FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	ATF 2500
COURSE TITLE:	Certified Flight Instructor
PREREQUISITE(S):	None
COREQUISITE(S):	None
STUDENT ADVISING NOTES:	Suggested Course: ATF 2400 or FAA Commercial Pilot Certificate with Instrument Rating
CREDIT HOURS:	2
CONTACT HOURS/WEEK:	4
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	2
Laboratory:	2
Other _____:	
FACULTY WORKLOAD POINTS:	2
STANDARDIZED CLASS SIZE ALLOCATION:	30

CATALOG COURSE DESCRIPTION:

This course provides the flight and ground instruction to be certified as a flight instructor. This course consists of the ground and flight instruction necessary to achieve the FAA Certified Flight Instructor rating. In order to receive credit for the course, the student must have earned the Certified Flight Instructor rating.

SUGGESTED TEXT(S):	Jeppesen JS314530 - GFD Flight Instructor Textbook
IMPLEMENTATION DATE:	Spring Term, 2007 (20072)
REVIEW OR MODIFICATION DATE:	Fall Term, 2008 (20091) – Outline Review 2007

COURSE TOPICS	CONTACT HOURS PER TOPIC
I. FUNDAMENTALS OF INSTRUCTING	6
II. TECHNICAL SUBJECT AREAS	6
III. PREFLIGHT PREPARATION	4
IV. PREFLIGHT LESSON ON A MANEUVER TO BE PERFORMED IN FLIGHT	4
V. PREFLIGHT PROCEDURES	4
VI. AIRPORT AND SEAPLANE BASE OPERATIONS	4
VII. TAKEOFFS, LANDINGS, AND GO-AROUNDS	4
VIII. FUNDAMENTALS OF FLIGHT	4
IX. PERFORMANCE MANEUVERS	4
X. GROUND REFERENCE MANEUVERS	4
XI. SLOW FLIGHT, STALLS AND SPINS	4
XII. BASIC INSTRUMENT MANEUVERS	4
XIII. EMERGENCY OPERATIONS	4
XIV. POSTFLIGHT PROCEDURES	4

PROGRAM TITLE: PROFESSIONAL PILOT TECHNOLOGY

COURSE TITLE: Certified Flight Instructor

CIP NUMBER: 1649010200

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

01.0 DEMONSTRATE AN UNDERSTANDING OF SAFE AND EFFECTIVE WORK PRACTICES—The student will be able to:

01.02 Demonstrate an awareness and understanding of fueling operations.
01.03 Demonstrate an understanding of situation awareness.
01.04 Demonstrate an awareness and understanding of fire hazards and the ability to control and extinguish fires.

02.0 DEMONSTRATE AN UNDERSTANDING OF FUNDAMENTALS OF FLIGHT—The student will be able to:

02.01 State and give examples of Newton's three laws of motion.
02.02 Name and compare the four forces of flight.
02.03 Describe an airfoil.
02.04 Tell how lift is produced.
02.05 Discuss how and why an airplane stalls and spins.
02.06 Describe and explain how pitot/static vacuum, pressure and engine instruments work.
02.07 Explain the aircraft design performance and operation.

03.0 UNDERSTAND AND EXPLAIN FEDERAL AVIATION ADMINISTRATION REGULATIONS—The student will be able to:

03.01 Explain major portion of Parts 1, 61, 67, 91, 135 and NTSB of the Federal Aviation Regulations.

04.0 DEMONSTRATE 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.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

05.0 DEMONSTRATE KNOWLEDGE OF AIRCRAFT COMMUNICATION EQUIPMENT—The student will be able to:

05.01 Use and explain aircraft voice communication equipment.
05.02 Explain function and use of ELT's, voice recorders, and other emergency communication systems.
05.03 Demonstrate use of proper phraseology in ATC communications.
05.04 Discuss uses and limitations of portable transceivers.
05.05 Demonstrate use of phonetic alphabet.

06.0 DEMONSTRATE KNOWLEDGE AND UNDERSTANDING OF AIRCRAFT PROPULSION AND ASSOCIATED SYSTEMS—The student will be able to:

06.01 Describe and identify reciprocating and turbine engine components.
06.02 Describe a typical cooling system.
06.03 Describe and sketch a basic float type carburetor.
06.04 Describe the advantages of a fuel-injected engine.
06.05 Describe a typical lubrication system.
06.06 Describe a typical magneto ignition system, including proper magneto checks.
06.07 Describe the difference between a normally aspirated engine and one that is supercharged or turbocharged.
06.08 Demonstrate basic operation of an aircraft engine, including proper interpretation of instruments and operation of throttle, mixture control, carburetor heat control

07.0 DEMONSTRATE AN UNDERSTANDING OF NAVIGATION SYSTEMS AND PROCEDURES— The student will be able to:

07.01 Define radio navigation.
07.02 Explain the magnetic compass.
07.03 Describe and demonstrate VOR navigation.
07.04 Describe and demonstrate the ADF equipment.
07.05 Explain DME and RNAV principles.
07.06 Demonstrate usage of magnetic coordinates.
07.07 Demonstrate the use of a flight computer.
07.08 Explain sectional charts and their use.
07.09 Explain en route and terminal charts and approach plate.
07.10 Explain lost communications emergency procedures VFR and IFR.
07.11 Read and interpret aircraft performance charts.
07.12 Plot and explain a cross-country course.
07.13 Describe the FAA national airspace system.
07.14 Define SID's and STAR's.

08.0 DEMONSTRATE FLIGHT PLANNING SKILLS—The student will be able to:

08.01 Explain major portions of Parts 1, 61, 67, 91 and 830 of the Federal Aviation Rules and Regulations.
08.02 Define weight and balance.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

08.03 Define center of gravity, moment, datum line, CF envelope basic empty weight and gross weight.
08.04 Solve given weight and balance problems.
08.05 Determine route of flight.
08.06 Demonstrate acquisition of appropriate weather data.
08.07 Demonstrate proper selection of destination/enroute/alternate airports.
08.08 Explain fuel requirements.
08.09 Calculate and compute weight/balance.
08.10 Calculate aircraft performance.
08.11 Access and analyze NOTAMS.
08.12 Acquire and define mission profile.
08.13 Demonstrate and explain a flight log.
08.14 Demonstrate methods in VFR/IFR flight plans.

09.0 DEMONSTRATE EFFECTIVE COMMUNICATION SKILLS—The student will be able to:

09.01 Write logical and understandable statements, or phrases, to accurately fill out forms/invoices commonly used in business and industry.
09.02 Read and understand graphs, charts, diagrams, and tables commonly used in this industry/occupation area.
09.03 Read and follow written and oral English instructions.
09.04 Answer and ask questions coherently and concisely.
09.05 Read critically by recognizing assumptions and implications and by evaluating ideas.
09.08 Demonstrate interpersonal skills.

10.0 DEMONSTRATE ANALYTICAL SKILLS—The student will be able to:

10.01 Solve problems for volume, weight, area, circumference and perimeter measurements for rectangles, squares, and cylinders.
10.02 Add, subtract, multiply and divide using fractions, decimals, whole numbers, percentages, and ratios.

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.

13.0 DEMONSTRATE AIRCRAFT OPERATIONS—The student will be able to:

13.01 Obtain FAA commercial pilot certification with instructor rating.
13.02 Demonstrate the operation of aircraft in accordance with FARS and AFMS.
13.03 Identify specific aircraft handling characteristics.
13.04 Explain Crew Resource Management.
13.05 Demonstrate proper passenger briefing procedures.
13.06 Demonstrate post-operation report completion.
13.07 Demonstrate situation awareness.

LIST PERFORMANCE STANDARD ADDRESSED: (CONTINUED)

NUMBER(S): TITLES(S):

13.08 Demonstrate correct decision-making skills.

14.0 EXPLAIN BUSINESS ECONOMIC FUNDAMENTALS—The student will be able to:

14.04 Determine flight crew schedule requirements.
14.06 Demonstrate ability to select appropriate aircraft.
14.07 Demonstrate understanding of customer relation principles.

Florida State College At Jacksonville

Course Learning Outcomes & Assessment For All College Credit Courses

NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

Section 1	
COURSE PREFIX AND NUMBER: **ATF 2500**	SEMESTER CREDIT HOURS: **2**
COURSE TITLE: **Certified Flight Instructor**	

Section 2

TYPE OF COURSE: (Click on the box to check all that apply)

☐	**AA Elective**	X	**AS Required Professional Course**	☐	**College Prep**
X	**AS Professional Elective**	☐	**AAS Required Professional Course**	☐	**Technical Certificate**
☐	**Other** _____				
☐	**General Education: (For General Education courses, you must also complete Section 3 and Section 7)**				

Section 3 (If applicable)

INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

☐	**Communication**	☐	**Social & Behavioral Sciences**	☐ **Mathematics**
☐	**Natural Sciences**	☐	**Humanities**	

Section 4

INTELLECTUAL COMPETENCIES:

X	**Reading**	X	**Speaking**	X	**Critical Analysis**	X	**Quantitative Skills**	X	**Scientific Method of Inquiry**
☐	**Writing**	X	**Listening**	X	**Information Literacy**	X	**Ethical Judgment**	X	**Working Collaboratively**

Section 5 **LEARNING OUTCOMES**		**METHOD OF ASSESSMENT**
•	Knowledge of the fundamentals of instructing	FAA Written Exam
•	Knowledge of the technical subject areas	FAA Written Exam
•	Knowledge of the flight instructor's responsibilities concerning the pilot certification process	FAA Written Exam
•	Knowledge of the flight instructor's responsibilities concerning logbook entries and pilot certificate endorsements	FAA Written Exam
•	Ability to demonstrate the procedures and maneuvers selected by the examiner to at least the COMMERCIAL PILOT skill level while giving effective instruction	FAA Flight Test
•	Competence in teaching the procedures and maneuvers selected by the examiner	FAA Flight Test
•	Competence in describing, recognizing, analyzing, and correcting common errors simulated by the examiner	FAA Flight Test
•	Knowledge of the development and effective use of a course of training, a syllabus, and a lesson plan	FAA Flight Test
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Section 6Name of Person Completing This Form: Richard Rozanski 7/24/06