Course Syllabus
AVM 370 Airport Planning
Southwestern Illinois College, Spring Semester 2016

Instructor: David A. NewMyer, Ph.D., Professor Emeritus
Aviation Management and Flight
Transportation Education Center, CASA
Southern Illinois University Carbondale
545 North Airport Road
Murphysboro, IL 62966
(618) 201-5888--cell; Email: newmyer@siu.edu

AVM MISSION STATEMENT:

Aviation Management is a broad based aviation educational program designed to augment technical skills and develop managerial skills necessary for a career in aviation and related industries.

COURSE DESCRIPTION:

To acquaint the student with the basic concepts of airport planning and construction, as well as an investigation of various community characteristics and resources.

REQUIRED TEXTBOOKS:  (All available at www.faa.gov)


OTHER READINGS:

Additional readings will be handed out by the instructor during class.
REFERENCES:


COURSE OBJECTIVES:

**Outcome #1**: The student will be able to describe and understand the historical federal involvement in airports and airport planning.

**Outcome #2**: The student will be able to define and describe the federal requirements and guidelines for airport planning at all levels of government.

**Outcome #3**: The student will be able to identify and define the different kinds of airports and airport planning.

**Outcome #4**: The student will be able to understand and analyze key airport issues.

**Outcome #5**: Students will be able to define and discuss the inter-relationship of airport planning with planning for other modes of transportation.

**Outcome #6**: The student will be able to apply airport planning knowledge in both a course paper and in a group problem solving environment.
COURSE SCHEDULE, TOPICAL OUTLINE AND COURSE ASSIGNMENTS

Weekend 1, Day 1  
Introductions  
Review Syllabus including grading scale  
Paper Topics  
The Number and types of Airports in the US  
Historical Federal Involvement in Airports  
Airport Funding—What is AIP, PFC, etc?  
Types of Airport Planning  
The National Plan of Integrated Airport Systems  
The FAA Aerospace Forecast 2015-2035  
Reading Assignments for this week and next week: National Plan of Integrated Airport Systems “Narrative,” FAA Aerospace Forecast and Airport Master Plans Advisory Circular.

Weekend 1, Day 2  
Airport Planning Articles (2014 or later)  
Quiz #1 Weekend one notes including NPIAS reading.  
Airport Master Planning Steps or Phases  
Review FAA Advisory Circular 150/5300-13  
“Airport Design Standards” (especially as it relates to “Approach and Departure Reference Codes”)

Weekend 2, Day 1  
Finish Airport Master Plans Phases and Airport Design  
Terminal Area Forecasts (how to look one up on the FAA site)  
Airport Environmental Planning  
Reading Assignments: FAA Order 1050.1F and bring an airport Environmental planning article to class next week dated 2014 or later

Weekend 2, Day 2  
Articles on airport environmental planning (2014 or later)  
Environmental Assessments (EA’s)  
Airport Land Use Compatibility  
FAR 150 Studies  
MIDTERM EXAM

Weekend 3, Day 1  
Field Trip to Lambert St. Louis International Airport (tentative)

Weekend 3, Day 2  
Final Exam (all day group problem solving)  
Course Papers Due Today. Any papers not turned in on due date will be assessed a five points day per day penalty
COURSE REQUIREMENTS/GRADING SCALE

Each student will be graded on the completion of all of the following course requirements:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>Maximum Number of Points</th>
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<tbody>
<tr>
<td>1. Attendance (60 or 10 points per day; 5 for AM and 5 for PM),</td>
<td>100</td>
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<tr>
<td>participation (10), Quiz (10), Articles (20 total)</td>
<td></td>
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<tr>
<td>Notes: Late arrivals will be docked 2 pts once attendance is taken,</td>
<td></td>
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<tr>
<td>AM and PM. No hats will be worn in class. Cell phones will be turned</td>
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<td>off unless prior arrangements are made with the instructor due to an</td>
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<tr>
<td>emergency. 2 to 5 pts each will be taken off for these and any other class courtesy violations.</td>
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<td>2. Midterm Examination (closed book, in class)</td>
<td>100</td>
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<td>3. Final Examination (in class, instructor-assigned group problem solving);</td>
<td>100</td>
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<td>4. Airport Planning Course Paper (late papers lose 5 pts a day)</td>
<td>100</td>
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<tr>
<td>TOTAL</td>
<td>400</td>
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GRADING SCALE:

<table>
<thead>
<tr>
<th>POINTS</th>
<th>GRADE</th>
<th>PERCENTAGE</th>
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<tbody>
<tr>
<td>368 to 400</td>
<td>A</td>
<td>92 to 100</td>
</tr>
<tr>
<td>336 to 367</td>
<td>B</td>
<td>84 to 91.9</td>
</tr>
<tr>
<td>304 to 335</td>
<td>C</td>
<td>76 to 83.9</td>
</tr>
<tr>
<td>272 to 303</td>
<td>D</td>
<td>68 to 75.9</td>
</tr>
<tr>
<td>Below 272</td>
<td>F</td>
<td>67.9 and Below</td>
</tr>
<tr>
<td>Not Applicable</td>
<td>W/F</td>
<td>**</td>
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**Grade of W/F=Withdrawal/Failure. This grade is for students who did not officially withdraw from the class, ceased attendance, and/or failed to complete the course requirements.

A grade of Incomplete (INC) maybe assigned when, for reasons beyond their control, students engaged in passing work are unable to complete all required assignments. All incomplete grades must be discussed with the instructor and documented in writing to the instructor.

ATTENDANCE

The faculty of Southern Illinois University Carbondale affirm the importance of prompt and regular attendance on the part of all undergraduate students. Quality instruction depends upon active student participation in the classroom. The current SIUC Undergraduate Catalog further expounds upon attendance and attendance guidelines.
Students who remain enrolled in a course and who exceed the stated attendance policy shall be awarded a final course grade of either W/F or F (see Grading and Scholastic Regulations, in the SIUC Undergraduate Catalog. Any student enrolled in AVM 370 who misses a class, or a portion of a class, must contact the instructor prior to the class absence to make arrangements for completing class assignments that might have been missed. Note there are attendance points in the grading scale on a previous page. None of these attendance points can be made up in any way. Students who miss more than two days of class will be advised to drop the class due to the amount of in-class material covered.

AIRPORT PLANNING COURSE PAPER GUIDELINES (Due last day of class!)

The key purpose of the airport planning course paper is to make each student an “expert” in terms of your personal knowledge about the planning of an individual airport or airport system. Also, this assignment is designed to help you learn more about how to find out as much as possible about a particular airport through the available resources.

1. Each student will be randomly assigned an airport by the instructor on the first day of class.

2. The student will then collect data about the assigned airport, analyze these data and prepare a written report. This will include information from the airport itself, from the FAA (such as the Terminal Area Forecast for this airport), from the FAA Air Traffic Data for this airport (if it has an air traffic control tower) and from airport planning documents published for this airport (see below).

3. The Airport Planning Course Paper will be a minimum of five pages of double spaced, 12 font text plus one page of references (on a separate page from the text), and will be presented in APA format.

4. The report and presentation will focus on a critique of the most recent, available airport planning or environmental assessment documents for this airport. The critique should include such things as:

   A. Coverage of how well the planning document addressed the appropriate FAA guidelines for the type of planning being reviewed (Airport Master Plans, Environmental Assessments, etc);
   B. How well the planning document addressed future demand issues, both locally and nationally. For example, are the forecasts contained in airport planning documents for this airport too high or too low as compared with other planning reports and forecasts that are available—and, why?
   C. How practical the document and its recommendations are in light of recent trends in the aviation industry?
   D. Are the recommended airport improvements too much or too little?
   E. Is there anything that was missed in the planning document?
   F. Is there anything in the document that was done particularly well?
   G. In answering the above questions, make sure that you document in your paper WHY you are answering the questions in a particular way.

5. Reference list. It is expected that you will have at least five to ten sources for your paper, the majority of which will be from the last two to three years so that you will present the
most current data available on your assigned airport. In addition to the usual aviation-wide websites, it is suggested that you **contact the airport directly** for information via their website, by email, or by calling them. Also, do not forget the website of the Federal Aviation Administration at [www.faa.gov](http://www.faa.gov) or the website of the U. S. Department of Transportation, Bureau of Transportation Statistics ([www.bts.gov](http://www.bts.gov)), where those might be appropriate to use.

6. Only your original work will be accepted. Plagiarism will result in an F grade being assigned for this assignment.

7. It is expected that each student will both email the final paper to [newmyer@siu.edu](mailto:newmyer@siu.edu) and present one printed copy to the instructor on the final day of class. Late papers lose 5 points a day commencing the day after the last class unless there is pre-discussed and approved reason for a late paper cleared by the instructor.