multi-tasking is a myth! Research shows that you cannot be fully present if you are using smart phone, tablets, iPads, or laptops for activities unrelated to class. Using technology for unrelated activities during class is disruptive, rude, and unprofessional. We assume you are preparing yourself for a career in aviation management and thus will create class norms for behavior that align with what one can expect in the workplace. Get into the habit of acting like/being a professional now – your transition into that first (or next) job will be smoother. Therefore, please adhere to the following class norms: All communications devices, like mobile phones/devices are to be turned off or muted during class. Laptops and other devices in the classroom may not be used for web browsing, email, or activity not directly related to the course. There will be a break approximately half-way through each class that will enable you to check email and voicemail.

Academic Integrity

Students caught cheating or plagiarizing will receive a zero (0) for that particular assignment or exam (or specific alternative sanction, such as course failure). Additionally, the incident will be reported to the Dean of Students, who may impose further penalty. According to the UNT catalog, the term "cheating" includes, but is not limited to: a. use of any unauthorized assistance in taking quizzes, tests, or examinations; b. dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; c. the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university; d. dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s); or, e. any other act designed to give a student an unfair advantage. The term "plagiarism" includes, but is not limited to: a. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment; and, b. the knowing or negligent unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

Any work on the graded material (quizzes, abstracts, case study, individual presentation, etc.) is to be treated identically to an in-class exam: the work must be entirely your own with no outside help or assistance. When working on individual assignments, you must not discuss your work with anyone (other faculty or other students) unless specifically approved by me. Headphones are prohibited during exams.

For written assignments: Borrowed ideas and summaries of portions of the articles should also be paraphrased in your own words AND must be fully cited. Any idea, concept, or material that was not generated by you should be fully documented with citations. All sources may be cited using numbered footnotes/endnotes or using the in-line (author year) format. Footnotes and endnotes should include the fully bibliographic information. If you prefer the (author year) format, a full bibliography, in

alphabetical order, should be included at the end of the written assignment. If you quote material, you must also include you source through proper citations. Large-scale "cutting and pasting" from other sources, even when properly cited, does not meet the criterion of submitting your own work and will result in a failing grade. According to University policy, if you become aware of any misconduct related to academic integrity, you should inform me or another proper authority, such as department chair or associate dean.

Americans with Disabilities Act The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at http://www.unt.edu/oda. You may also contact them by phone at 940.565.4323.

Exam & Assignment Grade Appeals

If you disagree with how any assignment or examination was graded, you must submit a written appeal to me by email or letter within one (1) week after the grade was awarded or the graded work was returned. The written appeal should include your concern or question about your grade, an explanation about why you believe your answer is correct, AND documentation or evidence supporting your belief. Appropriate documentation includes references from the text, course lecture slides, or outside reading from the course syllabus. Appeals without supporting rational and specific reference(s) to the course will be returned without consideration. Grades will not be lowered due to an appeal.

Course Disclaimer

The schedule, policies, and assignments contained in the course syllabus are subject to change in the event of extenuating circumstances, or to accommodate class progress. Also, changes may occur to provide more in-depth focus or discussion where warranted, to take advantage of a guest speaker opportunity, or by mutual agreement between the instructor and students. All changes will be announced in class and posted on Blackboard.

Emergency Notification Procedures UNT uses a system called Eagle Alert to quickly notify you with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). The system sends voice messages (and text messages upon permission) to the phones of all active faculty staff, and students. Please make certain to update your phone numbers at <a href="https://www.my.unt.edu">www.my.unt.edu</a>. Some helpful emergency preparedness actions include: 1. Know the evacuation routes and severe weather shelter areas in the buildings where your classes are held; 2. Determine how you will contact family and friends if phones are temporarily unavailable; and. 3. Identify where you will go if you need to evacuate the Denton area suddenly. In the event of a university closure, please refer to Blackboard for contingency plans for covering course materials.

Retention of Student Records Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted and unreturned during the duration of the course are kept for at least one calendar year after course completion. Coursework completed via the Blackboard on-line system, including grading information and comments, is also stored in a safe electronic environment. You have a right to view your individual record; however, information about your records will not be divulged to other individuals without the proper written consent. You are encouraged to review the Public Information Policy and FERPA (Family Educational Rights and Privacy Act) laws and UNT's policy in accordance with mandates:

http://essc.unt.edu/registrar/ferpa.html