## Flight Instructor Airplane Single-Engine

# Fundamentals of Flight, Takeoffs and Landings, Traffic Patterns

#### Scenario:

You are flying your first flight with your student. You want them to get a realistic idea of what flying is all about. You are going to take them on a short cross-country during which you will introduce the fundamentals of flight as well as introducing them to takeoff, landings, and traffic patterns. You plan to stop at the other airport for lunch before returning to the original airport.

#### Lesson Objectives:

The purpose of this lesson is for the student instructor to learn to effectively perform and analyze the listed preflight operations, basic maneuvers, normal takeoffs and landings and traffic pattern procedures.

#### **Pre-Briefing:**

The student instructor will review the desired outcomes, discuss the scenario for the flight, and discuss the key elements of each maneuver to be flown. The student instructor will develop a maneuver lesson that describes and utilizes the scenario prescribed for this lesson. During the preflight briefing, the instructor will play the role of the student being trained and respond accordingly.

The student instructor should be able to explain the risks associated with a new student learning how to fly basic maneuvers and while in the traffic pattern doing takeoffs and landings.

### **Completion Standards:**

This lesson will be complete when the student instructor can perform, teach and analyze each maneuver to the level shown on the desired outcome table and within the tolerances specified by the Flight Instructor Practical Test Standard for Airplane, Single-Engine.

			т		Task Grades			SRM Grades		
FI- ASE- Fundamentals of Flight, Takeoffs and Landings, Traffic Pattern <b>Desired Outcome Grade Sheet</b>			Not Observed	Describe	Explain	Practice	Perform	Explain	Manage/Decide Practice	
Scenario Activities	Task	Desired Performance	a						de	
Preflight Lesson on a Maneuver to be Performed in Flight.	Maneuver Lesson SRM									
Preflight Procedures	Preflight Inspection Engine Starting Taxiing Before Takeoff Check SRM									
Airport Operations	Radio Communications and ATC Light Signals Traffic Patterns Airport, Runway, and Taxiway Signs, Markings, and Lighting SRM									
Takeoffs and Departure	Normal and Crosswind Takeoff and Climb Airport Departure Procedures SRM									
Fundamentals of Flight	Straight-and-Level Flight Level Turns Straight Climbs and Turning Climbs Straight Descents and Turning Descents SRM									
Arrival and Landings	Normal and Crosswind Approach and Landing Slips to a Landing Go-Around/Rejected Landing SRM									
Post Flight Procedures	Postflight Procedures SRM									

## **De-Briefing:**

The debriefing will be lead by the student instructor using the Learner-Centered Grading method. The student instructor will critique the instructor about the instructor's "simulated student" performance. Then the student instructor will critique his/her own performance using the Desired Outcomes Grading sheet as a guide. The instructor and student instructor will discuss any discrepancies in their respective evaluations.

#### Notes to the Instructor:

The student instructor is learning how to prepare and to present effective scenario-based instruction. The student instructor may not have received scenario-based instruction and may need to review the information provided on the FAA/FITS website to gain a full understanding of the instructional process and its value.

The student instructor should develop a lesson plan that incorporates this scenario and conduct the flight in accordance with that plan. You should review this lesson plan during the preflight briefing and make any suggestions for improvement at that time.

During the outbound leg of the scenario, you should play the role of the student and have the student instructor demonstrate to you the maneuvers and procedures. On the return leg, you should fly the airplane in the role of the "student" and have the student instructor analyze and evaluate your performance and offer proper corrective instruction.

You should have the student instructor "teach" you the preflight procedures for the airplane on the outbound leg. On the return flight, you could perform another preflight inspection with the student instructor analyzing your performance.

During the break between the two legs, you can review the student instructor's instruction and demonstrations of the basic maneuvers. Before you return, the student instructor should give you a preflight briefing about what you will be expected to do during that portion of the flight.

While flying the second leg playing the role of the "student", perform the maneuvers with some basic and common errors to determine if the student instructor can recognize and correct them.

Be sure to discuss the risk elements involved with teaching new students and how an instructor can mitigate those risks. This is especially critical when conducting takeoff and landing with new students.