

CFI ACS Companion

Area of Operation I | Task C

The Teaching Process

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This companion document breaks down every element of the CFI ACS Area of Operation I, Task C: Course Development, Lesson Plans, and Classroom Training Techniques. Each knowledge element, risk management item, and skill demonstration is mapped to the Aviation Instructor's Handbook Chapters 5, 7, and 9 with page references.

Primary Sources: Aviation Instructor's Handbook (FAA-H-8083-9B), Chapters 5, 7 & 9; Flight Instructor ACS (FAA-S-ACS-25); 8900.1 Volume 5, Chapter 2, Section 1 (Scenario-Based Evaluation); FOI & FIA Written Exams (FAA Testing Matrix)

Testing Rules: At least one knowledge element (plus any missed on the FOI written). At least one risk management element. All skill elements. Scenario-based evaluation to the maximum extent possible (8900.1). The underlying private/commercial ACS questions are also fair game.

AOO I Note: The evaluator must select Task E, Task F, and at least one other task for initial flight instructor applicants. For add-on ratings or reinstatements, FOI coverage is at the evaluator's discretion.

Why Task C Is Effectively Required: Area of Operation IV, Task A (Technical Subject Knowledge Areas) overlaps almost completely with Task C. Think of it as concentric circles — Task C lives inside AOO IV Task A. Since the evaluator must test AOO IV Task A on every checkride, you will almost certainly demonstrate Task C content whether it is formally selected or not. Design your lesson plans to cover both simultaneously.

KNOWLEDGE ELEMENTS

K1 — The Teaching Process

FI.I.C.K1

K1A: The Teaching Process

AIH Chapter 5, pp.5-1

The teaching process has four steps: preparation, presentation, application, and assessment. This is an iterative cycle, not a one-shot sequence — you teach, assess, and loop back through the process until the student meets the standard.

Bob the Maintenance Instructor: Chapter 5 opens with Bob, an aviation maintenance instructor, arriving early to prepare his classroom — checking lighting, organizing notes, testing his computer and slides, counting handouts. Then he teaches weight and balance: he presents the concept with safety examples, has the class work a problem together as a group, then assigns one to solve independently. Preparation → Presentation → Application → Assessment, all in one lesson. That sequence is the teaching process.

K1B: Essential Teaching Skills

AIH Chapter 5, pp.5-1 to 5-3

Four categories of essential teaching skills:

- **People skills** — Rapport, communication, reading the room.
- **Subject matter expertise** — You don't have to know everything, but you need to know where to find everything. Think of yourself as a librarian, not an encyclopedia.
- **Assessment skills** — Knowing whether the student actually learned it. Build a circle of trust: debrief, self-assess, get honest feedback. On a checkride, 100% of what the DPE does is assessment.
- **Management skills** — Planning, organizing, leading, and supervising the training environment.

The Librarian Analogy: You don't need to memorize every page of the AIH. You need to know that the AIH exists, which chapter covers what, and how to find the answer quickly. A great instructor is a great librarian — they know where the knowledge lives.

K2 — Course of Training

FI.I.C.K2

AIH Chapter 5, pp. 5-4 and Chapter 7, pp 7-1

A course of training is a complete, organized series of studies leading to a specific goal — a certificate, rating, or endorsement. Think of the entire private pilot syllabus from day one through checkride. It defines the overall structure that individual lesson plans and blocks of learning fit into.

K3 — Preparation of a lesson

FI.I.C.K3

K3A: Training objectives and completion standards

AIH Chapter 5, pp.5-5

Aviation training involves two types of objectives: performance-based and decision-based. Performance-based objectives help define exactly what needs to be done and how it is done during each lesson. As the learner progresses through higher levels of performance and understanding, the instructor should shift the training focus to decision-based training objectives. Decision-based training objectives rely on a more dynamic training environment and are ideally

suited to scenario-based training and teach aviation learners critical thinking skills, such as risk management and aeronautical decision-making (ADM).

K3B: Performance-Based Objectives

AIH Chapter 5, pp.5-5 to 5-6

Performance-based objectives have hard numbers attached. They are measurable and binary — the student either meets the number or doesn't. Example: maintain altitude within ± 100 feet, airspeed within ± 10 knots. These are the black-and-white standards you can point to in the ACS.

K3C: Importance of the ACS in Aviation Training

AIH Chapter 5, pp.5-6

The ACS contains all performance-based and decision-based criteria for a given certificate or rating. It is the single authoritative document that defines what a student must demonstrate. Know how to read it, know how to identify which type each element is, and build your training around it.

K3D: Decision-based objectives

AIH Chapter 5, pp 5-7

Decision-based objectives are subjective — they deal with risk management, ADM, and judgment. The PAVE checklist (Pilot, Aircraft, enVironment, External pressures) is the classic framework. There is no single right answer; the evaluator is looking for a sound decision-making process, not a specific number.

Know the Difference: On the ACS, you need to identify which elements are performance-based (hard numbers) and which are decision-based (risk management / judgment). The examiner may ask you to classify them.

K4 — Organization of Material

FI.I.C.K4

AIH Chapter 5, pp.5-9 to 5-10

Four principles for organizing instructional material:

- Past to present — Build on what came before.
- Simple to complex — Straight-and-level before chandelles.
- Known to unknown — Connect new concepts to existing knowledge (cognitive theory from EP2).
- Most frequently used to least used — Prioritize what the student will use most often in the real world.

K5 — Teaching Methods

FI.I.C.K5

K5A: Lecture

AIH Chapter 5, pp.5-10 to 5-13

The most traditional delivery method. Should be rehearsed — practice teaching out loud before you do it for real. A lecture that isn't rehearsed tends to ramble. This is the method most new instructors default to, and the one that benefits most from preparation.

K5B: Discussion / Guided Discussion

AIH Chapter 5, pp.5-13 to 5-16

Great for emergency procedures and scenario-based training. The instructor guides the conversation with questions rather than delivering a monologue. Think of the Air Force stand-up model: the instructor presents a scenario and the students talk through it. The instructor steers, but the students do the thinking.

Stand-Up Example: Present a partial-panel engine failure scenario. Ask the students what they would do first, second, third. Guide the discussion toward the correct procedures without simply telling them the answer.

K5C: Cooperative / Group Learning

AIH Chapter 5, pp.5-21

Useful in ground school settings where you have multiple students. Students teach each other, work through problems together, and learn from peer interaction. Less common in one-on-one flight instruction but valuable in a classroom environment.

K5D: Demonstration and Performance

AIH Chapter 5, pp.5-21 to 5-22

The five phases: explanation, demonstration, learner performance, instructor supervision, and evaluation. This is the bread-and-butter method for flight instruction — explain the maneuver, demonstrate it, let the student try, supervise their attempts, and evaluate the result.

K5E: Drill and Practice

AIH Chapter 5, pp.5-22 to 5-23

Thorndike's law of exercise in action. Repetition strengthens skills. Emergency procedures are the classic example — you drill engine failures until the response is automatic. The goal is moving from the cognitive stage to automatic response through deliberate repetition.

K6: E-Learning

AIH Chapter 5, pp.5-18 to 5-20

Covers BATDs (Basic Aviation Training Devices), AATDs (Advanced Aviation Training Devices), and FTDs (Flight Training Devices). Unsupervised e-learning leaves gaps — a student doing self-paced online ground school without instructor interaction will miss things. Training devices are generally better for instrument training than VFR because the instrument environment is easier to replicate accurately.

Key Point: E-learning and training devices supplement instruction — they don't replace it. A student who only does online ground school without an instructor to fill in the gaps will have holes in their knowledge.

K7 — Instructional Aids and Training Technologies

FI.I.C.K7

AIH Chapter 5, pp.5-23 to 5-27

Instructional aids are supplements, not substitutes. Don't use them as a crutch. The classic mistake: reading your PowerPoint slides word-for-word to the class. If you're doing that, you're not instructing — you're projecting a document.

- K7A — Types of instructional aids (models, charts, diagrams, videos)
- K7B — Reasons for using aids (enhance understanding, save time)
- K7C — Guidelines for effective use (match the aid to the specific point)
- K7D — Types of training technologies (simulators, CBT, multimedia)

The PowerPoint Rule: An instructional aid should support a specific point you are making. If you can't explain what point the aid supports, you don't need it. And if you're reading your slides to the class, the slides are doing the teaching — not you.

K8: Integrated Flight Instruction

AIH Chapter 9, pp.9-10 to 9-11

Teach students to use both outside visual references and instruments from the very beginning. Don't condition a VFR student to fixate on instruments, but don't ignore them either. The goal is a pilot who naturally cross-references instruments while maintaining visual awareness — not one who has to unlearn bad habits later for instrument training.

K9: Problem-Based Learning

AIH Chapter 5, pp.5-16 to 5-17

Present problems with no single correct solution. NTSB accident reports are perfect for this — real-world scenarios with real consequences. The ACE Guide's CAROL search feature lets you find accident reports by ACS element, giving you ready-made case studies to use in training.

CAROL Search: The ACE Guide's Case-study And Real-world Outcomes Library (CAROL) links NTSB reports to specific ACS elements. Search by element code to find relevant accident scenarios for any topic you're teaching.

K10 — Course Development Components

FI.I.C.K10

K10A: Blocks of Learning

AIH Chapter 7, pp.7-2 to 7-3

Building-block units within a course of training. Each block stands alone as a teachable unit but connects to the blocks before and after it. Think of the private pilot syllabus: straight-and-level is a block, turns are a block, slow flight is a block — each builds on the previous one.

K10B: Training Syllabus

AIH Chapter 7, pp.7-3 to 7-7

The roadmap for the entire course of training. It defines the sequence of blocks, the order of lessons, and the overall flow from enrollment to checkride. A good syllabus is a living document that adapts to the student while maintaining structure.

K10C: Lesson Plans

AIH Chapter 7, pp.7-7 to 7-10

The unit-level blueprint. Five characteristics of a good lesson plan: unity (one central theme), content (the material itself), scope (appropriate depth for the time available), practicality (can actually be taught in the real world), and flexibility (adapts to the student's needs in real time).

The Brick Wall Analogy: A lesson plan is the blueprint for building a wall. The bricks are your lesson plan, your references, and your visual aids. The mortar is your knowledge as an instructor — the context, the connections, the stories that hold the bricks together. Without the mortar, you just have a pile of bricks.

RISK MANAGEMENT ELEMENTS

You must demonstrate at least one risk management element. Task C has only one, so it will always be tested if this task is selected.

R1: Selection of a Teaching Method Appropriate to the Student and Content

FI.I.C.R1 | AIH Chapters 5 & 9

Don't jump straight to demonstration and performance without ensuring the student has the underlying knowledge first. Example: before demonstrating steep turns, teach the why — lift vectors, load factor, increased stall speed, maneuvering speed, accelerated stalls. The teaching method must match both the content being taught and the student's current level of understanding.

SKILL ELEMENTS

You must demonstrate all of the following skill elements.

S1: Prepare an Instructional Lesson Plan

FI.I.C.S1

This is the umbrella skill element. You must be able to develop a complete lesson plan that covers an aeronautical knowledge topic (S1A) and a maneuver introduction (S1B). The lesson plan demonstrates unity, content, scope, practicality, and flexibility.

S1A: Aeronautical Knowledge Ground Lesson

FI.I.C.S1A | AIH Chapter 9

Teach the why before the how. Before a student ever flies steep turns, they need to understand lift vectors, load factor, how stall speed increases in a bank, why maneuvering speed matters, and what an accelerated stall is. The ground lesson builds the conceptual foundation that makes the flight lesson meaningful.

Steep Turns Example: Don't start with "bank to 45 degrees and add back pressure." Start with why the airplane needs more back pressure (load factor), why stall speed increases (lift vector geometry), why you fly at or below maneuvering speed (structural protection), and what happens if you exceed the critical angle of attack in a bank (accelerated stall). Now the student understands why they're doing what they're doing.

S1B: Maneuver Introduction and Ground Lesson

FI.I.C.S1B | AIH Chapter 9

Cover four components: entry (how to set up the maneuver), execution (what to do during the maneuver), common errors (what typically goes wrong), and completion standards (the ACS tolerances). Use visual aids — diagrams, whiteboard drawings, models — to show what the maneuver looks like from outside the airplane. The student should be able to describe the entire maneuver on the ground before attempting it in the air.

WALKTHROUGH SCENARIO

This scenario demonstrates how Task C elements apply in a practical lesson-planning context. The evaluator may ask you to plan and present a lesson during the oral exam.

The Setup: You are a newly certificated CFI at a Part 61 flight school. Your first student is a zero-time private pilot candidate. The chief instructor hands you the school's syllabus and says: "Plan the ground and flight lesson for the student's introduction to slow flight. They've completed four dual lessons covering straight-and-level, turns, climbs, and descents."

Skill S1A — Aeronautical Knowledge Ground Lesson

Before the flight, build the conceptual foundation. The student already knows straight-and-level and basic maneuvering — connect the known to the unknown (K4, organization of material). Explain why slow flight matters: it teaches the student how the airplane behaves near stall speed, which is where accidents happen. Cover the aerodynamics: angle of attack increasing, induced drag rising, the back side of the power curve. Use a whiteboard to draw the lift-drag relationship. This is the "why before the how" approach that makes the flight lesson meaningful.

Skill S1B — Maneuver Introduction

Walk through the maneuver on the ground: entry (power reduction, pitch attitude, configuration), execution (maintaining altitude and heading while managing airspeed near V_{s1}), common errors (fixating on airspeed indicator, over-controlling, altitude deviations), and completion standards from the ACS. Use a model airplane or diagram to show the pitch attitude visually. The student should be able to describe the entire procedure before they touch the airplane.

Risk Management R1 — Teaching Method Selection

The student has four flights of experience. Jumping straight to demonstration-performance without the ground lesson would skip the foundational knowledge. Start with a brief lecture on the aerodynamics (K5A), use guided discussion to connect slow flight to what they've already experienced in flight (K5B), then move to demonstration-performance in the airplane (K5D). The progression matches the student's level and the content complexity.

QUICK REFERENCE — AOO I, TASK C

Code	Element	Source
K1A	The teaching process	AIH Ch 5, pp.5-1
K1B	Essential teaching skills	AIH Ch 5, pp.5-1 to 5-3
K2	Course of training	AIH Ch 7, pp.7-1
K3A	Performance-based objectives	AIH Ch 5, pp.5-5
K3B	Decision-based objectives	AIH Ch 5, pp. 5-5 to 5-6
K3C	Importance of ACS in training	AIH Ch 5, pp. 5-6
K4	Organization of material	AIH Ch 5, pp.5-9 to 5-10
K5A	Lecture	AIH Ch 5, pp.5-10 to 5-13
K5B	Discussion / guided discussion	AIH Ch 5, pp.5-13 to 5-16
K5C	Cooperative / group learning	AIH Ch 5, pp.5-21
K5D	Demonstration and performance	AIH Ch 5, pp.5-21 to 5-22
K5E	Drill and practice	AIH Ch 5, pp.5-22 to 5-23
K6	E-learning	AIH Ch 5, pp.5-18 to 5-20
K7	Instructional aids (K7A-D)	AIH Ch 5, pp.5-23 to 5-28
K8	Integrated flight instruction	AIH Ch 9, pp.9-10 to 9-11
K9	Problem-based learning	AIH Ch 5, pp.5-16 to 5-17
K10A	Blocks of learning	AIH Ch 7, pp.7-2 to 7-3
K10B	Training syllabus	AIH Ch 7, pp.7-3 to 7-7
K10C	Lesson plans	AIH Ch 7, pp.7-10 to 7-10
R1	Selection of teaching method	AIH Ch 5 & 9
S1	Prepare instructional lesson plan	—
S1A	Aeronautical knowledge ground lesson	—
S1B	Maneuver intro / ground lesson	—

VSL ACE Guide: Every ACS element links directly to the source material. Green buttons take you straight to the right page in the AIH, AFH, and dozens of other FAA documents. Get the ACE Guide at vslaviation.myshopify.com