



Nice Air
Private Pilot Course
Part 141 Training Syllabus

2575 Robert Fowler Way, San Jose, CA 95148
Phone:(408)729-3383, Fax:(408)729-4160, www.niceairaviation.com

Part 141 Private Pilot Syllabus

COURSE OVER VIEW--GROUND TRAINING

GROUND TRAINING					
	Private Pilot Maneuvers, Class Discussion, Video and CD-ROM	Private Pilot Manual, Class Discussion and Video	Pilot Briefings	Stage/ Final Exams	Exam Debriefings
GROUND STAGE I	3.0	10.0		1.0	As Required
GROUND STAGE II	3.0	6.0	2.0	1.0	As Required
GROUND STAGE III	3.0	6.0	2.0	4.0	1.0
TOTAL	9.0	24.0	4.0	6.0	1.0

COURSE OVERVIEW-----FLIGHT TRAINING

	FLIGHT TRAINING							
	DUAL				SOLO			
	Day Local	Day Cross Country	Night Local	Night Cross Country	Instrument	Day Local	Cross Country	Dual/Solo Combined Total
FLIGHT STAGE I	10.5				1.0	0.5		11.0
FLIGHT STAGE II	4.0	2.0	1.0	2.0	2.0	2.0		13.0
FLIGHT STAGE III	6.0					2.0	3.0	11.0
TOTALS	20.5	2.0	1.0	2.0	3.0	4.5	5.0	35.0

Note; Dual instrument training in airplane is allocated to portion of flight lessons 3, 4, 5, 7, 8, 14, 15, 19, and 20 for a total of 3.0 hours. The minimum recommended times are 2 hours (120 minutes) for Flight lesson 3, 4, 5, 7, 8 and 5 hours (300 minutes) each for Flight lesson 14, 15, 19, and 20. The total of 3.0 hours of instrument training is specified in Appendix B, Part 141.

LESSON TIME ALLOCATION											
Ground training						Flight training					
Private pilot maneuvers, discussion private pilot manual, class, discussion, video	Pilot briefing	Stage/Final exam	Exam debriefing			Dual			Solo		
						Day local	Day cross-country	Night local	Night cross-country	Instrument	Day local
Ground stage I, II and Flight stage I											
2.0				Ground Lesson 1-Discovering aviation							
2.0				Ground Lesson 2-Airplane systems							
				Flight 1-Introduction to flight	0.5						
2.0				Ground Lesson 3-Aerodynamic principles							
1.0				Flight 2-Ground operation	1.0						
2.0				Ground Lesson 4-The flight environment							
1.0				Flight 3-Basic maneuvers & stalls	1.5				0.2		
2.0				Ground Lesson 5-Communication & Flight info.							
1.0				Flight 4-Emergency operation	1.0				0.2		
		1.0	AS req.	Ground Lesson 6-Stage I exam							
1.0				Flight 5-Ground reference maneuvers	1.0				0.2		
2.0				Ground Lesson 7-Meteorology for pilots							
1.0				Flight 6-Airport operations	2.0						
2.0				Ground Lesson 8-Federal aviation regulation							
1.0				Flight 7-Ground reference maneuvers	1.0				0.2		
2.0				Ground Lesson 9-Interpreting weather data							
		2.0	AS req.	Pre-solo written exam and briefing							
				Flight 8-Review	1.0				0.2		
		1.0	AS req.	Ground Lesson 10-Stage II exam							
				Flight 9-Stage check	1.0						
				Flight 10-First solo	0.5					0.5	
6.0	16.0	2.0	1.0	AS req.	Stage total	10.5			1.0	0.5	

NOTE: 1. The first column shows the recommended Private Pilot Maneuvers discussion, video, and/or CD-ROM training time. The third column shows the minimum recommended training time for private Pilot Manual class discussion, and video. Times shown in columns 1 may be credited toward the total time shown in column 3 up to 9 hours of Private Pilot Maneuvers class discussion, video, and/or CD-ROM.

LESSON TIME ALLOCATION																						
Ground training				Flight training																		
Private Pilot maneuvers, discussion, video	Private Pilot manual, class, discussion, video	Pilot briefing	Stage/Final exam	Dual			Solo															
				Day	Night	Instrument	Day	Night	Instrument	Day	Night											
Ground stage III and Flight stage II																						
	20			Ground Lesson 11-Airplane performance																		
10				Flight 11-Performance takeoffs and landings			10															
	20			Ground Lesson 12-Navigation																		
				Flight 12-Second Solo									10									
	20			Ground Lesson 13-Human factors principles																		
				Flight 13-Local area solo									10									
	20			Ground Lesson 14-Flying cross country																		
10				Flight 14-VOR/ADF/GPS			10							05								
			10	Ground Lesson 15-Stage III exam																		
				Flight 15-Dual instrument			10							05								
				Flight 16-Dual night					10													
10				Flight 17-Dual cross-country				20						05								
		20		Flight 18-Dual Night cross-country						20				05								
			30	Ground Lesson 16 & 17-Final exam A & B																		
				Flight 19-Stage Check				10														
				Briefing-Solo cross-country																		
				Flight 20-Solo cross-country										20								
30	80	20	40	Stage total							40	20	10	20	20	20						

NOTE: The first column shows the recommended Private Pilot Maneuvers discussion, video. The third column shows the minimum recommended training time for private Pilot Manual class discussion, and video. Times shown in columns 1 may be credited toward the total time shown in column 3 up to 9 hours of Private Pilot Maneuvers class discussion, video.

LESSON TIME ALLOCATION																					
Ground training				Flight training																	
Private Pilot maneuvers, discussion, video	Private Pilot manual, class, discussion, video	Pilot briefing	Stage/Final exam	Dual			Solo														
				Day	Night	Instrument	Day	Night	Instrument	Day	Night										
Flight stage III																					
				Flight 21-Solo Long cross-country																	30
				Flight 22-Dual PTS preparation				20													
				Flight 23-Solo PTS preparation										20							
				Flight 24-Dual PTS preparation				20													
				Flight 25-Stage Check				10													
				AS req. Briefing-Private pilot practical test																	
				Flight 26-End-of-Course check				10													
				Stage total							60									20	30

The individual times shown on the accompanying lesson time allocation tables are for instructor/ student guidance only; they are not mandatory for each ground lesson, flight lesson or stage of training. At the end of this course, the student must meet the minimum requirements of FAR part 14, appendix B for each category in order to graduate. Pre-flight and post-flight briefing time are not specified but minimum of 5 hour for each dual or solo lessons is suggested. The time for the pilot briefing, although assigned and completed along with selected flight lessons, are considered part of ground training.

Private Pilot Certification Course Airplane Single-Engine Land

Ground Training: 35 Hours

GROUND TRAINING COURSE OBJECTIVES

The student will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements for a private pilot certificate with an airplane category rating and a single-engine land class rating.

GROUND TRAINING COURSE COMPLETION STANDARDS

The student must demonstrate through knowledge tests, flight tests, and show through appropriate records that he / she meets the knowledge, skill, and experience requirements necessary to obtain a private pilot certificate with an airplane category rating and a single-engine land class rating.

STAGE I

STAGE OBJECTIVES

During this stage, the student will be introduced to pilot training, aviation opportunities, human factors in aviation, and become familiar with airplane systems and aerodynamic principles, as well as the flight environment. The student also will obtain a basic knowledge of safety of flight, airports, aeronautical charts, airspace, radio communications, and air traffic control services, including the use of radar. In addition, the student will learn radio procedures and the common sources of flight information.

STAGE COMPLETION STANDARDS

This stage is complete when the student has completed the Stage I written exam with a minimum passing score of 80%, and the instructor has reviewed each incorrect response to ensure complete understanding before the student progresses to Stage II.

PRIVATE PILOT SYLLABUS

STAGE I

GROUND LESSON 1

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 1, Discovering Aviation

RECOMENNDDED SEQUENCE:

NOTE: *Students should read Chapter 1, Section A, B and C, prior to Ground Lesson 1.*

Lesson introduction

Class discussion

LESSON OBJECTIVES:

- Become familiar with pilot training, aviation opportunities, and human factors in aviation.
- Gain a basic understanding of a school's pilot training program.

ACADEMIC CONTENT:

SECTION A-PILOT TRAINING

- How to get started
- Role of the FAA
- Fixed-base operations (FBOs)
- Eligibility requirement
- Types of training available
- Phases of training
- Private pilot privileges and limitations

SECTION B- AVIATION OPPORTUNITIES

- New experiences
- Aviation organizations
- Category/Class ratings
- Additional pilot certificates
- Aviation careers

SECTION C-INTRODUCTION TO HUMAN FACTORS

- Aeronautical decision making

- Crew resource management
- Pilot-In Command responsibility
- Communication
- Resource use
- Workload management
- Situational awareness
- Aviation physiology
- Alcohol, drugs and performance
- Fitness for flight

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL
CHAPTER2, Airplane systems

COMPLETION STANDARDS:

The student will indicate, through oral quizzing, familiarity with pilot training programs, opportunities in aviation, and human factor. In addition, the instructor will make sure the student has a basic understanding of policies and procedure applicable to the school's pilot training program.

PRIVATE PILOT SYLLABUS

STAGE I

GROUND LESSON 2

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 2, Airplane Systems

VIDEO

PART I , CHAPTER 2

RECOMENNDDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Gain a basic understanding of the main airplane components and systems.
- Become familiar with flight instrument functions and operating characteristics, including errors and common malfunctions.
- Learn about the power plant and related systems.

ACADEMIC CONTENT:

SECTION A-AIRPLANE

- Fuselage
- Wings
- Empennage
- Landing Gear
- Engine/Propeller
- Pilot's Operating Handbook (POH)

SECTION B-THE POWER PLANT AND RELEATED SYSTEMS

- Reciprocating Engine
- Induction Systems
- Supercharging and Turbo charging
- Ignition Systems
- Fuel Systems
- Refueling
- Oil Systems
- Cooling Systems
- Exhaust Systems

- Propellers
- Propeller Hazards
- Electrical Systems

SECTION C-FLIGHT INSTRUMENTS

- Pitot-Static Instruments
- Airspeed Indicator
- Altimeter
- Vertical Speed Indicator
- Gyroscopic Instruments
- Magnetic Compass

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL
CHAPTER 3, Aerodynamic Principles

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes Chapter 2 questions for Sections A, B, and C with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure student understanding prior to progression to Ground Lesson 3.

PRIVATE PILOT SYLLABUS

STAGE I

GROUND LESSON 3

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 3, Aerodynamic Principles

VIDEO
PART I, CHAPTER 3

RECOMENNDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Become familiar with the four forces of flight, aerodynamic principles of stability, maneuvering flight, and load factor.
- Gain a basic understanding of stall/spin characteristics as they relate to training airplanes.
- Learn the importance of prompt recognition of stall indications

ACADEMIC CONTENT:

SECTION A-FOUR FORCE OF FLIGHT

- Lift
- Airfoils
- Pilot Control of Lift
- Weight
- Thrust
- Drag
- Ground Effect

SECTION B-STABILITY

- Three Axes of Flight
- Longitudinal Stability
- Center of Gravity Position
- Lateral Stability
- Directional Stability
- Stalls
- Spins

SECTION C-AERODYNAMICS OF MANEUVERING FLIGHT

- Climbing Flight
- Left-Turning Tendencies
- Descending Flight
- Turning Flight
- Load Factor

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL
CHAPTER 4, The Flight Environment

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes Chapter 3 questions for Sections A, B, and C with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure complete student understanding prior to progression to Ground Lesson 4

PRIVATE PILOT SYLLABUS

STAGE I

GROUND LESSON 4

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 4 The Flight Environment

VIDEO
PART II , CHAPTER 4

RECOMENNDDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Understand important safety considerations, including collision avoidance cautions, flight-of-way rules, and minimum safe altitudes.
- Become familiar with airport marking and lighting, aeronautical charts, and types of airspace.
- Learn about collision avoidance procedures and runway incursion avoidance.

ACADEMIC CONTENT:

SECTION A -SAFETY OF FLIGHT

- Collision Avoidance/Visual Scanning
- Airport Operations
- Right-of-Way Rules
- Minimum Safe Altitudes
- Taxiing in Wind
- Positive Exchange of Flight Controls

SECTION B-AIRPORTS

- Controlled and Uncontrolled
- Runway Layout
- Traffic Pattern
- Airport Visual Aids
- Taxiway Markings
- Ramp Area Hand Signals
- Runway Incursion Avoidance
- Land and Hold Short Operations (LAHSO)
- Airport Lighting

- Visual Glideslope Indicators
- Approach Light Systems
- Pilot-Controlled Lighting

SECTION C-AERONAUTICAL CHARTS

- Latitude and Longitude
- Projections
- Sectional Charts
- World Aeronautical Charts
- Chart Symbology

SECTION D-AIRSPACE

- Classifications
- Uncontrolled Airspace
- Controlled Airspace
- Class E
- Class D
- Class C
- Class B
- Class A
- Special VFR
- Special Use Airspace
- Other Airspace Areas
- Emergency Air Traffic Rules
- Air Defense Identification Zones

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL
CHAPTER 5, Communication and Flight
Information

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes Chapter 4 questions for Sections A,B, C, and D with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure complete student understanding prior to progression to ground Lesson 5.

PRIVATE PILOT SYLLABUS

STAGE I

GROUND LESSON 5

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 5, Communication And Flight Informations

VIDEO
PART II , CHAPTER 5

RECOMENNDDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Become familiar with radar, transponder operations, and FAA radar equipment and services for VFR aircraft.
- Understand the types of service provided by an FSS.
- Learn how to use the radio for communication. Gain a basic understanding of the sources of flight information, particularly the Aeronautical Information Manual and FAA advisory circulars.

ACADEMIC CONTENT:

SECTION A-RADAR AND ATC SERVICE

- Radar
- Transponder Operation
- FAA Radar Systems
- VFR Radar Services
- Automatic Terminal Information Service (ATIS)
- Flight Service Stations
- VHF Direction Finder Assistance

SECTION B-RADIO PROCEDURES

- VHF Communication Equipment
- Using the Radio
- Phonetic Alphabet
- Coordinated Universal Time
- Common Traffic Advisory Frequency (CTAF)
- ATC Facilities and Controlled Airports
- Lost Communication Procedures

Emergency Procedures

- Emergency Locator Transmitters (ELTs)

SECTION C-SOURCE OF FLIGHT INFORMATION

- Airport/Facility Directory
- Federal Aviation Regulations
- Aeronautical information Manual (AIM)
- Notices to Airmen (NOTAMs)
- Advisory Circulars

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL

Review Chapters 2,3,4 and 5 in preparation for the Stage I Exam.

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes Chapter 6 question for Sections A, B, C with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure complete understanding prior to progression to the Stage Exam in Ground Lesson 6.

PRIVATE PILOT SYLLABUS

STAGE I

GROUND LESSON 6

STAGE I EXAM

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 1 through 5,

VIDEO
PART I AND II , CHAPTER1- 5

RECOMENNDED SEQUENCE:

1. Lesson Introduction
2. Testing
3. Critique

LESSON OBJECTIVES:

- Demonstrate comprehension of the material presented in Chapters 1 through 5 of the Private Pilot Manual.

ACADEMIC CONTENT:

STAGE EXAM

- Airplane Systems
- Aerodynamic Principles
- The Flight Environment
- Communication and Flight Information

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL
Review Chapters 6, Meteorology for Pilot

COMPLETION STANDARDS:

This lesson and stage are complete when the student has completed the Stage 1 Exam with minimum of 80%, and the instructor has reviewed each incorrect response to ensure complete understanding before the student progresses to Stage II.

STAGE II

STAGE OBJECTIVES

During this stage, the student will become familiar with weather theory, typical weather pattern and aviation weather hazards. In addition to meteorological theory, the student will learn how to obtain and interpret various weather reports, forecasts and graphic charts.

Finally, the student will become thoroughly familiar with FAR as they apply to private pilot operations.

STAGE COMPLETION STANDARDS

This stage is complete when the student has completed the Stage II written exam with a minimum passing score of 80%, and the instructor has reviewed each incorrect response to ensure complete understanding before the student progresses to Stage III.

PRIVATE PILOT SYLLABUS

STAGE I

GROUND LESSON 7

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 6, Meteorology for Pilot

VIDEO
PART III , CHAPTER 6

RECOMENNDDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Learn the causes of various weather conditions, frontal systems, and hazardous weather phenomena.
- Understand how to recognize critical weather situations from the ground and during flight, including hazards associated with thunderstorms.
- Become familiar with the recognition and avoidance of wind shear and wake turbulence.

ACADEMIC CONTENT:

SECTION A-BASIC WEATHER THEORY

- The Atmosphere
- Atmospheric Circulation
- Atmospheric Pressure
- Coriolis Force
- Global Wind Patterns
- Local Wind Patterns

SECTION B-WEATHER PATTERN

- Atmospheric Stability
- Temperature Inversions
- Moisture
- Humidity
- Dewpoint
- Clouds and Fog
- Precipitation
- Airmasses

- Fronts

SECTION C-WEATHER HAZERDS

- Thunderstorms
- Turbulence
- Wake Turbulence
- Wind Shear
- Microburst
- Icing
- Restrictions to Visibility
- Volcanic Ash

STUDY ASSIGNMENT:

FAR/ AIM

Private Pilot FARs, Recommended Study Lists

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes Chapter 6 question for Sections A, B, C with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure complete understanding prior to Ground Lesson 8.

PRIVATE PILOT SYLLABUS

STAGE II

GROUND LESSON 8

LESSON REFERENCE:

FAR/AIM

Private Pilot FARs

FAR/AIM Manual

Private Pilot FARs

RECOMENNDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Understand the appropriate Federal Aviation Regulations in the Private Pilot Recommended Study List.
- Gain specific knowledge of those FARs which govern student solo flight operations, private pilot privileges, limitations, and National Transportation Safety Board (NTSB) accident reporting requirements.

ACADEMIC CONTENT:

- FAR Part 1
- FAR Part 61
- FAR Part 91
- NTSB 830

STUDY ASSIGNMENT:

Private Pilot Manual-

Chapter 7, Interpreting Weather Data

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes Ground Lesson 8 Private Pilot FAR Exercises with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure understanding prior to progressing to Ground Lesson 9.

PRIVATE PILOT SYLLABUS

STAGE II

GROUND LESSON 9

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 7, Interpreting Weather Data

VIDEO
PART III , CHAPTER 7

RECOMENNDDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Learn how to obtain and interpret weather reports, formats, and graphic charts.
- Become familiar with the sources of weather information during preflight planning and while in flight.
- Recognize critical weather situations described by weather reports and forecasts.

ACADEMIC CONTENT:

SECTION A -THE FORECASTING PROCESS

- Forecasting Methods
- Types of Forecasts
- Compiling and Processing Weather Data
- Forecasting Accuracy and Limitations

SECTION B-PRINTED REPORTS AND FORECASTS

- Aviation Routine Weather Report (METAR)
- Radar Weather Reports
- Pilot Weather Reports
- Terminal Aerodrome Forecast (TAF)
- Aviation Area Forecast
- Winds and Temperatures Aloft Forecast
- Severe Weather Reports and Forecasts
- AIRMET/SIGMET/Convective SIGMET

SECTION C-GRAPHIC REPORTS AND FORECASTS

- Surface Analysis Chart
- Weather Depiction Chart Radar Summary Chart

- Satellite Weather Pictures
- Low-Level Significant Weather Prog
- Severe Weather Outlook Chart
- Forecast Winds and Temperatures Aloft Chart
- Volcanic Ash Forecast and Dispersion Chart

SECTION D-SOURCE OF WEATHER INFORMATION

- Preflight Weather Sources
- In-Flight Weather Sources
- Enroute Flight Advisory Service
- Weather Radar Services
- Automated Weather Reporting Systems

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL
Review Chapters 6 and 7 and the FAR/AIM in preparation for the Stage II Exam.

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at the completion of lesson. Student completes Chapter 7 questions for Section A, B, C and D with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure complete student understanding prior to progressing to the Stage II Exam.

PRIVATE PILOT SYLLABUS

STAGE II

GROUND LESSON 10

STAGE II EXAM

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 6 and 7
FAR/AIM-Private Pilot FARs

VIDEO
PART III , CHAPTER 6 and 7

RECOMENNDED SEQUENCE:

1. Lesson Introduction
2. Testing
3. Critique

LESSON OBJECTIVES:

- Demonstrate comprehension of the material presented in Chapters 6 and 7 of the Private Pilot Manual and the FARs that apply to private pilot operations, including private pilot privileges, limitations, and NTSB accident reporting requirements.

ACADEMIC CONTENT:

STAGE II EXAM

- Meteorology for Pilots
- Federal Aviation Regulations
- Interpreting Weather Data

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL
CHAPTER 8, Airplane Performance

COMPLETION STANDARDS:

This lesson and stage are complete when the student has completed the State II Exam with a minimum passing score of 80%, and the instructor has reviewed each incorrect response to ensure complete understanding before the student progresses to Stage III.

STAGE III

STAGE OBJECTIVES

During this stage, the student will learn how to predict performance and control the weight and balance condition of the airplane. In addition, the student will be introduced to pilotage, dead reckoning, and navigation equipment. This includes understanding the basic concepts of how to use actual charts, potters, flight computers, and flight publications to plan cross-country flight. The student will learn how to use VOR, ADF, and advanced navigation systems. In addition, the student will obtain an understanding of the physiological factors which can affect both pilot and passengers during flight. Finally, the student will learn how to conduct comprehensive preflight planning for cross-country flights and gain insight into factors affecting aeronautical decision making.

STAGE COMPLETION STANDARDS

This stage is complete when the student has completed the Stage III written exam with a minimum passing score of 80%, and the instructor has reviewed each incorrect response to ensure complete understanding .

PRIVATE PILOT SYLLABUS

STAGE III

GROUND LESSON 11

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 8, Airplane Performance

VIDEO

PART IV , CHAPTER 8

RECOMENNDDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Learn how to use data supplied by the manufacturer to predict airplane performance, including takeoff and landing distances and fuel requirements.
- Learn to compute and control the weight and balance condition of a typical training airplane.
- Become familiar with basic functions of aviation computers. Understand the effects of density altitude on takeoff and climb performance.

ACADEMIC CONTENT:

SECTION A-PREDICTING PERFORMANCE

- Aircraft Performance and Design
- Chart Presentations
- Factors Affecting Performance
- Takeoff and Landing Performance
- Climb Performance
- Cruise Performance
- Using Performance Charts

SECTION B-WEIGHT AND BALANCE

- Importance of Weight
- Importance of Balance
- Terminology
- Principles of Weight and Balance
- Computation Method
- Table Method
- Graph Method

- Weight-Shift Formula
- Effects of Operating at High Total Weights
- Flight at Various CG Positions

SECTION C-WEATHER HAZARDS

- Mechanical Flight Computers
- Time, Speed, and Distance
- Airspeed and Density Altitude Computations
- Wind Problems
- Conversions
- Multi-Part Problems
- Electronic Flight Computers Modes and Basic Operations

STUDY ASSIGNMENT:

Private pilot manual-
CHAPTER 9, Navigation

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of each lesson. Student completes Chapter 8 questions for Section A, B and C with a minimum passing score of 80%. Instructor reviews incorrect answers to ensure complete understanding prior to progressing to Lesson 12.

PRIVATE PILOT SYLLABUS

STAGE III

GROUND LESSON 12

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 9, Navigation

VIDEO

PART IV , CHAPTER 9

RECOMENNDDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Learn the basic concepts for VFR navigation using pilotage, dead reckoning, and aircraft navigation systems.
- Become familiar with guidelines and recommended procedures related to flight planning, use of an FAA Right Plan, VFR cruising altitudes, and lost procedures.
- Gain a basic understanding of VFR navigation using pilotage, dead reckoning, and navigation systems.

ACADEMIC CONTENT:

SECTION A-PILOTAGE AND DEAD RECKONING

- Pilotage
- Dead Reckoning
- Right Planning
- VFR Cruising Altitudes
- Flight Plan
- Lost Procedures

SECTION B-VOR NAVIGATION

- VOR Operations
- Ground and Airborne Equipment
- Basic Procedures
- VOR Orientation and Navigation
- VOR Checkpoints and Test Signals
- VOR Precautions
- Horizontal Situation Indicator
- Distance Measuring Equipment (DME)

SECTION C-ADF NAVIGATION

- ADF Equipment
- Orientation
- Homing
- ADF Intercepts and Tracking
- Movable-Card Indicators
- Radio Magnetic Indicator
- ADF Precautions

SECTION D-ADVANCED NAVIGATION

- VORTAC-Based Area Navigation
- Inertial Navigation System
- Global Positioning System

STUDY ASSIGNMENT:

Private pilot manual-
CHAPTER 10, Applying Human Factors
Principles

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes Chapter 9 questions for Sections A, B, C and D with a minimum passing score 80%. Instructor reviews incorrect responses to ensure complete student understanding prior to progressing to Ground Lesson 13.

PRIVATE PILOT SYLLABUS

STAGE III

GROUND LESSON 13

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 10, Applying Human Factors Principles

VIDEO

PART V , CHAPTER 10

RECOMENNDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Gain an insight into important aviation physiological factors as they relate to private pilot operations.
- Become familiar with the accepted procedures and concepts pertaining to aeronautical decision making and judgment, including cockpit resource management and human factors training.
- Gain a basic understanding of aeronautical decision making and judgment.

ACADEMIC CONTENT:

SECTION A-AVIATION PHYSIOLOGY

- Vision in Flight
- Night Vision
- Visual Illusions
- Disorientation
- Respiration
- Hypoxia
- Hyperventilation

SECTION B-AERONAUTICAL DECISION MAKING

- Applying the Decision Making Process
- Pilot-in-Command Responsibility
- Communication
- Workload Management
- Situational Awareness
- Resource Use

- Applying Human Factors Training

STUDY ASSIGNMENT:

Private pilot manual-
CHAPTER 11, Flying cross-country

COMPLETION STANDARDS:

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes for Sections A, and B with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure complete student understanding prior to progressing to Ground Lesson 14.

PRIVATE PILOT SYLLABUS

STAGE III

GROUND LESSON 14

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 11, Flying Cross-Country

RECOMENNDED SEQUENCE:

1. Lesson Introduction and Video Presentation
2. Class Discussion

LESSON OBJECTIVES:

- Develop a sound understanding of the planning process for a cross-country flight.
- Become familiar with the details of flying a typical cross-country flight, including evaluation of in-flight weather and decisions for alternative actions, such as a diversion.
- Understand how to plan for alternatives.

ACADEMIC CONTENT:

SECTION A-THE FLIGHT PLANNING PROCESS

- Developing the Route
- Preflight Weather Briefing
- Completing the Navigation Log
- Flight Plan
- Preflight Inspection

SECTION B-THE FLIGHT

- Departure Reid-Hillview Airport to Stockton Airport
- Stockton Airport to Hollister Airport
- Hollister Airport to Reid-Hillview
- Diversion to San Jose International Airport
- Return to Reid-Hillview Airport

STUDY ASSIGNMENT:

Private pilot manual-
CHAPTER 8-11 in preparation for the Stage
III Exam

**COMPLETION
STANDARDS:**

Demonstrate understanding during oral quizzing by instructor at completion of lesson. Student completes for Sections A, and B with a minimum passing score of 80%. Instructor reviews incorrect responses to ensure complete student understanding prior to progressing to Ground Lesson 14.

PRIVATE PILOT SYLLABUS

STAGE III

GROUND LESSON 15

STAGE III EXAM

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 8-11

VIDEO

PART III , CHAPTER 8-11

RECOMENNDED SEQUENCE:

1. Lesson Introduction
2. Testing
3. Critique

LESSON OBJECTIVES:

- Demonstrate comprehension of the material presented in Chapters 8 through 11 of the Private Pilot Manual

ACADEMIC CONTENT:

STAGE III EXAM

- Airplane Performance
- Navigation
- Human Factors Principles
- Aeronautical Decision Making
- Flying Cross-Country

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL

Review entire manual, as necessary, in preparation for Private Pilot Final Exam "A"

COMPLETION STANDARDS:

This lesson and stage are complete when the student has completed the Stage III Exam with a minimum passing score of 80% and the instructor has reviewed each incorrect response to ensure complete understanding before the student progresses to the course final examinations.

PRIVATE PILOT SYLLABUS

STAGE III

GROUND LESSON 16

END OF COURSE FINAL EXAM "A"

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 1-11

VIDEO

PART I-V , CHAPTER 2-10

RECOMENNDED SEQUENCE:

1. Lesson Introduction
2. Testing
3. Critique

LESSON OBJECTIVES:

- Demonstrate comprehension of the material presented in this course in preparation for the FAA Private Pilot Airmen Knowledge Test.

ACADEMIC CONTENT:

- Private Pilot Final Exam "A"

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL

Review any deficient subject areas based on the result of End of Course Final Exam "A".
Review in preparation for Private Pilot Final Exam "B"

COMPLETION STANDARDS:

Each student must complete the Private Pilot Final exam "A" with a minimum passing score of 80%, and the instructor should review each incorrect response to ensure complete understanding before the student progresses to the Private Pilot Final Exam "B."

PRIVATE PILOT SYLLABUS

STAGE III

GROUND LESSON 17

END OF COURSE FINAL EXAM "B"

LESSON REFERENCE:

PRIVATE PILOT MANUAL-
CHAPTER 1-11

VIDEO

PART I-V , CHAPTER 2-10

RECOMENNDED SEQUENCE:

1. Lesson Introduction
2. Testing
3. Critique

LESSON OBJECTIVES:

- Demonstrate comprehension of the academic material presented in this course and the student's readiness to complete the FAA Private Pilot Airmen Knowledge Test.

ACADEMIC CONTENT:

- Private Pilot Final Exam "B"

STUDY ASSIGNMENT:

PRIVATE PILOT MANUAL

Review any deficient subject areas based on the result of End of Course Final Exam "A".
Review in preparation for FAA Private Pilot Airman Knowledge Test.

COMPLETION STANDARDS:

Each student must complete Private Pilot Final Exam "B" with a minimum score of 80%, and the instructor should review each incorrect response to ensure complete understanding

PRIVATE PILOT FLIGHT TRAINING SYLLABUS

FLIGHT TRAINING COURSE OBJECTIVES

The student pilot will obtain the necessary skill and experience necessary to obtain a private pilot certificate with an airplane category rating and single-engine and class rating

FLIGHT TRAINING

COURSE COMPLETION REQUIREMENTS

The student must demonstrate through flight test and school records that the necessary aeronautical skill and experience requirements to obtain a private pilot with an airplane category rating and single engine land class rating have been met.

STAGE I

STAGE OBJECTIVE

During this stage, the student will obtain the foundation for all future aviation training. The student become familiar with the training airplane and learns how the airplane controls are used to establish and maintain specific flight attitude and ground tracks. The student also will gain the proficiency to solo the training airplane in the traffic pattern.

STAGE COMPLETION STANDARDS

At the completion of this stage, the student will demonstrate proficiency in basic flight maneuvers, and will have successfully soloed in the traffic pattern. In addition, the student will have the proficiency required for introduction of maximum performance takeoffs and landings procedure in Stage II.

STAGE II

STAGE OBJECTIVE

This stage allows the student to expand the skill learned in the previous stage. The student is introduced to short-field and soft-field takeoff and landing procedures, as well as night flying, which are important steps in preparation for cross country training. Additionally,

greater emphasis is placed on attitude control by instrument reference to increase the student's overall competence. In the cross-country phase, the student will learn to plan and conduct cross-country flights using pilotage, dead reckoning, and radio navigation systems and how to safely conduct flight in the national airspace systems.

STAGE COMPLETION STANDARDS

This stage is completed when the student can accurately plan and conduct cross-country flights. In addition, the student will have the proficiency to safely demonstrate consistent results in performing short-field and soft-field takeoffs and landings and night operations. The proficiency level must be such that the successful and safe outcome of each task is never seriously doubt.

STAGE III

STAGE OBJECTIVES

During this stage, the student will gain additional proficiency in solo cross-country operations and will receive instruction in preparation for the end-of-course stage check.

STAGE COMPLETION STANDARDS

This stage will be complete when the student demonstrates performance of private pilot operations at a standard that meets or exceeds the minimum performance criteria established in the practical test standards for a private pilot certificate.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 1

Dual-Local (0.5)

LESSON OBJECTIVES:

- Become familiar with the training airplane and its systems.
- Learn about certificate, documents, and checklists. Understand how to conduct the necessary preflight activities. Learn about the functions of the flight controls, and how they are used to maintain specific attitude.
- Gain an understanding of preflight preparation and procedures.

PRE-FLIGHT DISCUSSION:

- Fitness for flight
- Positive exchange of flight control
- certificates and documents
- Airworthiness requirement
- Airplane logbook
- Airplane servicing
- Fuel grade

INTRODUCE:

- Use of checklists
- Operation of systems
- Equipment check
- Location of first aid kit
- Location of fire extinguisher
- Engine starting
- Radio communication
- Positive exchange of flight control
- Taxiing
- Before takeoff check
- Normal takeoff and climb
- Straight-and-level flight
- Climb, descend, and level offs
- Medium bank turn in both directions

- Normal approach and landing
- After landing , parking and securing

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS

Ground operations and basic maneuvers

COMPLETION STANDARDS:

- Display basic knowledge of aircraft systems and the necessity of checking their operation before the flight.
- Become familiar with the control systems and how they are used to maneuver the airplane on the ground and in the air.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 2

Dual-Local (1.0)

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-
Ground operations and basic maneuvers

MANEUVERS VIDEO
Ground operations and basic maneuvers

LESSON OBJECTIVES:

- Review procedures and maneuvers introduced in lesson 1, especially preflight activities, ground operations, and attitude control during basic maneuvers using visual reference(VR).
- Introduce additional maneuvers and procedures.
- Emphasis will be on correct procedures for preflight and ground operation.

PRE-FLIGHT DISCUSSION:

- Human factors concept
- Preflight activities
- Engine starting
- Airport runway, and taxiway signs, marking and lighting
- Ground operations, including crosswind taxiing
- Collision avoidance precautions
- Airspeed and configuration change

INTRODUCE:

- Use of checklists
- Airport, runway, and taxiway signs, markings and lighting
- Crosswind taxi
- Collision avoidance precaution
- Airspeed and configuration change
- Flight at approach speed
- Traffic pattern
- Descents in high and low drag configuration

REVIEW:

- Preflight inspection
- Certificates and documents
- Airworthiness requirements
- Operation of systems
- Positive exchange of flight controls
- Use of check lists
- Engine starting
- Radio communication
- Positive exchange of flight control
- Taxiing
- Before takeoff check
- Normal takeoff and climb
- Straight-and-level flight
- Climb, descend, and level offs
- Medium bank turn in both directions
- Normal approach and landing
- After landing , parking and securing

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS
Flight maneuvers

COMPLETION STANDARDS:

- Display increased proficiency in preflight activities, ground operation, and coordinated airplane attitude control.
- Perform takeoffs with instructor assistance.
- Be familiar with control usage necessary to maintain altitude within ± 250 feet during airspeed change and configuration changes.
- Exhibit understanding of attitude control by visual reference(VR).

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 3

Dual-Local (1.5)

Note: A view-limiting device is required for the 0.2 hours of dual instrument time allocated to Flight Lesson 3.

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-
Flight maneuvers

MANEUVERS VIDEO
Flight maneuvers

LESSON OBJECTIVES:

- Review airspeed control during basic maneuvers.
- Introduce stalls from various flight attitude to increase understanding of airplane control during normal and critical flight conditions..
- Introduce attitude control by instrument reference(IR).
- Emphasis will be directed to proper execution of the listed maneuvers and procedures, particularly takeoffs and landings.

PRE-FLIGHT DISCUSSION:

- Situational awareness
- Basic instrument maneuvers
- Preflight planning, operation of power plant, aircraft systems and engine runup procedures.
- Visual scanning and collision avoidance precautions
- Wind shear and wake turbulence avoidance procedure

INTRODUCE:

- Flight at various airspeed from cruise to slow flight
- Maneuvering during slow flight
- Power off stalls
- Power on stalls
- Straight-and-level flight (IR)

- Constant airspeed climb (IR)
- Constant speed descend (IR)

REVIEW:

- Use of checklists
- Airplane servicing
- Preflight inspection
- Airworthiness requirements
- Engine starting
- Radio communication
- Before takeoff check
- Normal takeoff and climb
- Straight-and-level flight
- Climb, descend, and level offs
- Medium bank turn in both directions
- Collision avoidance precaution
- Airspeed and configuration change
- Descents in high and low drag configuration
- Flight at approach speed
- Normal approach and landing
- Airport, runway, and taxiway signs, markings and lighting
- Parking and securing the airplane

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS
Flight maneuvers and emergency landing procedures

COMPLETION STANDARDS:

- Display increased proficiency in coordinated airplane attitude control during basic maneuvers.
- Perform unassisted takeoffs.
- Demonstrate correct communications. Landings completed with instructor assistance.
- Maintain altitude within ± 250 feet during airspeed transitions and while maneuvering at slow airspeed.
- Indicate basic ability to control attitude by instrument reference (IR).

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 4

Dual-Local (1.0)

Note: A view-limiting device is required for the 0.2 hours of dual instrument time allocated to Flight Lesson 4.

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-

Flight maneuvers and emergency landing procedures

MANEUVERS VIDEO

Flight maneuvers and emergency landing procedures

LESSON OBJECTIVES:

- Practice maneuvers listed for review to gain additional proficiency and demonstrate the ability to recognize and recover from stalls.
- The student will also receive instruction and practice in the maneuvers and procedures listed for introduction, including emergency operations and additional practice of airplane control by the instrument reference (IR).
- Instructor may demonstrate secondary, accelerated, crossed-controlled, elevator trim stalls.
- Emphasis will be on procedure related to airport operations, steep turns, slow flight, stalls and stall recovery.

PRE-FLIGHT DISCUSSION:

- Wake turbulence avoidance
- Runway incursion avoidance
- Work load management
- Pilot-in-command responsibility
- Emergency procedure and equipment malfunctions
- Emergency field selection.

INTRODUCE:

- Systems And equipment malfunction
- Emergency procedures
- Emergency descent
- Emergency approach and landing (simulated)

- Emergency equipment and survival gear
- Climbing and descending turn(VR/IR)
- Steep turn
- Turn to heading(VR/IR)
- Flight at slow airspeed with realistic distraction, and the recognition and recovery from stalls entered from various attitude (straight/turn)
- Spin awareness
- Demonstrated stall (secondary, accelerated, crossed-controlled, elevator trim stall)

Note: The demonstrated stalls are not a proficiency requirement for private pilot certification. The purpose of the demonstration is to help the student learn how to recognize, prevent, and if necessary, recover before stall develops into a spin. These stalls should not be practiced without a qualified instructor. In addition, some stalls may be prohibited in some airplanes.

REVIEW:

- Airport, runway, and taxiway signs, markings and lighting
- Airspeed and configuration change
- Flight at approach speed
- Flight at various airspeed from cruise to slow flight
- Maneuvering during slow flight
- Power on stall
- Power off stall
- Normal takeoff and landing
- Collision avoidance precaution
- After landing , parking and securing

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS

Ground reference maneuvers

COMPLETION STANDARDS:

- Display increased proficiency in coordinated airplane attitude control during basic maneuvers.
- Perform unassisted takeoffs.
- Demonstrate correct communications.
- Landings completed with instructor assistance.
- Demonstrate basic understanding of steep turns, slow flight, stalls, stall recovery and emergency operations.
- Complete demonstrated stalls.
- Indicate basic understanding of airplane control by use of flight instruments.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 5

Dual-Local (1.0)

Note: A view-limiting device is required for the 0.2 hours of dual instrument time allocated to Flight Lesson 5.

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-

Ground reference maneuvers

MANEUVERS VIDEO

Ground reference maneuvers

LESSON OBJECTIVES:

- Practice the review maneuvers to gain proficiency.
- Introduce ground reference maneuvers and maneuvering at slow airspeed by instrument reference.(IR).
- Emphasis will be on emergency landing procedure.

PRE-FLIGHT DISCUSSION:

- Situational awareness
- Realistic distraction
- Determining wind direction

INTRODUCE:

- Turns around a point
- S-turns
- Rectangular course
- Maneuvering during slow flight (IR)

REVIEW:

- Positive exchange of flight control
- Maneuvering during slow flight
- Power off stalls
- Power on stalls
- Flight at slow airspeed with realistic distraction, and the recognition and recovery from stalls entered from various attitude (straight/turn)
- Spin awareness

- Emergency approach and landing (simulated)
- Emergency equipment and survival gear
- Normal takeoff and landing
- Turn to heading (VR/IR)

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS

Airport operations

COMPLETION STANDARDS:

- Display increased proficiency in coordinated airplane attitude control during basic maneuvers. Perform unassisted takeoffs.
- Demonstrate correct communications. Landings completed with a minimum of instructor assistance.
- Maintain altitude ± 225 feet and heading $\pm 15^\circ$ during a straight-and-level flight.
- Demonstrate the ability to recognize and recover from stalls
- Indicate basic understanding of attitude instrument flying and simulated emergency landing procedure.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 6

Dual-Local (2.0)

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-
Airport operations

MANEUVERS VIDEO
Airport operations

LESSON OBJECTIVES:

- Practice the review maneuvers to gain proficiency.
- Introduce normal and crosswind takeoffs and landings, go around, no flap landing and slip.
- Review ground reference maneuvers.
- Emphasis will be on go-arounds and any of the more advanced maneuvers that appears to be difficult for the student.

PRE-FLIGHT DISCUSSION:

- Communication
- Workload management
- Lost communication procedure
- Runway incursion avoidance

INTRODUCE:

- Normal takeoffs and landings
- Go-arounds from a rejected landing
- Crosswind takeoffs and climbs
- Cross-wind approach and landings
- ATC light gun signals

REVIEW:

- Turns around a point
- S-turns

- Rectangular course
- Normal takeoffs and landings
- Traffic patterns
- Wake turbulence avoidance
- Emergency descent
- Emergency approach and landing (simulated)

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS
Reference for Flight Lesson 1-6

COMPLETION STANDARDS:

- Display increased proficiency in coordinated airplane attitude control d.
- Demonstrate ability to fly a specific ground track while maintaining altitude \pm 200 feet.
- Demonstrate basic understanding of how the forward slip is used for an approach to landing, the ability to recognize and recover from stalls
- Indicate knowledge of crosswind takeoffs/landing procedure and go-arounds.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 7

Dual-Local (1.0)

Note: A view-limiting device is required for the 0.2 hours of dual instrument time allocated to Flight Lesson 7.

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-

References for Flight Lesson 1-6

MANEUVERS VIDEO

References for Flight Lesson 1-6

LESSON OBJECTIVES:

- Practice instrument flight maneuvers, takeoffs, landings, and emergency procedure in preparation for solo flight.
- Review those maneuvers and procedures that appears to be difficult for the student.
- Emphasis will be on ground reference maneuvers and emergency operations.

PRE-FLIGHT DISCUSSION:

- Sections of FAR part 61 and 91 applicable to private pilots.
- Airspace rule and procedure for the airport where solo flight will be performed
- Flight characteristics and operational limitations for the make and model of aircraft to be flown in solo flight

REVIEW:

- Straight-and-level flight(VR/IR)
- Steep turns
- Constant airspeed climbs(VR/IR)
- Constant airspeed descents(VR/IR)
- Climbing and descending turns
- Turn to the headings(IR)
- Turns around a pint
- S-turns
- Rectangular course

- Cross wind takeoffs and climbs
- Crosswind approach and landings
- Go-around from a rejected landing
- Forward slip to landing
- Systems and equipment malfunctions
- Emergency procedures
- Emergency descent
- Emergency approach and landing
- ATC light gun signals

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

Prepare for the presolo written exam and briefing. The student will be provided with the exam questions in advance.

COMPLETION STANDARDS:

- Display increased proficiency and skill in instrument scan and interpretation during practice of instrument flight maneuvers.
- Takeoffs, landings, no flap l;anding,go-around and power off landing should be performed without instructor assistance.
- Emergency procedure should be accomplished with minimal assistance.
- Ground reference maneuvers should indicate increasing proficiency and precision.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 8

Dual-Local (1.0)

Note: A view-limiting device is required for the 0.2 hours of dual instrument time allocated to Flight Lesson 8.

LESSON OBJECTIVES:

- Prior to this flight, the instructor will administer and grade the presolo written exam and briefing.
- Practice the listed maneuvers and procedure including emergency operations and basic instrument maneuvers, to help the student gain proficiency and confidence.
- Emphasis will be directed toward correction of any faulty tendencies to prepare the student for the first solo.

PRE-FLIGHT DISCUSSION:

- presolo written exam critique
- Presolo flight training requirements

REVIEW:

- Operations of systems
- Preflight inspection
- Engine starting
- Radio communication
- Normal and crosswind taxiing
- Before takeoff check
- Normal and/or crosswind takeoff
- Climbing and descending turns
- Collision avoidance precautions
- Wake turbulence avoidance
- Straight-and-level flight(IR)
- Turn to the headings(IR)
- Maneuvering during slow flight(VR/IR)
- Power off stall
- Power on stall
- Maneuvering during slow flight
- Flight at slow airspeed with realistic distractions, and the recognition and recovery

- from stalls entered from straight flight and from turns.
- Spin awareness
- Steep turns
- Turns around a point
- S-turns
- Rectangular course
- Systems and equipment malfunctions
- Emergency procedures
- Emergency descent
- Emergency approach and landing
- Traffic patterns
- Forward slip to landing
- Go-around from a rejected landing
- Normal and crosswind approach and landing

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

Review any deficient areas based on the results of presolo written exam.

COMPLETION STANDARDS:

- This lesson is completed when the student successfully passes the presolo written exam with a minimum score of 80 % and the instructor has reviewed each incorrect response to ensure complete student understanding.
- Demonstrate the ability and readiness for supervised solo flight in the traffic pattern.
- Exhibit understanding of attitude instrument flying.
- Indicate good understanding of local airport and airspace rules as well as systems and equipment malfunctions and related emergency procedure.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 9

Dual-Local (1.0)

Stage Check

LESSON OBJECTIVES:

- The chief instructor, assistant chief instructor, or the designated check instructor will evaluate the student's proficiency to determine if he/she is prepared to depart the traffic pattern area on future solo flight.
- In addition, the student will be evaluated in all other maneuvers, procedures and knowledge areas appropriate to the first stage of the training syllabus.

PRE-FLIGHT DISCUSSION:

Conduct of the stage I check, including;

- Maneuvers
- Procedure
- Acceptable performance criteria
- Applicable rules

REVIEW:

- Operations of systems
- Minimum equipment list
- Engine starting
- Radio communication
- Taxiing
- Before takeoff check
- Normal and/or crosswind takeoff and climb
- Collision avoidance precautions
- Wake turbulence avoidance
- Maneuvering during slow flight
- Flight at slow airspeed with realistic distractions and the recognition and the recovery from the stalls entered from straight flight and from turns
- Spin awareness
- Power off stall
- Power on stall
- Systems and equipment malfunctions

- Emergency procedure
- Emergency descent
- Emergency approach and landing
- Traffic patterns
- Normal and/or crosswind approach and landings

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS

Performance takeoffs and landings

COMPLETION STANDARDS:

- This lesson and stage I are completed when the student can competently perform preflight duties and all other procedures and maneuvers necessary for the safe conduct of a solo flight in the traffic pattern and the local practice area. Altitude will be maintained ± 150 feet' headings $\pm 15^\circ$, and airspeed ± 10 kt.
- Additional instruction will be assigned, if necessary, to ensure that the student meet the standard for advancing to Stage II.

PRIVATE PILOT SYLLABUS

STAGE I

FLIGHT LESSON 10

Dual-Local (0.5)

Solo-Local (0.5)

LESSON OBJECTIVES:

- During the dual portion of the lesson, the instructor will review takeoff and landing procedures to check the student's readiness for solo flight. In the second portion of the lesson, the student will fly the first supervised solo flight in the local traffic pattern.
- Emphasis will be on the correct procedure and techniques for the student's solo.

PRE-FLIGHT DISCUSSION:

- Any student questions
- Student pilot supervised solo flight operations in the local traffic pattern

REVIEW:

- Engine starting
- Radio communication
- Normal and crosswind taxiing
- Before takeoff check
- Normal takeoffs
- Traffic patterns
- Go-around/Rejected landing
- Normal landings

INTRODUCE:

Supervised solo

- Radio communication
- Taxiing
- Before takeoff check
- Normal takeoffs and climbs (3)
- Traffic patterns
- Normal approaches and landings (3)After landing procedure
- Parking and securing

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

STUDY ASSIGNMENT:

**COMPLETION
STANDARDS:**

- The student will display the ability to solo the training airplane safely in the traffic pattern. At no time will the safety of the flight be in question .
- Complete solo flight in the local traffic pattern as directed by the instructor.

STAGE II

STAGE OBJECTIVE

This stage allows the student to expand the skill learned in the previous stage. The student is introduced to short-field and soft-field takeoff and landing procedures, as well as night flying, which are important steps in preparation for cross country training. Additionally, greater emphasis is placed on attitude control by instrument reference to increase the student's overall competence. In the cross-country phase, the student will learn to plan and conduct cross-country flights using pilotage, dead reckoning, and radio navigation systems and how to safely conduct flight in the national airspace systems.

STAGE COMPLETION STANDARDS

This stage is completed when the student can accurately plan and conduct cross-country flights. In addition, the student will have the proficiency to safely demonstrate consistent results in performing short-field and soft-field takeoffs and landings and night operations. The proficiency level must be such that the successful and safe outcome of each task is never seriously doubt.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 11

Dual-Local (1.0)

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-
Performance takeoffs and landings

MANEUVERS VIDEO
Performance takeoffs and landings

LESSON OBJECTIVES:

- Learn the basic procedure for short-and soft-field takeoffs, climbs, approach and landings.
- Review ground reference maneuvers, slow flight and stall recognition as needed.
- Determine if the student is competent to fly the the second supervised solo in the traffic pattern.
- Emphasis on short-field, soft-field takeoffs and landings.

PRE-FLIGHT DISCUSSION:

- Weight and balance computations
- Performance estimates
- Effect of high density altitude
- Aeronautical decision making
- Pilot-in-command responsibility.

INTRODUCE:

- Low-level wind shear precautions
- Short field takeoff and climb
- Soft field takeoff and climb
- Short field approach and landing
- Soft field approach and landing

REVIEW:

- Turns around a point

- S-turns
- Rectangular course
- Maneuvering during slow flight
- Flight at slow airspeed with realistic distractions and the recognition and recovery from stalls entered from straight flight and from turns

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

STUDY ASSIGNMENT:

Review, as required, in preparation for Flight Lesson 12, which is the second supervised solo flight in the traffic pattern.

**COMPLETION
STANDARDS:**

- The student will be able to explain runway conditions that necessitate the use of soft field and short field takeoff and landing techniques.
- Demonstrate the correct procedure to be used under existing or simulated conditions, although proficiency may not be at private pilot level.
- Ground track during the ground reference maneuvers will be accurate. Maintain altitude within ± 150 feet.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 12

Solo-Local (1.0)

Note: At instructor's prerogative, a portion of this lesson may be dual.

LESSON OBJECTIVES:

- The student will fly the second supervised solo in the local traffic pattern.
- Emphasize airport operations, including takeoff, traffic pattern, approach and landing procedures as well as collision avoidance and radio communications.

PRE-FLIGHT DISCUSSION:

- Solo operations in the traffic pattern.

REVIEW:

Supervised solo

- Radio communication
- Taxiing
- Before takeoff check
- Normal takeoff and climb
- Traffic pattern
- Normal approach and landing
- After landing procedures
- Parking and securing

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

STUDY ASSIGNMENT:

Review, as required, in preparation for the first solo flight in local flying area.

**COMPLETION
STANDARDS:**

- The student will perform each of the takeoffs using the correct techniques. Liftoff speed will not vary from the recommended speed by more than five kt.
- The landing approach will be stabilized and the approach speed will not vary more than five kt from the desired speed.
- Smooth landing touch downs at the correct speed within 300 feet of the desired touch down point.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 13

Solo-Local (1.0)

LESSON OBJECTIVES:

- Practice the listed maneuvers to gain proficiency and confidence.
- Review ground reference maneuvers to increase skill in a maintaining specific ground track.
- Practice other maneuvers as directed by the instructor.
- Emphasis on traffic pattern entry, exit, approach and landing procedure including use of stabilized approach.

REVIEW:

- Radio communication
- Normal takeoff and /or crosswind takeoffs and climb
- Power-off stall
- Power-on stall
- Maneuvering during slow flight
- S-Turn
- Turns around a point
- Traffic pattern
- Normal and/or crosswind approach and landing

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS

Attitude instrument flying

**COMPLETION
STANDARDS:**

- This lesson is completed when the student has conducted the assigned solo flight.
- The student should attempt to gain proficiency in each of the assigned maneuvers and procedures.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 14

Dual-Local (1.0)

Note: A view-limiting device is required for the 0.5 hours of dual instrument time allocated to Flight Lesson 14.

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-
Attitude instrument flying

MANEUVERS VIDEO
Attitude instrument flying

LESSON OBJECTIVES:

- Practice the listed maneuvers to gain proficiency and confidence.
- Introduce airplane control by instrument reference during emergency situations to broaden the student's knowledge.
- Emphasis will be on the introduction of VOR and ADF orientation, tracking and homing as well as attitude instrument flying.

PRE-FLIGHT DISCUSSION:

- Basic instrument maneuvers including recovery from unusual attitude
- Radio communication, navigation systems/facilities and radar service
- Emergency descents and climbs
- Resource use
- Situational awareness
- Disorientation

INTRODUCE:

- VOR orientation and tracking (VR)
- ADF orientation and homing (VR)
- Power-off stall (IR)
- Power-on stall (IR)
- Recovery from unusual attitude
- Emergency descents and climbs using radio aids or radar directives (IR)

- Use radio communication, navigation systems/facilities and radar service (IR)

REVIEW:

- Low level wind shear precautions
- Short field takeoffs and climbs
- Short field approaches and landings
- Power off stalls
- Power on stalls
- Maneuvering during slow flight (IR)

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

COMPLETION STANDARDS:

- Perform takeoffs and landings smoothly while maintaining good directional control. Approach will be stabilized and airspeed will be within five knots of that desired.
- Demonstrate basic understanding of VOR/ADF orientation, tracking and homing.
- Display the correct unusual attitude recovery techniques and be able to initiate emergency climb and descents by instrument reference using radio communications, VOR and radar service.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 15

Dual-Local Instrument (1.0)

Note: A view-limiting device is required for the 0.5 hours of dual instrument time allocated to Flight Lesson 15.

LESSON OBJECTIVES:

- Review attitude instrument flying including all instrument procedures intended to help a private pilot (without an instrument rating) avoid hazardous situations due to marginal VMC or inadvertent flight into IMC.
- Review short and soft field procedure and emergency operations.
- Emphasis will be on the attitude instrument flying.

PRE-FLIGHT DISCUSSION:

- Flight instrument functions, common errors and limitations
- Navigation instruments
- Inadvertent flight into IMC
- Operations in turbulence
- Partial panel
- Resource use

REVIEW:

- VOR orientation and tracking(VR/IR)
- ADF orientation and homing(VR/IR)
- Flight on federal airways
- Maneuvering during slow flight(IR)
- Power off stall(VR/IR)
- Power on stall(VR/IR)
- Emergency descent and climbs using radio aids or radar directives (IR)Using radio communication, navigation systems/ facilities and radar service(IR)
- Recovery from unusual attitude(IR)
- Low level wind shear precautions
- Short field takeoffs and landings
- Soft field takeoffs and landings
- Crosswind takeoffs and landings
- Forward slip to a landing

- Go-around
- Emergency operations

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

PRIVATE PILOT MANEUVERS

Night operations

COMPLETION STANDARDS:

- Demonstrate competency in basic instrument maneuvers and procedures at the private pilot level including control of the airplane during unusual attitude recoveries and emergency climb and descents.
- Control altitude \pm 150 feet during level turn, straight -level-flight and slow flight. Stall recovery should be coordinated with a minimum loss of altitude.
- Demonstrate increasing skill in short and soft field takeoff and landing procedures.
- Display the correct recovery techniques from stall and unusual attitude.
- Be able to initiate emergency climb and descent by instrument reference using radio communications, navigation facilities and radar service.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 16

Dual-Night Local (1.0)

LESSON REFERENCE:

PRIVATE PILOT MANEUVERS-
Night operations

MANEUVERS VIDEO
Night operations

LESSON OBJECTIVES:

- Introduce the special operational considerations associated with night flying.
- Practice night traffic pattern, approaches and landings.
- Stress importance of including instrument reference for maintaining attitude.
- Emphasize the physiological factors and additional planning associated with the night environment.

PRE-FLIGHT DISCUSSION:

- Preparation for night flying
- Night vision
- Disorientation
- Visual illusions
- Night scanning/collision avoidance
- Aircraft, airport and obstruction lighting
- Personal equipment

INTRODUCE:

- Aeromedical factors
- Flight planning considerations
- Use of checklists
- Preflight inspection
- Airworthiness requirements
- Taxiing
- Before takeoff check

- Power-off stalls
- Power-on stalls
- Steep turns
- Maneuvering during slow Flight
- Normal takeoffs and climbs
- Normal approaches and landings
- Short field takeoffs and landings
- Soft field takeoffs and landings
- Go around
- VFR navigations

STUDY ASSIGNMENT:

Review, as required, in preparation for the dual cross-country in Flight Lesson 17.

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

NOTE: *The 10 night takeoffs and landings to a full stop with each involving flight in the traffic pattern are an FAR Part 141 requirement. Five are scheduled for Flight Lesson 17 and the other five for Flight Lesson 18. However, this requirement may be accomplished with fewer than five during a flight, as long as the total of 10 is completed*

COMPLETION STANDARDS:

- Demonstrate an understanding of the importance of attitude control.
- Control altitude \pm 150 feet during level turn, straight-and-level flight. Stall recovery should be coordinated with a minimum loss of altitude.
- Complete five takeoffs and landings to a full stop with each landing involving flight in the traffic pattern.
- All landing approaches should be stabilized with touchdown at a predetermined area on the runway.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 17

Dual-Cross-Country (2.0)

Note: A view-limiting device is required for the 0.5 hours of dual instrument time allocated to Flight Lesson 17.

LESSON OBJECTIVES:

- Introduce cross-country procedures and the proper techniques to be used during flight out of the local training area including use of VOR, ADF and radar service under simulated instrument flight condition.
- Prepare the student to make cross-country flights as the sole occupant of the airplane.
- Review instrument and emergency operations.
- Emphasize cross-country navigation procedures that include a point of landing at least a straight-line distance of more than 50 nautical mile from the original point of departure.

PRE-FLIGHT DISCUSSION:

Cross-Country Flight Planning

- Sectional chart
- Flight publications
- Route selection and basic navigation procedures (pilotage and dead reckoning)
- Weather information
- Fuel requirements
- Performance and limitations
- Navigation log
- FAA flight plan (how to file, open, close and amend)
- Weight and balance
- Cockpit management
- Aeromedical factors
- Aeronautical decision making
- Resource use
- Workload management
- Basic instrument maneuvers and procedures

INTRODUCE:

Cross-Country Flight

- Departure
- Opening flight plan
- Course interception
- Pilotage
- Dead reckoning
- VOR navigation
- ADF navigation
- Power setting and mixture control
- Actual ground speed computation
- Diversion to an alternate
- Lost procedure
- Estimate of ground speed and ETA
- Position fix by VOR
- Flight on federal airways
- Collision avoidance precautions
- Closing the flight plan

Instrument Flight

- VOR tracking (IR)
- ADF homing (IR)
- Use of radar service (IR)

Airport Operations

- National airspace system
- Controlled airport
- Use of ATIS
- Use of approach and departure control
- Go-around
- CTAF (FSS or UNICOM) airport

REVIEW:

- Emergency operations
- Systems and equipment malfunctions
- Emergency descent
- Runway incursion avoidance
- Emergency approach and landing
- Emergency equipment and survival gear

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

COMPLETION STANDARDS:

- Demonstrate the skill to perform cross-country flight safely as the sole occupant of the airplane including use of VOR and radar service under simulated instrument condition.
- Include a point of landing at least a straight line distance of more than 50 nautical miles from the original point of departure.
- Demonstrate complete preflight planning, weather analysis, use of FAA publications and chart, adherence to the preflight plan and the use of pilotage, dead reckoning, radio communication and navigation systems.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 18

Dual-Night Cross-Country (2.0)

Note: A view-limiting device is required for the 0.5 hours of dual instrument time allocated to Flight Lesson 18.

LESSON OBJECTIVES:

- Introduce night navigation and emergency operations.
- Recognize the importance of thoughtful planning and accurate navigation.
- The flight should include a total distance of more than 100 nautical mile and a point of landing at least a straight-line distance of more than 50 nautical mile from original point of departure.
- Attitude instrument flying practice.
- Emphasize precise aircraft control and the navigation accuracy required for night VFR cross-country flight.

PRE-FLIGHT DISCUSSION:

- Night orientation, navigation and chart reading techniques
- Weather information
- Route selection
- Altitude selection
- Fuel requirements
- Departure and arrival procedures

INTRODUCE:

- Use of ATIS, approach and departure control
- Pilotage
- Dead reckoning
- Radio navigation (VR/IR)
- Emergency operation
- Use of unfamiliar airport
- Collision avoidance precaution
- Lost procedure
- Diversion to an alternate
- Unusual attitude recovery(IR)

REVIEW:

- Aeromedical factors
- Maneuvering during slow flight (VR/IR)
- Normal takeoffs and climbs
- Normal approaches and landings
- Short field takeoffs and landings
- Soft field takeoffs and landings
- Go-around

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

Review, as required in preparation for the stage II check in Flight Lesson 19.

COMPLETION STANDARDS:

- Demonstrate an understanding of night cross-country preparation and flight procedure including ability to maintaining attitude by instrument reference.
- Navigation should be accurate and simulated emergency situation should be handled promptly utilizing proper instrument.
- Total distance of more than 100 nautical miles required.
- In addition, the flight must include a point of landing at least a straight-line distance of more than 50 nautical miles from the original point of departure.
- Complete 5 takeoffs and landings to a full stop with each involving flight in a traffic pattern.
- Landing approach stabilized with touchdown at or near the appropriate touchdown area on the runway.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 19

Dual-Local (1.0)

Stage Check

LESSON OBJECTIVES:

- This stage check, conducted by the chief instructor, the assistant chief instructor or the designated check instructor, will evaluate the student's takeoff, landing, and stall recognition /recovery procedure to determine any area of weakness.
- Additionally, the student' ability to plan and conduct cross-country flights will be evaluated as well as safe and efficient operation of the aircraft during all other phases of flight in stage I and II of the private pilot training syllabus.

PRE-FLIGHT DISCUSSION:

Conduct Of The Stage II Check, Including;

- Maneuvers
- Procedures
- Acceptable performance criteria
- Applicable rules

REVIEW:

Preflight Preparation

- National airspace system
- Cross-country planning
- Weather information
- Cockpit management
- Use of checklists

Cross-country flight

- Departure
- Course interception
- VOR navigation
- Pilotage
- Dead reckoning
- Collision avoidance precautions
- Low level wind shear precautions
- Lost procedure

- Diversion to alternate
- Emergency operations
- Use of power setting and mixture control
- Soft field takeoffs and climbs
- Soft field landings
- Short field landings
- Shot field takeoffs and climbs
- Power off stalls
- Power on stalls

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

**COMPLETION
STANDARDS:**

- Demonstrate the ability to plan and conduct cross-country flight using sound knowledge of flight planning, preflight action, weather analysis and the appropriate aeronautical publications.
- Exhibit the correct use of three method of navigation, ability to correctly determine location at any time, the ability to compute ETAs within 10 min. and correct technique for establishing a course to an alternate airport.
- Demonstrate short field and soft field takeoffs and landings safely with consistent result.
- The student should be proficient in all other maneuvers and procedure as well as the associated knowledge area of stage I and II prior to advancing to stage III.

PRIVATE PILOT SYLLABUS

STAGE II

FLIGHT LESSON 20

Solo-Cross-Country (2.0)

LESSON OBJECTIVES:

- Use previous experience and training to complete solo cross country.
- Increase proficiency and confidence.
- The flight should include a point of landing that is at least a straight-line distance of more than 50 nautical miles from the original point of departure.
- Emphasize planning and following the plan, including alternative.

PRE-FLIGHT DISCUSSION:

- Review the solo cross0country briefing
- Required documents and endorsements
- Basic VFR weather minimum and airspace rules
- Enroute communication
- ATC service available to the pilot
- Enroute weather information
- VFR position report
- Emergency operations
- Lost procedures
- Diversion
- Lost communication procedures
- ATC light signals
- Aeronautical decision making
- Resource use
- Workload management

REVIEW:

Preflight Preparation

- Sectional charts
- Flight publications
- Route selection
- Weather information
- Fuel requirements
- Performance and limitations

- Weight and balance
- Navigation log
- FAA flight plan
- Aeromedical factor

Cross Country Flight

- Opening the flight plan
- VOR and ADF navigation
- Position fix by navigation facilities
- Pilotage
- Dead reckoning
- Use of unfamiliar airport
- Estimates of ground speed
- Estimates of ETA
- Closing the flight plan

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

STUDY ASSIGNMENT:

**COMPLETION
STANDARDS:**

- Demonstrate accurate planning and conduct of a VFR cross-country flight using the three methods of navigation.
- During the post evaluation, the student will exhibit an understanding of unfamiliar airport operations.
- At least one landing more than 50 n.m. From the departure airport.

STAGE III

STAGE OBJECTIVES

During this stage, the student will gain additional proficiency in solo cross-country operations and will receive instruction in preparation for the end-of-course stage check.

STAGE COMPLETION STANDARDS

This stage will be complete when the student demonstrates performance of private pilot operations at a standard that meets or exceeds the minimum performance criteria established in the practical test standards for a private pilot certificate.

PRIVATE PILOT SYLLABUS

STAGE III

FLIGHT LESSON 21

Solo-Cross-Country (3.0)

LESSON OBJECTIVES:

- During this lesson, the student will complete the long cross-country requirement.

The flight should be of at least 100 nautical miles, total distance, with landings at a minimum of three points, including a straight-line segment at least 50 nautical miles between takeoff and landing location.

- Emphasize will be on cross-country procedures.

PRE-FLIGHT DISCUSSION:

- Conduct of the planned flight\
- Cockpit management, decision making, and judgment
- FAA flight plan(how to open, close, or amend)
- Use of a magnetic compass
- Emergency descend procedures
- Emergency operations
- En route communication and facilities
- In-flight weather analysis
- Unfamiliar airport operations

REVIEW:

Preflight Preparation

National airspace system

- Sectional charts
- Flight publication
- Route selection
- Weather information
- Fuel requirements
- Performance and limitations
- Weight and balance
- Navigation log
- FAA flight plan

Cross-Country Flight

- Opening and closing the flight plan
- VOR navigation
- Pilotage
- Dead reckoning
- Estimate of ground speed
- Estimate of ETA
- Use of controlled airport
- Use of airport with CTAF(FSS and/or UNICOM)

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

COMPLETION STANDARDS:

- Demonstrate cross-country proficiency by completing the flight as planned and without incident.
- Review the completed navigation log during the post flight evaluation to determine whether it was completed and used correctly.
- The cross-country must include a distance of over 100 nautical miles with landings at a minimum of three points, including a straight-line segment at least 50 nautical miles between takeoff and landing location.

PRIVATE PILOT SYLLABUS

STAGE III

FLIGHT LESSON 22

Dual-Local (2.0)

LESSON OBJECTIVES:

- Review the area of operation including specified maneuvers and procedures determined by the instructor to increase proficiency to the level required of a private pilot.
- Further develop the student's knowledge and skill in preparation for private pilot practical test.
- Emphasis will be on correction of any deficient skill or knowledge area.

PRE-FLIGHT DISCUSSION:

- Maneuvers and procedures in preparation for the stage III check, end-of-course flight check and FAA practical test, including spin awareness and night operations.

REVIEW:

- Preflight preparation
- Ground operation
- Maneuvering during slow flight (VR/IR)
- Power off stalls and Power on stalls (FR/IR)
- Steep turns
- Ground reference maneuvers
- Emergency descents and climbs using radio aids or radar directives (IR)
- Using radio communication, navigation systems/facilities and radar service(IR)
- Unusual attitude Recovery (IR)
- Airport operations
- Normal and crosswind takeoff and landing
- Go-around from a rejected landing
- Short field takeoff and landings
- Soft field takeoffs and landing
- Forward slip to landing
- Emergency operations
- Parking and securing the airplane
- Cross-country flight procedures
- Specific maneuvers and procedures assigned by the flight instructor

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

**COMPLETION
STANDARDS:**

- The student will exhibit progress and acceptable proficiency by performing each assigned maneuvers smoothly and with proper coordination and precision according to the criteria established in the private pilot practical test standard

PRIVATE PILOT SYLLABUS

STAGE III

FLIGHT LESSON 23

Solo-Local (2.0)

LESSON OBJECTIVES:

- The student will review flight maneuvers and procedures specified by the instructor to increase proficiency to the level required of a private pilot.
- Further develop the student's knowledge and skill in preparation for private pilot practical test.
- Emphasis will be on correction of any deficient skill or knowledge area.

REVIEW:

- Ground operations
- Takeoffs and climbs
- S-turns
- Turns around a point
- Steep turns
- Maneuvering during slow flight
- Power-off stalls
- Power-on stalls
- Short-field takeoffs and landings
- Soft-field takeoffs and landings
- Forward slip to landing
- Specific maneuvers or procedures assigned by the flight instructor

**POSTFLIGHT DISCUSSION AND
PREVIEW OF NEXT LESSON**

COMPLETION STANDARDS:

- The student will attempt to gain proficiency by performing each assigned maneuvers smoothly and with proper coordination and precision according to the criteria established by the private pilot practical test standards.

PRIVATE PILOT SYLLABUS

STAGE III

FLIGHT LESSON 24

Dual-Local (2.0)

LESSON OBJECTIVES:

- Review the area of operation specifically assigned by the instructor with special emphasis on correcting any deficiency in the performance of maneuvers or procedures before the Stage III check.
- Further develop the student's knowledge and skill in preparation for private pilot practical test.
- Emphasis will be on correction of any deficient skill or knowledge area.

PRE-FLIGHT DISCUSSION:

- Maneuvers and procedures in preparation for the stage III check, end-of-course flight check and FAA practical test, including spin awareness and night operations.

REVIEW:

- Preflight preparation
- Ground operation
- Maneuvering during slow flight (VR/IR)
- Power off stalls and Power on stalls (FR/IR)
- Steep turns
- Ground reference maneuvers
- Emergency descents and climbs using radio aids or radar directives (IR)
- Using radio communication, navigation systems/facilities and radar service(IR)
- Unusual attitude Recovery (IR)
- Airport operations
- Normal and crosswind takeoff and landing
- Go-around from a rejected landing
- Short field takeoff and landings
- Soft field takeoffs and landing
- Forward slip to landing
- Emergency operations
- After landing procedure
- Cross-country flight procedures
- Specific maneuvers and procedures assigned by the flight instructor

POSTFLIGHT DISCUSSION AND

PREVIEW OF NEXT LESSON

COMPLETION STANDARDS:

- This lesson is completed when the student has practiced the assigned maneuvers and procedures.
- The student should exhibit competence and ability to correct any weak performance areas determined previously.
- Perform each assigned maneuvers and procedures with proper coordination and precision according to the criteria established in the private pilot practical test standard

PRIVATE PILOT SYLLABUS

STAGE III

FLIGHT LESSON 25

Dual-Local (1.0)

LESSON OBJECTIVES:

- This stage check, conducted by the chief instructor, assistant chief instructor or the designated check airman, will evaluate the student ability to perform the listed maneuvers at the proficiency level of a private pilot.
- Additionally, the student's ability to plan and conduct cross-country flights safely will be evaluated, as well as safe and effective operation of the aircraft during all other phases of flight in Stage III of the private pilot flight training syllabus.

PRE-FLIGHT DISCUSSION:

Conduct Of The Stage III Check, Including;

- Maneuvers
- Procedures
- Acceptable performance criteria
- Applicable rules
- Human factor concepts

REVIEW:

Maneuvers And Procedures

- Ground operations
- Takeoffs and landings
- S-turns
- Turns around a point
- Power-off stalls (VR/IR)
- Power-on stalls (VR/IR)
- Maneuvering during slow flight (VR/IR)
- Emergency descents and climbs using radio aids or radar directives (IR)
- Unusual attitude recovery (IR)
- Short-field takeoffs and landings
- Forward slip to landings
- Go-around
- Emergency operations
- After landing procedures

- Parking and securing the airplane

Cross-Country Flight

- Radio navigation
- Pilotage and read reckoning
- Diversion to the alternate
- Lost procedure

POSTFLIGHT DISCUSSION AND PREVIEW OF NEXT LESSON

STUDY ASSIGNMENT:

Private pilot practical test briefing in preparation for the end-of-course check and the FAA practical test.

COMPLETION STANDARDS:

- Each maneuvers and procedures should be performed at the proficiency level of a private pilot
- Mastery of the airplane should be evident and the successful outcome of each task performed should be expected.
- Any maneuvers or procedures which do not meet this standard should be reviewed with the student and assigned additional practice.
- Student should exhibit a sound understanding of the knowledge, skill and proficiency requirements for private pilot certification.
- Demonstrate the ability to plan and conduct cross-country flights using sound knowledge of flight planning, preflight action, weather analysis and the appropriate aeronautical publications.

PRIVATE PILOT SYLLABUS

STAGE III

FLIGHT LESSON 26

Dual-Local (1.0)

LESSON OBJECTIVES:

- This final stage check, conducted by the chief instructor, assistant chief instructor or the designated check instructor, is to evaluate the student's overall proficiency, skill and knowledge in private pilot operation.
- Additionally, the student will exhibit the sound judgment and decision making capabilities necessary for a private pilot to operate effectively and safely within the U.S. national airspace system.

PRE-FLIGHT DISCUSSION:

Conduct Of The End-Of_course Flight Check, Including;

- Maneuvers
- Procedures
- Acceptable performance criteria
- Applicable rules

REVIEW:

Preflight Preparation

- Certificates and documents
- Weather information
- Performance and limitations
- Cross-country flight planning
- Operation of systems
- Aeromedical factors

Cross-Country Flying

- Pilotage and dead reckoning
- Radio navigation
- Diversion to alternate
- Lost procedures

Basic Piloting Skills

- Preflight inspection
- Cockpit management
- Use of checklist
- Engine starting
- Taxing

- Before takeoff check
- Radio communications
- ATC light signals
- Collision avoidance precautions
- Low-level wind shear precautions
- Wake turbulence avoidance
- Airport and runway marking and lighting
- Normal and crosswind takeoffs and climbs
- Short-field takeoffs and climbs
- Soft-field takeoffs and climbs
- Straight-and-level flight (VR/IR)
- Constant airspeed climbs (VR/IR)
- Constant airspeed descents (VR/IR)
- Turns to headings (VR/IR)
- Unusual attitudes (IR)
- Using radio communications, navigation facilities and radar services (IR)
- Maneuvering during slow flight
- Power-off stalls
- Power-on stalls
- Flight at slow airspeeds with realistic distractions and recognition and recovery from the stalls entered from straight flight and from turns.
- Spin awareness
- Steep turns
- Ground reference maneuvers
- Emergency descent
- Emergency approach and landing
- Emergency equipment and survival gear
- Systems and equipment malfunctions
- Traffic patterns
- Normal and crosswind approaches and landings
- Forward slip to landings
- Go-arounds
- Short-field approach and landing
- Soft-field approach and landing
- After landing procedures
- Parking and securing

COMPLETION STANDARDS:

- The student will demonstrate proficiency that meet or exceeds the standard of performance outlined in the current FAA private pilot practical test standards.
- Mastery of the airplane should be demonstrated with the successful outcome of each task performed never seriously in doubt.
- Additional instruction will be assigned, if necessary, to meet the stage and course completion standards.