

**SYLLABUS**  
**SAN JOSE STATE UNIVERSITY**  
**DEPARTMENT OF AVIATION & TECHNOLOGY**

**Aviation 178 – Airport Planning and Management**

**Fall Semester, 2016**  
**Monday, 1500-1745**

**Instructor:** Wenbin Wei, Ph.D.  
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**Classroom:** Industrial Studies 216  
**Office Hours:** Wednesday 1300-1500

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

**Course Catalog Description**

Design, planning, and management of airports in the US including airport development and airport design. Legal responsibilities as an airport manager. Issues and regulations applicable to airport planning and management.

**Course Objectives**

This course will provide the students with an understanding of the major elements in the process of airport planning and management from a system perspective. The course will cover such topics as airport financing and privatization, site selection and environment impact, airport capacity and delays, terminal plan and design, ground access plan, daily operations and security, international difference, multiple-airport system and airport's relationship with airlines.

**Course Learning Outcomes**

At the end of this class, students will be able to obtain the basic knowledge of airport planning and management; develop technical skills for managing airport; understand the airport business from a system perspective; and be able to carry out the majority of tasks for airport planning and management.

## Prerequisite

Aviation 78

## Required Textbooks

1. *Airport Systems: Planning, Design and Management*, 2<sup>nd</sup> edition, by Richard de Neufville and Amedeo Odoni, 2013, ISBN 978-0-07-177058-3.

## Class Format

- a. Instructor's lectures and presentations
- b. Group discussions and student presentations

## Course Schedule (subject to change with fair notice)

Course Module	w e e k	Date	Lecture Topics	Reading Assignment	Reminder
I: Airport Planning and System Analysis	1	Aug. 29	Syllabus, course introduction, airline and airport industry	Ch.1	
	2	Sep. 5	No class (Labor day)		
	3	Sep. 12	Airport system planning; environment impact	Ch.4, 6	
	4	Sep. 19	Organization and financing; user charges	Ch. 7, 8	HW1 Due
II: Airfield Plan, Design and Management	5	Sep. 26	Airport layout and land use plan; airfield plan and design	Ch. 9	Proposal Due
	6	Oct. 3	Airfield capacity	Ch. 10	HW2 Due
	7	Oct. 10	Airfield delay; demand management	Ch. 11, 12	
	8	Oct. 17	Air traffic control and management; course review	Ch. 13	HW3 Due
<b>Exam</b>	9	Oct. 24	Midterm		Midterm
III: Terminal and Ground Access	10	Oct. 31	Plan and configuration of passenger buildings	Ch. 14	
	11	Nov. 7	Design of passenger buildings	Ch. 15, 16	
	12	Nov. 14	Ground access and distribution	Ch. 17	HW4 Due
IV: Airport Management and Student Presentations	13	Nov. 21	Airline's impact on airport; international differences; multi-airport system	Ch. 2, 3, 5	
	14	Nov. 28	Airport daily operations and security		HW5 Due
	15	Dec. 5	Student presentations		
	16	Dec. 12	Student presentations		Project Due

**Final Examination: Monday, Dec 19, 2016, 1215 – 1430**

## **Class Grading**

Class Participation (class conversation and discussion) 10%

Homework 20%

Midterm 20%

Final 30%

Case study and presentation 20%

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 exams and other assignments.

## **Reading Assignment**

Students are required 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, homework, class discussions and required readings. 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.

## **Term paper**

The term paper is expected to be completed by a team consisting of 2 to 4 students.

Students are encouraged to discuss with the instructor on the topics, resources and writing of this project.

There are two options for the topic of this term paper: 1) "master plan" option – a case study of an airport master plan; and 2) "article analysis" option – to review and analyze "related" research articles available in the published journals in library or in other published reports.

Students are required to submit a one-page proposal for the selection of topic for this term paper at the beginning of the fourth class of the semester. This will include team members, the title, objectives and preliminary outline of the paper, and initial references as well as data and information sources.

The final paper should be less than 20 pages. All the reviewed/referred articles should be attached to the paper. The final paper is due on the last class of instruction for this semester.

For the "master plan" option, you can choose any major airport in the US or in other countries.

For the "article analysis" option, the topic can be chosen from, but not limited to, the following topics:

\* Airport privatization, current airport finance issues/problems, or innovative airport financing approaches

- \* Airport ground access development and management
- \* Airport security and safety
- \* Airport delays
- \* Airport site selection; and relationship between airport and the community over such issues as environment concerns
- \* Relationship between airlines and airport
- \* Multi-airport system development
- \* International issues
- \* Airport capacity expansion or new airport construction projects

Grading of the term paper is based on the following criteria:

- a. Use of resources: your final paper should indicate a thorough search of information and in-depth investigation of the chosen subject.
- b. Organization and style of writing: the final paper should include introduction, literature review, analysis details, and a summary or conclusion. It should have clear transitions.
- c. Contents and analysis: focused and relevant discussion of subject, in-depth analysis, and clear summarization of main points.
- d. 15 - 20 minutes presentation: effectiveness of presentation and clear answers to questions on the presentation.

### **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/>