

SYLLABUS
SAN JOSE STATE UNIVERSITY
DEPARTMENT OF AVIATION AND TECHNOLOGY

AVIA 179 – Advanced Airport Planning and Management

Spring Semester, 2017
Wednesday, 1500-1745

Instructor: Wenbin Wei
Office: Industrial Studies 103
Email: wenbin.wei@sjsu.edu
Phone: 408-924-3206
Classroom: IS 216
Office Hours: Monday 1450- 1650

THE INSTRUCTOR RESERVES THE RIGHT TO AMEND THIS SYLLABUS
AS APPROPRIATE WITH COURSE PROGRESSION

Course Catalog Description:

Noise generation and abatement. Leasing and property management including the impact of federal regulations. Concession planning. Use of technology to increase efficiency and security in airports.

Course Objectives:

This course will cover advanced and current topics in airport planning and management, such as relationship between airlines and airport, airport finance and economics, airport ground access and intermodalism, environmental issues, cargo operations, new generation of aircraft and ATC technology, impact of High Speed Rail, etc. This course will also cover various advanced topics on airport daily operations including ground operations, passenger flow management, baggage handling and cargo operations.

Course Learning Outcomes

At the conclusion of this class, the students will be able to understand and follow up with the most updated and emerging airports issues related to capacity, delay, efficiency, finance and administration; apply the basic principle and methodology to study some focused issues in airport industry; develop skills for majority of tasks in airport and related industry; better understand and be able to resolve issues related to noise, environment and relationship with the community, and analyze airport safety and security issues; and develop research-oriented project implementation skills and professional presentation skills.

Prerequisite:

Avia 178

Required Textbook:

1. Airport Operations (3rd ed.). Ashford, et al., (2013). New York: McGraw-Hill.

Class Format

- a. Instructor's lectures and presentations; and the most recent research by the instructor in these areas will also be introduced in the class.
- b. Guest lecturers from local airports (such as SJC, OAK, and SFO), Caltrans, FAA, and NASA will be invited to this class to discuss some current issues in the industry.
- c. Discussions on current/emerging issues in airport business
- d. Group work and student presentations.

Class Grading

Class Participation (answer/ask questions in class and correctly answer questions): 20%

Two papers: 60% (1st: 25%; 2nd: 35%)

Paper presentations: 10%

Final exam: 10%

The typical final grade distribution is: 93-100 A; 90-92 A-; 88-89 B+; 83-87 B; 80-82 B-; 78-79 C+; 73-77 C; 70-72 C-; 69 D+; 65-68 D; below 65 F. And the final grade might be adjusted due to the degree of difficulty of the assignments.

Reading Assignment

Students are recommended to complete the advance reading assignment for each lecture. The lecture will be difficult for those who don't make this preparation.

Homework

Homework is due on the day of class, before class starts. No late homework will be accepted, unless prior approval is granted. Students are required to use Microsoft Word or any other document editor software to write the text part of their homework.

Exams

Exams will cover materials in lectures, assigned readings, homework, class discussions, and student presentations. Make-up tests will not be allowed unless prior approval is obtained from the instructor and will be given in the case of evidenced extreme circumstances.

Class Paper / Term Paper

Each student is required to write two papers of two different topics for this class. The first paper is based on the individual project, and the second is based on the group project.

Grading of the papers is based on the following criteria:

- a. Use of resources: your papers should indicate a thorough search of information and in-depth investigation of the chosen subject.
- b. Organization and style of writing: the papers should include introduction, literature review, analysis, and a conclusion summarizing your own points. It should have clear transitions.
- c. Contents and analysis: focused and relevant discussion of subject, in-depth analysis, and clear summarization of main points.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at <http://www.sjsu.edu/gup/syllabusinfo/>

Tentative Course Schedule (subject to change with fair notice)

Class	Date	Lecture Topic	Reminders
1	Feb. 1	Introduction and review	
2	Feb. 8	Airport peaks and airline rescheduling, relationship between airlines and airport; Landing fee policies	
3	Feb. 15	Airport finance and economics, leasing and property management, concession planning	
4	Feb. 22	Terminal operations, ground handling, baggage handling, safety and security; airport operation strategies	
5	Mar. 1	Airport ground access and intermodalism; Impact of HSR, transfer center	
6	Mar. 8	Airport noise, environmental issues, abatement measure, operational administration and performance; Airport site selection, GA operations	
7	Mar. 15	Guest lecture/ Regional airport/Emerging issues	
8	Mar. 22	Student presentation	First paper due
	Mar. 29	Spring break/no class	
9	Apr. 5	Guest lecture/ Regional airport/ Emerging issues	
10	Apr. 12	Aircraft operating characteristics, operational readiness, technical service; NextGen technologies	
11	Apr. 19	Air cargo and its economic impact, aircraft emergencies; UAV, larger aircraft	
12	Apr. 26	Airport capacity, congestion and delay; Sustainability, green technologies; Course summary/guest lecture	
13	May 3	Student presentation	
14	May 10	Student presentation	Second paper due

Final exam: Wednesday, May 24, 2017, 1215-1430.