

## FLORIDA STATE COLLEGE AT JACKSONVILLE

## COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: ASC 1210

COURSE TITLE: Aviation Weather

PREREQUISITE(S): None

COREQUISITE(S): None

CREDIT HOURS: 3

CONTACT HOURS/WEEK: 3

CONTACT HOUR BREAKDOWN:

Lecture/Discussion: 3

Laboratory:

Other \_\_\_\_\_:

FACULTY WORKLOAD POINTS: 3

STANDARDIZED CLASS SIZE  
ALLOCATION: 30

## CATALOG COURSE DESCRIPTION:

This introductory level course acquaints the aviation student with the fundamentals of the Earth's atmosphere, current theories on meteorology, and the effects of weather on aircraft and air traffic control. Particular emphasis will be given to the acquisition and interpretation of weather reports and forecasts from various weather information sources. Aviation Weather is specifically designed for the aviation student wishing to improve their knowledge and understanding of aviation weather (both theory and services) beyond that necessary for any of the FAA Computer-Based Pilot Knowledge Tests.

SUGGESTED TEXT(S): Jeppesen: Aviation Weather, ISBN: 0-88487-336-6  
Gleim Publishing: Aviation Weather and Weather Services

IMPLEMENTATION DATE: May 14, 1984

REVIEW OR MODIFICATION DATE: Fall Term, 2002 (20031)  
Summer Term, 2007 (20073)  
Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. The Earth's Atmosphere	3
II. Temperature	3
III. Atmospheric Pressure and Altimetry	3
IV. Wind	3
V. Moisture, Cloud Formation and Precipitation	4
VI. Stable and Unstable Air	4
VII. Clouds	3
VIII. Air Mass and Fronts	4
IX. Turbulence	3
X. Icing	3
XI. Thunderstorms	3
XII. Common IFR Producers	3
XIII. High Altitude Weather	3
XIV. Arctic Weather	1
XV. Tropical Weather	1
XVI. Soaring Weather	1
XVII. Examinations	3
Total	45

PROGRAM TITLE: Professional Pilot Technology

COURSE TITLE: Aviation Weather

CIP NUMBER: 0649.010200

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLE(S):

04.0 DEMONSTRATE AN UNDERSTANDING OF METEOROLOGY - The student will be able to:

04.01 Describe the composition, circulation and stability of the atmosphere.

04.02 Demonstrate an understanding of air mass development, the movement of fronts and their effect on aviation.

04.03 Demonstrate an awareness of weather hazards to aviation and an understanding of how to avoid them.

04.04 Demonstrate the ability to access weather information prior to and during flights through a variety of media.

04.05 Interpret printed reports, forecasts and graphic weather products.

11.0 DEMONSTRATE UNDERSTANDING OF APPLIED SCIENCES - The student will be able to:

11.01 Draw conclusions or make inferences from data.

11.02 Understand pressure measurement in terms of P.S.I., inches of mercury, and metric.

PROGRAM TITLE: Aviation Operations

COURSE TITLE: Aviation Weather

CIP NUMBER: 1649.010400

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLE(S):

09.0 PREPARE, ANALYZE AND EVALUATE TECHNICAL REPORTS AND DATA - The student will be able to:

09.06 List types of reports, and describe use of illustrations.

12.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE—The student will be able to:

12.01 Understand molecular action as a result of temperature extremes, chemical reaction, and moisture content.

12.02 Draw conclusions or make inferences from data.

12.03 Identify health-related problems, which may result from exposure to work-related chemicals and hazardous materials, and know the proper precautions required for handling such materials.

12.04 Understand pressure measurement in terms of P.S.I., inches of mercury, and K.P.A.

