



COMBINED COMMERCIAL & FLIGHT INSTRUCTOR SYLLABUS



Arlynn McMahon

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INTRODUCTION

Why a Combined Program

Let's face it, after completing the instrument course you were worn out. The instrument is so long and arduous that many are not excited about facing two additional exhaustive training programs. This combined commercial/flight instructor syllabus reduces the burden and is a more efficient use of your time, energy, and money. For the industry, facing yet another shortage of flight instructors, it provides a fast track for those local, mature pilots who are not airline-bound and would love the opportunity to share their passion and experience with others.

80% of the material covered in the Commercial Pilot Course is a repeat of the Private Pilot material and then it is repeated again in the Flight Instructor Course. Information on knowledge exams is very close. The big difference is that as a commercial candidate the material is reviewed, while as a flight instructor candidate you learn to teach it. Why do the job twice? Why not review the material while learning to teach it?

Even in flight the maneuvers are nearly the same except that in the flight instructor course you perform them from the right seat. However, newly certificated flight instructors often report that they don't feel completely comfortable flying and teaching from the right seat—they would like more hours flying from the right seat—without having to pay for them! So, why not initially learn commercial maneuvers while flying from the right seat?

Why You Care About the Author of Your Syllabus

Arlynn McMahon was Chief Flight Instructor for 30 years at a robust 141/61 flight school with satellites on three airports. Under her direction, the school trained 1,000s of pilots and hired 100s of flight instructors. It was common for new flight instructors to work at her flight school for five years or more. They earned better than average wages, experienced aviation adventures of all kinds and were excited about their aviation lives. Her philosophy was to produce "aviation citizens and work-ready instructors." Graduates launched successful, long-term, aviation careers spanning every branch of the military, every major airline around the world, in the DOT/FAA/NTSB and in Fortune 500 corporate flight departments. Some she hired in her business, others started their own aviation businesses.

Additionally, McMahon has served on the FAA General Aviation Joint Steering Committee (GAJSC), was an active member of the National Association of Flight Instructors (NAFI) served on the Board of Directors and was National Chief Flight Instructor Mentor for the Society of Aviation and Flight Professionals (SAFE).

The author brings this top-gun experience and philosophy to your training in this syllabus. Hang on; this is not the normal aviation training experience. You're gonna love it.

Course Objectives

With this syllabus you'll acquire the necessary flight proficiency to meet the requirements for an initial commercial pilot certificate and an initial flight instructor certificate with an airplane category and single-engine land class rating.

The objective of this course is to weave learning the material with teaching the material. By learning to teach the material you are better equipped to apply the information later on.

Another objective of this course is to make you an aviation citizen and a work-ready professional. As a pro pilot, you'll be flying to never-been-before places; in never-flown-before airplanes. This means you'll need to know not only WHAT to think, but HOW to think through never-experienced-before problems and managing never-met-before people. This course teaches you to think like an experienced pro pilot so that you may be worthy of a higher than average wage as you compete with others for the best aviation clients, the most lucrative aviation assignments, flying the most exciting airplanes.

This syllabus is designed to be used in a Part 61 training environment, completed within 60 days. However, it can easily accommodate part-time training by reducing the number of training hours per week or it can be accelerated. A commercial pilot certificate is a prerequisite to enrolling in the flight portion of a Part 141 flight instructor course. However, portions of this syllabus: the ground training, the scenarios and the concepts used in training, can easily be incorporated into an approved training environment.

Hey, You! Yeah, I'm Talking to You!

The word “you” is used throughout this syllabus because this is your training—the learner, the student, the customer—the future aviation professional. Every opportunity is harnessed to provide you with new and varied experiences that will build your confidence and competence. The focus is on You! We know you want to do your best. This syllabus will guide your training but success is up to You!

What's Expected of You

You are expected to think. No super-intelligence is necessary. But participating in the role-playing and completing the pre-flight assignments are key in developing the ability to think like an experienced pro pilot; the key to good aeronautical decision-making.

During your first appointment with the instructor, you will review your logbook and compare your experience to the required 14 CFR §61.127 aeronautical experience. With this information, you'll know how many total hours are needed. Knowing your total hours, you will participate in making a Training Plan (*see* Appendix page 89). Once the Training Plan is completed, you can establish a budget (page 92). After the budget is done, you and the instructor will sign a Training Agreement (page 93). Then training will begin.

Prerequisites

You must:

- Hold at least a private pilot certificate with airplane single engine land with an airplane instrument rating.
- Possess at least a current third class medical certificate during training and practical exams (...but you'll need at least a second class medical once you're ready for work.)
- Be at least 18 years of age—but more than that, you must be emotionally mature enough to accept a little tough-love critique and to deal with people respectfully in a working, business relationship... many of whom will be much older than you
- Know how to work: meaning, that you are disciplined in being punctual for appointments and in following-thru on promises; you know how to self-direct learning tasks; and, you're willing to put in extra effort when necessary to meet deadlines and goals.
- Have a Spin Endorsement. It's preferred that your spin endorsement be done in something more like an Aerobat or a Citabria rather than a Stearman or an Extra300. Granted, the latter are way more cool but an airplane having flight characteristics similar to one you'll be instructing in, is valuable. It's recommended that your spin endorsement be completed within six months of your initial flight instructor practical exam—the endorsement never expires, but this assures you don't forget the finer points of the spin training.

It is recommended that FAA knowledge exams be passed before enrolling, preferably within six months of your initial flight instructor practical exam. Just buy the test prep material and get the tests done. You are required to pass three exams:

- Commercial Pilot Airplane (CAX)
- Fundamentals of Instruction (FOI)
- Flight Instructor Airplane (FIA)

Additionally, it's recommended that you have logged at least 221 hours of flight time before enrolling. Otherwise, plan to do some extra flying outside of the syllabus. This syllabus will provide 29 hours of flight time. On the first meeting with your instructor, you'll compare your logged experience against CFR 61.127 to develop a complete list of aeronautical experience requirements you have met or will need to meet before graduation.

Aeronautical Experience in this Syllabus

This syllabus includes 29 dual hours in a complex airplane, during which you will usually occupy the right seat, including a daytime, 2-hour, 100 NM cross-country flight and a nighttime, 2-hour, 100 NM cross-country flight. You are usually PIC during training flights, logging PIC time to the extent possible. No solo time is included. If you choose to solo, be aware that some airplanes require the PIC to occupy the left seat. This may affect your ability to fly from the right seat when solo. It may also restrict your ability to be PIC during training. Your instructor will help you to determine your status of PIC before each flight.

The FAA does not allow a “combined checkride.” Two separate practical exams are planned in this syllabus: a commercial and a flight instructor. With the consent of the Designated Pilot Examiner, in an airplane where the manufacture does not require the PIC to occupy the left seat, your commercial practical exam may be conducted with you flying from the right seat. Your instructor will communicate with the examiner in advance, so you'll not have any last minute surprises.

There are no block quizzes. The FAA Knowledge Exams demonstrate your knowledge. There are no progress checks. Your commercial practical test is a good indication of training that may be necessary as you continue toward the flight instructor practical test.

Grades Used in Training

NOTE: Only the letter in the () will appear on lesson plans.

- **Explain (E)**—At this level, you can discuss the topic and understand its underlying concepts. In flight, you are pilot-in-command but transfer of controls to the instructor for correction of technique is routine.
- **Practice (R)**—You understand what to do and how to do it—but prompting from the instructor is necessary. In flight, transfer of controls to the instructor is seldom; as you quickly identify and correct your own errors. If you hear “watch your altitude”, “get back on heading”, or while as the instructor in training “you forgot to remind your student to complete the checklist”, this would be an indication that you are at this level.
- **Perform (P)**—You approach aviation with a businesslike attitude. You gather pertinent information, identify possible courses of action, evaluate risks and make appropriate decisions. You are the decision-maker. You discuss the task correctly, clearly and concisely without prompting. You complete inflight maneuvers to commercial practical test standards while simultaneously explaining them. You complete individual tasks while maintaining an overall big-picture situational awareness. As an instructor, you recognize and leverage unscheduled learning opportunities.
- **Manage (M)**—You plan and design an efficient flight experience to meet objectives. You handle multiple priorities while maintaining situational awareness. As the instructor, you apply effective instruction techniques. You bring multi facets to each new learning opportunity and you prevent instructional surprises by anticipating student errors. You perform nearly all of the “instruction” in the cockpit.
- **Not Observed (NO)**—Any task not accomplished or observed.

Training Record

Each lesson plan is designed to document training, with grades and notes, to serve as a training record. Additionally, a Training Summary Chart is provided in the Appendix (page 94).

Personal Material Needed

- TSA acceptable proof of US citizenship
- Your driver's license, pilot certificate and medical certificate
- Not required, but a laptop and a thumb-drive would be nice, but don't purchase one just for this training
- Flying equipment—headsets, sunglasses, E6-B and plotter, VFR NavLogs, kneeboard, view limiting device, fuel checker, checklists, airport diagrams, etc.

Required Materials

There are a number of great training books available but FAA handbooks are recommended for technical subject area reference. Your teaching techniques and procedures must conform to the information set forth in these handbooks. These handbooks are the references used by the FAA and examiners in evaluating your performance and the performance of customers you train.

A new instructor must have reference material that is easy to use and well organized. Each of the required materials is available from online suppliers, but it is recommended that new flight instructors purchase books and charts—real paper stuff. This allows you to yellow highlight important information and to make personal notes in margins. After certification, then it is preferred to use online resources to maintain materials up to date. We're not against using modern online resources; but we know what works best for you during training. Verify that you have the current edition!

- Local VFR sectional chart
- POH/PIM/AFD for your training airplane
- *Train Like You Fly* by Arlynn McMahon
- *Lesson Plans to Train Like You Fly* by Arlynn McMahon
- *The Savvy Flight Instructor* by Greg Brown
- FAR/AIM Book
- *Aviation Instructor's Handbook* (FAA-H-8083-9)
- *Airplane Training Handbook* (FAA-H-8083-3)
- *Pilot's Handbook of Aeronautical Knowledge* (FAA-H-8083-25)
- Advisory Circular 61-65
- Practical Test Standards, Sport Pilot
- Practical Test Standards, Recreational Pilot
- Practical Test Standards, Private Pilot
- Practical Test Standards, Commercial Pilot
- Practical Test Standards, Flight Instructor
- A voice recording device for teaching rehearsals
- An email address

Recommended Materials

- File crate or flight bag on rollers to organize, store in one place and transport flight instructor tools. Save your back while being professional!
- Textbook highlighter

- Large 3-ring binder or expanded file
- Small toy airplane
- *Commercial Pilot Oral Exam Guide* by Michael D. Hayes
- *Flight Instructor Oral Exam Guide* by Michael D. Hayes

Resources—Plane, Instructor, and Examiner

A complex airplane is used for each lesson. The preferred airplane does not require the PIC to occupy the left seat. The instructor must meet the requirements of §61.195(h) to train initial flight instructors. Select an examiner that will allow the commercial practical test to be conducted with the applicant occupying the right seat.

Hours Allocation Table

	Ground Instruction	Self Study	Dual Flight
In Phase 1 You will...			
On the Ground: You will be introduced to scenario-based training. You'll learn how to write a lesson briefing and you'll start teaching on the ground while reviewing technical subject areas.			
In the Plane: You'll review private pilot maneuvers while earning a complex aircraft endorsement and become familiar with flying from the right seat.			
GND 1: Course Orientation	3.0	2.0	
GND 2: Introduction to Teaching—The Teaching & Learning Process	2.0	2.0	
GND 3: Visual Scanning, Collision & Runway Incursion Avoidance	1.0	4.0	
GND 4: Weather Information	2.0	2.0	
GND 5: Principles of Flight & Airplane Flight Controls	2.0	5.0	
FLT 1.1: Selling Your Airplane	1.0	4.0	1.5
GND 6: Regulations & Publications	3.0	2.0	
GND 7: National Airspace System	1.0	4.0	
GND 8: Aeromedical Factors	1.0	2.0	
FLT 1.2: Your New Synthetic Vision	1.0	4.0	1.5
GND 9: Navigation and Cross-Country Flight Planning	1.0	4.0	
GND 10: Navigation Systems & Radar Services	1.0	2.0	
GND 11: Airplane Weight & Balance	1.0	3.0	
GND 12: Night Operations	1.0	2.0	
FLT 1.3: Dual Cross-Country Adventure	1.0	4.0	4.0
Phase Totals	22.0	46.0	7.0
In Phase 2 you will...			
On the Ground: Finish writing lesson briefings and practice teaching commercial maneuvers on the ground.			
In the Plane: Learn to think, act and fly as an aviation citizen and commercial pilot. You are not yet teaching in the plane, so just concentrate on flying with smoothness and accuracy.			
GND 13: Aircraft Documents	1.0		
GND 14: Airworthiness Requirements	1.0	2.0	
GND 15: Operation of Systems & Performance and Limitations	2.0	6.0	
GND 16: High Altitude Operations	1.0	2.0	
GND 17: Commercial Pilot Certification & PTS	2.0	1.0	
FLT 2.1: Power-Off 180° Accuracy Landing	1.0	6.0	1.0
FLT 2.2: Eights-On-Pylons	1.0	6.0	1.0
FLT 2.3: Steep Turns and Accelerated Stalls	1.0	6.0	1.0
FLT 2.4: Steep Spiral	1.0	4.0	1.5
FLT 2.5: Chandelle	1.0	4.0	1.5
FLT 2.6: Lazy Eight	1.0	4.0	1.5
FLT 2.7: Simulated Engine Failure	1.0	4.0	1.5
FLT 2.8: Review as Necessary	1.0	2.0	2.0
FLT 2.9: Mock Commercial Practical Exam	3.0	2.0	1.5
FAA Commercial Pilot Practical Exam	—	—	1.5
Phase Totals	18.0	49.0	14.0

In Phase 3 you will...

On the Ground: You will learn to plan instructional activities, apply the fundamentals of instruction, give effective instruction and to provide adequate student supervision.

In the Plane: You will start teaching during flight and become a work-ready flight instructor.

GND 18: Instructor Responsibilities & Professionalism	2.0	2.0	
GND 19: Techniques of Flight Instruction	1.0	1.0	
GND 20: Effective Communication, Assessment & Critique	2.0	1.0	
GND 21: Risk Management & Liability Reduction	2.0	1.0	
GND 22: Pilot Certificates	2.0	3.0	
GND 23: Logbook Entries, Endorsements, 8710 & IACRA	2.0	2.0	
FLT 3.1: Effective Instruction...In the Cockpit, On the Ground	2.0	1.0	
FLT 3.2: Effective Instruction...In Flight	1.0	1.0	1.5
FLT 3.3: Effective Instruction...A Complete Lesson	1.0	1.0	1.5
FLT 3.4: Supervising a Student Pilot...Initial Solo	1.0	1.0	1.0
FLT 3.5: Supervising a Student Pilot...Faulty Landings	1.0	2.0	1.0
FLT 3.6: Mock Flight Instructor Practical Exam	6.0	2.0	1.5
FLT 3.7: Final Polish	2.0	2.0	1.5
Phase Totals	25.0	20.0	8.0
Syllabus Totals	65.0	115.0	29.0

As you can see, this course is heavy in ground training and in self-study assignments. You should expect to commit 209 hours all total to complete this training. Refer to the sample Training Plan in the Appendix (page 89) to see how these hours might best be scheduled in a training plan.

GROUND TRAINING

Ground 1: Course Orientation

The purpose of this lesson is to welcome you to our flight school and to help you become familiar with our personnel, facilities, airport, training airplane, environment and training philosophy. You'll learn about the resources organized to help you organize your time and money so that you have a great, enjoyable, hassle-free learning experience.

CONTENT

- Flight school tour, introduction to personnel, and invitation to upcoming social events
- Review of your training record for commercial pilot eligibility
 - Aeronautical experience, knowledge exams passed, current medical, TSA citizenship, etc.
- Training timelines, deadlines, goals, and challenges for you, the school and/or instructor(s)
- The role of the instructor(s)...you might have more than one!
- What's expected of you
- Training Plan (page 89), Training Budget (page 92), and Training Agreement (page 93) signed
- Use of online resources
- Training syllabus overview, define "work-ready instructor"
- Grading
- Scenario-based training
- The role of Practical Test Standards in this training
- Review of safety policies and procedures
- How to amend your reserved assets (plane, instructor, classroom, etc) and schedule
- How to communicate with us if you should become disenchanted
- Customer lockers—where to store your stuff
- Where to get snacks, refreshment, and meals

Out at the plane...

- Checklists for the training airplane. Use of checklists—read-and-do versus do-then-verify
- General training airplane interior and cockpit familiarization
- Exterior preflight inspection—how-to
- Aircraft inspection status and INOP equipment reporting procedures
- Training Manifest (*see* Appendix page 96)
- Airport taxi diagram, primary runways, where to runup, refueling, etc.

ASSIGNMENT

1. Become familiar with the lesson plans in Phase 1
2. Read the assignment for your first flight, "Selling Your Airplane" in the Appendix (page 98)
3. Your assigned airport is _____
4. Your instructor's weight (including headset/flightbag, etc.) is _____ lbs
5. Read the article on Maneuvers Setup in the Appendix (page 97)
6. Procure any last minute needed materials and get yourself settled in

COMPLETION

This lesson is complete when:

1. You and the instructor have agreed on the status of your eligibility to meet the aeronautical requirements of a commercial pilot; you have made a training plan and signed the training agreement.
2. All discussion items are complete.

Your Initials _____ **Date:** ____/____/____