

## FOI and Help Sheet for CFI Course and Check ride

### LEARNING

Definition of Learning	<b>A Change in behavior based on experience</b>
Principals or Laws of Learning 2-10	<b>R Readiness</b> - a degree of single-mindedness and eagerness <b>E Exercise</b> - most often repeated is best remembered <b>E Effect</b> - if emotional reaction is pleasant and satisfying <b>P Primacy</b> - that which is first taught is best remembered <b>I Intensity</b> - the most intense will be remembered better <b>R Recency</b> - the most recent lessons are easier to remember and recall
4 Theories of Learning 2-2	<b>B Behaviorism</b> - reinforced behavior to shape or control what has been learned <b>C Cognitive</b> - a change in the way one thinks feels and understands <b>I Information Processing</b> - our minds are like computers <b>C Constructivism</b> - what we learn is constructed in our minds based on experience
Levels of Learning 2-13	<b>R Rote</b> - the ability to repeat back answers with out necessarily understanding the meaning <b>U Understanding</b> - where the student comprehends or grasps the nature or meaning <b>A Application</b> - putting what is understood into use <b>C Correlation</b> - associating what has been learned with previous things that have been taught
Characteristics of Learning 2-16	<b>P Purposeful</b> - learning must have purpose and it is different for each student <b>E Experience</b> - we learn from personal experience and we react and learn differently from the same experience <b>A Active Process</b> - for students to learn they need to react and respond to what is being taught <b>M Multifaceted</b> - we learn through multiple ways including; memory, feelings, attitudes and actions
Factors How People Learn 2-6, 2-8, 2-29	<b>P Perceptions</b> - giving meaning to stimuli from the senses. perceptions change based on experiences <b>I Insights</b> - grouping perceptions into meaningful wholes <b>M Motivation</b> - the reason we behave or act a certain way and is the basis of our goals
Defense Mechanisms to Student Learning 1-6	<b>D Denial</b> - refusal to accept reality because it is too threatening <b>R Repression</b> - placing uncomfortable thoughts into inaccessible areas of the unconscious mind <b>D Displacement</b> - unconscious shift of emotion from original object(person) to a more acceptable less threatening one <b>R Rationalization</b> - subconscious method to justify unacceptable actions <b>C Compensation</b> - disguising weakness by focusing on strengths in other areas <b>P Projection</b> - blaming mistakes and unacceptable impulses on some one else <b>R Reaction Formation</b> - faking a belief opposite to the true belief to avoid anxiety <b>F Fantasy</b> - daydreaming to escape from reality
Senses How People Learn	<b>S Sight - 75%</b> <b>H Hearing - 13%</b> <b>T Touch - 6%</b> <b>S Smell - 3%</b> <b>T Taste - 3%</b>
Retention of Learning 2-35	<b>A Attitude</b> - positive attitudes aid in retention <b>A Association</b> - it is easier to remember something if it associated with something else <b>M Meaningful Repetition</b> - practice makes perfect as long as it has purpose and is not overdone <b>M Mnemonics</b> - using patterns of letters, ideas and visual images to assist in remembering <b>P Praise</b> - positive response promotes repeated behavior <b>S Senses</b> - all of our senses aid in the retention of learning
Theories of Forgetting 2-34	<b>F Fading</b> - forgetting information that is not used over time <b>I Interference</b> - new events displace what has already been learned <b>R Retrieval Failure</b> - inability to retrieve information (tip-of-the-tongue) <b>R Repression</b> - unconscious forgetting as result of negative feelings associated with the memory <b>S Suppression</b> - conscious forgetting as a result of negative feelings associated with the memory
Principals Applied to Learning a Skill 2-20	<b>A Associative</b> - taking steps and placing them together through practice to get desired results <b>C Cognitive</b> - learning based on factual knowledge <b>A Automatic Response</b> - when the skill becomes second nature
Transfer of Learning 2-36	<b>+</b> <b>Positive</b> <b>-</b> <b>Negative</b>
Factors That Affect Perceptions 2-6	<b>P Physical Organism</b> - perceptual apparatus for sensing the world around them. Our senses affect our perceptions <b>O</b> <b>G Goals and Values</b> - we perceive things differently based on our individual goals and values <b>S Self-Concept</b> - how we look at ourselves affects how we learn and take in information <b>E Element of Threat</b> - things that are threatening adversely affect the learning process <b>T Time and Opportunity</b> - having time to learn and the opportunity to apply what has been learned
Human Needs (Maslow's Pyramid) 1-4	<b>P Physiological</b> - Human biological needs; air food, sleep, water <b>S Security</b> - the need to feel safe and free from harm <b>B Belonging</b> - the need to overcome feelings of loneliness and alienation <b>E Esteem</b> - feeling good about one's self <b>C Cognitive</b> - humans need to understand what is going on around them <b>A Aesthetic</b> - emotional need of simply liking or disliking with no need for explanation <b>S Self-Actualization</b> - the need to do what we are born to do

## TEACHING

Steps in the Teaching Process 4-4, 4-8, 4-22	<p><b>P Preparation</b> - determine objectives and standards. Using syllabus, PTS or other training materials</p> <p><b>P Presentation</b></p> <p><b>A Application</b> - student using what the instructor has presented</p> <p><b>R Review</b> - go over what has been covered and evaluate how well lesson objectives have been met</p>
Demonstrated Performance Methods 4-21	<p><b>E Explanation</b> - Explain the maneuver specific to the individual student</p> <p><b>D Demonstration</b> - Instructor demonstrates the maneuver to the student</p> <p><b>S Student Performance</b> - Allowing student to perform the maneuver while providing <b>Instructor Supervision</b></p> <p><b>I Instructor Supervision</b> - providing instruction as needed while student performs the maneuver</p> <p><b>E Evaluation</b> - judge student performance, review and provide positive critique</p>
Characteristics of an Effective Critique 5-3	<p><b>F Flexible</b> - critique must be specific to the situation and the individual student</p> <p><b>A Acceptable</b> - the student needs to accept the instructor in order to accept the assessment willingly</p> <p><b>S Specific</b> - be specific in what needs to be corrected and how it needs to be corrected</p> <p><b>T Thoughtful</b> - be straight forward and honest but always consider the students feelings</p> <p><b>C Comprehensive</b> - be complete but not to the point of excessiveness</p> <p><b>O Objective</b> - base the critique on the performance. Be honest and leave personal opinions and biases out of the critique</p> <p><b>C Constructive</b> - give constructive criticism and credit when credit is due</p> <p><b>O Organized</b> - make sure assessment follows a pattern and makes sense</p>
Rules to Good Human Relations or How to Minimize Student Frustrations 7-4 * <b>CHECK RIDE*</b>	<p><b>M Motivated</b> - keeping students motivated will help them to stay focused and want to learn more</p> <p><b>I Informed</b> - let students know what is going on what is going to happen and what is expected of them</p> <p><b>I Individuals</b> - treat each student as an individual</p> <p><b>C Credit</b> - give credit when credit is due</p> <p><b>C Consistent</b> - always provide the same type of feedback. What is acceptable one day should be acceptable the next</p> <p><b>C Constructive</b> - provide explanations for student errors and how they can be corrected</p> <p><b>E Errors</b> - be willing to admit errors that you make to students</p>
Communication Barriers 3-4	<p><b>I Interference</b> - outside factors including physiological, environmental and psychological</p> <p><b>L Lack of Common Experience</b> - content may have different meanings to individuals based on their experiences</p> <p><b>O Over Use of Abstractions</b> - word that generalize as oppose to being specific</p> <p><b>C Confusion</b> - when a word is confused with what it is suppose to represent</p>
Guided Discussion Method 4-13	<p><b>L Lead-off</b> - get discussion started</p> <p><b>F Follow-up</b> - to guide and continue the conversation</p> <p><b>O Overhead</b> - directed to the whole group</p> <p><b>R Rhetorical</b> - stimulates group thought and then gives the answer</p> <p><b>D Direct</b> - directed to a specific person</p> <p><b>R Reverse</b> - used in response to a student question</p> <p><b>R Relay</b> - asked by student and instructor has another student respond</p>
Lecture Methods 4-10	<p><b>B Briefing</b> - a overview of facts and information with out getting into specific details</p> <p><b>F Formal</b> - to inform and persuade with little or no input from the students</p> <p><b>I Illustrated</b> - using visual aids</p> <p><b>T Teaching</b> - allows for active student participation added attention must be given to student reactions</p>
Decision Making Process	<p><b>P Perceives</b></p> <p><b>P Processes</b></p> <p><b>P Performs</b></p>
Types of Questions to Avoid 5-11	<p><b>B Bewilderment</b> - using a question to stump a student by over complexity</p> <p><b>T Toss-up</b> - picking on thing or another</p> <p><b>O Oversized</b> - the all encompassing question</p> <p><b>P Puzzle</b> - taking many variables and making the student choose what to do first</p> <p><b>I Irrelevant</b> - questions that are unrelated to what is being taught</p> <p><b>T Trick</b> - causes a battle of wits with the instructor</p>
Characteristics of an Effective Oral Question 5-11	<p><b>I One Correct Idea</b></p> <p><b>A Apply</b> - to the subject matter that is being taught</p> <p><b>A Adapted</b> - to the student(s) based on ability and training</p> <p><b>B Brief</b> - and concise, but also clear and definite</p> <p><b>C Challenge</b></p>
Characteristics of an Effective Written Test 5-4	<p><b>C Comprehensive</b> - the test should be complete and measure the overall objective</p> <p><b>U Usable</b> - test set up is straight forward and easy for students to understand and take</p> <p><b>R Reliable</b> - consistent results with repeated measurements</p> <p><b>V Valid</b> - it tests and evaluates what it is suppose to</p> <p><b>O Objective</b> - singleness of scoring while eliminating instructor biases (Multiple choice vs. essay)</p> <p><b>D Discriminating</b> - establish differences between students based on scores, difficulty and achievement</p>

**PROFESSIONALISM**

Characteristics of Professionalism 7-2  
**\*CHECK RIDE\***

- S Sincerity** - be straight forward and honest
- A Acceptance** - accept the student for who they are
- D Demeanor** - a professional image requires a calm, thoughtful and disciplined demeanor
- S Safety** - safety always comes first and foremost
- A Appearance** - dress the part
- P Proper Language** - avoid overuse of profanity and obscene gestures
- S Self-improvement** - always looking for ways to improve and grow as instructors

Aviation Instructor Responsibilities 7-5  
**\*CHECK RIDE\***

- P Provide adequate instruction**
- E Establish standards of performance**
- E Emphasize the positive**
- C Consider safety at all times**

Flight Instructor Responsibilities 7-5  
**\*CHECK RIDE\***

- P Provide student pilot evaluation and supervision**
- P Prepare practical test recommendations and endorsements**
- D Determine requirements for conducting additional training and endorsement requirements**

**FAR MEMORY ITEMS**

Day Required Equipment 91.205

- T Tachometer**
- O Oil Temp**
- M Manifold Pressure**
- A Altimeter**
- T Temp Gauge**
- O Oil Pressure**
- F Fuel Indicator**
- L Landing Gear Indicator**
- A Airspeed**
- M Magnetic Compass**
- E ELT**
- S Seat Belt**

Night VFR Equipment 91.205

- F Fuses or Circuit Breakers**
- L Landing Light (if for hire)**
- A Anti-collision Lights**
- P Position Lights**
- S Source of Power**

Private Pilot Hour Requirements 61.109

- 40 Total Flight Time**
- 20 Dual Instruction**
  - 3 hours cross country**
  - 3 hours night with one cross country over 100NM total distance. 10 night takeoffs and landings to a full stop**
  - 3 hours instrument**
  - 3 hours of flight training for practical test preparation within 60 days of the test**
- 10 Solo**
  - 5 Hours cross country with one flight of at least 150NM with full stop landings at 3 airports 1 LEG 50 + NM apart**
  - 3 takeoffs and landings to a full stop at an airport with an operating control tower**

61.56a **Flight Review Requirements**

61.39a.6. i, ii, iii **Prerequisites for Practical Tests**

**FARS BY CHAPTER**

Part

- 1 Definitions and Abbreviations**
- 43 Maintenance**
- 61 Certification - How to get pilot licenses and certifications**
- 67 Medical Standards - How to get a medical**
- 91 General Operating and Flight Rules - How to lose your license**
- 141 Pilot Schools**
- 49 NTSB 830 and Identification Requirements for Students both foreign and domestic**