

DEPARTMENT OF MARKETING & LOGISTICS COURSE SYLLABUS SAGE 116, 1400-1520

TERM: Fall 2020

COURSE TITLE: LGAV 3110.001, Aviation Maintenance Programs

COURSE DESCRIPTION FROM CATALOG: Basics of aviation maintenance management. Familiarization with functions and responsibilities of aviation maintenance managers. Topics include managing maintenance; complying with regulatory, legal and technical requirements of aviation maintenance; and defining safety concepts of the aviation maintenance industry. Emphasis on the identification of optimum applications used in aviation maintenance.

- INSTRUCTOR: Steve Joiner BLB, Rm 338E 940.565.3085 (office) E-mail: steve.joiner@unt.edu
- **OFFICE HOURS:** Tuesday: 11 am to 12 noon Thursday: 11 am to 12 noon Other times by appointment.
- **COMMUNICATION**: Preferred communication method is e-mail, via either Canvas or the UNT e-mail system. Texting can be effective and fast, but please include your name in any text, as I will not have your cell in number in my contacts list. Cell number: 214-693-3866. In all cases, a response can be expected within 24 hours of receipt.
- WELCOME: As members of the UNT community, we have all made a commitment to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity based discrimination, harassment, and retaliation. UNT's full Non-Discrimination Policy can be found in the INT Policies section of the syllabus.
- **TEACHING**: The course format will utilize the textbook, short quizzes at the end of each chapter covered, class lectures, occasional outside readings, and class presentations. Classroom attendance is highly recommended as most all material covered in the course will be delivered face-to-face. Learning is offered via textbook chapters, personal experiences and examples provided during the lectures,

and chapter PowerPoints. This may be best described as <u>reading</u>, <u>hearing</u>, <u>and seeing</u>.

REQUIRED TEXT: Kinnison, Harry: "Aviation Maintenance Management "Publisher: McGraw-Hill Professional; Second edition ISBN: 978-0-07-180502-5. Current FAR/AIM.

Course materials including PowerPoint slides, assignments, and outside readings will be available on Canvas (http://Canvas.unt.edu). Some materials will be available in Adobe Acrobat Reader (*.pdf) format. You can obtain Adobe Acrobat Reader via the Internet at <u>www.adobe.com</u>.

TA INFORMATION: If re-directed to my TA for any grade changes, questions posed etc., you may contact TBA via email: <u>TBA</u>

COURSE MATERIALS Canvas. Course materials, assignments, and any outside readings will be available within Canvas. Students can access Canvas using the Internet at the website *https://ecampus.unt.edu*. The site is password protected and can be accessed using your EUID. You can learn more about Canvas by reviewing the on-line student manuals.

Outside readings: Outside readings may be required for several class sessions. In the event outside readings are assigned, they will be posted by chapter in Canvas and can be downloaded.

Internet Software: You will need Internet access and a web browser such as Firefox or Microsoft Internet Explorer. Course materials and assignments will be distributed via Canvas. You will be responsible for accessing Canvas to obtain all course materials and to post completed assignments when so required. Adobe Acrobat Reader will be required to read the majority of these materials. Acrobat Reader is available free from the Adobe Many of the printed materials www.adobe.com. web site: required for this course will be in stored in PDF. This format is common for materials published throughout the web and for fulltext articles obtained on-line from the UNT library. Materials written in PDF can be viewed and printed only using the Adobe Acrobat Reader. Once the Reader is installed on your system, click on one of the items in PDF format. Your web browser should

automatically load the Adobe software within the browser, and show you what the document looks like. You can then print the document by clicking on the printer icon on the Adobe Acrobat Reader's window.

Technical Assistance

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: UIT Student Help Desk site (http://www.unt.edu/helpdesk/index.htm) Email: helpdesk@unt.edu Phone: 940-565-2324 In Person: Sage Hall, Room 130 Walk-In Availability: 8am-9pm

Telephone Availability:

- Sunday: noon-midnight
- Monday-Thursday: 8am-midnight
- Friday: 8am-8pm
- Saturday: 9am-5pm

Laptop Checkout: 8am-7pm

For additional support, visit Canvas Technical Help (https://community.canvaslms.com/docs/DOC-10554-4212710328)

Class PowerPoint Presentations: Copies of the PowerPoint slides used in-class can be downloaded from Canvas. The PowerPoint files will be saved as PDF (three slides per page) for note-taking and in the regular format. I would encourage you to download and print copies of the slides in advance of reading the book chapter.

Class Objectives: The daily objectives for each class session are posted by chapter in Canvas.

COURSE OBJECTIVE: To provide an understanding of the regulatory, legal and technical requirements of maintenance in the aviation industry. Students will learn about the different aspects of the aviation maintenance industry. Particular emphasis will be placed on defining the various safety concepts and optimum applications used in aviation maintenance.

COURSE FORMAT: The course will be conducted in a blended format, combination of in-class and distance. The lectures *supplement* the course text. As a result, you must attend the lectures <u>and</u> read the assigned material in the course text as well as the PowerPoint presentations for each chapter.

This course will not be about Aircraft maintenance but rather will be somewhat unique. It will be about all these topics-maintenance, engineering, management. We will be looking at the "big picture". We will be looking at maintenance, engineering and management as an integrated whole. We will examine how all these disciplines combine and coordinate to accomplish the goals and objectives of aviation maintenance.

The class will adhere as closely as possible to the schedule posted in the syllabus. You must progress with the schedule shown in this syllabus.

Before you begin any chapter, you should first refer to the chapter objectives posted in Canvas. You will find information on how to prepare for the chapter, the reading and viewing assignments, any required or recommended outside readings or videos, key learning objectives, and discussion questions, if any.

In several instances, the material in the book may already be outdated. If the material in the PowerPoint slides contradicts or contains different information from the book, you need to use the information which is contained in the given PowerPoint slides.

Any questions regarding the course should be posted in the discussion area. I will create a discussion area for each chapter and assignment. Post your questions in this area, and I will respond. This approach will ensure all students benefit from your question and my response.

GRADING: You should not view the graded elements, or assessments, as separate from learning course content. These assessments are an integral part of learning about aviation maintenance. Each graded element provides an opportunity for you to interact with the different problems frequently encountered by aviation professionals and to receive immediate feedback on how you have performed. The purpose of these assessments is to further your understanding of aviation.

The graded elements within the course include two examinations, a paper abstract, resume submission and quizzes. In addition, you are required to attend two presentations in the executive lecturer series or at professional meetings where a speaker is present. The weights assigned to each element are shown in the following table:

Graded Element	Percentage
Exam 1	25%
Exam 2	25%
Quizzes	20%
Team Project	15%
Resume Submission	10%
Professional Development (2)	5%
Total	100%

Your course grade will be determined based on the following evaluation instruments:

- 1. Exams. Two exams will be given. The exams will consist of 50 questions drawn from the readings, lectures, speakers, presentations, and assignments. You are responsible for the material even if it is not emphasized or covered during the lectures. Past experience strongly suggests you will learn much more (and thus perform better) in the class if you have completed the reading assignment before viewing the assignment and taking the guizzes and examinations. The book chapters cover much of the material addressed in this course; however, I will cover material in addition to the text in the in-class lectures and PowerPoint slides. It is strongly recommended that you take thorough notes. Exams will focus on the chapters and modules contained in the class schedule; however, due to the nature of the course and subject matter, all exams contain some comprehensive elements. There will be no make-up exams except in extraordinary situations that require approval before the scheduled exam. The exams are not cumulative. However, you must be familiar with basic concepts covered earlier in class.
- 2. *Quizzes.* A quiz will be administered online 0800 the Friday of the end of the week the chapter or subject is presented. You will be informed about the manner of the quiz in the class that week.

Quizzes will consist of five to ten questions covering the material assigned for the class period. Failure to prepare for the quizzes may seriously affect your grade. The quizzes are representative of the multiple choice questions that you can expect to see on the examinations. On-line quizzes given will be available beginning 0800 on the Friday of the week in which it was covered and will close by class time the following Tuesday. As a general rule, on line quizzes cannot be made up.

3. *Resumes.* Time to start thinking about graduation. Do you have your resume ready? You should! In order to be prepared you will be required to submit a resume for this class.

Your assignment:

First, in order to receive credit you must Submit your resume ELECTRONICALLY submit your resume in Canvas per your instructor's portal <u>no later than 1700, Friday, September 13, 2019</u>. The logistics faculty may use this version of your resume to send to companies that contact us throughout the semester and afterward- so make sure it is your very best. <u>There is a 100% penalty for late submission</u>. Students adding the course will have 48 hours to make-up this exercise from the time it is added.

<u>Second, you must provide the following naming convention</u> for your document uploaded into Canvas:

InstructorInitials_Full/intern_StudentLastName_Semester_Year Example: JSJ_Full_Joiner_Fall_2019

Third, in order or be visible to employers you must submit your resume via Eagle Careers into Handshake

<u>http://studentaffairs.unt.edu/career-center/eagle-careers</u> You need to have a student profile created. A Student User's Guide will be provided.

Fourth, once your resume is ready to upload into Handshake do the following:

Under "Personal Goals" select either "I want a job" or "I want an internship", and then click "Done".

If recruiters will be allowed to see your resume, choose "Other" dropdown, select "Has Public Resume".

4. *Team Project:* There will be a team project assigned to evaluate systems employed by local MROs.

Guidelines: Class will be divided into teams, each evaluating a topic/procedure in place at identified repair businesses. Detailed instructions will be provided prior to the event.

- 5. *Class participation.* Participation will be based on preparation for class, frequency of participation, quality of participation, organization, and conciseness.
- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use "I" statements to share thoughts and feelings. Try not to speak on behalf of groups or other individual's experiences.
- Use your critical thinking skills to challenge other people's ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as "YELLING!"
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using "text-talk" unless explicitly permitted by your instructor.
- Proofread and fact-check your sources.
 Keep in mind that online posts can be permanent, so think first before you type.
- 6. *Professional development*. It is understood that the best 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 (2) categories of PD – Primary and Supplemental. Primary PD consists of attendance at one of the scheduled College of Business Distinguished Speaker, Center for Logistics Education and research Speaker Series events, Onboarding speaker series or attendance at one of the DFW professional association meetings. These are the only activities that prequalify for Primary PD credit. Each student is expected to participate in at least two (2) Primary category events during the semester (each event earns 2.5 points for a total of 5 points).

The Supplemental category of PD is somewhat broader and includes many activities related to student organizations in the college. This includes attendance at AAAE, Alpha Eta Rho, LogSA or ISM meetings when an industry speaker is present, tours of industry operations organized by one of the organizations, and any leadership positions held in one of the student organizations. If there are other activities you believe may qualify for consideration, please seek approval form the instructor *AHEAD OF TIME*. Many of the opportunities are space limited, so plan early. Students can earn up to 1 point each for a limit of 3 supplemental events.

Because social distancing is the best practice for everyone's health, we are converting all speaker presentations to a virtual format. I will be setting up and hosting Zoom meetings for each event, which will still be held on Fridays from noon to 1:00 PM. Logistics and Supply Chain Management, Operations Management, and Aviation students will still be asked to register for each event. This will let us know which class they would like to receive credit for. Zoom sessions will be recorded and post-event attendance reports will continue to be distributed after each event.

Registration and attendance changes will be communicated to the students by email during the first week of the semester and will also be posted on the following websites. Executive Lecture Series: <u>https://cob.unt.edu/logistics-</u> <u>center/executive-lecture</u> and <u>https://cob.unt.edu/logistics-</u> <u>center/executive-lecture/speakers</u> Onboarding Program: <u>https://cob.unt.edu/logistics-</u> <u>center/onboarding-program</u>

ASSIGNMENTS AND DUE DATES: You are expected to approach each assignment with the professionalism required in the "real" world. Each assignment must be received by 1700 on the day due. A 50% penalty will be assessed for submissions within 24 hours after the assignment is due (one day late). Correct spelling, grammar, and punctuation are expected and will be considered in the grading of all assignments. The overall appearance and professionalism of the submission will also be considered in the grade. All submissions will be typed (25% penalty if not).

GRADINGThe grading scale is guaranteed. You will receive no less than the
grade listed within the appropriate interval. I reserve the right to
adjust the grading scale in favor of the class if warranted.

Numeric grades are <u>not</u> rounded up to the next high letter grade. I frequently curve the grades for many of the assessments in the course. Rounding would result in an additional curve for a limited number of students near grade "breaks."

Grade	Numeric Range	Grade Points
А	90 to 100	4.0
В	80 to 90	3.0
С	70 to 80	2.0
D	60 to 70	1.0
F	Below 60	0.0

LIBRARY Students can use the library to research materials for **ASSIGNMENTS:** their classes. Students will need to access the UNT library's electronic resources to obtain full-text access, www.library.unt.edu. COMPUTER The Internet provides considerable resources for obtaining additional information regarding the subjects covered in the class. **APPLICATIONS:** Course materials will be accessed via the Internet using Canvas. Students are encouraged to use the Internet. ACADEMIC Cheating, plagiarism, or other inappropriate assistance on INTEGRITY examinations will be treated with zero tolerance and will result in a grade of "F" for the course. Any work on the assignments is to be treated identically to examination: the work must be entirely yours with ABSOLUTELY NO outside help or assistance. When working on the assignments, you must not discuss your work with anyone unless specifically approved by the instructor.

You must footnote any outside sources used when preparing your assignments. Copying or using material from assignments previously submitted by other students (at UNT or other learning institutions) or downloaded from the Internet is plagiarism. If you quote material, you must cite your sources. Large scale "cutting and pasting" from other sources, even if properly footnoted does not meet the criterion of submitting your own work and will result in a failing grade for the course if resorted to in your assignments.

The examination instructions are very clear regarding what materials may be used on the exam. If you use any materials other than those permitted on the exam, talk with other individuals during the exam, exchange information about an exam with an individual that has not taken the exam, or copy or use material from another individual's exam, you will receive a failing grade for the course.

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 the department chair or associate dean.

Emergency Evacuation

Severe Weather In the event of severe weather, all building occupants should immediately seek shelter in the designated shelter-in-place area in the building. If unable to safely move to the designated shelter-in-place area, seek shelter in a windowless interior room or hallway on the lowest floor of the building. All building occupants should take shelter in rooms 055, 077, 090, and the restrooms on the basement level. In rooms 170, 155, and the restrooms on the first floor.

Bomb Threat/Fire In the event of a bomb threat or fire in the building, all building occupants should immediately evacuate the building using the nearest exit. Once outside, proceed to the designated assembly area. If unable to safely move to the designated assembly area, contact on or more members of your department or unit to let them know you are safe and inform them of your whereabouts. Persons with mobility impairments who are unable to safely exit the building should move to a designated area of refuge and await assistance from emergency responders. All building occupants should immediately evacuate the building and proceed to the south side of Crumley Hall in the grassy area, wests of parking lot 24.

AMERICANS WITH DISABILITIES ACT The College of Business complies with the Americans With Disabilities Act in making reasonable accommodations for qualified students with a disability. If you have an established disability as defined in the Act and would like to request accommodation, please see me as soon as possible. I can be contacted at the location and phone number shown in this syllabus. Please note: University policy requires that students notify their instructor within the first week of class than an accommodation will be needed. Please do not hesitate to contact me now or in the future if you have any questions or if I can be of assistance.

GRADE APPEALS, WITHDRAWALS, INCOMPLETES Please refer to the UNT Undergraduate Catalog for policies governing these actions. If you have any questions, please contact me for clarification.

EXAM AND ASSIGNMENT GRADE APPEALS If you disagree with how any assignment, quiz or examination was graded, you must submit a written appeal by email before the end of the following week. The email must clearly state the rationale for the appeal and provide evidence to support your position. For example, you may cite text references, PowerPoint slides, or outside readings to support your position—these must be clearly referenced by title and page number. The rationale should be objective in nature and should not include subjective opinions. Appeals that do not provide supporting rationale and specific reference(s) to course materials will be returned without consideration.

- **COURSE DISCLAIMER**: The schedule, policies, and assignments, contained in this course syllabus, are subject to change however all changes will be announced prior to taking effect with a posted change to the syllabus being placed in Canvas.
- **OTHER:** All cellular or digital phones and pagers are to be turned off during class. Failure to comply with this request will result in a letter grade deduction if repeated.

COVID-19 Impact on Attendance: While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent so I may make a decision about accommodating your request to be excused from class. If you are experiencing any <u>symptoms of COVID-19</u> (https://www.cdc.gov/coronavirus/2019-ncov/symptomstesting/symptoms.html) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or <u>askSHWC@unt.edu</u>) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or <u>COVID@unt.edu</u> for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important.

Face Coverings: Face coverings are required in all UNT facilities. Students are expected to wear face coverings during this class. If you are unable to wear a face covering due to a disability, please contact the Office of Disability Access to request an accommodation. UNT face covering requirements are subject to change due to community health guidelines. Any changes will be communicated via the instructor.

PROPOSED CLASS SCHEDULE & READINGS ASSIGNMENTS LGAV 3110, Aviation Maintenance

1400 to 1520 PM, Tuesday and Thursday, (Section 001): SAGE 116

Date	Topic Covered
Week 1	Course introduction
25 Aug	
	Chapter 1: Why do we have maintenance
27 Aug	
Week 2	Chapter 2: Developing Maintenance Programs
01 Sep	
	Chapter 3: Definitions, Goals, Objectives
03 Sep	
Week 3	Guest Speaker
08 Sep	
	Chapter 4: Aviation Industry Certification requirements
10 Sep	Resumes due by 1700, 11 Sep
Week 4	Chapter 5: Documentation for Maintenance
15 Sep	
	Chapter 6: Requirements for a Maintenance Program
17 Sep	
Week 5	Guest Speaker
22 Sep	
	Chapter 7: Maintenance and Engineering Organization
24 Sep	
Week 6	Chapter 7: Maintenance and Engineering Organization (continued)
29 Sep	
	Introduction to Forecasting Assignment
01 Oct	Review the project parameters
Week 7	Midterm Review
06 Oct	
	Midterm Exam
08 Oct	

Date	Topic Covered
Week 8 13 Oct	Chapter 8: Engineering
15 Oct	Guest Speaker
Week 9 20 Oct	Chapter 9: Production Planning and Control
22 Oct	Chapter 10: Technical Publications
Week 10 27 Oct	Chapter 11: Technical Training
29 Oct	Chapter 12: Aircraft Maintenance Management
Week 11 03 Nov	Chapter 13: Line Maintenance (on aircraft)
05 Nov	Chapter 14: Hangar Maintenance (on aircraft)
Week 12 10 Nov	Chapter 15: Materiel Support
	Chapter 16: Quality Assurance
12 Nov	Work on Forecasting Assignment
Week 13	Chapter 17: Quality Control
17 Nov	Forecasting Assignment Due @ Midnight
19 Nov	Continental Express Flight 2574
Week 14 24 Nov	Chapter 18 and Appendix D: Reliability and Investigation of Reliability Reports
26 Nov	Thanksgiving Break
Week 15 01 Dec	Chapter 19: MX Safety
03 Dec	Final Exam Review
Week 16 10 Dec	Final Exam (1330-1530)