Aim High Flight Academy

Introduction to Flight

(FLIGHT TRAINING SYLLABUS)

California Aeronautical University
1450 Boughton Drive
Bakersfield, CA 93308

AIM HIGH FLIGHT ACADEMY
Training Course Outline

COURSE OBJECTIVES

The student will obtain the aeronautical skill and experience necessary to meet the solo requirements for airplane single engine land.

COURSE COMPLETION STANDARDS

The student must demonstrate through knowledge and flight tests that the aeronautical knowledge, skill, and experience requirements necessary to solo an airplane are accomplished. Regardless of whether or not the student accomplishes the solo flight lesson, the student must achieve 15 hours of flight time to successfully complete the course.

COURSE INTRODUCTION

The Aim High Flight Academy (AHFA) Course Outline is the syllabus portion of the California Aeronautical University (CAU) Aim High Introduction to Flight course. This outline provides a logical, structured sequence that maximizes learning and meets FAA requirements to solo an airplane. This Training Course Outline also contains the ground lessons and knowledge test necessary to adequately prepare for solo flight.

The course is divided into three separate stages—

Stage I: Pre-Solo Maneuvers and Procedures
Stage II: Traffic Pattern Operations
Stage III: Solo Flight Preparation

COURSE CONCEPT

The AHFA Introduction to Flight Course Outline utilizes the building-block theory of learning, which recognizes that each item taught must be presented on the basis of previously learned knowledge and skills.

For optimal effectiveness, the ground lessons and study assignments should be completed prior to the respective flight lessons. It is of utmost importance to study and review training materials prior to each training session.

COURSE ELEMENTS

The course includes the latest FAA solo requirements and a maximum of student-oriented instruction. The syllabus and support materials not only provide necessary information, but also guide the student through the course in a logical manner.

PREFLIGHT ORIENTATION

Prior to each dual lesson, the instructor must provide the student with a thorough overview of the subject matter to be covered during the lesson. The instructor should select a quiet, private place to brief the student and explain the lesson material. It is important that the instructor defines unfamiliar terms and explains the maneuvers and objectives of each lesson.

AIRPLANE AND SIMULATOR (ATD) PRACTICE

Airplane and simulator practice must be conducted so that the student obtains the maximum benefit from each flight. Each flight, where applicable, should begin with a review of previously practiced maneuvers, as deemed necessary by the instructor, before any new maneuvers are introduced.

POSTFLIGHT EVALUATION

The postflight evaluation is equally as important as the preflight orientation. During each postflight session, the student must be thoroughly debriefed. Noticeable advancement should be apparent, and recommendations should be made for improvement, where appropriate. This action is a valuable instructional technique because it increases retention. The instructor must also discuss the elements of the next lesson. This prepares the student for the study assignments and will enhance the student's understanding.

LESSON TIMES

At the completion of this course, the student will have achieved 15 hours of flight time. The FAA does not specify a minimum amount of flight time for solo flight. Solo flight privileges are only granted once the student-pilot demonstrates adequate knowledge of all FAA required knowledge areas and demonstrates an acceptable level of flight proficiency on all FAA required tasks.

SOLO STAGE CHECK AND KNOWLEDGE TEST

The solo stage check and knowledge test measures the student's knowledge and proficiency prior to being approved for solo flight. This procedure provides close supervision of training and another opinion on the student's progress. Upon successful completion of both the knowledge test and solo stage check, the primary instructor will then be authorized to issue the required solo endorsements at their discretion.

GRADING

Due to the structured pace of this course, each lesson leading up to the solo stage check is graded as either *Complete* or *Incomplete*. By attending the lesson, the lesson will be marked as complete, and the student will progress to the next lesson.

The solo stage check will be graded as either *Satisfactory*, *Unsatisfactory,* or *Incomplete.* The stage check instructor will provide a thorough assessment of all tasks covered in the course. Upon successful completion of the stage check, the student pilot will be authorized to solo at the discretion of their primary flight instructor.

Each pilot operation or task covered during the stage check will be evaluated using the following grading scale—

S = SATISFACTORY	The student-pilot demonstrated adequate knowledge and/or skill on the specified task
U = UNSATISFACTORY	The student-pilot did not demonstrate adequate knowledge and/or skill on the specified task
I = INCOMPLETE	The student-pilot was not able to complete the specified task

The stage check lesson will be issued a final grade using the following grading scale—

S = SATISFACTORY	The student-pilot was able to demonstrate the necessary knowledge and skills on the tasks outlined in the lesson, demonstrating the ability safely solo the training aircraft
U = UNSATISFACTORY	The student-pilot was not able to demonstrate all or part of the lesson tasks to the standards necessary to safely solo the training aircraft
I = INCOMPLETE	The student-pilot was not able to complete all the content outlined in the lesson

COURSE TIME ALLOCATION TABLE

DAY	UNIT NUMBER	UNIT DESCRIPTION	UNIT TIMES			
			Ground	Dual	ATD(Sim)	Oral
0	1.00.FL	Aircraft Preflight				1.5
1	1.01.GL	Introduction to the Training Aircraft	1.0			
	1.01.ATD	Checklist, Radio Comms, and Ground Ops			1.0	0.5
	1.01.FL	Basic Flight Maneuvers I		1.0		0.5
2	1.02.GL	Basic Aerodynamics and Fundamentals of Flt	1.0			
	1.02.ATD	Basic Flight Maneuvers			1.0	0.5
	1.02.FL	Basic Flight Maneuvers II		1.0		0.5
3	1.03.GL	Aerodynamics and Flight Maneuvers	1.0			
	1.03.ATD	Slow Flight and Intro to Stalls			1.0	0.5
	1.03.FL	Slow Flight and Intro to Stalls		1.0		0.5
4	1.04.GL	Airport Operations and Intro to Airspace	1.0			
	1.04.ATD	Mastering Aircraft Control			1.0	0.5
	1.04.FL	Mastering Aircraft Control		1.0		0.5
5	1.05.GL	Aircraft Performance	1.0			
	1.05.ATD	Stalls(Full) and Steep Turns			1.0	0.5
	1.05.FL	Stalls(Full) and Steep Turns		1.0		0.5
6	2.06.GL	Basic Weather Principles	1.0			
	2.06.ATD	Ground Reference Maneuvers			1.0	0.5
	2.06.FL	Ground Reference Maneuvers		1.0		0.5
7	2.07.GL	Aviation Weather	1.0			
	2.07.ATD	Takeoffs, Landings, and Go-Arounds			1.0	0.5
	2.07.FL	Takeoffs, Landings, and Go-Arounds		1.0		0.5
8	2.08.GL	Emergency Procedures (AFM/POH)	1.0			
	2.08.ATD	Emergency Operations			1.0	0.5
	2.08.FL	Emergency Operations		1.0		0.5
9	2.09.GL	Aircraft Systems (AFM/POH)	1.0			
	2.09.ATD	Traffic Pattern Operations			1.0	0.5
	2.09.FL	Traffic Pattern Operations		1.0		0.5
10	2.10.GL	Aviation Rules and Regulations	1.0			
	2.10.ATD	Takeoffs and Landings at Additional Airport			1.0	0.5
	2.10.FL	Takeoffs and Landings at Additional Airport		1.0		0.5
11	3.11.GL	Pre-Solo Aeronautical Exam Review	1.0			
	3.11.ATD	Solo Stage Check Preparation			1.0	0.5
	3.11.FL	Solo Stage Check		1.0		0.5
12	3.12.GL	Airspace	1.0			
	3.12.ATD	Solo Preparation			1.0	0.5
	3.12.FL	*Solo Preparation		1.0		0.5
13	3.13.GL	Review	1.0			
	3.13.ATD	Solo Preparation			1.0	0.5
	3.13.FL	*Solo Preparation		1.0		0.5
14	3.14.GL	Review	1.0			
	3.14.ATD	Solo Preparation			1.0	0.5
	3.14.FL	*Solo Preparation		1.0		0.5
15	3.15.GL	Review	1.0			
	3.15.ATD	Solo Preparation			1.0	0.5
	3.15.FL	*Solo Preparation		1.0		0.5
		Totals:	15.0	15.0	15.0	16.5

Note: The times shown on the allocation table are for instructor guidance only. Actual times may vary slightly. There are no minimum flight hour requirements to solo the training aircraft. All maneuvers/procedures outlined in FAR 61.87 must be complete to be eligible for the required solo endorsements.

*Student performance and conditions permitting, students may be authorized to solo on any of the *Solo Preparation* lessons. Student pilots are only approved for **one** solo flight. If the student has already completed their solo flight, the CFI must continue to provide dual instruction for the remainder of the course until 15 hours of flight time is achieved. Not all students will be granted solo privileges.

DAY 0
1.00.FL
FLIGHT LESSON
AIRCRAFT PREFLIGHT

LESSON RESOURCES

Cessna/King Schools Online Training
C172S Preflight Checklist
C172N Checklist
Pilot's Handbook of Aeronautical Knowledge
Airplane Flying Handbook

LESSON OBJECTIVE:

During this lesson, the student will become familiar with how to thoroughly preflight the training aircraft using the aircraft checklist.

CONTENT:

_____ Aircraft Preflight Procedures

COMPLETION STANDARDS:

At the completion of this lesson, the student will understand how to properly preflight the aircraft prior to a flight lesson.

DAY 1
1.01.GL
GROUND LESSON
INTRODUCTION TO THE TRAINING AIRCRAFT

LESSON RESOURCES:

CAU Safety Procedures and Practices
Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH
Cessna/King Schools Online Training

LESSON OBJECTIVE:

During this lesson, the student will be introduced to the aeronautical decision-making process, some of the important resources available, and the training aircraft.

CONTENT:

_____ Course Introduction
_____ Training Resources
_____ Solo Requirements
_____ Flight Lesson Preparation
_____ Aeronautical Decision Making (ADM)
_____ IMSAFE Checklist
_____ Preflight Action 91.103
_____ Introduction to the Training Airplane
_____ Introduction to the POH

COMPLETION STANDARDS:

Upon completion of this lesson the student will be familiar with the AHFA Training Program. They will understand how to access their training resources and assignments. The student will also have basic understanding of aeronautical decision-making concepts and how to perform a self-evaluation using the IMSAFE checklist.

INSTRUCTOR TASKS:

- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 1 READING ASSIGNMENTS:

Pilot's Handbook of Aeronautical Knowledge (PHAK)- Chapter 1: Introduction to Flying
PHAK- Chapter 2: Aeronautical Decision Making
Airplane Flying Handbook (AFH)- Chapter 1: Introduction to Flight Training
AFH- Chapter 2: Ground Operations

DAY 1 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 1: Learning Your Airplane: Sec. 1: Getting to Know Your Airplane; Section 2: How an Airplane Flies
- FLYING PREP: STAGE 1- MODULE 1: Flight Preview Videos

LESSON QUIZ 

DAY 1
1.01.ATD
SIMULATOR LESSON
CHECKLIST USE, RADIO COMMS, AND GROUND OPS

LESSON RESOURCES

Cessna/King Schools Online Training
C172S Preflight Checklist
C172S Checklist
C172N Checklist
Pilot's Handbook of Aeronautical Knowledge
Airplane Flying Handbook

LESSON OBJECTIVE:

During this lesson, the student will become familiar with the engine start procedures, aircraft taxi, and the before takeoff checklist. The student will be introduced to basic radio communications, airport signs and markings, and basic ground procedures.

CONTENT:

_____ Checklist Use
_____ Engine Start Procedures
_____ Taxi Procedures
_____ Ground Operations
_____ Basic Radio Communications
_____ Aircraft Run-Up Procedures
_____ Airport Signs and Markings

COMPLETION STANDARDS:

At the completion of this lesson, the student will understand how to use a checklist for ground operations, be able to perform an engine start, taxi, and aircraft run-up. The student will also learn basic radio communications and how to properly communicate with ATC while on the ground.

DAY 1
1.01.FL
FLIGHT LESSON
BASIC FLIGHT MANEUVERS I

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will review aircraft checklist use, taxiing the aircraft, and airport ground operations. The student will be introduced to normal takeoffs and climbs, straight and level flight, level turns, climbing and descending turns, and how to properly trim the aircraft.

CONTENT:

_____ Checklist Use
_____ Taxi Operations
_____ ATC Communication and Procedures
_____ Airport Signs and Markings
_____ Normal Takeoff and Climb
_____ Straight and Level Flight
_____ Aircraft Trim
_____ Level Turns
_____ Climbing and Descending Turns
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have practiced basic flight maneuvers in the training aircraft.

DAY 2
1.02.GL
GROUND LESSON
BASIC AERODYNAMICS AND FUNDAMENTALS OF FLIGHT

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will be introduced to basic aerodynamic principles and the fundamentals of flight.

CONTENT:

_____ Review Lesson Quiz
_____ 4 Forces of Flight
_____ 3 Axis of Flight
_____ Aircraft Stability
_____ Left Turning Tendencies
_____ Angle of Attack and Lift
_____ Aircraft Control Surfaces and their Role
_____ Basic Flight Maneuvers
_____ Climbs & Descents
_____ Straight and Level
_____ Level Turns
_____ Climbing and Descending Turns
_____ Aircraft Trim
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

This lesson is complete when the student has been introduced to basic aerodynamic principles and the fundamentals of flight.

INSTRUCTOR TASKS:

- Review Day 1 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 2 READING ASSIGNMENT:

PHAK- Chapter 4: Principles of Flight
AFH- Chapter 3: Basic Flight Maneuvers

DAY 2 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 1: Learning Your Airplane: Sec. 3: More about Your Airplane; Section 4: Airplane Engines and Systems
- FLYING PREP: STAGE 1- MODULE 1: Flight Preview Videos

LESSON QUIZ

DAY 2
1.02.ATD
SIMULATOR LESSON
BASIC FLIGHT MANEUVERS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will review aircraft checklist use, taxiing the aircraft, and airport ground operations. The student will be introduced to normal takeoffs and climbs, straight and level flight, level turns, climbing and descending turns, and how to properly trim the aircraft.

CONTENT:

_____ Checklist Use
_____ Taxi Operations
_____ ATC Communication and Procedures
_____ Airport Signs and Markings
_____ Normal Takeoff and Climb
_____ Straight and Level Flight
_____ Aircraft Trim
_____ Level Turns
_____ Climbing and Descending Turns
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have practiced basic flight maneuvers in the ATD.

DAY 2
1.02.FL
FLIGHT LESSON
BASIC FLIGHT MANEUVERS II

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will review aircraft checklist use, taxiing the aircraft, and airport ground operations. The student will be introduced to normal takeoffs and climbs, straight and level flight, level turns, climbing and descending turns, and how to properly trim the aircraft.

CONTENT:

_____ Checklist Use
_____ Taxi Operations
_____ ATC Communication and Procedures
_____ Airport Signs and Markings
_____ Normal Takeoff and Climb
_____ Straight and Level Flight
_____ Aircraft Trim
_____ Level Turns
_____ Climbing and Descending Turns
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have practiced basic flight maneuvers in the training aircraft.

DAY 3
1.03.GL
GROUND LESSON
AERODYNAMICS AND FLIGHT MANEUVERS

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will be introduced to more aerodynamic principles and how they apply to various flight maneuvers.

CONTENT:

_____ Review Lesson Quiz
_____ Flying Slow
_____ Angle of Attack
_____ Critical Angle of Attack
_____ Stalls
_____ Coordinated Flight vs. Uncoordinated Flight
_____ Spins
_____ Load Factor
_____ Steep Turns
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will understand basic aerodynamic concepts and how they apply to various flight maneuvers.

INSTRUCTOR TASKS:

- Review Day 2 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 3 READING ASSIGNMENTS:

PHAK- Chapter 5: Aerodynamics of Flight
AFH- Chapter 5: Maintaining Aircraft Control: Upset Prevention and Recovery Training

DAY 3 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 2: Improving Control: Sec. 1: Single-Pilot Resource Management; Sec. 4: Stalls, Takeoffs and Landings Explained
- FLYING PREP: STAGE 1- MODULE 2: Flight Preview Videos

LESSON QUIZ 

DAY 3
1.03.ATD
SIMULATOR LESSON
SLOW FLIGHT AND INTRO TO STALLS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will practice flying the airplane at various airspeeds. The student will learn how to fly the airplane at its minimum controllable airspeed in multiple configurations. The student will learn how to recognize the onset of a stall and how to properly recover from an impending stall.

CONTENT:

_____ Normal Takeoff and Climb
_____ Straight and Level Flight
_____ Level Turns
_____ Climbing and Descending Turns
_____ Airspeed Changes
_____ Rudder Coordination Exercises
_____ Slow Flight Clean Configuration
_____ Slow Flight Landing Configuration
_____ Recognition of an Impending Stall
_____ Recovery of an Impending Stall
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will understand how to properly slow the airplane down, how to change the airplane's configuration, and how to recognize an impending stall.

DAY 3
1.03.FL
FLIGHT LESSON
SLOW FLIGHT AND INTRO TO STALLS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will practice flying the airplane at various airspeeds. The student will learn how to fly the airplane at its minimum controllable airspeed in multiple configurations. The student will learn how to recognize the onset of a stall and how to properly recover from an impending stall.

CONTENT:

_____ Normal Takeoff and Climb
_____ Straight and Level Flight
_____ Level Turns
_____ Climbing and Descending Turns
_____ Airspeed Changes
_____ Rudder Coordination Exercises
_____ Slow Flight Clean Configuration
_____ Slow Flight Landing Configuration
_____ Recognition of an Impending Stall
_____ Recovery of an Impending Stall
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will understand how to properly slow the airplane down, how to change the airplane's configuration, and how to recognize an impending stall.

DAY 4
1.04.GL
GROUND LESSON
AIRPORT OPERATIONS AND INTRO TO AIRPACE

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will review airport and runway signs, markings, and lighting. The student will be introduced to the local airspace that they will be flying in and some of the basic operating rules within the airspace.

CONTENT:

_____ Review Lesson Quiz
_____ Airport and Runway Signs
_____ Airport and Runway Markings
_____ Airport and Runway Lighting
_____ Basic Airport Operations
_____ Ground Control and Tower Control
_____ Local Airspace Operations
_____ Approach and Departure Control
_____ Local Flight Following

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with airport and runway signs, marking, and lighting. The student will understand how local air traffic control works and the importance of local radar services. The student will be familiar with the airspace in which they will be operating in.

INSTRUCTOR TASKS:

- Review Day 3 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 4 READING ASSIGNMENTS:

PHAK- Chapter 14: Airport Operations

DAY 4 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 2: Improving Control: Sec. 2: Using your Airport and Radio Communications; Sec. 3: The Airport Environment and Correcting for Wind
- FLYING PREP: STAGE 1- MODULE 2: Flight Preview Videos

LESSON QUIZ 

DAY 4
1.04.ATD
SIMULATOR LESSON
MASTERING AIRCRAFT CONTROL

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will continue to develop their ability to fully control the airplane during normal flight operations. They will learn how to control aircraft airspeed, altitude, and heading. The student will also be introduced to flight by reference to the instruments only.

CONTENT:

_____ Normal Takeoff and Climb
_____ Straight and Level Flight
_____ Level Turns
_____ Climbing and Descending Turns
_____ Airspeed Changes
_____ Constant Airspeed Climbs
_____ Constant Airspeed Descents
_____ Turns to Specific Headings
_____ Slow Flight
_____ Recognition of an Impending Stall
_____ Recovery from an Impending Stall
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have better aircraft control. They will be able to turn to specific headings ± 20 degrees, Altitude ± 150 feet, and airspeed ±10 knots, in visual conditions. The student will also learn how to maintain control of the airplane solely by reference to the flight instruments.

DAY 4
1.04.FL
FLIGHT LESSON
MASTERING AIRCRAFT CONTROL

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will continue to develop their ability to fully control the airplane during normal flight operations. They will learn how to control aircraft airspeed, altitude, and heading. The student will also be introduced to flight by reference to the instruments only.

CONTENT:

_____ Normal Takeoff and Climb
_____ Straight and Level Flight
_____ Level Turns
_____ Climbing and Descending Turns
_____ Airspeed Changes
_____ Constant Airspeed Climbs
_____ Constant Airspeed Descents
_____ Turns to Specific Headings
_____ Slow Flight
_____ Recognition of an Impending Stall
_____ Recovery from an Impending Stall
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have better aircraft control. They will be able to turn to specific headings ± 20 degrees, Altitude ± 150 feet, and airspeed ±10 knots, in visual conditions. The student will also learn how to maintain control of the airplane solely by reference to the flight instruments.

DAY 5
1.05.GL
GROUND LESSON
AIRCRAFT PERFORMANCE

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will be introduced to basic aircraft performance. The student will learn how to do basic performance computations and how to properly perform a weight and balance for the training aircraft.

CONTENT:

_____ Review Lesson Quiz
_____ Factors Affecting Performance
_____ Pressure Altitude
_____ Density Altitude
_____ Performance Computations (POH)
_____ Takeoff and Landing Distance
_____ T.O.L.D. Card
_____ Computing Aircraft Weight and Balance
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have a basic understanding of factors that affect aircraft performance. The student will understand how to use the aircraft POH to complete basic performance computations. The student will learn how to fill out a T.O.L.D. card for the airplane and how to do a weight and balance for the training aircraft.

INSTRUCTOR TASKS:

- Review Day 4 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 5 READING ASSIGNMENTS:

PHAK- Chapter 10: Weight and Balance
PHAK- Chapter 11: Aircraft Performance

DAY 5 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 3: Takeoffs and Landings: Sec. 2: Airplane Performance and Limitations
- FLYING PREP: STAGE 1- MODULE 3: Flight Preview Videos

LESSON QUIZ 

DAY 5
1.05.ATD
SIMULATOR LESSON
STALLS (FULL) AND STEEP TURNS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will learn to perform full stalls and recoveries as outlined in the Private Pilot ACS. The student will also be introduced to Steep Turns.

CONTENT:

_____ Normal Takeoff and Climb
_____ Slow Flight
_____ Power-Off Stalls- Imminent
_____ Power-On Stalls- Imminent
_____ Power-Off Stalls- Full
_____ Power-On Stalls Full
_____ Spin Awareness
_____ Steep Turns
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with power-off and power-on stalls as outlined in the Private Pilot ACS. The student will also be introduced to the flight maneuver, steep turns.

DAY 5
1.05.FL
FLIGHT LESSON
STALLS (FULL) AND STEEP TURNS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will learn to perform full stalls and recoveries as outlined in the Private Pilot ACS. The student will also be introduced to Steep Turns.

CONTENT:

_____ Normal Takeoff and Climb
_____ Slow Flight
_____ Power-Off Stalls- Imminent
_____ Power-On Stalls- Imminent
_____ Power-Off Stalls- Full
_____ Power-On Stalls Full
_____ Spin Awareness
_____ Steep Turns
_____ Normal Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with power-off and power-on stalls as outlined in the Private Pilot ACS. The student will also be introduced to the flight maneuver, steep turns.

DAY 6
2.06.GL
GROUND LESSON
BASIC WEATHER PRINCIPLES

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge

LESSON OBJECTIVE:

During this lesson, the student will be introduced to basic weather principles. The student will learn about the role weather and the environment plays in flight operations and the decision-making process.

CONTENT:

_____ Review Lesson Quiz
_____ What is the Cause of all Weather?
_____ High and Low Pressure Systems
_____ Fronts
_____ Clouds
_____ Fog
_____ Temperature/Dewpoint
_____ Wind
_____ Turbulence
_____ Windshear
_____ Thunderstorms
_____ Ice
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have a basic understanding of how the weather and the environment work and the importance of understanding the weather as a pilot.

INSTRUCTOR TASKS:

- Review Day 5 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 6 READING ASSIGNMENTS:

PHAK- Chapter 12: Weather Theory
AFH- Chapter 7: Ground Reference Maneuvers
AFH- Chapter 8: Airport Traffic Patterns

DAY 6 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 3: Takeoffs and Landings: Sec. 1: Weather and Weather Briefing; Sec. 3: Learning to Land
- FLYING PREP: STAGE 1- MODULE 3: Flight Preview Videos

LESSON QUIZ 

DAY 6
2.06.ATD
SIMULATOR LESSON
GROUND REFERENCE MANEUVERS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will learn about how to properly account for wind in the training airplane. The student will perform various ground reference maneuvers while maintaining the desired ground track. The student will continue to practice normal takeoffs and landings.

CONTENT:

_____ Accounting for Wind During Taxi
_____ Accounting for Wind on Takeoff and Landing
_____ Normal Takeoffs
_____ Rectangular Courses
_____ Turns Around a Point
_____ S-Turns Across a Road
_____ Flying the Traffic Pattern
_____ Normal Landings

COMPLETION STANDARDS:

Upon completion of this lesson, the student will understand the effects wind has on the airplane on the ground and in flight.

DAY 6
2.06.FL
FLIGHT LESSON
GROUND REFERENCE MANEUVERS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will learn about how to properly account for wind in the training airplane. The student will perform various ground reference maneuvers while maintaining the desired ground track. The student will continue to practice normal takeoffs and landings.

CONTENT:

_____ Accounting for Wind During Taxi
_____ Accounting for Wind on Takeoff and Landing
_____ Normal Takeoffs
_____ Rectangular Courses
_____ Turns Around a Point
_____ S-Turns Across a Road
_____ Flying the Traffic Pattern
_____ Normal Landings

COMPLETION STANDARDS:

Upon completion of this lesson, the student will understand the effects wind has on the airplane on the ground and in flight.

DAY 7
2.07.GL
GROUND LESSON
AVIATION WEATHER

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge

LESSON OBJECTIVE:

During this lesson, the student will be introduced to aviation weather services and the many available reports available to pilots.

CONTENT:

_____ Review Lesson Quiz
_____ METARs
_____ TAFs
_____ PIREPs
_____ AIRMETs
_____ SIGMETs
_____ Winds and Temperature Aloft Chart
_____ Graphical Weather Charts
_____ Standard Weather Briefings
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have an understanding of how to interpret various aviation weather reports. The student will also gain understanding of how to use the tools and information available to pilots to help determine when they should and shouldn't continue with a planned flight.

INSTRUCTOR TASKS:

- Review Day 6 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 7 READING ASSIGNMENTS:

PHAK- Chapter 13: Aviation Weather Services
AFH- Chapter 6: Takeoffs and Departure Climbs
AFH- Chapter 9: Approaches and Landings

DAY 7 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 2- MODULE 6: Getting Ready for Cross-Country Flying: Sec. 2: Reading Weather Reports and Charts
- FLYING PREP: STAGE 1- MODULE 3: Flight Preview Videos

LESSON QUIZ 

DAY 7
2.07.ATD
SIMULATOR LESSON
TAKEOFFS, LANDINGS, AND GO-AROUNDS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will learn how to properly fly the traffic pattern. The student will practice takeoffs and landings while properly correcting for wind in the pattern. The student will also learn how to properly do an aborted approach to landing (Go-Around) and why it is important to always be ready to abort an approach/landing.

CONTENT:

_____ Flying the Traffic Pattern
_____ Normal Takeoff and Climb
_____ Normal Approach to Landing
_____ Crosswind Takeoff and Climb
_____ Crosswind Approach and Landing
_____ Aborted Takeoff
_____ Go-Around

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have practiced multiple takeoffs and landings. The student will also perform multiple go-arounds and learn how to safely abort a takeoff.

DAY 7
2.07.FL
FLIGHT LESSON
TAKEOFFS, LANDINGS, AND GO-AROUNDS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual

LESSON OBJECTIVE:

During this lesson, the student will learn how to properly fly the traffic pattern. The student will practice takeoffs and landings while properly correcting for wind in the pattern. The student will also learn how to properly do an aborted approach to landing (Go-Around) and why it is important to always be ready to abort an approach/landing.

CONTENT:

_____ Flying the Traffic Pattern
_____ Normal Takeoff and Climb
_____ Normal Approach to Landing
_____ Crosswind Takeoff and Climb
_____ Crosswind Approach and Landing
_____ Aborted Takeoff (Only if coordinated with tower)
_____ Go-Around

COMPLETION STANDARDS:

Upon completion of this lesson, the student will have practiced multiple takeoffs and landings. The student will also perform multiple go-arounds and learn how to safely abort a takeoff.

DAY 8
2.08.GL
GROUND LESSON
EMERGENCY PROCEDURES (AFM/POH)

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH Cessna 172M POH Cessna 172N POH
Airplane Flying Handbook

LESSON OBJECTIVE:

During this lesson, the student will be introduced to various emergency and abnormal procedures.

CONTENT:

_____ Review Lesson Quiz
_____ AFM/POH Section 3
_____ Memory Items
_____ Engine Fire During Engine Start
_____ Engine Failure on Takeoff
_____ Engine Failure at Altitude
_____ Engine Fire in Flight
_____ Electrical Fire in Flight
_____ Emergency Descent
_____ Forced Landings
_____ Ditching
_____ Abnormal Engine Indications
_____ Abnormal Engine Performance
_____ Other Abnormal Situations
_____ Best Glide
_____ Choosing a Suitable Place to Land
_____ Emergency Frequency/Transponder Code
_____ Declaring an Emergency
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with various emergency and abnormal procedures as outlined in the aircraft's AFM/POH.

INSTRUCTOR TASKS:

- Review Day 7 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 8 READING ASSIGNMENTS:

AFH- Chapter 18: Emergency Procedures
Cessna 172S POH: Chapter 3 Cessna 172M POH: Chapter 3 Cessna 172N POH: Chapter 3

DAY 8 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 3: Takeoffs and Landings: Sec. 4: Charts, Publications, Hazards, and Emergencies
- FLYING PREP: STAGE 1- MODULE 3: Flight Preview Videos

LESSON QUIZ 

DAY 8
2.08.ATD
FLIGHT SIMULATOR
EMERGENCY OPERATIONS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will be introduced to various emergency and abnormal procedures.

CONTENT:

_____ Emergency Checklist
_____ Memory Items
_____ Engine Fire During Engine Start
_____ Engine Failure on Takeoff
_____ Engine Failure at Altitude
_____ Engine Fire in Flight
_____ Electrical Fire in Flight
_____ Emergency Descent
_____ Forced Landings
_____ Ditching
_____ Abnormal Engine Indications
_____ Abnormal Engine Performance
_____ Other Abnormal Situations
_____ Best Glide
_____ Choosing a Suitable Place to Land
_____ Emergency Frequency/Transponder Code
_____ Declaring an Emergency

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with various emergency and abnormal procedures.

DAY 8
2.08.FL
FLIGHT LESSON
EMERGENCY OPERATIONS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the instructor will simulate various aircraft emergencies and have the student practice the emergency procedures and checklist use to properly secure the emergency. Time permitting, the student will also practice normal takeoffs and landings in the traffic pattern.

CONTENT:

_____ Normal Takeoffs
_____ Emergency Checklist
_____ Memory Items
_____ Engine Failure at Altitude
_____ Engine Fire in Flight
_____ Emergency Descent
_____ Abnormal Engine Indications
_____ Abnormal Engine Performance
_____ Other Abnormal Situations
_____ Best Glide
_____ Choosing a Suitable Place to Land
_____ Emergency Frequency/Transponder Code
_____ Declaring an Emergency
_____ Normal Landings

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with various emergency and abnormal procedures.

DAY 9
2.09.GL
GROUND LESSON
AIRCRAFT SYSTEMS (AFM/POH)

LESSON RESOURCES:
Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH Cessna 172M POH Cessna 172N POH
Airplane Flying Handbook

LESSON OBJECTIVE:

During this lesson, the student will review common airplane systems.

CONTENT:

_____ Review Lesson Quiz
_____ AFM/POH Section 7
_____ Airplane Flight Controls
_____ Airplane Engines and Propellers
_____ Airplane Fuel System
_____ Airplane Electrical System
_____ Flight Instruments
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with the systems on the training airplane.

INSTRUCTOR TASKS:

- Review Day 8 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz
- Assign Pre-Solo Knowledge Exam (Due Day 11)

DAY 9 READING ASSIGNMENTS:

PHAK- Chapter 6: Flight Controls
PHAK- Chapter 7: Aircraft Systems
Cessna 172S POH: Chapter 7 Cessna 172M POH: Chapter 7 Cessna 172N POH: Chapter 7

DAY 9 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 1: Learning Your Airplane: Sec. 4: Airplane Engines and Systems (Review)
- FLYING PREP: STAGE 1- MODULE 3: Flight Preview Videos

LESSON QUIZ  **PRE-SOLO KNOWLEDGE TEST** 

DAY 9
2.09.ATD
FLIGHT SIMULATOR
TRAFFIC PATTERN OPERATIONS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will review traffic pattern operation. The student will be introduced to no-flap landings, slips to landings, and other abnormal situations while operating in the traffic pattern.

CONTENT:

_____ Traffic Pattern Operations
_____ Entering and Exiting the Traffic Pattern
_____ Collision Avoidance in the Pattern
_____ Wake Turbulence
_____ Wind Shear
_____ Normal Takeoffs
_____ Normal Landings
_____ Crosswind Takeoffs
_____ Crosswind Landings
_____ No Flap Landings
_____ Side Slip to Landing
_____ Forward Slip to Landing
_____ Go Around from Rejected Landing
_____ Aborted Takeoffs
_____ Abnormal ATC Instructions

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with normal and abnormal traffic pattern operations. The student will also understand how to properly enter and exit the traffic pattern.

DAY 9
2.09.FL
FLIGHT LESSON
TRAFFIC PATTERN OPERATIONS

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson the student will review traffic pattern operation. The student will be introduced to no-flap landings, slips to landings, and other abnormal situations while operating in the traffic pattern.

CONTENT:

_____ Traffic Pattern Operations
_____ Entering and Exiting the Traffic Pattern
_____ Collision Avoidance in the Pattern
_____ Wake Turbulence
_____ Wind Shear
_____ Normal Takeoffs
_____ Normal Landings
_____ Crosswind Takeoffs
_____ Crosswind Landings
_____ No Flap Landings
_____ Side Slip to Landing
_____ Forward Slip to Landing
_____ Go Around from Rejected Landing
_____ Aborted Takeoffs
_____ Abnormal ATC Instructions

COMPLETION STANDARDS:

Upon completion of this lesson the student will be familiar with normal and abnormal traffic pattern operations. The student will also understand how to properly enter and exit the traffic pattern.

DAY 10
2.10.GL
GROUND LESSON
AVIATION RULES AND REGULATIONS

LESSON RESOURCES:
Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH Cessna 172M POH Cessna 172N POH
Federal Aviation Regulations (FARs)
Aeronautical Information Manual (AIM)

LESSON OBJECTIVE:

During this lesson, the student will learn about some of the important FAA rules and regulations that apply while soloing the training aircraft. The student will also learn about the required maintenance inspections and how to ensure they are flying an airworthy aircraft.

CONTENT:

_____ Review Lesson Quiz
_____ 61.87- Solo Requirements
_____ 61.89- General Limitations for a Student Pilot
_____ 61.3(a)- Required Documents for Solo Flight
_____ 91.3- PIC Responsibility
_____ 91.103- Preflight Action
_____ 91.113- Right-of-Way Rules
_____ 91.119- Minimum Safe Altitudes
_____ 91.125- ATC Light Signals
_____ 91.129- Operations in Class D Airspace
_____ 91.213(d) Inoperative Instruments and Equipment (w/out MEL)
_____ 91.205(b) Instrument and Equipment Requirements
_____ Kind of Operation Equipment List
_____ Comprehensive Equipment List
_____ Required Aircraft Documents
_____ Required Maintenance and Inspections
_____ Reporting Aircraft Discrepancies
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with the FAA regulations that apply to them while conducting solo flight operations.

INSTRUCTOR TASKS:

- Review Day 9 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Pre-Solo Aeronautical Exam Reminder (Due Day 11)
- Assign Lesson Quiz (Due Day 12)

DAY 10 READING ASSIGNMENTS:

Federal Aviation Regulations (FARs)

DAY 10 VIDEO ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 4: Preparing for Solo Flight: Sec. 2: Aviation Rules and Terminology
- FLYING PREP: STAGE 1- MODULE 4: Flight Preview Videos

LESSON QUIZ 

DAY 10
2.10.ATD
FLIGHT SIMULATOR
TAKEOFFS AND LANDINGS AT ADDITIONAL AIRPORT

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student and instructor will prepare a flight to a nearby airport (w/in 25nm) from the departure airport. The student will enter the airspace and the traffic pattern and perform at least 3 takeoffs and landings.

CONTENT:

_____ Traffic Pattern Operations
_____ Entering and Exiting the Traffic Pattern
_____ Collision Avoidance in the Pattern
_____ Wake Turbulence
_____ Wind Shear
_____ Normal Takeoffs
_____ Normal Landings
_____ Crosswind Takeoffs
_____ Crosswind Landings
_____ No Flap Landings
_____ Side Slip to Landing
_____ Forward Slip to Landing
_____ Go Around from Rejected Landing
_____ Aborted Takeoffs
_____ Abnormal ATC Instructions
_____ Power-Off 180 Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with a nearby airport (w/in 25nm) from the departure airport. The student will apply their knowledge of traffic patterns and enter/exit the area safely.

DAY 10
2.10.FL
FLIGHT LESSON
TAKEOFFS AND LANDINGS AT ADDITIONAL AIRPORT

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student and instructor will prepare a flight to a nearby airport (w/in 25nm) from the departure airport. The student will enter the airspace and the traffic pattern and perform at least 3 takeoffs and landings.

CONTENT:

_____ Traffic Pattern Operations
_____ Entering and Exiting the Traffic Pattern
_____ Collision Avoidance in the Pattern
_____ Wake Turbulence
_____ Wind Shear
_____ Normal Takeoffs
_____ Normal Landings
_____ Crosswind Takeoffs
_____ Crosswind Landings
_____ No Flap Landings
_____ Forward Slip to Landing
_____ Go Around from Rejected Landing
_____ Power-Off 180 Approach and Landing

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with a nearby airport (w/in 25nm) from the departure airport. The student will apply their knowledge of traffic patterns and enter/exit the area safely.

DAY 11
3.11.GL
GROUND LESSON
PRE-SOLO AERONAUTICAL EXAM

LESSON RESOURCES:

Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH
Federal Aviation Regulations (FARs)
Aeronautical Information Manual (AIM)
Airplane Flying Handbook

LESSON OBJECTIVE:

During this lesson, the instructor will review each question from the pre-solo aeronautical exam with the class.

CONTENT:

_____ Pre-Solo Aeronautical Exam Review

COMPLETION STANDARDS:

Upon completion of this lesson, the student and instructor will have reviewed all questions/answers from the pre-solo aeronautical exam. The instructor will ensure the exam is 100 percent correct prior to issuing the required solo endorsements.

DAY 11
3.11.ATD
FLIGHT SIMULATOR
SOLO STAGE CHECK PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will get a chance to continue to refine their skills in preparation for their solo stage check.

CONTENT:

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be able to perform the maneuvers and procedures in a safe and consistent manner.

DAY 11
3.11.FL
FLIGHT LESSON (CHECK)
SOLO STAGE CHECK

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH
Solo Endorsements

LESSON OBJECTIVE:

During this lesson, the student will demonstrate the aeronautical decision making, skills, and knowledge necessary for solo flight.

CONTENT:

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be able to perform the maneuvers and procedures in a safe and consistent manner. Based on the performance of the student, the CFI may issue the required solo endorsements.

DAY 12
3.12.GL
GROUND LESSON
AIRSPACE

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Aeronautical Information Manual

LESSON OBJECTIVE:

During this lesson, the student will learn about the National Airspace System.

CONTENT:

_____ Review Lesson Quiz
_____ National Airspace System Overview
_____ Class A Airspace
_____ Class B Airspace
_____ Class C Airspace
_____ Class D Airspace
_____ Class E Airspace
_____ Class G Airspace
_____ Special Use Airspace
_____ Assign Lesson Quiz

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be familiar with the national airspace system and the rules related to the airspace they will be operating in/around.

INSTRUCTOR TASKS:

- Review Day 10 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Assign Lesson Quiz

DAY 12 READING ASSIGNMENTS:

AIM Chapter 3: Airspace
PHAK- Chapter 15: Airspace

DAY 12 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 4: Preparing for Solo Flight: Sec. 1: Airspace; Sec. 3: Flight Instruments and Cockpit Displays; Sec. 4: GPS, Lost Procedures, and Emergency Instrument Skills
- FLYING PREP: STAGE 1- MODULE 4: Flight Preview Videos

DAY 12
3.12.ATD
FLIGHT SIMULATOR
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will get a chance to continue to refine their skills in preparation for their solo flight.

CONTENT:

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be able to perform the maneuvers and procedures in a safe and consistent manner.

DAY 12
3.12.FL
FLIGHT LESSON
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH Cessna 172M POH Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the CFI may choose Option A: Solo Preparation or Option B: Supervised Solo based on the student's performance, weather conditions, traffic pattern congestion, etc. If the CFI chooses Option B, the student must first demonstrate a minimum of 3 consistent, safe landings and a go-around with the CFI on board the aircraft before allowing the student to solo.

Note: Student pilots are only approved for one solo flight. If the student has already completed their solo flight, the CFI must continue to provide dual instruction for the remainder of the course until 15 hours of flight time is achieved.

CONTENT:

OPTION A: SOLO PREPARATION

The CFI may choose any of the below tasks to continue to prepare the student for solo flight.

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

OPTION B: SUPERVISED SOLO

_____ Normal Takeoffs
_____ Traffic Pattern Operations
_____ ATC Radio Communications
_____ Normal Landings
_____ Go-Arounds

COMPLETION STANDARDS:

Upon completion of this lesson, the student will continue to gain the aeronautical experience necessary to solo the aircraft. Student performance and conditions permitting, the student may also be approved to solo the training aircraft under the supervision of the CFI.

DAY 13
3.13.GL
GROUND LESSON
REVIEW

LESSON RESOURCES:
Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH Cessna 172M POH Cessna 172N POH
Federal Aviation Regulations (FARs)
Aeronautical Information Manual (AIM)
Airplane Flying Handbook

LESSON OBJECTIVE:

This lesson is an open review of all course tasks. The instructor will be available to answer any student questions in preparation for the solo flight lesson.

CONTENT:

_____ Review Lesson Quiz
_____ Basic Aerodynamics & Fundamentals of Flight
_____ Flight Maneuvers
_____ Airport Operations
_____ Aircraft Performance
_____ Aviation Weather
_____ Emergency Procedures
_____ Aircraft Systems
_____ Aircraft Airworthiness
_____ Rules and Regulations
_____ Airspace

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be provided with answers and/or guidance on any relevant knowledge subject areas.

INSTRUCTOR TASKS:

- Review Day 12 Quiz
- Brief student on upcoming lesson
- Brief student on study assignments
- Answer any Student Questions

DAY 13 READING ASSIGNMENTS:

Review as Necessary

DAY 13 ONLINE ASSIGNMENTS:

- KNOWLEDGE: STAGE 1- MODULE 5: Solo Flight: Sec. 1: Solo Flight
- FLYING PREP: STAGE 1 (REVIEW AS NECESSARY)

DAY 13
3.13.ATD
FLIGHT SIMULATOR
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will get a chance to continue to refine their skills in preparation for their solo flight.

CONTENT:

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be able to perform the maneuvers and procedures in a safe and consistent manner.

DAY 13
3.13.FL
FLIGHT LESSON
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH Cessna 172M POH Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the CFI may choose Option A: Solo Preparation or Option B: Supervised Solo based on the student's performance, weather conditions, traffic pattern congestion, etc. If the CFI chooses Option B, the student must first demonstrate a minimum of 3 consistent, safe landings and a go-around with the CFI on board the aircraft before allowing the student to solo.

Note: Student pilots are only approved for one solo flight. If the student has already completed their solo flight, the CFI must continue to provide dual instruction for the remainder of the course until 15 hours of flight time is achieved.

CONTENT:

OPTION A: SOLO PREPARATION

The CFI may choose any of the below tasks to continue to prepare the student for solo flight.

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

OPTION B: SUPERVISED SOLO

_____ Normal Takeoffs
_____ Traffic Pattern Operations
_____ ATC Radio Communications
_____ Normal Landings
_____ Go-Arounds

COMPLETION STANDARDS:

Upon completion of this lesson, the student will continue to gain the aeronautical experience necessary to solo the aircraft. Student performance and conditions permitting, the student may also be approved to solo the training aircraft under the supervision of the CFI.

DAY 14
3.14.GL
GROUND LESSON
REVIEW

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH Cessna 172M POH Cessna 172N POH
Federal Aviation Regulations (FARs)
Aeronautical Information Manual (AIM)
Airplane Flying Handbook

LESSON OBJECTIVE:

This lesson is an open review of all course tasks. The instructor will be available to answer any student questions in preparation for the solo flight lesson.

CONTENT:

_____ Basic Aerodynamics & Fundamentals of Flight
_____ Flight Maneuvers
_____ Airport Operations
_____ Aircraft Performance
_____ Aviation Weather
_____ Emergency Procedures
_____ Aircraft Systems
_____ Aircraft Airworthiness
_____ Rules and Regulations
_____ Airspace

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be provided with answers and/or guidance on any relevant knowledge subject areas.

INSTRUCTOR TASKS:

- Brief student on upcoming lesson
- Brief student on study assignments
- Answer Student Questions

DAY 15 READING ASSIGNMENTS:

Review as Necessary

DAY 15 ONLINE ASSIGNMENTS:

Review as Necessary

DAY 14
3.14.ATD
FLIGHT SIMULATOR
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will get a chance to continue to refine their skills in preparation for their solo stage check.

CONTENT:

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be able to perform the maneuvers and procedures in a safe and consistent manner.

DAY 14
3.14.FL
FLIGHT LESSON
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH Cessna 172M POH Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the CFI may choose Option A: Solo Preparation or Option B: Supervised Solo based on the student's performance, weather conditions, traffic pattern congestion, etc. If the CFI chooses Option B, the student must first demonstrate a minimum of 3 consistent, safe landings and a go-around with the CFI on board the aircraft before allowing the student to solo.

Note: Student pilots are only approved for one solo flight. If the student has already completed their solo flight, the CFI must continue to provide dual instruction for the remainder of the course until 15 hours of flight time is achieved.

CONTENT:

OPTION A: SOLO PREPARATION

The CFI may choose any of the below tasks to continue to prepare the student for solo flight.

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

OPTION B: SUPERVISED SOLO

_____ Normal Takeoffs
_____ Traffic Pattern Operations
_____ ATC Radio Communications
_____ Normal Landings
_____ Go-Arounds

COMPLETION STANDARDS:

Upon completion of this lesson, the student will continue to gain the aeronautical experience necessary to solo the aircraft. Student performance and conditions permitting, the student may also be approved to solo the training aircraft under the supervision of the CFI.

DAY 15
3.15.GL
GROUND LESSON
REVIEW

LESSON RESOURCES:

Cessna/King Schools Online Training
Pilot's Handbook of Aeronautical Knowledge
Cessna 172S POH Cessna 172M POH Cessna 172N POH
Federal Aviation Regulations (FARs)
Aeronautical Information Manual (AIM)
Airplane Flying Handbook

LESSON OBJECTIVE:

This lesson is an open review of all course tasks. The instructor will be available to answer any student questions in preparation for the solo flight lesson.

CONTENT:

_____ Basic Aerodynamics & Fundamentals of Flight
_____ Flight Maneuvers
_____ Airport Operations
_____ Aircraft Performance
_____ Aviation Weather
_____ Emergency Procedures
_____ Aircraft Systems
_____ Aircraft Airworthiness
_____ Rules and Regulations
_____ Airspace

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be provided with answers and/or guidance on any relevant knowledge subject areas.

INSTRUCTOR TASKS:

- Brief student on upcoming lesson
- Brief student on study assignments
- Answer Student Questions

DAY 15 READING ASSIGNMENTS:

Review as Necessary

DAY 15 ONLINE ASSIGNMENTS:

Review as Necessary

DAY 15
3.15.ATD
FLIGHT SIMULATOR
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH
Cessna 172M POH
Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the student will get a chance to continue to refine their skills in preparation for their solo flight.

CONTENT:

_____ Taxi Procedures
_____ Aircraft Runup Procedures
_____ Normal Takeoff and Climb
_____ Crosswind Takeoff and Climb
_____ Straight and Level Flight
_____ Turns to Headings
_____ Slow Flight
_____ Power-Off Stalls
_____ Power-On Stalls
_____ Spin Awareness
_____ Steep Turns
_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

COMPLETION STANDARDS:

Upon completion of this lesson, the student will be able to perform the maneuvers and procedures in a safe and consistent manner.

DAY 15
3.15.FL
FLIGHT LESSON
SOLO PREPARATION

LESSON RESOURCES:

Airplane Flying Handbook
CAU Maneuvers Manual
Cessna 172S POH Cessna 172M POH Cessna 172N POH

LESSON OBJECTIVE:

During this lesson, the CFI may choose Option A: Solo Preparation or Option B: Supervised Solo based on the student's performance, weather conditions, traffic pattern congestion, etc. If the CFI chooses Option B, the student must first demonstrate a minimum of 3 consistent, safe landings and a go-around with the CFI on board the aircraft before allowing the student to solo.

Note: Student pilots are only approved for one solo flight. If the student has already completed their solo flight, the CFI must continue to provide dual instruction for the remainder of the course until 15 hours of flight time is achieved.

CONTENT:

OPTION A: SOLO PREPARATION

The CFI may choose any of the below tasks to continue to prepare the student for solo flight.

_____ Taxi Procedures
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_____ Simulated Engine Failure (at altitude)
_____ Ground Reference Maneuvers
_____ Traffic Pattern Operations
_____ Normal Approach and Landing
_____ Crosswind Approach and Landing
_____ Engine Shutdown and Securing
_____ Post Flight Procedures

OPTION B: SUPERVISED SOLO

_____ Normal Takeoffs
_____ Traffic Pattern Operations
_____ ATC Radio Communications
_____ Normal Landings
_____ Go-Arounds

COMPLETION STANDARDS:

Upon completion of this lesson, the student will continue to gain the aeronautical experience necessary to solo the aircraft. Student performance and conditions permitting, the student may also be approved to solo the training aircraft under the supervision of the CFI.