Objectives	▪ The student will understand the elements relate to the various methods of flight instruction
Elements	▪ Obstacles in learning during flight instruction ▪ Demonstration-performance training delivery ▪ Positive exchange of controls ▪ Sterile cockpit ▪ Use of distractions ▪ Integrated flight instruction ▪ Assessment of piloting ability ▪ Aeronautical decision making
Schedule	▪ Review lesson objectives ▪ Review lesson material ▪ Conclusion & Review
Equipment	▪ White Board / Markers ▪ References
CFI Actions	▪ Present lesson ▪ Use teaching aids ▪ Ask/ answer questions
Student Actions	▪ Participate in discussion ▪ Take notes ▪ Ask / answer questions
Completion Standards	▪ The student can explain and teach using the methods discussed in this less

Additional Notes: _____
_____
_____
_____

CE = Common Error

Introduction

Overview

Review objectives / Elements

What

This lesson will cover the elements required to be a proficient flight instructor

Why

Student are paying a lot of money for your time, they expect proficient flight instruction

How

Obstacles to Learning

Feeling of Unfair Treatment

- **Students who believe their instruction in inadequate, or that all their efforts are not evaluated do not learn well**
  - Assigning a student challenging goal makes the student more motivated and promotes learning

Impatience to proceed to more interesting operations

- **Impatient students doesn't understand the need for training and only desires the final goal**
  - The basic topics must be mastered before the student can move on

Physical discomfort, illness, fatigue, and dehydration

- **Learning is not beneficial if the student doesn't have the physical needs**
- **Fatigue can be acute or chronic**

Apathy due to inadequate instruction

- **The instructor must prepare and care**
- **Students are spending a lot of money to have you instruct them**

Anxiety

- **Students must be comfortable/confident in the instructor and the airplane**
- **A safe, healthy atmosphere will boost learning**

Demonstration-Performance Method

Explanation Phase

- **The instructor must discuss the objectives, completion standards and provide a thorough briefing of the task**
  - Students need to know what they are expected to learn
  - Encourages questions
- **The instructor shows the action to complete the skill within standards**

Student performance and instructor supervision phase

- **Student performs the skill and learns from repetition**
  - Instructor provides advice

Evaluation Phase

- **Evaluate the student and advise the student of their progress**

Positive Exchange of Controls

- **There must be a clear understanding of who is flying the airplane at a given time**
  - 2 people cannot fly the airplane at once

Use 3-way exchange when giving or taking the controls

- "You have the flight controls"
- "I have the flight controls"
- "You have the flight controls"

Sterile Cockpit

- **The idea of a sterile cockpit is to avoid non-essential conversation during critical phases of flight**
  - Talking about the football game while taxiing isn't productive
- **Critical phases of flight include takeoff, landing, departure, arrival (everything other than cruise)**

Use of Distractions

- **Many accidents occur due to the pilot being distracted from flying the plane**
- **A sterile cockpit helps concentrate on flying the airplane**
- **The FAA encourages instructors to simulate scenarios that could cause distractions**
  - This teaches the student to divide his/her attention
- **A student must be able to take charge and tell passengers, the DPE, act. Then something is distracting**

Integrated Flight Instruction

- **The student is taught to perform maneuvers by both visual and instrument reference**
- **Develops good scanning habits**
- **Evolves into overall better aircraft control**
- **In no way does this mean that students are ready for IFR flight**

Procedures

- **Explain the control inputs used and the associated visual and instrument references**
  - Be detailed, use specific terms such as control pressure or control movements

See & Avoid

- **It is always the pilot's responsibility to see and avoid traffic**
  - Don't let the student depend on you, teach them safety first
- **Perform clearing turns before maneuvering**
- **Understand and comply with 14 CFR 91.113 right of way rules**

Assessment of Piloting Ability

- **It's important to keep students updated on their progress**
- **Provide them with direction and guidance to raise their performance**

Maintain a Written Record/Grade of Every Flight Lesson & Maneuver

- **This provides a student with a picture of what needs improvement, allowing them to see progress over time**
- **The student needs to be (although not immediately in training) heled to ACS/PTS standards**
- **Don't forget a post-flight debrief**

Correction of Student Error

- **Don't immediately take controls during a mistake**
  - Let the student work it out unless it is dangerous or becoming dangerous

Pilot Supervision

- **Before endorsing a student for solo flight, ensure the student is consistently in standards with all required maneuvers**

Dealing with Normal Challenges

- **Students must be able to handle challenges thrown at them in the air**
- **Ensure they are competent and confident with challenges on the ground**
  - If they cannot handle problems on the ground, they will not be able to in the plane

Practicing Landings

- Perform full stop landings (not just touch and goes)
    - Full stops help learn aircraft control and checklist usage

Practical Test endorsements

- AC 61-65H
    - Students need to be completely prepared or else its on you

Aeronautical Decision Making (ADM)

- **ADM is a systematic approach to the metal process used by pilots to consistently determine the best course of action for a given set of circumstances**
- **Teaching pilots to make sound decisions is the key to preventing accidents**

The Decision-Making Process

- **Defining the Problem**
    - Recognize that a change has occurred, and expected result did not occur
        - Incorrectly identifying the problem can create a worse problem
- **Choose a course of action**
    - Evaluate the need to react and determine what available actions can solve the problem in the time available
- **Implementing the decision and evaluation the outcome**
    - Continue to evaluate how the decision will affect the flight

Factors Affecting Decision Making

- **Hazardous Attitudes – These must be recognized and removed**
- **Stress**
    - Some stress is needed/good
    - Too much stress can be very bad
- **3 Types of stress**
    - Physical
    - Physiological
    - Psychological

Use of Resources

- **Use all available resources, think outside the box**
- **Internal resources – found inside the flight deck**
    - Equipment, systems, charts, books, etc.
    - The knowledge of the flight crew, Passengers, etc.
- **External resources – ATC and flight service**
- **Workload management (Plan, Plane, Pilot, Passengers, Programming)**

Conclusion & Review

Conclusion

- Briefly review the main lesson plans and anything in question

Review

1. Obstacles to learning during flight instruction
2. Demonstration-performance training delivery
3. Positive exchange of controls
4. Sterile cockpit
5. Use of distractions
6. Integrated flight instruction
7. Assessment of piloting ability
8. Aeronautical Decision Making