This Flight Instructor Airplane Single Engine Land Training Course Outline meets the requirements of 14CFR Section 141, Appendix F. It consists of a separate ground training syllabus and flight training syllabus. Both the ground and flight training syllabi must be completed in their entirety. The ground training syllabus must be completed, and the FAA Fundamentals of Instruction and Flight Instructor Airplane Knowledge tests must be passed prior to taking the end of course stage check in the flight training syllabus.

Airport: Max Westheimer Airport has a hard surface runway and meets the requirements of 14 CFR, Section 141.38 for day and night operation. Fuel is available from 7:00 A.M. to 10:00 P.M. daily. Maintenance is available from 6:30 A.M. to 3:00 P.M. Monday through Friday and at other times on call. Training will originate at Max Westheimer Airport.

AIRCRAFT: The aircraft to be used in this course of training are the PA28-161, PA28-181, and C-152. They meet the requirements of 14 CFR, Section 141.39. VFR airplanes are equipped for day and night VFR as specified in 14 CFR, Section 91.205. Airplanes used for instrument training are equipped for IFR as specified in 14 CFR, 91.205. Radio equipment will consist of at least one VHF transceiver and at least one VOR receiver.

CHIEF FLIGHT INSTRUCTOR: The Chief Flight Instructor will meet the requirements of 14 CFR, Section 61.195(h), and141.35. They must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, they must hold a flight instructor/instrument certificate with an airplane category rating and a single-engine class rating and have at least second-class medical privileges. See Appendix A of this Training Course Outline for Chief Flight Instructor designation.

ASSISTANT CHIEF FLIGHT INSTRUCTOR: Assistant Chief Flight Instructors will meet the requirements of 14 CFR, Section 61.195(h), and 141.36. They must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, they must hold a flight instructor/instrument certificate with an airplane category rating and a single-engine class rating and have at least a second-class medical privileges. See Appendix A of this Training Course Outline for Assistant Chief Flight Instructor designation.

CHECK INSTRUCTORS: Check instructors will meet the requirements of 14 CFR, Section 61.195(h), and 141.37. They must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, they must hold a flight instructor/instrument certificate with an airplane category rating and single-engine class rating and have at least a second-class medical privileges.

FLIGHT INSTRUCTORS: Flight instructors will meet the requirements of 14 CFR 61.195(h). They must hold at least a commercial pilot certificate with an airplane category, single engine land rating and airplane instrument rating. In addition, they must hold a flight instructor certificate with an airplane category rating and a single-engine class rating and have at least a second-class medical certificate privileges.

FACILITIES USED FOR AVIATION LEARNERS: Ground training and pilot briefing areas, audiovisual aids and training aids are described below. Additional training aids used in this course: 14 CFR parts 23, 39, 43, 61, 68, 71, 91, 93; 49 CFR part 830; AC 60-28, AC 61-65, AC61-67, AC 61-107, AC 68-1, AC 90-48, AC 91-73, AC 91-78, AC 91-92, AC 120-71; AIM; Chart Supplements; FAA-H-8083-1, FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25, FAA-H-8083-28; POH/AFM; NOTAMs; VFR Navigation Charts; FAA-ACS-S-6, FAA-S-ACS-7, FAA-S-ACS-25

Rooms Used for Ground Training

Location	Size	Learner Capacity
Building 1700, Room 205	35' X 36' 1260 sq. ft.	50
Building 1928, Room 107	24' X 24' 576 sq. ft.	25
Building 1928, Room 114	45' X 25' 1125 sq. ft.	50
Building 1928, Room 214	25' X 35' 825 sq. ft.	35

Training Aids: Each classroom contains a computer system with video monitor presentation capability.

Pilot Briefing Areas

Location

Building 1700, Rooms 118,120, 121, 122, 123, 125, 208, 208A (13 stations)

Additional Facilities

Location

Building 1700, Administrative Offices

Building 1630, Instructor offices, Learner Study Area, and Aircraft Storage

Building 1620, Maintenance Facility and Aircraft Storage

Building 1928, Administrative Offices, Learner library

Building 1205, Flight Simulation Area

GROUND AND FLIGHT TRAINING SYLLABUS

PREREQUISITES FOR ENROLLMENT IN GROUND TRAINING: There are no prerequisites for enrollment in the ground training part of this course.

PREREQUISITES FOR ENROLLMENT IN FLIGHT TRAINING: You must possess an FAA medical certificate that is valid for at least third-class privileges. You must possess an FAA commercial pilot certificate with at least airplane single engine land and Instrument airplane ratings.

COURSE OBJECTIVE: You will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements of 14 CFR, Section 141, Appendix F for award of an initial flight instructor certificate with airplane single engine rating.

COURSE POLICY: At the discretion of the instructor, learners who progress rapidly within a specific stage, may within reasonable variances, continue to the next lesson with less time than is specified in the specific lesson curriculum, provided all content and completion standards are satisfactorily completed. The time stated in the lesson is the approximate minimum time that a learner would need to meet the lesson objectives and completion standards not absolute required times. The lesson time could be slightly more or slightly less. These reduced hours must be included in other lessons to complete the total ground and/or flight time specified by category in the syllabus to satisfactorily complete the course.

At no time will a learner be allowed to continue to the next stage without having successfully completed all of the lessons and the required tests or stage checks related to the completion of the previous stage. If a learner is unable to attend a ground lesson the instructor and learner will coordinate a time to accomplish that lesson. The makeup lesson will be conducted in any of the approved "Rooms Used for Ground Training" at a time when the room is not otherwise scheduled for a class.

Flight training for this course will be done in accordance with the FAA approved syllabus. Deviations from the syllabus due to learner training requirements, weather related factors, or other items as necessary will be allowed as long as a notation is made in the learner training record as to the lesson covered and the reason for the deviation. Deviations must be approved by the chief or assistant chief flight instructor.

To satisfactorily complete the course of training, the learner must meet all course objectives and completion standards.

EXPECTED ACCOMPLISHMENTS AND STANDARDS: To satisfactorily complete ground training you must complete each ground training lesson. To satisfactorily complete the flight training you must complete each flight lesson. Prior to completion of flight training, you must pass the FAA Fundamentals of Instruction and Flight Instructor Airplane Knowledge Tests (minimum passing scores 70%). Each lesson lists specific objectives and standards of completion.

CHECKS AND TESTS: Ground Training Stage I contains two take home quizzes and a comprehensive end of stage oral exam covering Fundamentals of Instruction. Ground Training Stage II contains four take home quizzes and a comprehensive end of stage exam. The flight training stage contains an intermediate stage check and an end of course stage check which will be equal to in scope, depth and difficulty to the practical test defined by the Flight Instructor for Airplane Category Airman Certification Standards (CFI ACS) for award of an Initial Flight Instructor Certificate with Airplane Single Engine Rating. This test will be administered by the Chief, Assistant Chief Flight Instructor or Check Instructor approved by the FSDO. Specific content and completion standards are listed on the test lesson plans.

GROUND TRAINING SYLLABUS

LESSON TIME ALLOCATION*

STAGE 1

Ground Lesson	Ground Instruction Time
101	1.3
102	1.3
103	1.3
104	Written Homework
105	1.3
106	1.3
107	1.3
108	Written Homework
109 FOI Oral Stage Check	1.3
Stage 1 Total	9.1

*The individual lesson times on these tables are for instructor/learner guidance only, they are not mandatory for a given lesson. However, the total ground instruction will be attained at the end of the course.

GROUND TRAINING SYLLABUS

STAGE I OBJECTIVE

During this stage, the learner will develop an understanding of the fundamentals of instruction. The learner will understand the effects of human behavior and communication on the learning process, course development, lesson plans, classroom training techniques, student evaluation assessment and testing, elements of effective teaching in a professional environment, and elements of effective teaching that include risk management and accident prevention.

Homework- The learner will prepare an outline covering the material in each lesson and be prepared to teach the material to be covered in each lesson. For large seminar classes it will not be possible for each learner to make a presentation during each class. At the beginning of each lesson the learner will turn in his/her outline. The quality of the outline will be reflected in the overall grade for that lesson.

STAGE I COMPLETION STANDARDS

The learner has demonstrated through oral and written tests that the prerequisites specified in FAR Part 61.185 (a) and (b) have been met. The learner will demonstrate the knowledge and skill necessary to pass the FAA Fundamentals of Instructing knowledge test, and to pass an oral exam over Area of Operation I from the Flight Instructor for Airplane Category ACS.

GROUND TRAINING SYLLABUS

Ground Lesson 101 1.3 Hours

References: 14 CFR parts 1, 61, 91; 49 CFR part 830; AIM; Chart Supplements; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-25; POH/AFM

Lesson Objective:

This will be an introductory lesson for the learner introducing them to the necessary references and their use in successfully creating teaching resources to reference for future instructional activities.

Pilot's Operating Handbooks or flight manuals.

Airman Certification Standards.

Advisory Circulars, INFOs, and SAFOs.

Aeronautical Information Manual (AIM).

14 CFR parts 1, 61, and 91.

49 CFR part 830.

Completion Standards:

Through guided discussion the learner will develop an understanding of the relevant FAA resources, Code of Federal Regulations, and other relevant publications and how to utilize them in preparation for instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 102 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The purpose of this lesson is to introduce the learner to human behavioral and basic communication theories. The learner will develop an understanding of how behavior and communications affect the learning process.

Content: (CFI ACS FI.I.A) (AIH 2 and 4)

Elements of human behavior, including:

a. Definitions of human behavior

b. Instructor and learner relationship

c. Motivation

d. Human needs

e. Defense mechanisms

Learner emotional reactions, including:

a. Anxiety and stress

b. Impatience

c. Worry or lack of interest

d. Physical discomfort, illness, fatigue, and dehydration

e. Apathy due to inadequate instruction

Teaching the adult learner.

AMT's and Flight Instructors as learners.

Effective communication, including:

a. Basic elements of communication

b. Barriers to effective communication

c. Developing communication skills.

Completion Standards:

Through guided discussion the learner will develop an understanding of human behavior and effective communication, applying that knowledge, managing associated risks, demonstrating appropriate skills, and providing effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 103 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

During this lesson, the learner is introduced to the learning process. They will develop an understanding of how people learn and how learning is used in the teaching process.

Content: (CFI ACS FI.I.B) (AIH 3)

Definitions of learning.

Learning theory as it applies to ground and flight instruction including:

a. Behaviorism

b. Cognitive Theory

Perceptions and insight

Acquiring knowledge

Laws of learning

Domains of learning, including:

a. Cognitive

b. Affective

c. Psychomotor

Characteristics of learning

Learning Styles

Types of Practice

Evaluation vs. Critique

Scenario-based training (SBT).

(Lesson 103 cont.)

Content: (CFI ACS FI.I.B cont.)

Acquiring skill knowledge, including:

a. Stages

b. Knowledge of results

c. How to develop skills.

d. Learning plateaus

Types of practice

Evaluation versus critique

Distractions, interruptions, fixation, and inattention

Errors

Memory, including:

a. Sensory

b. Short-Term Memory (STM) and Long-Term Memory (LTM)

c. How usage affects memory.

d. Forgetting

Retention of learning

Transfer of learning

Completion Standards:

Through guided discussion the learner will develop an understanding of the learning process, applying that knowledge, managing associated risks, demonstrating appropriate skills, and providing effective instruction, The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 104 Written Homework

Lesson Objective:

The objective of this lesson is to evaluate the learner's knowledge of the Flight Instructor for Airplane Category ACS through a written homework assignment.

Content: CFI ACS

Completion Standards:

This lesson is complete when the learner scores 70% or better. In addition, the instructor is responsible for reviewing those questions missed.

GROUND TRAINING SYLLABUS

Ground Lesson 105 1.3 Hours

Reference: FAA-H-8083-2, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to the teaching process, teaching methods and the principles of lesson plan and syllabus development, learner evaluation, assessment, and testing.

Content: (CFI ACS FI.I.C) (AIH 5 and 7)

Teaching, including:

a. Process

b. Essential skills

Instructor's Code of Ethics

Course of training.

Preparation of a lesson, including:

a. Training objectives and completion standards

b. Performance-based objectives

c. Importance of Airman Certification Standards (ACS) in aviation training curricula

d. Decision-based objectives

Organization of material.

Training delivery methods, including:

a. Lecture

b. Discussion

c. Guided discussion

d. Cooperative or group learning

e. Demonstration-performance

f. Drill and practice

(Lesson 105 cont.)

Electronic learning (e-Learning).

Instructional aids and training technologies, including:

a. Characteristics of effective instructional aids

b. Reasons for use

c. Guidelines for use

d. Types

Integrated flight instruction.

Problem-based instruction.

Planning instructional activity, including:

a. Blocks of learning

b. Training syllabus

c. Lesson plans

Application of the Lesson

Assessment of the Lesson

Course of Training

Blocks of Learning

Training Syllabus

Lesson Plans

Scenario Based Training

Single-Pilot Resource Management

Completion Standards:

Through guided discussion the learner will develop an understanding of the teaching process, applying that knowledge, managing associated risks, demonstrating appropriate skills, and providing effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 106 1.3 Hours

Reference: FAA-H-8083-2, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to evaluation and testing and characteristics of an effective assessment.

Content: (CFI ACS FI.I.D) (AIH 6)

Assessment Terminology

Purpose and characteristics of effective assessment.

Traditional assessments.

Authentic assessments, including:

a. Learner-centered assessment.

b. Maneuver or procedure grades.

c. Assessing risk management skills.

Choosing an effective assessment method.

Purposes and types of critiques.

Oral assessment, including:

a. Characteristics of effective questions.

b. Types of questions to avoid.

c. Answering learner questions.

Scenario Based Training

Assessment of piloting ability.

Completion Standards:

Through guided discussion the learner will develop an understanding of skills and testing, applying that knowledge, managing associated risks, demonstrating appropriate skills, and providing effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 107 1.3 Hours

Reference: FAA-H-8083-2, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to the effects of instructor behavior on effective teaching and to teaching practical risk management including risk identification, how to teach it and risk management application in aviation.

Content: (CFI ACS FI.I.E, FI.I.F) (AIH 1, 8, and 10)

Aviation instructor responsibilities, including:

a. Helping learners.

b. Providing adequate instruction.

c. Training to established standards of performance.

d. Emphasizing the positive.

e. Minimizing learner frustrations.

Flight instructor responsibilities, including supervision and surveillance during training.

Aviator's Model Code of Conduct

Safe and efficient operation of aircraft

Safety Practices and Accident Prevention

Flight instructor qualifications and professionalism.

Evaluation of Learner Ability

Professional development.

Instructor ethics and conduct.

Teaching risk identification, assessment, and mitigation.

Teaching risk management tools, including:

a. Pilot/Aircraft/enVironment/External Pressures (PAVE) checklist

b. Flight Risk Assessment Tools (FRATs)

Poor Risk Management and accident Causality

When and how to introduce risk management.

Risk management teaching techniques by phase of instruction.

(Lesson 107 cont.)

Managing risk during flight instruction, including:

a. Common flight instruction risks

b. Best practices

c. Special considerations while teaching takeoffs and landings.

Aeronautical Decision-Making (ADM) to include using Crew Resource Management (CRM) or Single-Pilot Resource Management (SRM), as appropriate.

How to plan for alternatives if the planned flight cannot be completed or delays are encountered.

Completion Standards:

Through guided discussion the learner will develop an understanding of the effects of instructor behavior, effective teaching and teaching practical risk management, applying that knowledge, managing associated risks, demonstrating appropriate skills, and providing effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 108 Written Homework

Lesson Objective:

The objective of this homework is to evaluate the learner's knowledge of the material presented in the Aviation Instructor's Handbook in preparation for the Fundamentals of Instructing written exam.

Content: CFI ACS FI. I. Tasks A-F

Completion Standards:

This lesson and stage are complete when the learner has completed both the written and oral exams with a minimum passing score of 70%.

GROUND TRAINING SYLLABUS

FOI Oral Stage Check 109 1.3 Hours

Lesson Objective:

The learner will prepare a presentation of the tasks in Area of Operations I of the ACS to be presented to the chief or assistant chief flight instructor.

Content: FAA-S-ACS-25 Area of Operations I Tasks A-F

Completion Standards:

The applicant understands the Tasks of Area of operations I, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction.

GROUND TRAINING SYLLABUS

LESSON TIME ALLOCATION*

STAGE 2

Ground Lesson	Ground Instruction Time
201	1.3
202	1.3
203	1.3
204	Written Homework
205	1.3
206	1.3
207	1.3
208	1.3
209	Written Homework
210	1.3
211	1.3
212	1.3
213	1.3
214	1.3
215	1.3
216	1.3
217	1.3
218	1.3
219	1.3
220	1.3
221	1.3
222	1.3
223	Written Homework
224	1.3
225	Written Homework
226	1.3
227	1.3
228 Stage II Exam	1.3
Stage 2 Total	31.2
Total Both Stages	40.3

*The individual lesson times on these tables are for instructor/learner guidance only, they are not mandatory for a given lesson. However, the total ground instruction will be attained at the end of the course.

GROUND TRAINING SYLLABUS

STAGE 2 OBJECTIVE

During this stage, the learner will gain instructional knowledge of all tasks listed in Areas of Operation II, III, and IV of the Flight Instructor for Airplane Category ACS.

Homework: The learner will prepare an outline covering the material in each lesson and be prepared to teach the material to be covered in each lesson. For large seminar classes it will not be possible for each learner to make a presentation during each class. At the beginning of each lesson the learner will turn in their outline. The quality of the outline will be reflected in the overall grade for that lesson.

STAGE 2 COMPLETION STANDARD

This stage is complete when the learner has taken the Stage II written exam with a minimum passing score of 70%. The learner will demonstrate the knowledge and skill necessary to pass the FAA Flight Instructor Airplane written exam, and to pass an oral exam over Area of Operation II during the Flight Instructor End of Course Test.

GROUND TRAINING SYLLABUS

Ground Lesson 201 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to aerodynamics appropriate to the desired instructor certificate.

Content: (CFI ACS AI.II.D)

Aircraft Structure

- Major Components Fuselage
- Wings
- Empennage
- Landing Gear
- Power Plant

Principles of Flight

- Bernoulli's Principle.
- Newtons s Third Law
- Lift Equation
- Relative Wind, Angle of Attack, Downwash
- Stalls

Airfoil design characteristics.

- Airfoil Design (Chamber, Leading Edge, Trailing Edge, Chord line, Angle of Incidence)
- Wing Planforms (Aspect Ratio, rectangular, elliptical, tapered, swept back, delta)
- Relative Wind, Angle of Attack, Downwash
- Stall Design Characteristics

Completion Standards:

The learner understands aerodynamics appropriate to the desired instructor certificate, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 202 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to aerodynamics appropriate to the desired instructor certificate.

Content: (CFI ACS AI.II.D cont.)

Forces acting on an airplane.

Lift, Weight, Thrust and Drag (Induced & Parasite)

Relationship Between Speed, Angle of Attack and Induced/Parasite Drag

Relationship Between Thrust and Drag; Lift ·and Weight in Straight and Level Flight, Climbs and Descents

Forces Acting on an Airplane in Turns

Factors Affecting Lift and Drag

Ground Effect

Completion Standards:

The learner understands aerodynamics appropriate to the desired instructor certificate, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 203 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to aerodynamics appropriate to the desired instructor certificate.

Content: (CFI ACS AI.II.D cont.)

Airplane stability, maneuverability, and controllability.

Positive, Neutral and Negative Static and Dynamic Stability

Longitudinal Stability about the Lateral Axis

Longitudinal Control about the Lateral Axis

Lateral Stability about the Longitudinal Axis

Lateral Control about the Longitudinal Axis

Lateral Stability or Instability in Turns

Directional Stability about the Vertical Axis

Directional Control about the Vertical Axis

Loads and Load Factors

Effect of Turns on Load Factor

Effect of Load Factor on Stalling Speed

Effect of Speed on Load Factor

Effect of Turbulence on Load Factor

Structural Integrity and Velocity/Load Factor Chart

Forces Acting on a Propeller.

Turning tendency (e.g., torque, p-factor, spiraling slipstream, and gyroscopic precession, corrections for turning tendencies).

Wingtip vortices and appropriate precautions.

Completion Standards:

The learner understands aerodynamics appropriate to the desired instructor certificate, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 204 Written Homework

Lesson Objective:

The objective of this lesson is to evaluate the learner's knowledge of aerodynamics through a written homework assignment.

Content: CFI ACS AI.II.D

Completion Standards:

This lesson is complete when the learner scores 70% or better. In addition, the instructor is responsible for reviewing those questions missed.

GROUND TRAINING SYLLABUS

Ground Lesson 205 1.3 Hours

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to personal health, flight physiology, aeromedical and human factors.

Content: (CFI ACS AI.II.A)

Symptoms, recognition, causes, effects, and corrective actions associated with aeromedical and physiological issues, including:

a. Hypoxia

b. Hyperventilation

c. Middle ear and sinus problems

d. Spatial disorientation

e. Motion sickness

f. Carbon monoxide poisoning

g. Stress

h. Fatigue

i. Dehydration and nutrition

j. Hypothermia

k. Optical illusions

l. Dissolved nitrogen in the bloodstream after scuba dives

Regulations regarding use of alcohol and drugs.

Effects of alcohol, drugs, and over-the-counter medications.

Aeronautical Decision-Making (ADM) to include using Crew Resource Management (CRM) or Single-Pilot Resource Management (SRM), as appropriate.

Completion Standards:

The learner understands personal health, flight physiology, aeromedical and human factors, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 206 1.3 Hours

References: AC 90-48, AC 91-73; AIM; Chart Supplements; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to visual scanning and collision avoidance and runway incursion avoidance.

Content: (CFI ACS AI.II.B and AI.II.C)

Environmental conditions that degrade vision.

Vestibular and visual illusions.

“See and Avoid” responsibilities.

Visual scanning procedure and the importance of peripheral vision.

Aircraft blind spots and clearing procedures.

Visual cues of an impending mid-air collision.

Situations that create the greatest collision risk.

Division of attention inside and outside the aircraft.

Runway incursion definition.

Taxi instructions/clearances.

Progressive Taxi

The importance of recording taxi instructions and reviewing taxi routes on the airport diagram.

Hot Spots

Airport markings, signs, and lights, including the importance of hold lines associated with runways.

Appropriate flight deck activities during taxiing, including taxi route planning, briefing the location of Hot Spots, communicating, and coordinating with ATC.

Communication and operational procedures at uncontrolled airports.

Completion Standards:

The learner understands visual scanning and collision avoidance and runway incursion avoidance, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 207 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to flight controls and systems on the airplane provided for the flight test.

Content: (CFI ACS AI.II.E)

Airplane systems, including:

a. Primary flight controls
   - Ailerons
   - Rudder
   - Elevator and Stabilator

b. Secondary flight controls
   - Elevator Trim (Servo Tab)
   - Stabilator Trim (Anti Servo Tab)
   - Aileron and Rudder Trim (Fixed and Adjustable)
   - Balance Tabs
   - Leading Edge Devices
   - Spoilers and Flaps - Purpose-Increase Descent Rate Without Increasing Speed - How Deployment Affects Lift (Changing Chord Line, Surface Area and Drag)
   - Types (Plane, Split, Slotted, Fowler

c. Powerplant and propeller
   - Reciprocating Engines
   - Propeller Fixed/Adjustable
   - Induction Systems
     - Carburetor Systems
     - Fuel Injection Systems
     - Super/Turbochargers o Ignition System
   - Oil System and Engine Cooling
   - Engine Exhaust
   - Engine Starting
   - FADEC

(Lesson 207 cont.)

d. Landing gear

e. Fuel, oil, and hydraulic

f. Electrical

Completion Standards:

The learner understands flight controls and systems on the airplane provided for the flight test, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 208 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to flight controls and systems on the airplane provided for the flight test.

Content: (CFI ACS AI.II.E cont.)

Airplane systems, including:

g. Avionics

Electronic Flight Display

Primary Flight Display (PFD)

Multi-Function Flight Display (MFD)

h. Pitot-static, vacuum/pressure, associated gyroscopic flight instruments, and magnetic compass.

Impact Pressure Chamber and Lines

Static Pressure Chamber and Lines

Altimeter and Types of Altitude

Vertical Speed Indicator

Airspeed Indicator and Types of Airspeed

i. Environmental

j. Deicing and anti-icing

Wings (Pneumatic Boots and Weeping Wing)

Propellers (Electric Boots and Glycol)

Windshield (Electric, Air Defrost and Glycol)

Pitot Tube and Fuel Vents (Electric)

Engine Intake (Heated Air and Inertial)

l. Oxygen system (Different Regulator Types and Altitudes of Use)

Indications of and procedures for managing system abnormalities or failures.

Completion Standards:

The learner understands flight controls and systems on the airplane provided for the flight test, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 209 Written Homework

Lesson Objective:

The objective of this lesson is to evaluate the learner's knowledge of aircraft and engine systems through a written homework assignment.

Content CFI ACS AI.II.E

Completion Standards:

This lesson is complete when the learner scores 70% or better. In addition, the instructor is responsible for reviewing those questions missed.

GROUND TRAINING SYLLABUS

Ground Lesson 210 1.3 Hours

References: 14 CFR parts 23, 39, 43, 61, 68, 91; AC 60-28, AC 68-1; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to pilot qualifications, airworthiness requirements.

Content: (CFI ACS AI.III.A and AI.III.B)

Certification, currency, and recordkeeping requirements, including training and logbook entries.

Privileges and limitations of pilot certificates and ratings at student pilot, sport, recreational, private, commercial, and flight instructor levels.

Medical certificates: class, expiration, privileges, temporary disqualifications, and operations under BasicMed.

General airworthiness requirements and compliance for airplanes, including:

a. Location and expiration dates of required aircraft certificates

b. Required inspections and aircraft logbook documentation.

c. Airworthiness Directives and Special Airworthiness Information Bulletins

d. Purpose and procedure for obtaining a special flight permit.

Pilot-performed preventive maintenance.

Equipment requirements for day and night VFR flight, including:

a. Flying with inoperative equipment.

b. Using an approved Minimum Equipment List (MEL)

c. Kinds of Operation Equipment List (KOEL)

d. Required discrepancy records or placards.

Standard and special airworthiness certificates and their associated operational limitations

Documents pilots must possess to exercise privileges of the specified certificate(s) and rating(s).

Completion Standards:

The learner understands pilot qualifications, airworthiness requirements, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 211 1.3 Hours

References: 14 CFR part 91; AC 91-92; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25, FAA-H-8083-28

Lesson Objective:

The learner will be introduced to weather information.

Content: (CFI ACS AI.III.C)

Sources of weather data (e.g., National Weather Service, Flight Service) for flight planning purposes.

Acceptable weather products and resources required for preflight planning, current and forecast weather for departure, en route, and arrival phases of flight such as:

a. Airport Observations (METAR and SPECI) and Pilot Observations (PIREP)

b. Surface Analysis Chart, Ceiling and Visibility Chart (CVA)

c. Terminal Aerodrome Forecasts (TAF)

d. Graphical Forecasts for Aviation (GFA)

e. Wind and Temperature Aloft Forecast (FB)

f. Convective Outlook (AC)

g. Inflight Aviation Weather Advisories including Airmen's Meteorological Information (AIRMET), Significant Meteorological Information (SIGMET), and Convective SIGMET

Meteorology applicable to the departure, en route, alternate, and destination under visual flight rules (VFR) in Visual Meteorological Conditions (VMC), including expected climate and hazardous conditions such as:

a. Atmospheric composition and stability

b. Wind (e.g., windshear, mountain wave, factors affecting wind, etc.)

c. Temperature and heat exchange

d. Moisture/precipitation

e. Weather system formation, including air masses and fronts.

f. Clouds

g. Turbulence

h. Thunderstorms and microbursts

i. Icing and freezing level information

j. Fog/mist

(Lesson 211 cont.)

k. Frost

l. Obstructions to visibility (e.g., smoke, haze, volcanic ash, etc.)

Recognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts

Flight deck instrument displays of digital weather and aeronautical information.

Completion Standards:

The learner understands communications, light signals, and runway lighting systems and traffic patterns, and post flight procedures can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 212 1.3 Hours

References: 14 CFR part 91; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to communications, light signals, and runway lighting systems and traffic patterns and post flight procedures.

Content: (CFI ACS AI.VI.A and AI.VI.B)

How to obtain appropriate radio frequencies.

Proper radio communication procedures and air traffic control (ATC) phraseology.

ATC light signal recognition.

Appropriate use of transponder(s).

Lost communication procedures.

Equipment issues that could cause loss of communication.

Radar assistance.

Runway Status Lighting Systems.

Common errors related to this Task.

Towered and nontowered airport operations.

Traffic pattern selection for the current conditions.

Right-of-way rules.

Use of automated weather and airport information.

Common errors related to this Task.

Completion Standards:

The learner understands communications, light signals, and runway lighting systems and traffic patterns, and post flight procedures can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 213 1.3 Hours

References: 14 CFR part 91; AC 91-73, AC 120-71; Chart Supplements; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083-25; POH/AFM
Lesson Objective:

The learner will be introduced to preflight assessment, flight deck management, engine starting, taxiing, airport signs, and lighting, and before takeoff check.

Content: (CFI ACS AI.V. A, AI.V.B, and AI.V.C)

Pilot self-assessment.

Determining that the airplane to be used is appropriate and airworthy.

Airplane preflight inspection, including:

a. Which items should be inspected.

b. The reasons for checking each item.

d. The associated regulations

Environmental factors, including weather, terrain, route selection, and obstructions.

Flight Deck Management

Passenger briefing requirements, including operation, and required use of safety restraint systems.

How to plan for alternatives if the planned flight cannot be completed or delays are encountered.

Use of appropriate checklists.

Requirements for current and appropriate navigation data.

Securing items and cargo.

Starting under various conditions.

Starting the engine(s) by use of external power.

Engine limitations as they relate to starting.

Completion Standards:

The learner understands preflight assessment, flight deck management, engine starting, airport signs, and lighting, and before takeoff check, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 214 1.3 Hours

Lesson Objective:

The learner will demonstrate understanding of taxiing, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction.

Content: (CFI ACS AI.V.D)

Elements of safe taxi operations.

Current airport aeronautical references and information resources such as the Chart Supplement,

airport diagram, and Notices to Air Missions (NOTAMs).

How to obtain information on runway lengths at airports of intended use, data on takeoff and landing distances, weather reports and forecasts, and fuel requirement

Taxi instructions/clearances.

Airport markings, signs, and lights.

Visual indicators for wind.

Aircraft lighting, as appropriate.

Procedures for:

a. Appropriate flight deck activities prior to taxi, including route planning and identifying the location of Hot Spots

b. Radio communications at towered and nontowered airports

c. Entering or crossing runways.

d. Night taxi operations

e. Low visibility taxi operations

Purpose of before takeoff checklist items, including:

a. Reasons for checking each item.

b. Detecting malfunctions

c. Ensuring the aircraft is in safe operating condition as recommended by the manufacturer.

Completion Standards:

The learner understands taxiing operations, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 215 1.3 Hours

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-23, FAA-H-8083 25; POH/AFM

Lesson Objective:

The learner will develop a better understanding of takeoff, landings and go arounds, apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction Content: (CFI ACS AI.VII. Tasks A, B, C, D, E, F, M, N, and O)

The learner will be able to describe the following:

Maneuver Objective

Knowledge, Risk Management, and Skills for the maneuver.

Procedural elements of the Maneuver

Common Errors.

Associated with:

Normal Takeoff and Climb

Normal Approach and Landing

Soft-Field Takeoff and Climb (ASEL)

Soft-Field Approach and Landing (ASEL)

Short-Field Takeoff and Maximum Performance Climb (ASEL)

Short-Field Approach and Landing (ASEL)

Slip to a Landing (ASEL)

Go-Around/Rejected Landing

Power-Off 180° Accuracy Approach and Landing (ASEL)

Refer to the appropriate task in the CFI ACS individual maneuvers.

Completion Standards:

The learner understands takeoff, landings and go arounds, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 216 1.3 Hours

References: AC 61-67; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The Learner will learn to present a preflight lesson on the selected maneuver as the lesson would be taught to a learner and determine the outcome of this Task. The learner will also be introduced to fundamentals of flight, performance and ground reference maneuvers and slow flight, stalls, and spins.

Content: (CFI ACS AI.IV.A, AI.VIII. Task A - D, AI.IX. Tasks A- F, and AI.X. Tasks, A- I)

Maneuver Lesson

Straight-and-Level Flight

Level Turns

Straight Climbs and Climbing Turns

Straight Descents and Descending Turns

Steep Turns

Steep Spiral (ASEL)

Chandelles (ASEL)

Lazy Eights (ASEL)

Ground Reference Maneuvers

Eights on Pylons (ASEL)

Maneuvering During Slow Flight

Demonstration of Flight Characteristics at Various Configurations and Airspeeds (ASEL)

Power-Off Stalls

Power-On Stalls

Accelerated Stalls

Cross-Controlled Stall Demonstration (ASEL)

Elevator Trim Stall Demonstration (ASEL)

Secondary Stall Demonstration (ASEL)

Spin Awareness and Spins

Refer to the appropriate task in the CFI ACS individual maneuver knowledge areas.

(Lesson 216 cont.)

Completion Standards:

The learner understands the elements associated with a maneuver Task selected from Area of Operation VII through Area of Operation XII (ASEL, ASES) or Area of Operation VII through Area of Operation XIII (AMEL, AMES) and applies that knowledge when delivering ground instruction.

The learner also understands fundamentals of flight, performance and ground reference maneuvers and slow flight, stalls, and spins, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 217 1.3 Hours

References: FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-15, FAA-H-8083-16, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to basic instrument maneuvers and emergency operations.

Content: (CFI ACS AI.XI. Tasks A-E and AI.XII. Tasks A-D)

AOOXI

Task A. Straight-and-Level Flight

Task B. Constant Airspeed Climbs

Task C. Constant Airspeed Descents

Task D. Turns to Headings

Task E. Recovery from Unusual Flight Attitudes

AOO XII

Task A. Emergency Descent

Task B. Emergency Approach and Landing (Simulated)

Task C. Systems and Equipment Malfunctions

Task D. Emergency Equipment and Survival Gear

Refer to the appropriate task in the CFI ACS individual maneuver knowledge areas.

Completion Standards:

The learner understands basic instrument maneuvers and emergency operations, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 218 1.3 Hours

References: FAA-H-8083-1, FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to aircraft performance and limitations.

Content: (CFI ACS AI.II.F)

Elements related to performance and limitations by explaining the use of charts, tables, and data to determine performance.

Factors affecting performance, including:

a. Atmospheric conditions

b. Pilot technique

c. Airplane configuration

d. Airport environment

e. Loading and weight and balance

Significance and effects of exceeding aircraft performance limitations

Factors affecting performance, including:

Weight and balance terms including: basic empty weight, maximum gross weight, arm, moment, reference datum, center of gravity (CG) and CG limits, and useful load.

Completion Standards:

The learner understands aircraft performance and limitations, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 219 1.3 Hours

References: 14 CFR parts 71, 91, 93; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25; VFR Navigation Charts

Lesson Objective:

The learner will be introduced to the National Airspace System.

Content: (CFI ACS AI.II.G)

Airspace classes and associated requirements and limitations.

Chart symbols.

Special use airspace (SUA), special flight rules areas (SFRA), temporary flight restrictions (TFR), and other airspace areas.

Currency of publications.

Special visual flight rules (VFR) requirements

Procedures for operating within the National Airspace System

Air traffic control clearances and procedures

Completion Standards:

The learner understands the National Airspace System, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 220 1.3 Hours

References: AC 91-78; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to navigation systems and radar services.

Content: (CFI ACS AI.II.H)

Ground-based navigation (identification, orientation, course determination, equipment, tests, regulations, interference, appropriate use of navigation data, and signal integrity).

Satellite-based navigation (e.g., equipment, regulations, authorized use of databases, and Receiver Autonomous Integrity Monitoring (RAIM)).

Radar assistance to visual flight rules (VFR) aircraft (e.g., operations, equipment, available services, traffic advisories).

Transponder (Mode(s) A, C, and S) and Automatic Dependent Surveillance-Broadcast (ADS-B).

Completion Standards:

The learner understands navigation systems and radar services, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 221 1.3 Hours

References: AC 91-78; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to navigation and cross-country flight planning.

Content: (CFI ACS AI.II.I)

Use of aeronautical charts and a magnetic compass for pilotage and dead reckoning

Magnetic Compass

Magnetic Dip

Compass Errors

As a function of latitude

Acceleration errors

Lead/Lag errors in turns.

Using the Magnetic Compass

Route planning, including consideration of different classes and special use airspace (SUA) and selection of appropriate and available navigation/communication systems and facilities.

Altitude selection accounting for terrain and obstacles, glide distance of airplane, visual flight rules (VFR) cruising altitudes, and effect of wind.

Plotting a course.

Power setting selection.

Calculating:

a. Time, climb and descent rates, course, distance, heading, true airspeed, and groundspeed.

b. Estimated time of arrival, including conversion to universal coordinated time (UTC)

c. Fuel requirements, including reserve.

Elements of a VFR flight plan.

Correlate weather information to make a go/no-go decision.

Procedures for activating and closing a VFR flight plan.

Completion Standards:

The learner understands navigation and cross-country flight planning, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 222 1.3 Hours

References: AC 91-78; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25

Lesson Objective:

The learner will be introduced to navigation and cross-country flight planning.

Content: (CFI ACS AI.II I cont.)

Pilotage and dead reckoning.

Planned calculations versus actual results and required corrections.

Diversion and lost procedures.

Inflight intercept procedures.

Use of an electronic flight bag (EFB), if used.

Chart symbols.

Completion Standards:

The learner understands navigation and cross-country flight planning, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 223 Written Homework

Lesson Objective:

The objective of this lesson is to evaluate the learner's knowledge of VFR cross-country planning, pilotage, dead reckoning, and radio navigation through a written homework assignment.

Content: CFI ACS AI.II. Tasks G, H, and I

Completion Standards:

This lesson is complete when the learner scores 70% or better. In addition, the instructor is responsible for reviewing those questions missed.

GROUND TRAINING SYLLABUS

Ground Lesson 224 1.3 Hours

References: 14 CFR parts 1, 61, 91; 49 CFR part 830; AC 61-65*;* AIM; Chart Supplements; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to the Code of Federal Regulations and other relevant publications, and logbook entries and endorsements.

Content: (CFI ACS AI.II. I, J, and K)

14 CFR parts 1, 61, and 91.

Federal Aviation Regulations of this chapter that apply to privileges, limitations and flight operations for Recreational, Private, and commercial pilots, and flight operations under IFR.

49 CFR part 830. Accident reporting requirements of the National Transportation Safety Board

Advisory Circulars, INFOs, and SAFOs.

Airman Certification Standards or Practical Test Standards.

Flight Instructor for Airplane Category ACS (FAA-S-ACS-25)

Pilot's Operating Handbooks or flight manuals.

Aeronautical Information Manual (AIM).

Required logbook entries for instruction given.

Required student pilot pre-solo knowledge test, solo endorsements, and logbook entries.

Other required pilot logbook endorsements (e.g., Class B Airspace, Special Federal Aviation Regulation (SFAR)).

GROUND TRAINING SYLLABUS

Lesson 224 cont.

Preparation of a recommendation for a pilot practical test, including appropriate logbook entry and

a. Initial pilot certification

b. Additional pilot certification

c. Additional aircraft qualification

Endorsement of a pilot logbook for the satisfactory completion of an FAA flight review.

Required flight instructor records.

Flight instructor renewal and reinstatement requirements.

Completion Standards:

The learner understands the Code of Federal Regulations and other relevant publications, and logbook entries and endorsements., can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Lesson 225 Written Homework

Lesson Objective:

The objective of this lesson is to evaluate the learner's knowledge of Federal Aviation Regulations-Part 61 through a written homework assignment.

Content: FAR Take-Home Quiz

Completion Standards:

This lesson is complete when the learner scores 70% or better. In addition, the instructor is responsible for reviewing those questions missed.

GROUND TRAINING SYLLABUS

Ground Lesson 226 1.3 Hours

References: AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to night operations.

Content: (CFI ACS AI.II.M)

Physiological aspects of vision related to night flying.

Lighting systems identifying airports, runways, taxiways, obstructions, and pilot-controlled lighting.

Airplane equipment and lighting requirements for night operations.

Personal equipment essential for night flights.

Night orientation, navigation, chart reading techniques and methods for maintaining night vision effectiveness.

Use of instruments to verify the aircraft's attitude at night.

Visual illusions at night.

Night taxi operations.

Interpretation of traffic position and direction based solely on position lights.

Completion Standards:

The learner understands night operations, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 227 1.3 Hours

References: 14 CFR part 91; AC 61-107; AIM; FAA-H-8083-2, FAA-H-8083-3, FAA-H-8083-9, FAA-H-8083-25; POH/AFM

Lesson Objective:

The learner will be introduced to flight at higher altitudes where supplemental oxygen is required or recommended, and flight in pressurized aircraft at high altitudes.

Content: (CFI ACS AI.II. Task N and O)

Regulatory requirements for supplemental oxygen use by flight crew and passengers.

Physiological factors, including:

a. Impairment

b. Symptoms of hypoxia

c. Time of useful consciousness (TUC)

Operational factors, including:

a. Characteristics, limitations, and applicability of continuous flow, demand, and pressure demand oxygen systems

b. Differences between and identification of “aviator’s breathing oxygen” and other types of oxygen

c. Precautions when using supplemental oxygen systems.

Fundamental concepts of aircraft pressurization system, including failure modes.

Physiological factors, including:

a. Impairment

b. Symptoms of hypoxia

c. Time of useful consciousness (TUC)

d. Effects of rapid decompression on crew and passengers

Completion Standards:

The learner understands flight at higher altitudes where supplemental oxygen is required or recommended, and flight in pressurized aircraft at high altitudes, can apply that knowledge, manage associated risks, demonstrate appropriate skills, and provide effective instruction. The evaluation of the learner can take the form of an oral or written quiz or demonstration.

GROUND TRAINING SYLLABUS

Ground Lesson 228 1.3 Hours

Lesson Objective:

The exam administered during this lesson evaluates the learner's comprehension of the aeronautical knowledge requirements for the private, commercial, and flight instructor certificates in preparation for the Certified Flight Instructor - Airplane written and practical exam.

Content:

Stage II Exam

Completion Standards:

This lesson and stage are complete when the learner has completed the exam with a minimum passing score of 70%.

FLIGHT TRAINING SYLLABUS

LESSON TIME ALLOCATION*

FLIGHT STAGE 1

LESSON	DL	IDL	DL NGT	GI	PP
101	1.0				.5
102	1.0				.5
103	1.0				.5
104	1.0				.5
105	1.0				.5
106	1.0				.5
PGI A				1.2	
107	1.0				.5
108	1.0				.5
109	1.0				.5
110	1.0				.5
PGI B				1.3	
111	1.0	.5	1.0		.5
112	1.0				.5
113	1.0				.5
114	1.0				.5
PGI C				1.3	
115 STAGE CHECK ORAL				.5	
115 STAGE CHECK FLIGHT	1.0				.5
Stage 1 Total	15.0	.5	1.0	4.3	7.5

*The individual lesson times shown on this table are for instructor/learner guidance only, they are not mandatory for a given lesson. However, the totals in each category must be attained at the completion of the stage to ensure the learner will acquire at least the minimum amount of required instruction.

DL = Dual Instruction; IDL = Instrument Dual; DL NGT = Dual Night; GI = Ground Instruction

PGI = Practice Ground Instruction PP = Pre/Post

FLIGHT TRAINING SYLLABUS

STAGE 1 OBJECTIVE

The objective of this stage is for the learner to begin developing the instructional skills and flight proficiency required for the Flight Instructor, Airplane - Single- Engine rating.

STAGE 1 COMPLETION STANDARDS

This stage of training will be complete when the learner has developed the skills necessary to complete the required maneuvers from the right seat to CFI ACS standards and satisfactorily completes the stage 1 exam.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON l01

Leeson Objective:
This lesson allows the learner to analyze and perform private pilot flight training maneuvers. In preparation, the learner should review the flight maneuvers in 14 CFR, Part 61 covering solo flight requirements for student pilots and flight proficiency requirements for private pilots.

Content: (CFI ACS AI.V. Tasks A-D and F, AI.VI. Tasks A and B, AI.VII A, AI.VIII. Tasks A-D, AI.IX. A, And AI.X. Tasks A-D)

Lesson Introduction
Preflight Preparations and Procedures
- -Demonstration of Primary Controls
- -Visual Inspection
- -Taxiing
- -Pre-takeoff Check
- -Radio Communications
- -Airport and Runway Markings and Lights
- -Airport Operations

Take-off and Landings
- -Normal
- -Crosswind

Straight Climbs and Climbing Turns Straight and Level Flight
Straight Descents and Descending Turns
Level Turns
- -Shallow
- -Medium
- -Steep Turns

Maneuvering During Slow Flight
Recognition and Recovery from Stalls Entered from Straight Flight and From Turns and various Power Combinations
- -Power On Stalls
- -Power Off Stalls

Post Flight Procedures

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 102

Lesson Objective:

This lesson continues analysis and performance of private flight training maneuvers. The maneuvers are those listed in FAR Part 61 and the Private Pilot ACS.

Content: (CFI ACS AI.VIII. Tasks A, B and N, AI.VIII.D, AI.IX. E)

Lesson Review Takeoffs and Landings

- Normal
- Crosswind
- Go-Arounds

Lesson Introduction

Flight by Reference to Ground Objects

- Tracking Along a Road
- Rectangular Course
- Turns About a Point
- S Turns Across a Road

Descents

- High and Low Drag Configuration

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 103

Lesson Objective:

This lesson continues analysis and performance of private flight training maneuvers. The maneuvers are those listed in the Private Pilot ACS.

Content: (CFI ACS AI.VII.O, AI.XII. Tasks A-D)

Lesson Introduction

Power-Off 180 Degree Accuracy Approach and Landing

Emergency Procedures

- Forced Landings Initiated on:

    Takeoff

    Initial Climb

    Cruise

    Descent

    Landing Patterns

Equipment Malfunctions

Fire in Flight

Emergency Descent

Collision Avoidance

Slips

Go-Arounds Initiated From:

    -Landing Flare

    -Turns

    -Various Flight Configurations

Completion standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 104

Lesson Objective:

The learner will perform and analyze traffic pattern procedures and takeoffs and landings. The learner should read AC90-48 11Pilots Role in Collision Avoidance" and the AIM Section on Airport Operations before the lesson. Also, the learner will demonstrate the ability to plan a cross country by bringing a typical learner cross country flight plan to the lesson.

Content: (CFI ACS AI.II.I)

Lesson Introduction

Cross Country Flying
- Single Pilot Resource Management
- Course Intersection
- Pilotage/Dead Reckoning
- Power Setting and Mixture Control
- Estimate of Ground Speed and ETA
- Diversion to an Alternate
- Lost Procedures
- Radio Navigation
- Airport and Runway Lighting

Airport and Traffic Pattern Operations
- Traffic Patterns
- Departure Procedures
- Entry Procedures
- Wake Turbulence Avoidance
- Collision Avoidance Precautions
- Radio Communications
- Light Gun Signals
- Runway Marking
- Runway Incursion Precautions

Takeoffs and Landings
- Short Field
- Soft Field
- Landings With Power at Idle
- Landings With and Without Flaps
- Turbulent Air Approach and Landing
- Power-Off 180 Degree Accuracy Approach and Landing

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 105

Lesson Objective:
The learner will perform and analyze a series of commercial flight training maneuvers.

Content: (CFI ACS AI.VII. Tasks C-F, AI.IX. Tasks A-D, and F)
Lesson Introduction
Performance Maneuvers
- Chandelles
- Lazy Eights
- Steep Turns
- Steep Spirals

Emergency Approach and Landing
Slips
Takeoff and Landings
- Short Field
- Soft Field

Ground Reference Maneuver
- Eights-on-Pylons

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 106

Lesson Objective:

During this lesson the learner will analyze and perform Maneuvering During Slow Flight and stalls that are familiar from private and commercial pilot operations. A series of stalls that are listed in the Flight Instructor ACS are introduced.

Content: (CFI ACS AI.X. Tasks A-H)

Lesson Review

Power On Stalls

Power Off Stalls

Lesson Introduction

Engine Failure on Climb Followed by 180 Degree Turn

Secondary Stalls

Cross Controlled Stalls

Elevator Trim Stalls

Accelerated Stalls

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

PRACTICE GROUND INSTRUCTION A

Lesson Objective:
During ground lesson A through D, the learner will demonstrate to their flight instructor the instructional knowledge of Airman Certification Standards (ACS) Format and the subjects listed in area of operation II of the Flight Instructor for Airplane Category ACS (CFI ACS). The intent of these five hours is for the learner to demonstrate the ability to give effective instruction, not to receive instruction. These four lessons can be placed at any convenient point in the flight training syllabus. The learner should be given enough time to prepare to teach on the assigned subject areas. The lesson content is suggested. The flight instructor can re-arrange the content of lessons A through D as required to meet the learner's needs, but all subjects must be covered.

Content:
Lesson Introduction: General Airman Certification Standards (ACS) Format
Airman Certification Standards Concept

Appendices 1-3
Practical Test Roles, Responsibilities, and Outcomes
Safety of Flight
Aircraft, Equipment, and Operational Requirements & Limitations

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINNG SYLLABUS

FLIGHT LESSON 107

Lesson Objective:
During this lesson, the learner will explain and demonstrate basic private pilot maneuvers. The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing, then conduct the training flight. The learner should refer to FAA-H-8083-3 " Airplane Flying Handbook," during their preparation for this lesson.

Content: (CFI ACS AI.II. A, AI.V, AI.VI, AI.VII, AI.VII)

Briefing:
The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for this flight. The lesson plan and briefing will be appropriate for student pilots.
Flight:
Lesson Review:
Preflight Preparations and Procedures
- Demonstration of Primary Controls
- Visual Inspection
- Taxiing
- Pre-takeoff Check
- Radio Communications
- Airport and Runway Markings and Lights
- Runway Incursion Precautions

Take-off and Landings
- Normal
- Crosswind

Straight Climbs and Climbing Turns
Straight and Level Flight
Straight Descents and Descending Turns
Level Turns
- Shallow
- Medium
- Steep Bank Turns

Slow Flight with Realistic Distractions
Post Flight Procedures

Completion standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 108

Lesson Objective:
During this lesson, the learner will explain and demonstrate stalls, slow flight, and private pilot ground reference maneuvers. The learner should refer to FAA-H- 8083 Airplane Flying Handbook and AC61-67 "Stall and Spin Awareness Training" during the preparation of the lesson plan. The learner will conduct the training flight.

Content: (CFI ACS AI.VII, AI.X , and AI.IX)

Briefing:
The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for this flight. The lesson plan and briefing will be appropriate for student pilots.

Flight:
Lesson Review
Takeoff and Landings
- Normal
- Crosswind
- Go-Arounds

Power On Stalls
Power Off Stalls
Ground Reference Maneuvers
- Tracking Along a Road
- Rectangular course
- Turns About a Point
- S-Turns Across a Road
- Traffic Pattern

Completion standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 109

Lesson Objective:
The learner will explain and demonstrate emergency procedures. The learner should refer to FAA-H-8083-3 Airplane Flying Handbook when preparing the lesson plan. The learner will conduct the training flight.

Content: (CFI ACS AI.XII)

Briefing:
The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for this lesson. The lesson plan and briefing will be appropriate for student pilots.

Flight:
Lesson Review
Emergency Approach and Landing Forced Landings Initiated On:
- Takeoff
- Initial Climb
- Cruise
- Descent
- Landing Patterns

Systems and Equipment Malfunctions
- Smoke, Fire or Both During Ground or Flight Operations
- Engine Overheat
- Electrical system Malfunction
- Carburetor or Induction Icing
- Door open in Flight.

Emergency Descent
Slips
Go Arounds Initiated From:
- Landing Flare
- Turns
- Various Flight Configurations

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 110

Lesson Objective:

The learner will explain and demonstrate airport traffic pattern operations and maximum performance takeoff and landing. The learner should refer to FAA-H-8083-3B Airplane Flying Handbook, Private and Commercial ACS, AC90-48 Pilots Role in Collision Avoidance and the AIM Section on Airport Operations when preparing the lesson plan. The learner will conduct the training flight.

Content: (CFI ACS AI.VI, AI.VII)

Briefing:

The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for this lesson. The lesson plan and briefing will be appropriate for student pilots.

Flight:

Lesson Review

Airport Traffic Pattern Operation

- Departure Procedure
- Entry Procedures
- Wake Turbulence Avoidance
- Collision Avoidance Precaution
- Land and Hold Short (LAHSO) Procedures
- Light Gun Signals

Takeoffs and Landings

- Landings With and Without Flaps
- Turbulent Air Approaches and Landing
- Power-off 180 Degree Accuracy Approach and Landing
- Short Field
- Soft Field

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

PRACTICE GROUND INSTRUCTION B

Lesson Objective:

During ground lesson A through D, the learner will demonstrate to their flight instructor the instructional knowledge of Airman Certification Standards (ACS) Format and the subjects listed in area of operation II of the Flight Instructor for Airplane Category ACS (CFI ACS). The intent of these five hours is for the learner to demonstrate the ability to give effective instruction, not to receive instruction. These four lessons can be placed at any convenient point in the flight training syllabus. The learner should be given enough time to prepare to teach on the assigned subject areas. The lesson content is suggested. The flight instructor can re-arrange the content of lessons A through D as required to meet the learner's needs, but all subjects must be covered.

Content:

Lesson Introduction:

Principles of Flight

Airplane Flight Controls

Runway Incursion Avoidance

Airplane Weight and Balance

Completion Standards:

The learner will demonstrate instructional knowledge of the subjects covered during the practice ground instruction session.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 111 NIGHT, INSTRUMENT

Lesson Objective:

The learner will explain and demonstrate night operations and flight by reference to instruments. The learner should refer to FAA-H-8083-3, AC6l-23, the Private and CFI ACS when preparing the lesson plan. The learner will conduct the training flight.

Content: (CFI ACS AI.II. M and AI.XI)

Briefing:

The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for this flight lesson. The lesson plan and briefing will be appropriate for student pilots. The learner should assume that this is the first night flight and the first flight by reference to instruments for their learner.

Lesson Review

Night Flight Considerations

Aeromedical Factors

- Night Vision
- Vertigo Aircraft Lights Airport Lights

Runway Incursion Precautions during night operations

Flight By Reference to Instruments (IR)

- Straight and Level
- Turns to Headings
- Climbs
- Descents
- Unusual Attitudes
- Radio Navigation

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 112

Lesson Objective,
The learner will explain and demonstrate VFR navigation. The learner should refer to FAA-H-8083-3 "Airplane Flying Handbook" and the Private Pilot and Commercial Pilot ACS when preparing the lesson plan. The learner will conduct the training flight.

Content: (CFI ACS AI.II and AI.VI)

Briefing:
The learner will prepare a briefing for this lesson, a lesson plan and deliver a twenty-minute preflight. The lesson plan and briefing will be appropriate for student pilots.

Flight:
Lesson Review
Cross Country Flying
- Single Pilot Resource Management
- Course Intersection
- Pilotage/Dead Reckoning
- Power Setting and Mixture Control
- Estimate of Ground Speed and ETA
- Diversion to an A1ternate
- Lost Procedures
- Radio Navigation
- Airport and Runway Lighting

Airport and Traffic Pattern Operations
- Traffic Patterns
- Departure Procedures
- Entry Procedures
- Wake Turbulence Avoidance
- Collision Avoidance Precautions
- Radio Communications
- Light Gun Signals
- Runway Marking
- Runway Incursion Precautions

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 113

Lesson Objective:

The learner will explain and demonstrate commercial pilot ground reference maneuvers. The learner should refer to FAA-H-8083-3 Airplane Flying Handbook and the Commercial Pilot ACS when preparing the lesson plan. The learner will conduct the training flight.

Content: (CFI ACS AI.VII, AI.IX, and AI.XII)

Briefing:

The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for the flight lesson. The lesson plan and briefing will be appropriate for commercial pilot applicants.

Flight:

Lesson Review

Eights-on-Pylons

Takeoff and Landings

- Short Field
- Soft Field
- Power-Off 180 Degree Accuracy Approach and Landing

Emergency Procedures

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 114

Lesson Objective:

This lesson is a review in preparation of the intermediate stage check.

Content: (CFI ACS AI.II.D)

Briefing:

The learner will prepare a lesson plan and deliver a thirty-minute preflight briefing for the flight lesson on a commercial performance maneuver selected by the examiner. The lesson plan and briefing will be appropriate for commercial pilot applicants. In addition to a description of how the maneuver is performed and common errors associated with the maneuver the learner will also describe the aerodynamics of the maneuver. During the briefing include an explanation of:

Forces Acting on an Airplane During Turns

Load Factor

Overbanking Tendency

Adverse Yaw

Left Turning Tendencies

Flight:

Review of takeoffs, landings and maneuvers as determined by the instructor.

Completion Standards:

This lesson is complete when the student has conducted the assigned flight. The student should attempt to gain proficiency in the subject areas, explanations, and demonstration of each task in preparation to meet the CFI ACS standards.

FLIGHT TRAINING SYLLABUS

PRACTICE GROUND INSTRUCTION C

Lesson Objective:

During ground lesson A through D, the learner will demonstrate to their flight instructor the instructional knowledge of ACS Format and the subjects listed in area of operation II of the CFI ACS. The intent of these five hours is for the learner to demonstrate the ability to give effective instruction, not to receive instruction. These four lessons can be placed at any convenient point in the flight training syllabus. The learner should be given enough time to prepare to teach on the assigned subject areas. The lesson content is suggested. The flight instructor can re-arrange the content of lessons A through Das required to meet the learner's needs, but all subjects must be covered.

Content:

Lesson Introduction

Aeromedical Factors

Visual Scanning and Collision Avoidance

Use of Distractions During Flight Training

Navigation and Flight Planning

Night Operations

High Altitude Operations

Completion Standards:

The learner will demonstrate instructional knowledge of the subjects covered during the practice ground instruction session.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 115 INTERMEDIATE STAGE CHECK

Lesson Objective:
The learner will explain and demonstrate commercial pilot performance maneuvers. The learner should refer to FAA-H-8083-3 Airplane Flying Handbook and the Commercial Pilot ACS when preparing the lesson plan. The learner will conduct the training flight.

Content: (CFI ACS AI.II.D, AI.VII, AI.IX, and AI.XII)

Briefing,
The learner will prepare a lesson plan and deliver a thirty-minute preflight briefing for the flight lesson on a commercial performance maneuver selected by the examiner. The lesson plan and briefing will be appropriate for commercial pilot applicants. In addition to a description of how the maneuver is performed and common errors associated with the maneuver the learner will also describe the aerodynamics of the maneuver. During the briefing include an explanation of:

Forces Acting on an Airplane During Turns
Load Factor
Overbanking Tendency
Adverse Yaw
Left Turning Tendencies

Flight:
Lesson Review
Steep Turns
Chandelles
Lazy Eights
Steep Spirals
Takeoff and Landings
    Short Field
    Soft Field
Emergency Procedures

Completion Standards:

The learner's knowledge of the subject areas and explanations will meet CFI ACS. The flight will be done with the learner performing the required maneuvers from the right seat to CFI ACS standards.

FLIGHT TRAINING SYLLABUS

LESSON TIME ALLOCATION *

FLIGHT STAGE 2

LESSON	DL	IDL	DL NGT	GI	PP
201	1.0				.5
202	2.0				.5
203	1.0				.5
PGI D				1.3	
204	1.0				.5
205	1.0				.5
206	2.0				.5
207	1.0				.5
208 FINAL EOC STAGE CHECK GROUND				3.0	
208 FINAL EOC STAGE CHECK FLIGHT	1.0				.5
Stage 2 Total	10.0			4.3	4.5
TOTAL BOTH STAGES	25.0	.5	1.0	8.6	12.0

*The individual lesson times shown on this table are for instructor/learner guidance only, they are not mandatory for a given lesson. However, the totals in each category must be attained at the completion of the stage to ensure the learner will acquire at least the minimum amount of required instruction.

DL = Dual Instruction; IDL = Instrument Dual; DL NGT = Dual Night; GI = Ground Instruction.

PGI = Practice Ground Instruction; PP = Pre/Post; EOC=End of Course

FLIGHT TRAINING SYLLABUS

STAGE 2 OBJECTIVE

The objective of this stage is for the learner to gain the instructional skills and flight proficiency required for the Flight Instructor, Airplane - Single- Engine rating.

STAGE 2 COMPLETION STANDARDS

This stage of training will be complete when the learner has gained the instructional skills and flight proficiency required to act as a Flight Instructor, Airplane - Single-Engine. The learner will successfully complete the ground and flight end-of-course stage checks.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 201

Lesson Objective:

During this lesson the learner should explain and demonstrate all maneuvers that need work from the previous stage check. A lesson plan should be developed prior to the flight and presented to the instructor over those specific maneuvers.

Content: (As determined)

Briefing:

The learner will prepare and give a twenty-minute presentation over assigned maneuvers from the previous stage check. The lesson plan and briefing will be appropriate for private and commercial pilot applicants.

Flight:

Lesson Review

The learner will explain and demonstrate assigned maneuvers. These maneuvers should be derived from the previous stage check.

Completion Standards:

The learner's knowledge of the subject areas, explanations, and demonstrations will meet the CFI ACS.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 202

Lesson Objective,

During this lesson the learner will explain and demonstrate stalls appropriate to the flight instructor rating. The applicant should refer to FAA-H-8083-3 Airplane Flying Handbook and AC 6l-67 stall and Spin Awareness Training during the preparation for the lesson plan.

Content: (CFI ACS AI.X)

Briefing:

The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for this flight lesson. The lesson plan and briefing will be appropriate for private and commercial pilot applicants.

Flight:

Lesson Review

The learner will explain and demonstrate the following:

Stall Awareness

Stall Avoidance at Slow Airspeed

Realistic Distractions for Student Pilots

Power On Stalls

Engine Failure in Climb Followed by 180 Degree Turn

Cross-Controlled Stalls

Power Off Stalls

Elevator Trim Stalls

Secondary Stalls

Accelerated Stalls

Completion Standards,

The learner's knowledge of the subject areas, explanations, and demonstrations will meet the CFI ACS.

FLIGHT TRAINING SYLLABUS

PRACTICE GROUND INSTRUCTION D

Leason Objective:

During ground lesson A through D, the learner will demonstrate to their flight instructor the instructional knowledge of Airman Certification Standards (ACS) Format and the subjects listed in area of operation II of the Flight Instructor for Airplane Category ACS (CFI ACS). The intent of these five hours is for the learner to demonstrate the ability to give effective instruction, not to receive instruction. These four lessons can be placed at any convenient point in the flight training syllabus. The learner should be given enough time to prepare to teach on the assigned subject areas. The lesson content is suggested. The flight instructor can re-arrange the content of lessons A through D as required to meet the learner's needs, but all subjects must be covered.

Content:

Lesson Introduction

14 CFR and Publications

National Airspace System

Navigation Systems and Radar Services

Logbook Entries and Certificate Endorsements

Completion Standards:

The learner will demonstrate instructional knowledge of the subjects covered during the practice ground instruction session.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 203

Lesson Objective,

During this lesson the learner will explain and demonstrate spins. The learner should review the l4 CFR, Part 61 relating to spin briefings required for private pilots and spin proficiency demonstrations required for Certified Flight Instructors. Also, the learner should refer to FAA-H-8083-3 Airplane Flying Handbook and AC 6l-67 Stall and Spin Awareness Training during the preparation of their lesson plan.

Content: (CFI ACS AI.X.I)

Briefing:

The learner will prepare a lesson plan and deliver a twenty-minute preflight briefing for this flight lesson. The lesson plan and briefing will be appropriate for CFI applicants.

Flight:

Lesson Review

Left or Right Spins with power on and power off entry

Cross Controlled Stall with Full Power Addition After the Stall Occurs (demonstration of Torque Effect)

Completion Standards:

The learner’s knowledge of the subject areas, explanations, and demonstrations will meet the CFI ACS. The learner will receive a logbook endorsement for spin training.

NOTE: If Learner has obtained Part 61 spin endorsement, flight lesson may substitute stall review including cross-controlled stalls and accelerated stalls in lieu of spin maneuvers.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 204

Lesson Objective:

The learner will plan and conduct a flight review. The learner will prepare an outline for the flight review before the class period. The outline will include subjects to be covered during the ground portion of the flight review and this flight. The learner's outline will comply with applicable FAR's. The learner should refer to AC61-98 "Currency and Additional Qualification Requirements for Certificated Pilots" while preparing the outline. The learner will ask the instructor for any additional information needed by the learner to prepare the outline. This may include the type of flying most commonly done, currency, type aircraft flown, and ratings held by the pilot receiving the flight review.

Content: (As determined)

Flight and Lesson Review:

Determined by the learner. The learner will explain and demonstrate each maneuver that they have selected for the flight.

Completion Standards:

The learner will demonstrate an understanding of a flight review, the applicable regulations, and FAA recommendations. The learners’ flying and explanations will meet the standards set in the CFI ACS.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 205

Lesson Objective:

During this lesson the learner will continue to develop flight instructor competency. The lesson is primarily focused on those tasks in the CFI ACS. If possible, the learner will ride with a flight instructor from the Aviation Department other than their regular flight instructor. The object is to provide different input to the learner on how to satisfactorily explain and demonstrate these maneuvers. The learner's instructor will select which maneuvers will be performed and may assign others if needed.

Content: (CFI ACS AI.VII and FI.XII)

Lesson Review:

Takeoffs and Climbs

- Normal
- Crosswind
- Short Field
- Soft Field

Emergency Approach and Landing (Simulated)

Approaches and Landings

- Normal
- Crosswind
- Short Field
- Soft Field
- Forward Slip to Landing
- Go-Around
- Power-Off 180 Degree Accuracy Approach and Landing

Completion Standards:

The learner's knowledge of the subject areas, explanations, and demonstrations will meet the CFI ACS.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 206

Lesson Objective:

The lesson continues to enhance proficiency to meet CFI ACS. If possible, the learner will ride with a flight instructor from the Aviation Department other than their regular flight instructor. The object is to provide different input to the learner on how to satisfactorily explain and demonstrate these maneuvers. The learner's instructor will select which maneuvers will be performed and may assign· others if needed.

Content: (CFI ACS AI.IX and AI.X)

Lesson Review:

Steep Turns

Chandelles

Lazy Eights

Steep Spirals

Eights-on-Pylons

Stalls

Cross Controlled Stalls

Elevator Trim Stalls Secondary Stalls

Accelerated Stalls

As Selected by Flight Instructor

Completion Standards:

The learner's knowledge of the subject areas, explanations, and demonstrations will meet the CFI ACS.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 207

Lesson Objective:
During this lesson the learner will continue to develop flight instructor competency. The flight instructor will select from those listed maneuvers and assign others as needed.

Content: (CFI ACS AI.VII and AI.XII)

Lesson Review:
Takeoffs and Climbs
- Normal
- Crosswind
- Short Field
- Soft Field

Emergency Approach and Landing {Simulated) Systems and Equipment Malfunctions
- Fire in Flight
- Engine Failure
- Engine Overheat
- Electrical System Malfunction
- Door Open in Flight
- Inoperative or Runaway Trim

Approaches and Landings
- Normal
- Crosswind
- Short Field
- Soft Field
- Power-Off 180 Degree Accuracy Approach and Landing

As Assigned by Flight Instructor

Completion Standards:

The learner's knowledge of the subject areas, explanations, and demonstrations will meet the CFI ACS.

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 208

Lesson Objective: This lesson is a stage check conducted by the Chief/Assistant Chief Flight Instructor or Check Instructor approved by the FSDO and conducted in accordance with the evaluator's prepared plan of action. The learner must demonstrate flight instructor proficiency in strict accordance with the current CFI ACS. Note: Several areas of operation are highlighted to indicate mandatory tasks which must be evaluated, and other tasks selected at random. Random task selection is made during the evaluation. Therefore, the learner must be prepared to demonstrate proficiency in all the listed tasks.

The required minimum elements to be tested from each applicable Task include:

• any elements in which the applicant was shown to be deficient on the knowledge test, as applicable.

• at least one knowledge element.

• at least one risk management element; and

• all skill elements unless otherwise noted

Ground Portion of the End of Course Stage Check (this must be satisfactorily completed before progressing to the flight portion.)

Flight Portion of the End of Course Stage Check

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 208 (CONTINUED)

Oral Portion of the End of Course Test

AOI: Fundamentals of Instructing (**Task E, F, and At Least One Other Task**)

Effects of Human Behavior and Communication on the Learning Process (Task A)

Learning Process (Task B)

Course Development, Lesson Plans, and Classroom Training Techniques (Task C)

Student Evaluation, Assessment, and Testing (Task D)

Elements of Effective Teaching in a Professional Environment (Task E)

Elements of Effective Teaching that Include Risk Management and Accident Prevention (Task F)

AOII: Technical Subject Areas (**Tasks C, D, K, and At Least One Other Task**)

Human Factors (Task A)

Visual Scanning and Collision Avoidance (Task B)

Runway Incursion Avoidance (Task C)

Principles of Flight (Task D)

Airplane Flight Controls and Operation of Systems (TaskE)

Performance and Limitations (Task F)

National Airspace System (Task G)

Navigation Systems and Radar Services (Task H)

Navigation and Cross-Country Flight Planning (Task I)

14 CFR and Publications (Task J)

Endorsements and Logbook Entries (Task K)

Night Operations (Task M)

Logbook Entry and Certificate Endorsements (Task M)

High Altitude Operations - Supplemental Oxygen (Task N)

High Altitude Operations – Pressurization (Task O)

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 208 (CONTINUED)

AOIII: Preflight Preparation (**At Least One Task**)

Pilot Qualifications (Task A)

Airworthiness Requirements (Task B)

Weather Information (Task C)

AOIV: Preflight Lesson on a Maneuver to Be Performed in Flight (At least One Maneuver from AO's VII through XIV)

Maneuver Lesson (Task A)

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 208 (CONTINUED)

Flight Portion of the End of Course Test

AOV: Preflight Procedures (**At Least One Task**)

Preflight Assessment (Task A)

Flight Deck Management (Task B)

Engine Starting (Task C)

Taxiing, Airport Signs, and Lighting (Task D)

Before Takeoff Check (Task F)

AOVI: Airport Operations (**At Least One Task**)

Communications, Light Signals, and Runway Lighting Systems (Task A)

Traffic Patterns (Task B)

AOVII: Takeoffs, Landings and Go-Arounds (**At Least Two Takeoff and Two Landing Tasks**)

Normal Takeoff and Climb (Task A)

Normal Approach and Landing (Task B)

Soft-Field Takeoff and Climb (Task C)

Soft-Field Approach and Landing (Task D)

Short-Field Takeoff and Maximum Performance Climb (Task E)

Short-Field Approach and Landing (Task F)

Slip To a Landing (Task M)

Go-Around/Rejected Landing (Task N)

Power-Off 180 Degree Accuracy Approach and Landing (Task O)

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 208 (CONTINUED)

AOVIII: Fundamentals of Flight (**At Least One Task**)

Straight and Level Flight (Task A)

Level Turns (Task B)

Straight Climbs and Climbing Turns (Task C)

Straight Descents and Descending Turns (Task D)

AOIX: Performance Maneuvers and Ground Reference Maneuvers (**at least four Tasks including Task A or B, Task C or D, and Tasks E and F**)

Steep Turns (Task A)

Steep Spirals (Task B)

Chandelles (Task C)

Lazy Eights (Task D)

Ground Reference Maneuvers (Task E, at least one ground reference maneuver)

Eights on Pylons (Task F)

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 208 (CONTINUED)

AOXI: Slow Flight Stalls and Spins (**Must select at least Task A or B; Task C, D, or E; Task F, G, or H; and Task I**.)

Maneuvering During Slow Flight (Task A)

Demonstration of Flight Characteristics at Various Configurations and Airspeeds (Task B)

Power-Off Stalls (Task C)

Power-On Stalls (Task D)

Accelerated Stalls (Task E)

Cross-Controlled Stall Demonstration (Task F)

Secondary Stall Demonstration (Task H)

Spin Awareness and Spins (Task I) Note: Logbook Endorsement attesting instructional competency acceptable.

AOXII: Basic Instrument Maneuvers (**At Least One Task**)

Straight and Level Flight (Task A)

Constant Airspeed Climbs (Task B)

Constant Airspeed Descents (Task C)

Turns to Headings (Task D)

Recovery From Unusual Flight Attitudes (Task E)

AOXIII: Emergency Operations **(At Least Tasks B and C**)

Emergency Descent (Task A)

Emergency Approach and Landing (Simulated) (Task B)

Systems and Equipment Malfunctions (Task C)

Emergency Equipment and Survival Gear (Task D)

AOXIV: Postflight Procedures (**Task A**)

After Landing, Parking, and Securing (**Task A**)

FLIGHT TRAINING SYLLABUS

FLIGHT LESSON 208 (CONTINUED)

Completion Standards:

The learner will demonstrate proficiency in strict accordance with the current FAA Flight Instructor-Airplane Airman Certification Standards. The End of Course Stage Check must be at least equal in scope, depth, and difficulty to a practical test conducted under the FAA Flight Instructor-Airplane Airman Certification Standards.