



UNIVERSITY *of*
DUBUIQUE

PRIVATE PILOT
TRAINING COURSE OUTLINE



UNIVERSITY *of* DUBUQUE

PRIVATE PILOT TRAINING COURSE OUTLINE

UNIVERSITY of DUBUQUE

This is to certify that

_____ is enrolled in the FAA approved

PRIVATE PILOT CERTIFICATION COURSE

conducted at the University of Dubuque

School #GV8S178Q

_____ Enrollment Date

_____ Primary Flight Instructor

_____ Chief Flight Instructor

PRIVATE PILOT CERTIFICATION COURSE

STUDENT FLIGHT RECORD

University of Dubuque / 2000 University Ave / Dubuque, IA 52001

FTN #

AIR AGENCY CERTIFICATE NO. GV8S178Q

Pilot 's Legal Name _____ SODA DOB _____

Pilot 's Official Signature _____

CITIZENSHIP

I certify that _____ has presented to me a _____

(Certified Birth Certificate or U.S. Passport), establishing that he / she is a U.S. Citizen or national in accordance with 49 CFR 1552.3 (h).

Instructor _____ Date _____

Cert.# _____ Exp. _____

PERMANENT ADDRESS

Street _____ City _____ State _____ Zip _____

Phone: Home _____ Cell _____

ENROLLMENT

Date of Enrollment _____ Date Completed _____

Medical Certificate: Class _____ Date Issued _____ Expires _____

Student Pilot Certificate No. _____ Date Issued _____ Expires _____

Pre-Solo Written Exam: Date _____ Score _____

SOLO ENDORSEMENTS

MAKE _____ MODEL _____ DATE _____ INSTRUCTOR _____

MAKE _____ MODEL _____ DATE _____ INSTRUCTOR _____

MAKE _____ MODEL _____ DATE _____ INSTRUCTOR _____

SOLO CROSS-COUNTRY ENDORSEMENTS

1ST: DATE _____ ROUTE _____ INSTRUCTOR _____

2ND: DATE _____ ROUTE _____ INSTRUCTOR _____

3RD: DATE _____ ROUTE _____ INSTRUCTOR _____

GRADUATION RECORD

FAA KNOWLEDGE TEST: DATE _____ SCORE _____

END-OF-COURSE GRADUATION: DATE _____ RESULT _____

END-OF-COURSE EXAMINER _____

RECORDS CERTIFIED COMPLETE AND ACCURATE

DATE _____ NAME _____ TITLE _____

PREVIOUS EXPERIENCE

DUAL _____

NIGHT SOLO _____

SOLO _____

NIGHT LANDINGS _____

X-C DUAL _____

HOOD _____

X-C SOLO _____

ACTUAL IFR _____

NIGHT DUAL _____

FLIGHT TRAINING DEVICE _____

EVALUATION

FLIGHT / ORAL BY _____ DATE _____

TITLE _____

CREDIT GIVEN

GROUND HOURS: Part 141 _____ Part 61 _____ HOURS AWARDED _____

FLIGHT HOURS: Part 141 _____ Part 61 _____ HOURS AWARDED _____

TERMINATION OF TRAINING

DATE _____

CERTIFIED BY _____

CHIEF INSTRUCTOR

CERTIFICATE NO.

TRANSFERRED

SCHOOL _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

TRANSFER DATE _____

AIR AGENCY NO. _____

COPY ISSUED TO STUDENT: DATE _____ BY _____

List of Effective Pages

This list of effective pages shows the standing of all pages in this syllabus with regard to their revision status. The list shows the page number, the revision number and the date of the revision.

Revised pages in this syllabus will include a change bar (|) on the side of the page where changes have been made.

The Revision Process

1. Revise the pages in question.
2. Make two copies of the revised pages.
3. Correct this "List of Effective Pages" to reflect the revised pages.
4. Make two copies of this corrected "List of Effective Pages".
5. Send all four copies to the local Flight Standards District Office for approval.
6. Insert corrected pages in all syllabus copies when approval is granted.

<u>Page</u>	<u>Revision</u>	<u>Revision Date</u>	<u>Page</u>	<u>Revision</u>	<u>Revision Date</u>
14a	Revision 20	09-15-2019	37b	Revision 15	07-14-2016
15	Revision 20	09-15-2019	38	Revision 14	05-31-2016
15a	Revision 20	09-15-2019	38a	Revision 20	09-15-2019
16	Revision 3	06-18-2012	39	Revision 18	09-01-2018
16a	Revision 20	09-15-2019	39a	Revision 18	09-01-2018
17	Revision 3	06-18-2012	40	Revision 18	09-01-2018
17a	Revision 20	09-15-2019	41	Revision 1	08-03-2009
18	Revision 2	06-18-2012	42	Revision 17	01-08-2018
18a	Revision 20	09-15-2019	43	Revision 17	01-08-2018
19	Revision 4	01-09-2014	44	Original	05-31-2002
19a	Revision 3	06-18-2012	45	Revision 17	01-08-2018
20	Revision 18	09-01-2018	46	Revision 17	01-08-2018
20a	Revision 20	09-15-2019	47	Revision 17	01-08-2018
21	Original	05-31-2002	48	Revision 17	01-08-2018
22	Revision 20	09-15-2019	49	Original	05-31-2002
23	Revision 3	06-18-2012	50	Revision 17	01-08-2018
23a	Revision 20	09-15-2019	51	Revision 17	01-08-2018
24	Revision 11	07-18-2014	52	Revision 17	01-08-2018
24a	Revision 20	09-15-2019	53	Revision 17	01-08-2018
25	Revision 3	06-18-2012	54	Revision 17	01-08-2018
25a	Revision 20	09-15-2019	55	Revision 17	01-08-2018
26	Revision 18	09-01-2018	56	Revision 17	01-08-2018
26a	Revision 20	09-15-2019	57	Revision 17	01-08-2018
27	Revision 20	09-15-2019			
27a	Revision 20	09-15-2019			
28	Revision 11	07-18-2014			
28a	Revision 20	09-15-2019			
29	Revision 11	07-18-2014			
29a	Revision 20	09-15-2019			
30	Revision 18	09-01-2018			
30a	Revision 20	09-15-2019			
31	Original	05-31-2002			
32	Revision 20	09-15-2019			
33	Revision 4	06-18-2012			
33a	Revision 20	09-15-2019			
34	Revision 11	07-18-2014			
34a	Revision 20	09-15-2019			
35	Revision 3	06-18-2012			
35a	Revision 20	09-15-2019			
36	Revision 20	09-15-2019			
36a	Revision 20	09-15-2019			
37	Revision 20	09-15-2019			
37a	Revision 15	07-14-2016			

<u>Page</u>	<u>Revision</u>	<u>Revision Date</u>
1	Original	05-31-2002
2	Original	05-31-2002
3	Revision 20	09-15-2019
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5	Revision 21	05-13-2021
6	Revision 19	06-01-2019
7	Revision 20	09-15-2019
7a	Revision 21	05-13-2021
8	Revision 14	05-31-2016
9	Revision 20	09-15-2019
10	Original	05-31-2002
11	Original	05-31-2002
12	Revision 20	09-15-2019
13	Revision 18	09-01-2018
14	Revision 3	01-09-2014

**FAA APPROVED - OFFICE CE01
SIGNATURE & EFFECTIVE DATE:**

TRAINING COURSE OUTLINE

LOCATION

The University of Dubuque, located at 2000 University Avenue, Dubuque, Iowa, 52001, holds Air Agency Certificate No. GV8S178Q. The University of Dubuque operates its pilot training school at the Dubuque Regional Airport, Dubuque, Iowa.

COURSE TITLE

Private Pilot Certification Course—Airplane Single-Engine Land

This Training Course Outline meets all the curriculum requirements for the Private Pilot Certification Course contained in Appendix B of Title 14 Code of Federal Regulation Part 141 (14 CFR Part 141). This syllabus contains separate flight training and ground training sections, which can be taught concurrently or separately.

COURSE OBJECTIVE

Students will gain the knowledge, skill and aeronautical experience necessary to meet the requirements for a Private Pilot Certificate; Airplane Single-Engine Land.

COURSE COMPLETION STANDARDS

To meet the course completion standards, students must demonstrate through knowledge, oral, flight tests, and appropriate records, that they meet the knowledge, skill and experience requirements necessary to acquire a Private Pilot Certificate, airplane category, single-engine land class rating.

MAIN OPERATIONS BASE

The Dubuque Regional Airport is the main operations base for training in this course. The airport has hard-surface runways and meets the requirements of 14 CFR 141.38 for day and night operations. Fuel services and maintenance services are available weekdays during normal working hours. Weekend and after hours fuel and maintenance are available on request.

MAIN OPERATIONS FACILITY

The school's primary flight facility is the Babka Flight Center, 10656 Airport Road, located at the Dubuque Regional Airport, Dubuque, Iowa 52003. This building conforms to the requirements of 14 CFR 141.43 for briefing areas and 14 CFR 141.45 for ground training facilities. This permanent structure has 10 briefing areas of at least 6' by 7' and 14 additional office/training rooms with a maximum number of two students per area. Each briefing/training room will have communications capabilities for contacting a Flight Service Station. The building has Wi Fi capabilities for students and instructors to access weather and flight planning applications online.

GROUND INSTRUCTIONAL FACILITIES

The primary ground instructional facilities are in the Babka Flight Center, located at the Dubuque Regional Airport, Dubuque, Iowa 52003. This facility has three classrooms with a capacity of 24 students in each. The building and rooms are heated, lighted, and ventilated to conform to local building, sanitation, and health codes.

Based on enrollment and class formats, ground schools may also be conducted on the main campus of the University of Dubuque located at 2000 University Avenue, Dubuque, Iowa 52001. The University of Dubuque is accredited by the North Central Association of the Council for Higher Education. The University's classrooms meet the requirements of the Association and conform to local building, sanitation and health codes. Campus classrooms and computer labs are available in the Myers Library, Blades Hall, Alumni Hall, Dunlap Technology Center, MTAC, Mercer-Birmingham, and the University Science Center. Classrooms range in size from 142 seats in the Dunlap Technology Center to 6 seats in the Myers library.

GROUND INSTRUCTIONAL EQUIPMENT / TRAINING AIDS

Training aids and equipment used may include the following: Whiteboards, televisions, podium, LCD/Overhead projector with screen, laptop and/or desktop and/or tablet computers, computer/video interface units for TV/LCD projector. Other aids may include airplane models, airplane parts, instrument panel posters, aviation software, multiple aviation websites, E6B flight computer, plotter, navigation charts, Instrument Terminal Procedures, and EFB's. These aids and equipment will be kept accurate and current for the relevant course of training.

An Advanced Aviation Training device (AATD) may be used in this course as outlined in 14 CFR 141 and AC 61-136. An aircraft may be used to fulfill the instrument training requirement of those lessons if the training devices are not available or desired.

TRAINING DEVICES

The FRASCA Mentor, FRASCA RTD, Redbird SD, and an ALSIM AL250 are approved Advanced Aviation Training Devices that are available for training in accordance with their respective FAA Letter of Authorization.

AIRCRAFT

Cessna 172 aircraft are available for flight training.

For day, VFR, local area flight within 25 nautical miles of Dubuque Regional Airport or an approved satellite base, an airplane can be dispatched when it meets the requirements of 14 CFR 91.205 (a)(b), and has a serviceable communications radio.

For night, VFR, local area flight within 25 nautical miles of Dubuque Regional Airport or an approved satellite base, an airplane can be dispatched when it meets the requirements of 14 CFR 91.205 (a)(c), and has a serviceable communications radio, and a serviceable landing light.

For flight outside the local area, the airplane must meet the above requirements and also be equipped with at least one serviceable VOR navigational receiver, or one panel mounted GPS receiver.

PERSONNEL

The Chief Instructor for the Private Pilot Certification Course meets the requirements for Chief Instructor as listed in the 14 CFR 141.35 and has been approved by the local FAA Flight Standards District Office.

When course enrollments and individual availabilities warrant such appointments, the University of Dubuque will request the appointment of other key personnel such as; Assistant Chief Instructors, Check Instructors and Chief Ground Instructors. All requested appointees will meet the requirements of the appropriate sections of 14 CFR 141.35, Subpart B.

Flight instructors will have a Certified Flight Instructor, Airplane Single Engine Land rating, will have received standardization, and will receive recurrent training annually.

CHIEF AND ASSISTANT CHIEF INSTRUCTORS

The Chief Flight Instructor for the Private Pilot Airplane Certification Course is Ms. Suzanne Peterson certificate #2801778.

The Chief Ground Instructor for the Private Pilot Airplane Certification Course is Ms. Polly Kadolph certificate #3689827.

The following persons have been authorized as Assistant Chief Flight Instructors for the Private Pilot Course: Mr. Michael J. Glynn certificate #2883378, Mr. Robert Anthony (Tony) Foster certificate #3213651, Mr. Kyle F. Jones certificate #3755779, Mr. Jack D. Erickson certificate #3891398, and Mr. Ching-Kuan Su certificate #3540078.

ENROLLMENT PREREQUISITES

Students must be able to write, read, speak, and understand the English language and possess an Aviation Medical Certificate prior to enrolling in the flight portion of the Private Pilot Certification Course. Students are required to obtain a Student Pilot Certificate prior to their first solo flight.

ENROLLMENT PROCEDURE

Students will be required to show a certified birth certificate or a U.S. passport establishing U.S. citizenship or national in accordance with 49 CFR 1552.3 (h). A copy of the proof of citizenship or U.S. national will be kept on file in the student's TCO. Alien flight students must apply online and be granted approval from TSA to begin flight training.

Upon enrollment in the flight portion of the training syllabus students will be issued a Certificate of Enrollment showing the date of enrollment and the course entered. Students will also receive a copy of the approved training syllabus. Students may enter the ground portion of the syllabus prior to or during the flight portion. Enrollment certificates and syllabi will be retained at UD Flight Operations at all times unless otherwise directed by the Chief Instructor. Students will have access to a copy of the University of Dubuque Student Flight Operations Manual which outlines the school's operational and safety procedures.

CREDIT FOR PREVIOUS 14 CFR PART 141 PILOT TRAINING

Flight credit may be transferred from other certificated schools to the University of Dubuque's flight program based on an oral test, flight check, written test, or any combination thereof. Students must arrange for the transmittal of flight records from the previous school to the University of Dubuque. The University will determine the amount of credit to be transferred. Credit will be entered in the student's training record along with the documents and tests on which the acceptance is based. The maximum credit given may be up to 50% of the University's approved curriculum requirements.

CREDIT FOR PREVIOUS 14 CFR PART 61 PILOT TRAINING

Flight credit may be transferred from 14 CFR Part 61 schools to the University of Dubuque's flight program based on an oral test, flight check, written test or any combination thereof. Students should submit a record of previous training from the school where it was received. The University will determine the amount of credit to be transferred. Credit will be entered in the student's training record along with the documents and tests on which the acceptance is based. The maximum credit given may be up to 25% of the University's approved curriculum requirements.

GRADING SYSTEM FOR FLIGHT TRAINING

GRADE STANDARD

- 3.....Meets Airman Certification Standards
- 2.....Meets Lesson Standards
- 1.....Needs Additional Training
- D.....Demonstration
- S.....Solo Flight

The above grading standard will be used to evaluate student performance. Grades will be entered on each lesson page. At the completion of each stage of training the students will be examined orally and by flight evaluation. Upon successful completion of the evaluation the student will proceed to the next stage of flight training.

AIRPORTS USED

The airports listed below are approved for use by the University of Dubuque, 14 CFR Part 141 Private Pilot students for the purpose of solo cross-country flights, to satisfy the requirements of the school 's Private Pilot Certification Course syllabus.

Mileage to these airports is indicated.

IOWA

Cedar Rapids (CID) - 54
 Decorah (DEH) - 69
 Iowa City (IOW) - 59
 Independence (IIB) - 55
 Muscatine (MUT) - 65
 Oelwein (OLZ) - 58
 Vinton (VTI) - 60
 Waterloo (ALO) - 75

ILLINOIS

Freeport (FEP) - 50
 Moline (MLI) - 58
 Sterling (SQI) - 60

WISCONSIN

Reedsburg (C35) - 65
 Monroe (EFT) - 51
 Lone Rock (LNR) - 54
 Madison (MSN) - 53
 Baraboo (DLL) - 70

Other airports may be selected by a student, but those airports must be approved by a university flight instructor, considering the following:

1. 3000 ' recommended minimum runway length
2. Availability of 100LL aviation gasoline.

Instructors must ensure that all airports used meet the requirements of Title 14 CFR Part 141.38 (b) (c) (d) (e) and (f).

REVIEW LESSON PROCEDURE

During training, students may need to do additional work on lessons, or review past lessons. If an instructor needs additional lesson pages the instructor will:

- Copy a blank lesson page for the lesson concerned
- Use the copied page to record the review or additional work
- Write the word " Review " in a prominent place on the copied lesson page
- Place the added lesson page(s) sequentially behind the original lesson page

	Dual Flight	Solo Flight	Dual X-Country	Solo X-Country	Dual Night	Instrument	AATD* (Inst.)
STAGE 1	12.0	0.0	0.0	0.0	0.0	1.0	0.9
STAGE 2	10.0	2.5	5.0	0.0	3.0	1.0	0.8
STAGE 3	4.0	4.0	0.0	2.0	0.0	1.0	0.8
TOTALS	26	6.5	5.0	2.0	3.0	3.0	*2.5

Total minimum Private Pilot flight training time is 35.0 hours

26 hrs + 6.5 hrs + *2.5 hrs = 35.0 hours

*A maximum of 2.5 hours may be used in an AATD.

HOW TO USE THIS SYLLABUS

1. This syllabus was designed to be a reasonable complete list of the tasks required for the completion of each lesson. The list of tasks relieves the instructor of having to remember all of the things that should be covered and rated in each lesson. At first, the number of tasks may seem daunting; however, they flow in a natural progression from start to finish and should cause little additional load on the instructor. Some tasks may be accompanied by italicized notes. These notes are additional memory helps for the instructor, student and check pilot.
2. At the top left of each lesson page is a block labeled "HOURS". There are three white blocks inside the black "HOURS" block. Each lesson allows for three flights or briefings. You should put the time for each flight or briefing in one of the white boxes. When a lesson is completed, that is, when every task in the lesson has a grade of "2" or better, the instructor should total up the time for the lesson and enter it at the bottom of the page in the cumulative times area.
3. Each task in a lesson has three blank lines to the left. These lines are for recording the rating of each task. Every task in a lesson must receive a rating of "2" or better before the lesson can be considered complete. If a lesson requires more than three flights or briefings to complete the lesson, the instructor will insert and use blank copies of the original lesson to record further flights or briefings, until the lesson is satisfactorily completed.
4. Lessons may require the instructor's and the student's signature or initials, along with the date, airplane type, and airplane "N" number at the completion of each flight or briefing.
5. The cumulative times area at the bottom of each lesson is self-explanatory. It is the instructor's and the student's combined responsibility to make sure this area is accurately filled out, not at the conclusion of each flight or briefing, but at the conclusion of each lesson. Be sure to carry the "TOTAL" time for a finished lesson to the "PREVIOUS" time on the next lesson.
6. The "TIME" requirement at the top of each lesson is the time required for the student to stay "on track", time wise, throughout the syllabus. A lesson may be completed with somewhat less than the approximate time noted, but this time must then be made up in later lessons if the student is to finish the syllabus with the required amount of time, this is, 35 flight / FTD hours. Stage Checks, Lessons 7 and 15, have hours noted at the bottom of the cumulative time area. These hours are listed so instructors will know the approximated hours each student should have when they reach that lesson. Having more hours than required is not a problem. Having fewer hours than suggested is cause for the instructor to be aware of the situation and work to ensure that the student finishes the syllabus with the required number of hours. On reaching Lesson 21, the required minimum hours are listed. If a student DOES NOT have these hours then they cannot be sent for a Rating Check. The instructor will have to continue with review lessons until the minimum time is met..
7. We will use the "read and do" system when doing checklists. All checklists denoted by a \surd , are to be read aloud by the student; and the checklist item being read must be touched as it is read to confirm the item's correctness of position. This procedure instills consciousness of task and thoroughness in the student. If students do not "read and do" and touch the checklist items they should be instructed to repeat the checklist.
8. All hold short lines are to be called aloud and noted aloud as to whether or not the airplane has permission to cross.

ABBREVIATIONS

acft	aircraft	PMC	pre-maneuver checklist
airspd	airspeed	MRA	Manufacturer' s recommended airspeed
alt	altitude	nav	navigation
approx	approximately	obs	omni bearing selector
ARROW	Airworthiness, registration, radio license (international) , operator ' s manual, weight and balance	ops	operations
ATC	Air Traffic Control	pre	before
CG	center of gravity	prep	preparation
comm	communication	pwr	power
Cs	constant speed	req	required
cx	correction	sim	simulated
dist	distance	TACs	Terminal Area Charts
equip	equipment	TC	true course
ETA	estimated time of arrival	VHF	very high frequency
FAA	Federal Aviation Association	VR-IR	Integrated flight training using visual and instrument reference
freq	frequency / frequencies	vol	volume
FSS	Flight Service Station	VOR	very high freq, omnidirectional, radio range
FTD	Flight Training Device	Vx	best angle of climb
GPS	Global Positioning System	Vy	best rate of climb
hdg	heading	WACs	World Aeronautical Charts
hr	hour	xctry	cross country
ID	identify	xmitter	transmitter
inop	inoperative	xwind	crosswind
inst	flight solely by reference to instruments while using a view limiting device	√	The aircraft checklist will be used

PRIVATE PILOT CERTIFICATION

Training Course Outline

STAGE ONE

Initial Flight Training

Lessons 1—7

12.0 hours (approx) of dual flight training

1.0 hours (approx) of instrument flight training (Aircraft)

0.9 hours (approx) of Advanced Aviation Training Device (AATD)

Stage One Objectives

The student will be instructed in basic flying procedures necessary for the first solo flight.

Stage One Completion Standards

This stage will be complete when the student meets all lesson standards and satisfactorily performs the Stage One Check.

Hours		

AIRPORT OPERATIONS— (BRIEFING)

OBJECTIVE: Students will become familiar with the Dubuque Regional Airport, approved satellite bases, and procedures/materials used in the Private Pilot Certification Course.

TIME: As required

AIRPORT ENVIRONMENT

- ___ ___ ___ Runways
- ___ ___ ___ Runway markings
- ___ ___ ___ Taxiways
- ___ ___ ___ Taxiway markings
- ___ ___ ___ RUNWAY INCURSIONS
- ___ ___ ___ HOLD SHORT LINES
(Clearances)
- ___ ___ ___ Ramp areas/operations
- ___ ___ ___ Ramp markings
- ___ ___ ___ UD flight practice areas

AIRPORT SERVICES

- ___ ___ ___ UD Flight Operations facilities
- ___ ___ ___ Airport administrative facilities
- ___ ___ ___ Airport maintenance facilities
- ___ ___ ___ Aviation security
- ___ ___ ___ Aircraft maintenance facilities
- ___ ___ ___ Fueling facilities
- ___ ___ ___ Weather facilities
- ___ ___ ___ Aircraft storage facilities

AIR TRAFFIC CONTROL FACILITIES

- ___ ___ ___ Tower
- ___ ___ ___ Communication frequencies
- ___ ___ ___ LAHSO
- ___ ___ ___ Navigation facilities

TRAINING COURSE MATERIALS

- ___ ___ ___ Flight Operations Manual
- ___ ___ ___ Training Course Outline
- ___ ___ ___ Standardization manual
- ___ ___ ___ UD Safety Manual
- ___ ___ ___ Aircraft Flying Manual
- ___ ___ ___ Enrollment paperwork
- ___ ___ ___ Airman Certification Standards
- ___ ___ ___ Checklist usage

COMPLETION STANDARDS

The lesson will be complete when:

1. The student has been shown the airport environment.
2. The student has been tutored on the provided course materials.
3. The student' s enrollment papers have been completed.

Instructor

Student

Date

Hours		

PRIVATE PILOT LESSON 1— (DUAL) BASIC MANEUVERS

OBJECTIVE: The student will be introduced to, and practice piloting skills for activities listed.

TIME: Approximately 3.0 hours including approximately 0.5 hours of instrument training.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS

- ___ ___ ___ Discussion of this lesson
- ___ ___ ___ Checklist usage
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ Collision avoidance
- ___ ___ ___ ADM and risk management
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ Positive exchange of flight controls

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Forced landings, ditching
- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical malfunctions

PREFLIGHT

- ___ ___ ___ Cockpit / taxi brief
- ___ ___ ___ Certificates & documents—*ARROW*
- ___ ___ ___ Preflight inspection √
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—*freq, vol, xmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind*
- ___ ___ ___ Climbs √ - *turn, Cs (Vx, Vy, cruise), VR-IR*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level-off from climb—*VR-IR*
- ___ ___ ___ Cruise √

BASIC MANEUVERS

- ___ ___ ___ Straight & level—*VR-IR*
- ___ ___ ___ Level turns—*shallow, medium, VR-IR*
- ___ ___ ___ Tracking a straight line—*wind cx, VR-IR*
- ___ ___ ___ Engine checks
- ___ ___ ___ Traffic checks
- ___ ___ ___ Descents √ - *turns, Cs, hi/low drag, VR-IR*
- ___ ___ ___ Level-off from descent—*VR-IR*

EMERGENCY PROCEDURES √ (Practical review)

- ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
- ___ ___ ___ Landing with a flat tire
- ___ ___ ___ Forced landings—*power, no power*

**PRIVATE PILOT LESSON 1— (DUAL) BASIC MANEUVERS
(CONTINUED)**

LANDING

- ___ ___ ___ Approach—*location, communication*
- ___ ___ ___ Pattern entry / traffic pattern
- ___ ___ ___ Landing ✓
- ___ ___ ___ Landing clearance—*copy, confirm, comply*
- ___ ___ ___ Stabilized approach
- ___ ___ ___ Slips to a landing
- ___ ___ ___ Flaps 0° - 10° - 20° - 30°
- ___ ___ ___ Landings—*normal, crosswind*
- ___ ___ ___ Roundout—*height, crosswind cx*
- ___ ___ ___ Touchdown—*drift, centerline, full stall*
- ___ ___ ___ Go around ✓
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Runway incursion avoidance
- ___ ___ ___ Taxi ✓ - *wind, speed, braking, hazards*
- ___ ___ ___ Shutdown ✓

POSTFLIGHT

- ___ ___ ___ Postflight inspection of aircraft
- ___ ___ ___ Debrief / update syllabus and logbook

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±300 feet
2. Headings and rollouts ±20°
3. Airspeed within ±20 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 2—(AATD or ACFT) GROUND AND FLIGHT PROCEDURES

OBJECTIVE: The student will be introduced to standard ground and flight procedures.

TIME: Approximately 0.9 hour of instruction.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of this lesson
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ Collision avoidance
- ___ ___ ___ SRM
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ Positive aircraft control

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Forced landings, ditching
- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical—*over-voltage light, ammeter discharge*

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates & documents—*ARROW*

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—*freq, vol, xmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Level-off from climb—*VR-IR*
- ___ ___ ___ Cruise √

BASIC MANEUVERS

- ___ ___ ___ Straight & level—*VR-IR*
- ___ ___ ___ Level turns—*VR-IR*
- ___ ___ ___ Tracking a straight line—*wind cx*
- ___ ___ ___ Engine checks / Traffic checks
- ___ ___ ___ Descents √ - *turns, Cs, hi/low drag, VR-IR*
- ___ ___ ___ Level-off from descent—*VR-IR*

EMERGENCY PROCEDURES √ (Practical review)

- ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
- ___ ___ ___ Landing with a flat tire
- ___ ___ ___ Forced landings—*power, no power*

SHUTDOWN

- ___ ___ ___ Shutdown √

POSTFLIGHT

- ___ ___ ___ Postflight inspection of aircraft
- ___ ___ ___ Debrief / update syllabus and logbook

**PRIVATE PILOT LESSON 2— (AATD or ACFT) GROUND AND FLIGHT PROCEDURES
(CONTINUED)**

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ± 300 feet
2. Headings $\pm 20^\circ$
3. Airspeed ± 20 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 3— (DUAL) GROUND REFERENCE MANEUVERS

OBJECTIVE: The student will apply previously learned skills to Ground Reference Maneuvers.

TIME: Approximately 2.5 hours including approximately **0.5 hours of instrument training.**

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of this lesson
- | ___ ___ ___ ADM and risk management
- ___ ___ ___ Wake turbulence / wind shear
- | ___ ___ ___ Positive aircraft control
- ___ ___ ___ Collision avoidance
- ___ ___ ___ RUNWAY INCURSION avoidance
- | ___ ___ ___ CFIT/wire strike avoidance

EMERGENCY PROCEDURES ↓ (Oral review)

- ___ ___ ___ Forced landings, ditching
- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical—*over-voltage light, ammeter discharge*

PREFLIGHT

- ___ ___ ___ Cockpit ↓
- ___ ___ ___ Certificates & documents - ARROW
- ___ ___ ___ Preflight inspection ↓
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start ↓
- ___ ___ ___ Comm radio setup—*freq, vol, xmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- | ___ ___ ___ Taxi ↓ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- | ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup ↓

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff ↓
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind*
- ___ ___ ___ Climbs ↓ - *turn, Cs (Vx, Vy, cruise), VR-IR*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level-off from climb—*VR-IR*
- ___ ___ ___ Cruise ↓

BASIC INSTRUMENT FLIGHT (IR)

- ___ ___ ___ Level flight with turns
- ___ ___ ___ Climbs with turns
- ___ ___ ___ Descents with turns

GROUND REFERENCE MANEUVERS

- ___ ___ ___ PMC, emerg landing area, clearing turns
- ___ ___ ___ Rectangular patterns—*wind, dist, altitude*
- ___ ___ ___ Turns around a point—*wind, dist, altitude*
- ___ ___ ___ S-Turns—*wind, dist, altitude*
- ___ ___ ___ Traffic watch / instrument check

EMERGENCY PROCEDURES ↓ (Practical review)

- ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
- ___ ___ ___ Landing with a flat tire
- ___ ___ ___ Forced landings—*power, no power*

**PRIVATE PILOT LESSON 3— (DUAL) GROUND REFERENCE MANEUVERS
(CONTINUED)**

LANDING

_____	_____	_____	Approach— <i>location, communication</i>
_____	_____	_____	Pattern entry / traffic pattern
_____	_____	_____	Landing ✓
_____	_____	_____	Landing clearance— <i>copy, confirm, comply</i>
_____	_____	_____	Stabilized approach
_____	_____	_____	Slips to a landing
_____	_____	_____	Flaps 0° - 10° - 20° - 30°
_____	_____	_____	Landings— <i>normal, crosswind</i>
_____	_____	_____	Roundout— <i>height, crosswind cx</i>
_____	_____	_____	Touchdown— <i>drift, centerline, full stall</i>
_____	_____	_____	Go around ✓
_____	_____	_____	Taxi clearance— <i>copy, confirm, comply</i>
_____	_____	_____	Runway incursion avoidance
_____	_____	_____	Taxi ✓ - <i>wind, speed, braking, hazards</i>
_____	_____	_____	Shutdown ✓

POSTFLIGHT

_____	_____	_____	Postflight inspection of aircraft
_____	_____	_____	Debrief / update syllabus and logbook

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±250 feet
2. Headings ±15°
3. Airspeed ±15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 4— (DUAL) ADVANCED FLIGHT MANEUVERS

OBJECTIVE: The student will apply previously learned skills to Advanced Flight Maneuvers.

TIME: Approximately 3.0 hours of flight instruction.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of this lesson
- ___ ___ ___ Positive aircraft control
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ ADM and risk management
- ___ ___ ___ Collision avoidance
- ___ ___ ___ LAHSO
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ Stall/spin awareness

TAXI

- ___ ___ ___ Taxi ✓ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup ✓

EMERGENCY PROCEDURES ✓ (Oral review)

- ___ ___ ___ Forced landings, ditching
- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical—*over-voltage light, ammeter discharge*
- ___ ___ ___ Emergency descent

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff ✓
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind*
- ___ ___ ___ Climbs ✓ - *turn, Cs (Vx, Vy, cruise), VR-IR*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level-off from climb—*VR-IR*
- ___ ___ ___ Cruise ✓

PREFLIGHT

- ___ ___ ___ Cockpit ✓
- ___ ___ ___ Certificates & documents—*ARROW*
- ___ ___ ___ Preflight inspection ✓
- ___ ___ ___ Airplane servicing

ADVANCED MANEUVERS

- ___ ___ ___ PMC, emerg landing area, clearing turns
- ___ ___ ___ Slow flight—*P-factor, torque, heading, alt*
- ___ ___ ___ Stalls—*power-off, power-on*
- ___ ___ ___ Spin awareness

STARTUP

- ___ ___ ___ Engine start ✓
- ___ ___ ___ Comm radio setup—*freq, vol, xmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

EMERGENCY PROCEDURES ✓ (Practical review)

- ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
- ___ ___ ___ Landing with a flat tire
- ___ ___ ___ Forced landings—*power, no power*
- ___ ___ ___ Emergency descent

**PRIVATE PILOT LESSON 4— (DUAL) ADVANCED FLIGHT MANEUVERS
(CONTINUED)**

LANDING

_____	_____	_____	Approach— <i>location, communication</i>
_____	_____	_____	Pattern entry / traffic pattern
_____	_____	_____	Landing ✓
_____	_____	_____	Landing clearance— <i>copy, confirm, comply</i>
_____	_____	_____	Stabilized approach
_____	_____	_____	Slips to a landing
_____	_____	_____	Flaps 0° - 10° - 20° - 30°
_____	_____	_____	Landings— <i>normal, crosswind</i>
_____	_____	_____	Roundout— <i>height, crosswind cx</i>
_____	_____	_____	Touchdown— <i>drift, centerline, full stall</i>
_____	_____	_____	Go around ✓
_____	_____	_____	Taxi clearance— <i>copy, confirm, comply</i>
_____	_____	_____	Taxi ✓ - <i>wind, speed, braking, hazards</i>
_____	_____	_____	Shutdown ✓

POSTFLIGHT

_____	_____	_____	Postflight inspection of aircraft
_____	_____	_____	Debrief / update syllabus and logbook

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±250 feet
2. Headings ±15°
3. Airspeed ±15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 5— (DUAL) TAKEOFFS AND LANDINGS

OBJECTIVE: The student will apply previously learned skills to takeoffs and landings and will learn to operate safely in the airport traffic pattern area.

TIME: Approximately 2.0 hours of flight instruction.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of this lesson
- | ___ ___ ___ SRM and ADM
- ___ ___ ___ Wake turbulence / wind shear
- | ___ ___ ___ Stall/spin awareness
- ___ ___ ___ Collision avoidance
- | ___ ___ ___ Positive aircraft control
- ___ ___ ___ RUNWAY INCURSION avoidance
- | ___ ___ ___ LAHSO

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Forced landings, ditching
- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- | ___ ___ ___ Electrical malfunctions
- | ___ ___ ___ Emergency descent

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates & documents—*ARROW*
- ___ ___ ___ Preflight inspection √
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—*freq, vol, xmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- | ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- | ___ ___ ___ Positive exchange of controls

TAXI (cont.)

- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind*
- ___ ___ ___ Climbs √ - *turn, Cs (Vx, Vy, cruise), VR-IR*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level-off from climb—*VR-IR*
- ___ ___ ___ Cruise √

CROSSWIND

- ___ ___ ___ Turn 90° ± *wind*
- ___ ___ ___ Check traffic
- ___ ___ ___ Level off at pattern altitude
- ___ ___ ___ Power for pattern speed
- ___ ___ ___ Trim

EMERGENCY PROCEDURES √ (Practical review)

- ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
- ___ ___ ___ Landing with a flat tire
- ___ ___ ___ Forced landings—*power, no power*
- ___ ___ ___ Emergency descent

DOWNWIND

- ___ ___ ___ Track straight downwind ± *wind*
- ___ ___ ___ Landing √
- ___ ___ ___ Check traffic and wind
- ___ ___ ___ Hold altitude
- ___ ___ ___ Landing clearance—*copy, confirm, comply*
- ___ ___ ___ Begin descent on the numbers

**PRIVATE PILOT LESSON 5— (DUAL) TAKEOFFS AND LANDINGS
(CONTINUED)**

BASE

___ ___ ___ Turn 90° \pm wind
 ___ ___ ___ Check traffic
 ___ ___ ___ Flaps, speed, trim, traffic

FINAL

___ ___ ___ Turn onto centerline \pm wind
 ___ ___ ___ Check traffic
 ___ ___ ___ Flap, speed, trim, traffic
 ___ ___ ___ Stabilized approach
 ___ ___ ___ Slips to a landing
 ___ ___ ___ Flaps 0° - 10° - 20° - 30°
 ___ ___ ___ Crosswind cx

LANDING

___ ___ ___ Go around \checkmark
 ___ ___ ___ Landings—*normal, crosswind*
 ___ ___ ___ Roundout—*height, crosswind cx*
 ___ ___ ___ Touchdown—*drift, centerline, full stall*
 ___ ___ ___ Taxi clearance—*copy, confirm, comply*
 ___ ___ ___ Runway incursion avoidance
 ___ ___ ___ Taxi \checkmark - *wind, speed, braking, hazards*
 ___ ___ ___ Shutdown \checkmark

POSTFLIGHT

___ ___ ___ Postflight inspection of aircraft
 ___ ___ ___ Debrief / update syllabus and logbook

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude \pm 250 feet
2. Headings \pm 15°
3. Airspeed \pm 15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 6— (BRIEFING) PRE-SOLO

OBJECTIVE: The student will demonstrate knowledge necessary to act as PIC on local solo flights.

TIME: As required.

PILOT ASSESSMENT

- ___ ___ ___ Hypoxia, hyperventilation
- ___ ___ ___ Dehydration, fatigue
- ___ ___ ___ Alcohol, drugs, carbon monoxide
- ___ ___ ___ Ear/sinus, vertigo, motion sickness
- ___ ___ ___ Emotional, immature behavior
- ___ ___ ___ SRM
- ___ ___ ___ ADM and risk management

CERTIFICATES—STUDENT

- ___ ___ ___ Syllabus correct
- ___ ___ ___ Verification of Student Certificate
- ___ ___ ___ Verification of Medical Certificate
- ___ ___ ___ Pre-solo Aeronautical Knowledge Test and Endorsement

DOCUMENTS—AIRPLANE

- ___ ___ ___ Operating limitations
- ___ ___ ___ ARROW
- ___ ___ ___ Airworthiness directives, Service Bulletins
- ___ ___ ___ Annual / 100 hr / Progressives

THE AIRPLANE

- ___ ___ ___ Checklist usage
- ___ ___ ___ Performance, limitations
- ___ ___ ___ Weight and balance
- ___ ___ ___ Ignition system
- ___ ___ ___ Electrical system
- ___ ___ ___ Cabin and carb heat
- ___ ___ ___ Fuel system
- ___ ___ ___ Oil system
- ___ ___ ___ Aircraft performance charts
- ___ ___ ___ Carburetor icing
- ___ ___ ___ Aircraft preflight
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Wake turbulence avoidance
- ___ ___ ___ Wind shear avoidance
- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Stall/spin awareness

THE FLIGHT ENVIRONMENT

- ___ ___ ___ Weather
- ___ ___ ___ TFRs and SUAs
- ___ ___ ___ Local geography—map the local area
- ___ ___ ___ Traffic pattern
- ___ ___ ___ Radio procedures
- ___ ___ ___ Lost procedures
- ___ ___ ___ Stall/spin awareness
- ___ ___ ___ Runway incursion avoidance

PART 61

- ___ ___ ___ Solo privileges
- ___ ___ ___ Solo limitations 61.89
- ___ ___ ___ Medical class & duration 61.23
- ___ ___ ___ UD solo procedures
- ___ ___ ___ Aviation security

PART 91

- ___ ___ ___ Pilot in command 91.3
- ___ ___ ___ Operating limitations 91.9
- ___ ___ ___ Reckless ops 91.13
- ___ ___ ___ Dropping objects 91.15
- ___ ___ ___ Alcohol / drugs 91.17
- ___ ___ ___ Preflight actions 91.103
- ___ ___ ___ Seatbelts & harnesses 91.107
- ___ ___ ___ Near other acft 91.111
- ___ ___ ___ Right-of-way rules 91.113
- ___ ___ ___ Aircraft speeds 91.117
- ___ ___ ___ Minimum altitudes 91.119
- ___ ___ ___ Altimeter setting 91.121
- ___ ___ ___ Light gun signals 91.125
- ___ ___ ___ Fuel req 91.151
- ___ ___ ___ Airspace 91.126-91.135
- ___ ___ ___ VFR minimums 91.155

**PRIVATE PILOT LESSON 6— (BRIEFING) PRE-SOLO
(CONTINUED)**

PART 91 (cont.)

- _____ CFIT and wire strike avoidance
- _____ Special VFR 91.157
- _____ VFR cruise altitudes 91.159
- _____ Operations of nav lights 91.209
- _____ Instr / equip req 91.205
- _____ ELTs 91.207
- _____ Inop equipment 91.213

EMERGENCY PROCEDURES / (Oral review)

- _____ Engine failure—*takeoff run, after takeoff, inflight*
- _____ Forced landings—*power, no power, ditching*
- _____ Fire—*startup, engine or electrical inflight, cabin, wing*
- _____ Emergency descent
- _____ Icing—*structural inflight, static port blockage, carb ice*
- _____ Landing—*with a flat tire*
- _____ Electrical malfunctions

**SYSTEMS AND EQUIPMENT MALFUNCTIONS
(Oral review)**

- _____ Partial or complete power loss
- _____ Engine roughness or overheat
- _____ Carburetor or induction icing
- _____ Loss of oil pressure
- _____ Fuel starvation
- _____ Electrical malfunction
- _____ Inoperative or runaway trim
- _____ Inadvertent door or window opening
- _____ Vacuum/pressure and associated flight instrument malfunction
- _____ Pitot/static
- _____ Landing gear or flap malfunction
- _____ Smoke/fire/engine compartment fire
- _____ Any other emergency appropriate to the airplane

COMPLETION STANDARDS

The student must demonstrate sufficient knowledge in the lesson areas to rate at least a 2 on each item and successfully complete the UD pre-solo exam.

Instructor

Student

Date

Hours		

PRIVATE PILOT LESSON 7 - (DUAL) STAGE ONE CHECK

OBJECTIVE: The student will demonstrate competent piloting skills for the procedures listed.

TIME: Approximately 1.0 hour.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ SRM
- ___ ___ ___ Students certificates and syllabus
- ___ ___ ___ LAHSO
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ Checklist usage
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Stall/spin awareness
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ ADM and risk management
- ___ ___ ___ Weather analysis
- ___ ___ ___ Crosswind component
- ___ ___ ___ Positive aircraft control

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Fire—*startup, engine or electrical in-flight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, induction ice*
- ___ ___ ___ Electrical malfunction
- ___ ___ ___ *Forced landing—power, no power, ditching*
- ___ ___ ___ Emergency descent

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection checklist √
- ___ ___ ___ Airplane servicing
- ___ ___ ___ Aviation security

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, aborted*
- ___ ___ ___ Tracks centerline \pm wind
- ___ ___ ___ Climbs √—*with turns, Cs (Vx, Vy, cruise)*

CROSSWIND

- ___ ___ ___ Turns 90° \pm wind
- ___ ___ ___ Checks traffic
- ___ ___ ___ Levels off at pattern altitude
- ___ ___ ___ Power for pattern speed
- ___ ___ ___ Trims

DOWNWIND

- ___ ___ ___ Tracks straight downwind \pm wind
- ___ ___ ___ Landing √
- ___ ___ ___ Checks traffic and wind
- ___ ___ ___ Holds altitude
- ___ ___ ___ Landing clearance—*copy, confirm, comply*
- ___ ___ ___ Begins descent

BASE

- ___ ___ ___ Turns 90° \pm wind
- ___ ___ ___ Checks traffic
- ___ ___ ___ Flaps, speed, trim

**PRIVATE PILOT LESSON 7
(DUAL) STAGE ONE CHECK
(CONTINUED)**

FINAL

___ ___ ___ Tracks centerline \pm wind
 ___ ___ ___ Landing \checkmark
 ___ ___ ___ Checks traffic and wind
 ___ ___ ___ Holds altitude
 ___ ___ ___ Landing clearance—*copy, confirm, comply*

EMERGENCY PROCEDURES J (Practical review)

___ ___ ___ Landing —with a flat tire
 ___ ___ ___ Engine failure—*takeoff run, pattern*

POSTFLIGHT

___ ___ ___ Postflight inspection of aircraft
 ___ ___ ___ Debrief / Update TCO and logbook

LANDING

___ ___ ___ Landings—normal, crosswind
 ___ ___ ___ Slips to a landing
 ___ ___ ___ Flaps 0° -10° -20° (select two and circle)
 ___ ___ ___ Go around \checkmark
 ___ ___ ___ Roundout
 ___ ___ ___ Holds centerline
 ___ ___ ___ Allows no drift
 ___ ___ ___ Full stall landing
 ___ ___ ___ Positive aircraft control
 ___ ___ ___ Taxi clearance—*copy, confirm, comply*
 ___ ___ ___ Runway incursion avoidance
 ___ ___ ___ Taxi \checkmark —*wind, speed, braking, hazards*
 ___ ___ ___ Shutdown \checkmark

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. The standards are as follows:

1. Altitude \pm 150 feet
2. Headings / rollouts \pm 15°
3. Airspeed \pm 15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											
	(\pm 12)	(0)	(0)	(\pm 1.0)	(\pm 1.0)	(0)	(0)	(0)	(0)	(\pm 12)	(\pm 2.0)

PRIVATE PILOT LESSON 7
STAGE ONE CRITIQUE

COMMENTS

- 1 This stage check performance indicates that additional review is necessary.
 - A. Do Review Lessons on all items marked “ 1 ” until your Instructor indicates a satisfactory “ 2 ”.
 - B. Insert the Review Lesson sheets following this page.
 - C. Return to a check instructor.

Check Instructor _____ Student _____ Date _____

- 2 This stage check was performed in a satisfactory manner. Move on to the next stage.

Check Instructor _____ Student _____ Date _____

PRIVATE PILOT CERTIFICATION

Training Course Outline

STAGE TWO

Lessons 8 –15

10.0 hours (approx) of dual flight training

1. Consolidation of flight skills previously introduced
2. Cross-country flight training
3. 3.0 hours (minimum) of dual night flight training to include:
 - One cross-country flight of more than 100 nautical miles total distance, and...
 - 10 takeoffs and landings to a full stop, at night, each landing involving a flight in the traffic pattern at an airport

2.5 hours (approx) of solo flight training

1.0 hour (approx) of instrument flight training

0.8 hours (approx) of AATD training

Stage Two Objectives

The student will complete first solo flight.

The student will consolidate previously introduced skills, and be instructed in cross-country planning and flying procedures.

Stage Two Completion Standards

This stage will be complete when the student has completed each task in each lesson with a grade of 2 or better and has passed the Stage Two Check.

Hours		

PRIVATE PILOT LESSON 8— (DUAL AND SOLO) DUAL REVIEW AND FIRST SOLO

OBJECTIVE: Review of maneuvers the instructor deems necessary prior to first solo flight.

TIME: Approx 1.0 hour dual and approx 0.5 solo flight.

PREFLIGHT BRIEFING /SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ Positive aircraft control
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ Checklist usage
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Stall/spin awareness
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ ADM/SRM and risk management
- ___ ___ ___ Endorsements—Logbook and Student Pilot Certificate
- ___ ___ ___ LAHSO

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Fire—startup, engine or electrical inflight, cabin, wing
- ___ ___ ___ Icing—structural inflight, static port blockage, carb ice
- ___ ___ ___ Electrical malfunctions
- ___ ___ ___ Emergency descent
- ___ ___ ___ Forced landing—power, no power, ditching

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection checklist √
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—freq, vol, transmitter
- ___ ___ ___ Nav radio setup—freq, ID, set course

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—copy, confirm, comply
- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Begin taxi—brake check, steering check
- ___ ___ ___ Taxiing—wind, speed, braking, hazards
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—copy, confirm, comply
- ___ ___ ___ Takeoff—normal, crosswind, aborted
- ___ ___ ___ Tracks centerline ± wind
- ___ ___ ___ Climbs √—with turns, Cs (Vx, Vy, cruise)

CROSSWIND

- ___ ___ ___ Turns 90° ± wind
- ___ ___ ___ Checks traffic
- ___ ___ ___ Levels off at pattern altitude
- ___ ___ ___ Power for pattern speed
- ___ ___ ___ Trims

EMERGENCY PROCEDURES √ (Practical review)

- ___ ___ ___ Landing —with a flat tire
- ___ ___ ___ Engine failure—takeoff run, pattern

PRIVATE PILOT LESSON 8
(DUAL AND SOLO) DUAL REVIEW AND FIRST SOLO
(CONTINUED)

DOWNWIND

- ___ ___ ___ Tracks straight downwind \pm wind
- ___ ___ ___ Landing \checkmark
- ___ ___ ___ Checks traffic and wind
- ___ ___ ___ Holds altitude
- ___ ___ ___ Landing clearance—*copy, confirm, comply*
- ___ ___ ___ Begins descent

BASE

- ___ ___ ___ Turns 90° \pm wind
- ___ ___ ___ Checks traffic
- ___ ___ ___ Flaps, speed, trim

FIRST SOLO FLIGHT

3 takeoffs, patterns, and landings (*taxibacks*)

Date _____ Instructor _____ Student _____

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. The standards are as follows:

1. Altitude \pm 150 feet
2. Headings / rollouts \pm 15°
3. Airspeed within \pm 15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

LANDING

- ___ ___ ___ Landings—normal, crosswind
- ___ ___ ___ Go around \checkmark
- ___ ___ ___ Roundout—*height, crosswind cx*
- ___ ___ ___ Touchdown—*full stall, drift, centerline*
- ___ ___ ___ Stop/go taxi back \checkmark
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Runway incursion avoidance
- ___ ___ ___ Taxi \checkmark —*wind, speed, braking, hazards*
- ___ ___ ___ Shutdown \checkmark

POSTFLIGHT

- ___ ___ ___ Postflight inspection of aircraft
- ___ ___ ___ Dual debrief / Update TCO and logbook

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 9— (DUAL) REVIEW OF MANEUVERS

OBJECTIVE: The student will practice previously learned piloting skills and be introduced to navigation and steep turns. Short and soft landings will be introduced as well.

TIME: Approx 2.0 hours of flight instruction.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ Positive aircraft control
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ LAHSO
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Checklist usage
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ CFIT/Wire strike avoidance

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Fire—*startup, engine or electrical in-flight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical malfunctions
- ___ ___ ___ *Forced landing—power, no power, ditching*
- ___ ___ ___ Emergency descent

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection checklist √
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft*
- ___ ___ ___ Climbs √—*with turns, Cs (Vx, Vy, cruise)*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level off from climb—*VR-IR*
- ___ ___ ___ Cruise √—*VR-IR*
- ___ ___ ___ Engine checks, traffic checks

NAVIGATION

- ___ ___ ___ Pilotage / Dead reckoning
- ___ ___ ___ VOR / Tracking / Intercepting
- ___ ___ ___ GPS navigation / Tracking
- ___ ___ ___ TFRs and SUAs

ADVANCED MANEUVERS

- ___ ___ ___ Clearing turns, emerg landing area, PMC
- ___ ___ ___ Slow flight—*P-factor, torque, heading, alt*
- ___ ___ ___ Stalls—*power-off, power-on*
- ___ ___ ___ Steep turns
- ___ ___ ___ Spin awareness
- ___ ___ ___ Descents √
- ___ ___ ___ Level-off from descent—*VR-IR*

GROUND REFERENCE MANEUVERS

- ___ ___ ___ PMC, emerg landing area, clearing turns
- ___ ___ ___ Rectangular patterns—*wind, dist, altitude*
- ___ ___ ___ Turns around a point—*wind, dist, altitude*
- ___ ___ ___ S-Turns—*wind, dist, altitude*
- ___ ___ ___ Traffic watch / instrument check

PRIVATE PILOT LESSON 9
(DUAL) REVIEW OF MANEUVERS
(CONTINUED)

EMERGENCY PROCEDURES I (Practical review)

___ ___ ___ Landing —with a flat tire
 ___ ___ ___ Engine failure—takeoff run, pattern
 ___ ___ ___ Emergency descent

POSTFLIGHT

___ ___ ___ Postflight inspection of aircraft
 ___ ___ ___ Debrief / Update TCO and logbook

LANDING

___ ___ ___ Approach—location, communication
 ___ ___ ___ Pattern entry
 ___ ___ ___ Landing ✓
 ___ ___ ___ Traffic Pattern
 ___ ___ ___ Landing clearance—copy, confirm, comply
 ___ ___ ___ Stabilized approach
 ___ ___ ___ Slips to a landing
 ___ ___ ___ Flaps 0° -10° -20° (select one and circle)
 ___ ___ ___ Go around ✓
 ___ ___ ___ Roundout—height, crosswind control
 ___ ___ ___ Landings—normal, crosswind, short, soft
 ___ ___ ___ Touchdown—full stall, drift, centerline
 ___ ___ ___ Taxi clearance—copy, confirm, comply
 ___ ___ ___ Runway incursion avoidance
 ___ ___ ___ Taxi ✓—wind, speed, braking, hazards

COMPLETION STANDARDS

The lesson will be complete when all areas have a grade of 2 or better. The standards are as follows:
 1. Altitude ±150 feet
 2. Headings / rollouts ±15°
 3. Airspeed ±15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 10— (SOLO) REVIEW OF MANEUVERS

OBJECTIVE: Student will practice the previously learned piloting skills.

TIME: Approx 2.0 hour.

PREFLIGHT BRIEFING /SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ SRM, ADM and risk management
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ CFIT/wire strike avoidance
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Checklist usage
- ___ ___ ___ Spin awareness
- ___ ___ ___ Positive aircraft control
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ Solo endorsement—current
- ___ ___ ___ LAHSO

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Landing—*with a flat tire*
- ___ ___ ___ Fire—*startup, engine or electrical in-flight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical malfunctions
- ___ ___ ___ Engine failure—*take off run, pattern*
- ___ ___ ___ Emergency descent

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection √
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft*
- ___ ___ ___ Climbs √ - *with turns, Cs (Vx, Vy, cruise), VR*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level-off from climb—VR
- ___ ___ ___ Cruise √—VR
- ___ ___ ___ *Engine checks, traffic checks*

NAVIGATION

- ___ ___ ___ Pilotage / dead reckoning / VOR / GPS / tracking
- ___ ___ ___ TFRs and SUAs

ADVANCED MANEUVERS

- ___ ___ ___ PMC, emerg landing area, clearing turns
- ___ ___ ___ Slow flight—P-factor, torque, heading, alt
- ___ ___ ___ Stalls—power-off, power-on
- ___ ___ ___ Steep turns
- ___ ___ ___ Descents √
- ___ ___ ___ Level-off from descent—VR

PRIVATE PILOT LESSON 10
(SOLO) REVIEW OF MANEUVERS
(CONTINUED)

GROUND REFERENCE MANEUVERS

- ____ ____ ____ Clearing turns, emerg landing area, PMC
- ____ ____ ____ Rectangular patterns—*wind, dist, altitude*
- ____ ____ ____ Turns around a point—*wind, dist, altitude*
- ____ ____ ____ S-Turns—*wind, dist, altitude*
- ____ ____ ____ Traffic watch / instrument check

LANDING

- ____ ____ ____ Approach—*location, communication*
- ____ ____ ____ Pattern entry
- ____ ____ ____ Landing ✓
- ____ ____ ____ Traffic Pattern
- ____ ____ ____ Landing clearance—*copy, confirm, comply*
- ____ ____ ____ Stabilized approach
- ____ ____ ____ Slips to a landing
- ____ ____ ____ Flaps 0° -10° -20° (select one and circle)
- ____ ____ ____ Go around ✓
- ____ ____ ____ Landings—*normal, crosswind, short, soft*
- ____ ____ ____ Roundout—*height, crosswind control*
- ____ ____ ____ Touchdown—*full stall, drift, centerline*
- ____ ____ ____ Taxi clearance—*copy, confirm, comply*
- ____ ____ ____ Taxi ✓—*wind, speed, braking, hazards*
- ____ ____ ____ Stop/go taxi back ✓
- ____ ____ ____ Shutdown ✓

POSTFLIGHT

- ____ ____ ____ Postflight inspection of aircraft
- ____ ____ ____ Dual debrief / Update TCO and logbook

RELEASED FOR SOLO

- Date _____ Instructor _____
- Date _____ Instructor _____
- Date _____ Instructor _____

COMPLETION STANDARDS

The lesson will be complete when the student has practiced all areas.

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual FTD	Dual Test	Solo Day	Solo X-Ctry	Total Acft	Inst/FTD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 11— (BRIEFING) CROSS-COUNTRY

OBJECTIVE: The student will demonstrate the ability to plan a VFR, cross-country trip.

TIME: As required.

WEATHER INFORMATION

- ___ ___ ___ Current weather charts
- ___ ___ ___ Forecast weather charts
- ___ ___ ___ Winds aloft reports
- ___ ___ ___ METARS / TAFs / FDs
- ___ ___ ___ Wind shear reports
- ___ ___ ___ PIREPs, SIGMETs, AIRMETs
- ___ ___ ___ Icing freezing level info

PUBLICATIONS

- ___ ___ ___ Sectional
- ___ ___ ___ Aeronautical Info Manual (AIM)
- ___ ___ ___ Airport / Facility Directories
- ___ ___ ___ Review appropriate FARs
- ___ ___ ___ NOTAMS

FLIGHT PLANNING

- ___ ___ ___ SRM, ADM and risk management
- ___ ___ ___ Finding runway lengths
- ___ ___ ___ Drawing the True Course (TC)
- ___ ___ ___ Marking obstructions to flight
- ___ ___ ___ Measuring TC and mileage
- ___ ___ ___ Flight log preparation
- ___ ___ ___ VOR navigation
- ___ ___ ___ GPS navigation
- ___ ___ ___ Dead reckoning / Pilotage
- ___ ___ ___ Magnetic compass
- ___ ___ ___ Performance charts
- ___ ___ ___ Fuel planning
- ___ ___ ___ Weight and balance
- ___ ___ ___ Go / No-go decisions
- ___ ___ ___ Alternate plans
- ___ ___ ___ Filing a VFR flight plan

COMMUNICATIONS

- ___ ___ ___ Flight Service Stations
- ___ ___ ___ Center--frequencies
- ___ ___ ___ Unicom, Multicom
- ___ ___ ___ Emergency--121.5
- ___ ___ ___ Position reporting

AIRSPACE

- ___ ___ ___ Traffic patterns - *entry, exit, uncontrolled*
- ___ ___ ___ Class A-B-C-D-E-G
- ___ ___ ___ SUAs, TFRs, SFRAs
- ___ ___ ___ VFR cruising altitudes

EMERGENCY PROCEDURES J (Oral review)

- ___ ___ ___ Engine failure - *takeoff run, after takeoff, inflight*
- ___ ___ ___ Forced landings - *power, no power, ditching*
- ___ ___ ___ Fire - *startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing - *structural inflight, static port blockage, carb ice*
- ___ ___ ___ Landing - *with a flat tire*
- ___ ___ ___ Electrical malfunctions
- ___ ___ ___ Emergency descent

**PRIVATE PILOT LESSON 11
(BRIEFING) CROSS-COUNTRY
(CONTINUED)**

SYSTEMS AND EQUIPMENT MALFUNCTIONS

- ___ ___ ___ Partial or complete power loss
- ___ ___ ___ Engine roughness or overheat
- ___ ___ ___ Carburetor or induction icing
- ___ ___ ___ Loss of oil pressure
- ___ ___ ___ Fuel starvation
- ___ ___ ___ Electrical malfunction
- ___ ___ ___ Vacuum/pressure and associated flight instrument malfunction
- ___ ___ ___ Pitot/static
- ___ ___ ___ Landing gear or flap malfunction
- ___ ___ ___ Inoperative or runaway trim
- ___ ___ ___ Inadvertent door or window opening
- ___ ___ ___ Structural icing
- ___ ___ ___ Smoke/fire/engine compartment fire
- ___ ___ ___ Any other emergency appropriate to the airplane

IN-FLIGHT

- ___ ___ ___ Opening the flight plan
- ___ ___ ___ Navigation procedures
- ___ ___ ___ Navigation log upkeep
- ___ ___ ___ Figuring groundspeed and ETE
- ___ ___ ___ Lost procedures
- ___ ___ ___ Equipment failures
- ___ ___ ___ Magnetic compass operations
- ___ ___ ___ Weather problems
- ___ ___ ___ Reporting weather
- ___ ___ ___ Diversion to an alternate
- ___ ___ ___ Instrument flight
- ___ ___ ___ In-flight visibility estimating

DESTINATION

- ___ ___ ___ Airplane securing
- ___ ___ ___ Closing the flight plan
- ___ ___ ___ Complete syllabus and logbook

COMPLETION STANDARDS

This lesson will be complete when the student has a thorough understanding of the topics listed, and a grade of 2 or better.

Instructor

Student

Date

COMMENTS

Hours		

PRIVATE PILOT LESSON 12—(AATD OR ACFT) BASIC INSTRUMENT FLIGHT AND NAVIGATION

OBJECTIVE: The student will learn basic instrument flight and navigation skills. Day or night config.

TIME: Approx 0.8 hours. Instrument

PREFLIGHT BRIEFING

___	___	___	Discussion of lesson	___	___	___
___	___	___	Wake turbulence / wind shear	___	___	___
___	___	___	Collision avoidance	___	___	___
___	___	___	RUNWAY INCURSION avoidance	___	___	___
___	___	___	Review of all emergency checklists ✓	___	___	___

___	___	___	Scanning
___	___	___	Straight and level
___	___	___	Level turns to headings
___	___	___	Unusual attitude recovery
___	___	___	Descents with turns (constant airspeed)
___	___	___	Level offs from descents

PREFLIGHT

___	___	___	Cockpit ✓	___	___	___
___	___	___	Certificates and documents—ARROW	___	___	___
___	___	___	Preflight inspection checklist ✓	___	___	___
___	___	___	Airplane servicing	___	___	___

NAVIGATION

___	___	___	VOR/HSI—frequencies, ID, set OBS
___	___	___	VOR/HSI—course intercepting
___	___	___	VOR/HSI—course tracking
___	___	___	VOR/HSI—position locating
___	___	___	GPS—entering DIRECT TO identifiers
___	___	___	GPS—reading other navigation pages
___	___	___	GPS—using the map page
___	___	___	GPS—using the NEAREST feature

STARTUP

___	___	___	Engine start ✓	___	___	___
___	___	___	Comm radio setup— <i>freq, vol, transmitter</i>	___	___	___
___	___	___	Nav radio setup— <i>freq, ID, set course</i>	___	___	___

TAKEOFF / CLIMB / CRUISE

___	___	___	Takeoff ✓	___	___	___
___	___	___	Takeoff clearance— <i>copy, confirm, comply</i>	___	___	___
___	___	___	Takeoff— <i>normal, crosswind</i>	___	___	___
___	___	___	Climbs ✓	___	___	___
___	___	___	Pattern departure	___	___	___

POSTFLIGHT

___	___	___	Shutdown ✓
___	___	___	Close flight plan
___	___	___	Debrief
___	___	___	Update syllabus and logbook

BASIC INSTRUMENT FLIGHT

___	___	___	Climbs—with turns, Cs (<i>Vx, Vy, cruise</i>)	___	___	___
___	___	___	Level-off from climbs	___	___	___

PRIVATE PILOT LESSON 12
(AATD OR ACFT) BASIC INSTRUMENT FLIGHT AND NAVIGATION
(CONTINUED)

COMPLETION STANDARDS

This lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ± 250 feet
2. Headings and rollouts $\pm 15^\circ$
3. Airspeed within ± 15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

COMMENTS

Hours		

PRIVATE PILOT LESSON 13— (DUAL) CROSS-COUNTRY FLIGHT TRAINING

OBJECTIVE: The student will learn cross-country piloting skills. VOR, GPS, pilotage/dead reckoning navigation will be alternated on various legs of the flight.

TIME: 3.0 hours minimum including 0.5 instrument training.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ Collision avoidance
- ___ ___ ___ CFIT/wire strike avoidance
- ___ ___ ___ Weather planning
- ___ ___ ___ TFRs, SUAs
- ___ ___ ___ Flight planning/filing
- ___ ___ ___ SRM, ADM
- ___ ___ ___ Aviation security
- ___ ___ ___ Runway incursion avoidance
- ___ ___ ___ LAHSO

TAXI (cont.)

- ___ ___ ___ Taxiing, wind, speed, brake hazards
- ___ ___ ___ Traffic watch/call hold short lines
- ___ ___ ___ Run up ✓

TAKEOFF

- ___ ___ ___ Takeoff ✓
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft*
- ___ ___ ___ Climbs ✓—with turns, Cs (Vx, Vy, cruise)
- ___ ___ ___ Pattern departure

EMERGENCY PROCEDURES ✓ (Oral review)

- ___ ___ ___ Checklist usage
- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical malfunctions
- ___ ___ ___ Emergency descent

BASIC MANEUVERS (VR and IR)

- ___ ___ ___ Level-off from climb procedure
- ___ ___ ___ Cruise ✓
- ___ ___ ___ Straight and level
- ___ ___ ___ Turns to headings
- ___ ___ ___ Engine check / traffic check

PREFLIGHT

- ___ ___ ___ Cockpit ✓
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection checklist ✓
- ___ ___ ___ Airplane servicing

NAVIGATION

- ___ ___ ___ Open flight plan
- ___ ___ ___ VOR intercepting, tracking
- ___ ___ ___ GPS intercepting, tracking
- ___ ___ ___ Pilotage, dead reckoning
- ___ ___ ___ Use of magnetic compass
- ___ ___ ___ Autopilot / flight director
- ___ ___ ___ Ground speed calculation
- ___ ___ ___ Navigation log usage
- ___ ___ ___ Diversion / lost procedures
- ___ ___ ___ Brief expected taxi route
- ___ ___ ___ Descents ✓—*turns, Cs, best glide*
- ___ ___ ___ Level offs from descent

STARTUP

- ___ ___ ___ Engine start ✓
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi ✓ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Positive exchange of control
- ___ ___ ___ Begin taxi, brake check, steering check

PRIVATE PILOT LESSON 13

(DUAL) CROSS-COUNTRY FLIGHT TRAINING

(CONTINUED)

EMERGENCY PROCEDURES I (Practical review)

- ____ ____ ____ Landing—*with a flat tire*
- ____ ____ ____ Engine failure—takeoff run, after takeoff, inflight
- ____ ____ ____ Forced landings—power, no power, ditching
- ____ ____ ____ Emergency descent

LANDING

- ____ ____ ____ Approach—location, communication
- ____ ____ ____ Approach—tower, no tower
- ____ ____ ____ Pattern entry
- ____ ____ ____ Landing ✓
- ____ ____ ____ Traffic pattern
- ____ ____ ____ Landing clearance
- ____ ____ ____ Stabilized approach
- ____ ____ ____ Slips to landing
- ____ ____ ____ Flaps 0° -10° -20° -30°
- ____ ____ ____ Go around ✓
- ____ ____ ____ Landings—normal, crosswind, short, soft
- ____ ____ ____ Positive aircraft control

COMPLETION STANDARDS

This lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±250 feet
2. Headings ±15°
3. Airspeed within ±15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

LANDING (Cont.)

- ____ ____ ____ Roundout—*height, crosswind control*
- ____ ____ ____ Touchdown—*full stall, drift, centerline*
- ____ ____ ____ Taxi clearance—*copy, confirm, comply*
- ____ ____ ____ Taxi ✓—*wind, speed, braking, hazards*
- ____ ____ ____ Shutdown ✓

POSTFLIGHT

- ____ ____ ____ Shutdown ✓
- ____ ____ ____ Close flight plan
- ____ ____ ____ Debrief
- ____ ____ ____ Update syllabus and logbook
- ____ ____ ____ Initial solo cross-country flight endorsement

<u>Flight Leg</u>	<u>Route</u>
<u>Pilotage/DR:</u>	
<u>VOR:</u>	
<u>GPS:</u>	

	<u>Dual Pre/Post</u>	<u>Dual Day</u>	<u>Dual Night</u>	<u>Dual X-Ctry</u>	<u>Dual Inst</u>	<u>Dual AATD</u>	<u>Dual Test Prep</u>	<u>Solo Day</u>	<u>Solo X-Ctry</u>	<u>Total Acft</u>	<u>Inst/AATD</u>
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 14— (DUAL) NIGHT MANEUVERS AND CROSS-COUNTRY NAVIGATION

OBJECTIVE: The student will practice night piloting skills, 10 full stop takeoffs and landings in the pattern, and a dual cross-country flight of more than 100 nautical miles total distance.

TIME: 3.0 hours minimum of night instruction including 0.5 hours of instrument training.

PREFLIGHT BRIEFING/SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ SRM, ADM and risk management
- ___ ___ ___ Aircraft lighting systems
- ___ ___ ___ Airport lighting systems
- ___ ___ ___ Night navigation
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Weather planning/TFRs, SUAs
- ___ ___ ___ Flight planning/filing
- ___ ___ ___ LAHSO
- ___ ___ ___ Runway incursion avoidance
- ___ ___ ___ CFIT/wire strike avoidance
- ___ ___ ___ Personal equipment
- ___ ___ ___ Aviation security

EMERGENCY PROCEDURES ↓ (Oral review)

- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical malfunctions

PREFLIGHT

- ___ ___ ___ Cockpit ↓
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection checklist ↓
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start ↓
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi ↓ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*

TAXI (Cont.)

- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Taxi—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / HOLD SHORT lines
- ___ ___ ___ Runup ↓

TAKEOFF

- ___ ___ ___ Takeoff ↓
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft*
- ___ ___ ___ Climbs ↓—*with turns, Cs (Vx, Vy, cruise)*
- ___ ___ ___ Pattern departure

BASIC MANEUVERS (VR and IR)

- ___ ___ ___ Level-off from climb procedure
- ___ ___ ___ Cruise ↓
- ___ ___ ___ Straight and level
- ___ ___ ___ Turns to headings
- ___ ___ ___ Engine check / traffic check

NAVIGATION

- ___ ___ ___ Open flight plan
- ___ ___ ___ VOR intercepting, tracking
- ___ ___ ___ GPS intercepting, tracking
- ___ ___ ___ Pilotage, dead reckoning
- ___ ___ ___ Autopilot/flight director
- ___ ___ ___ Ground speed calculation
- ___ ___ ___ Navigation log usage
- ___ ___ ___ Brief expected taxi route
- ___ ___ ___ Diversion / lost procedures
- ___ ___ ___ Use of magnetic compass
- ___ ___ ___ Descents ↓—*turns, Cs, best glide*
- ___ ___ ___ Level offs from descent

PRIVATE PILOT LESSON 14
(DUAL) NIGHT MANEUVERS AND CROSS-COUNTRY NAVIGATION
(CONTINUED)

EMERGENCY PROCEDURES J (Practical review)

____ ____ ____ Landing—*with a flat tire*
 ____ ____ ____ Engine failure—*takeoff run, after takeoff, inflight*
 ____ ____ ____ Forced landings—*power, no power, ditching*
 ____ ____ ____ Emergency descent

LANDING

____ ____ ____ Approach—*location, communications*
 ____ ____ ____ Approach—*tower, no tower*
 ____ ____ ____ Pattern entry
 ____ ____ ____ Landing ✓
 ____ ____ ____ Traffic pattern
 ____ ____ ____ Landing clearance
 ____ ____ ____ Stabilized approach
 ____ ____ ____ Slips to landing
 ____ ____ ____ Flaps 0° -10° -20° -30°
 ____ ____ ____ Go around ✓

LANDING (cont.)

____ ____ ____ Night landings—*normal, crosswind*
 ____ ____ ____ Roundout—*height, crosswind control*
 ____ ____ ____ Positive aircraft control
 ____ ____ ____ Touchdown—*full stall, drift, centerline*
 ____ ____ ____ Taxi clearance—*copy, confirm, comply*
 ____ ____ ____ Runway incursion avoidance
 ____ ____ ____ Taxi ✓—*wind, speed, braking, hazards*
 ____ ____ ____ Shutdown ✓

POSTFLIGHT

____ ____ ____ Postflight inspection of aircraft
 ____ ____ ____ Debrief / Update syllabus and logbook

Flight Leg	Route
<u>Pilotage/DR:</u>	
<u>VOR:</u>	
<u>GPS:</u>	
Number of Takeoffs and Landings (10 min): _____	

COMPLETION STANDARDS

This lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±250 feet
2. Headings ±15°
3. Airspeed within ±15 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 15— (DUAL) STAGE TWO CHECK (CROSS-COUNTRY)

OBJECTIVE: The student will demonstrate the ability to plan and fly cross-country flights.

TIME: Approximately 1.0 hour.

PREFLIGHT BRIEFING

- ___ ___ ___ Cross-country oral
- ___ ___ ___ ADM and Risk Management

EMERGENCY PROCEDURES ↓ (Oral review)

- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, induction ice*
- ___ ___ ___ Electrical malfunctions
- ___ ___ ___ Emergency descent

PREFLIGHT

- ___ ___ ___ Cockpit ↓
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection checklist ↓
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start ↓
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi ↓ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Taxi—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / HOLD SHORT lines
- ___ ___ ___ Runup ↓

TAKEOFF

- ___ ___ ___ Takeoff
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft*
- ___ ___ ___ Climbs ↓—*with turns, Cs (Vx, Vy, cruise)*
- ___ ___ ___ Pattern departure

BASIC MANEUVERS

- ___ ___ ___ Level-off from climb
- ___ ___ ___ Cruise ↓
- ___ ___ ___ Engine check / traffic check

NAVIGATION

- ___ ___ ___ Open flight plan
- ___ ___ ___ VOR intercepting, tracking
- ___ ___ ___ GPS intercepting, tracking
- ___ ___ ___ Pilotage, dead reckoning
- ___ ___ ___ Ground speed calculation
- ___ ___ ___ Navigation log usage
- ___ ___ ___ In-flight radio resources
- ___ ___ ___ Autopilot/flight director
- ___ ___ ___ Diversion / lost procedures
- ___ ___ ___ Use of magnetic compass
- ___ ___ ___ Descents ↓—*turns, Cs, hi-lo drag*
- ___ ___ ___ Brief expected taxi route

EMERGENCY PROCEDURES ↓ (Practical review)

- ___ ___ ___ Landing—*with a flat tire*
- ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
- ___ ___ ___ Forced landings—*power, no power, ditching*
- ___ ___ ___ Emergency descent

PRIVATE PILOT LESSON 15
(DUAL) STAGE TWO CHECK (CROSS-COUNTRY)
(CONTINUED)

LANDING

- ____ Approach—*location, communication*
- ____ Approach—*tower, no tower*
- ____ Pattern entry
- ____ Landing ✓
- ____ Traffic pattern
- ____ Landing clearance
- ____ Stabilized approach
- ____ Slips to landing
- ____ Landing flaps (select one: 0° -10° -20°)
- ____ Go around ✓
- ____ Landings—*normal, crosswind, short soft*
- ____ Roundout—*height, crosswind control*
- ____ Positive aircraft control
- ____ Touchdown—*full stall, drift, centerline*
- ____ Taxi clearance—*copy, confirm, comply*
- ____ Taxi ✓—*wind, speed, braking, hazards*
- ____ Shutdown ✓

POSTFLIGHT

- ____ Postflight inspection of aircraft
- ____ Debrief / Update syllabus and log-book

Flight Leg	Route
<u>Pilotage/DR:</u>	
<u>VOR:</u>	
<u>GPS:</u>	

COMPLETION STANDARDS

This lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±200 feet
2. Headings ±10°
3. Airspeed within ±10 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											
	(±19)	(3.0)	(5.0)	(2.0)	(1.7)	(0)	(0)	(±2.5)	(0)	(±24.5)	(3.7)

PRIVATE PILOT CERTIFICATION

Training Course Outline

STAGE THREE

Lessons 16 - 23

4.0 hours (approx) of dual flight training of which (approx) 1.0 hours of instrument flight training
3.0 hours flight training in preparation for the practical test must be within 60 days preceding the date of the test.

4.0 hours (approx) of solo flight training

Three (3) takeoffs and landings to a full stop with each landing involving a flight in the traffic pattern at an airport with an operating control tower.

0.8 hours (approx) of AATD training

Instrument training in a training device

Stage Three Objectives

Students will review all aspects of their flight training.

Stage Three Completion Standards

This stage will be complete when the student has satisfactorily completed an End-of-Course evaluation to Private Pilot Airman Certification Standards.

Hours		

PRIVATE PILOT LESSON 16— (SOLO) FIRST CROSS-COUNTRY SOLO FLIGHT

OBJECTIVE: The student will plan and fly a daytime cross-country flight of at least 100 nm, with landings at a minimum of 3 points, one segment of the flight consisting of a straight-line distance of at least 50 nm between the takeoff and landing locations.

TIME: *Minimum 2.0 hours.*

PREFLIGHT BRIEFING - DUAL

- ___ ___ ___ Discussion of this lesson
- ___ ___ ___ SRM, ADM and risk management
- ___ ___ ___ Wake turbulence/wind shear
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Runway incursion avoidance
- ___ ___ ___ Weather planning
- ___ ___ ___ TFRs and SUAs
- ___ ___ ___ Flight planning
- ___ ___ ___ LAHSO
- ___ ___ ___ Review of all emergency checklists
- ___ ___ ___ CFIT/wire strike avoidance
- ___ ___ ___ Diversion / lost procedures
- ___ ___ ___ Checklist usage
- ___ ___ ___ Check endorsements

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Landing—*with a flat tire*
- ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
- ___ ___ ___ Forced landings—*power, no power, ditching*
- ___ ___ ___ Emergency descent

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection √
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Taxi—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind*
- ___ ___ ___ Climbs √—*with turns, Cs (Vx, Vy, cruise)*
- ___ ___ ___ Pattern departure

BASIC MANEUVERS

- ___ ___ ___ Level-off from climb
- ___ ___ ___ Cruise √
- ___ ___ ___ Engine check / traffic check

NAVIGATION

- ___ ___ ___ Open flight plan
- ___ ___ ___ Course intercepting, tracking
- ___ ___ ___ Pilotage, dead reckoning, radio
- ___ ___ ___ Ground speed calculation
- ___ ___ ___ Navigation log usage
- ___ ___ ___ In-flight radio resources
- ___ ___ ___ Brief expected taxi route
- ___ ___ ___ Descents √

PRIVATE PILOT LESSON 16
(SOLO) FIRST CROSS-COUNTRY SOLO FLIGHT
(CONTINUED)

LANDING

- ___ ___ ___ Approach—*location, communication*
- ___ ___ ___ Approach—*tower, no tower*
- ___ ___ ___ Pattern entry—*45°*
- ___ ___ ___ Landing ✓
- ___ ___ ___ Traffic pattern
- ___ ___ ___ Landing clearance—*copy, confirm, comply*
- ___ ___ ___ Stabilized approach
- ___ ___ ___ Slips to landing
- ___ ___ ___ Flaps 0° -10° or -20°
- ___ ___ ___ Landings—*normal, crosswind*
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Runway incursion avoidance
- ___ ___ ___ Taxi ✓—*wind, speed, braking, hazards*
- ___ ___ ___ Shutdown ✓

POSTFLIGHT

- ___ ___ ___ Postflight inspection of aircraft
- ___ ___ ___ Dual debrief / Update syllabus and logbook

RELEASED FOR SOLO

Date _____ Instructor _____

Flight Route

COMPLETION STANDARDS

This lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±200 feet
2. Headings ±10°
3. Airspeed within ±10 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 17— (DUAL) REVIEW OF MANEUVERS AND NAVIGATION

OBJECTIVE: Instructor and student will review all areas of flight training listed below.

TIME: Approx 2.0 hours of flight instruction, including (approx) **0.5 hours of instrument.**

PREFLIGHT BRIEFING /SPECIAL EMPHASIS AREAS

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ SRM, ADM and risk management
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ CFIT/wire strike avoidance
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Stall/Spin awareness
- ___ ___ ___ Positive aircraft control
- ___ ___ ___ RUNWAY INCURSION avoidance
- ___ ___ ___ LAHSO

EMERGENCY PROCEDURES √ (Oral review)

- ___ ___ ___ Landing—*with a flat tire*
- ___ ___ ___ Checklist usage
- ___ ___ ___ Fire—*startup, engine or electrical in-flight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Electrical malfunctions
- ___ ___ ___ Emergency descent

PREFLIGHT

- ___ ___ ___ Cockpit √
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection √
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start √
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi √ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup √

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff √
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft*
- ___ ___ ___ Climbs √ - *with turns, Cs (Vx, Vy, cruise), VR-IR*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level-off from climb—*VR-IR*
- ___ ___ ___ Cruise √—*VR-IR*
- ___ ___ ___ *Engine checks, traffic checks*

NAVIGATION

- ___ ___ ___ Opening flight plan
- ___ ___ ___ VOR intercepting, tracking
- ___ ___ ___ GPS intercepting, tracking
- ___ ___ ___ Pilotage, dead reckoning
- ___ ___ ___ Diversion / use of compass

PRIVATE PILOT LESSON 17
(DUAL) REVIEW OF MANEUVERS AND NAVIGATION
(CONTINUED)

ADVANCED MANEUVERS

___ ___ ___ PMC, emerg landing area, clearing turns
 ___ ___ ___ Slow flight—P-factor, torque
 ___ ___ ___ Stalls—*power-off, power-on*
 ___ ___ ___ Steep turns—45°

EMERGENCY PROCEDURES ↓ (Practical review)

___ ___ ___ Landing—*with a flat tire*
 ___ ___ ___ Engine failure—*takeoff run, after takeoff, inflight*
 ___ ___ ___ Forced landings—*power, no power, ditching*
 ___ ___ ___ Emergency descent

GROUND REFERENCE

___ ___ ___ Clearing turns, emerg landing area, PMC
 ___ ___ ___ Rectangular patterns
 ___ ___ ___ Turns around a point
 ___ ___ ___ S-Turns

LANDING

___ ___ ___ Approach—*location, communication*
 ___ ___ ___ Pattern entry
 ___ ___ ___ Landing ✓
 ___ ___ ___ Landing clearance—*copy, confirm, comply*
 ___ ___ ___ Traffic pattern
 ___ ___ ___ Slips to landing
 ___ ___ ___ Flaps 0° -10° -20° -30°
 ___ ___ ___ Stabilized approach
 ___ ___ ___ Go around ✓
 ___ ___ ___ Landings—*normal, crosswind, short soft*
 ___ ___ ___ Roundout—*height, crosswind control*
 ___ ___ ___ Touchdown—*full stall, drift, centerline*
 ___ ___ ___ Taxi clearance—*copy, confirm, comply*
 ___ ___ ___ Taxi ✓—*wind, speed, braking, hazards*
 ___ ___ ___ Shutdown ✓

POSTFLIGHT

___ ___ ___ Postflight inspection of aircraft
 ___ ___ ___ Debrief / Update syllabus and logbook

COMPLETION STANDARDS

This lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ±200 feet
2. Headings ±10°
3. Airspeed within ±10 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 18— (SOLO) STUDENT REVIEW OF MANEUVERS

OBJECTIVE: The student will practice piloting skills for tasks assigned by the instructor.

TIME: Approx 2.0 hours of solo flight practice.

PREFLIGHT BRIEFING - DUAL

- ___ ___ ___ Discussion of this lesson
- ___ ___ ___ Review of all emergency checklists
- ___ ___ ___ Endorsements
- ___ ___ ___ SPECIAL EMPHASIS AREAS

PREFLIGHT

- ___ ___ ___ Cockpit ✓
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection ✓
- ___ ___ ___ Airplane servicing

STARTUP

- ___ ___ ___ Engine start ✓
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

- ___ ___ ___ Taxi ✓ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Taxiing—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / Call HOLD SHORT lines
- ___ ___ ___ Runup ✓

TAKEOFF

- ___ ___ ___ Takeoff ✓
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft*
- ___ ___ ___ Climbs ✓ - *with turns, Cs (Vx, Vy, cruise)*
- ___ ___ ___ Pattern departure

BASIC MANEUVERS

- ___ ___ ___ Level-off from climb
- ___ ___ ___ Cruise ✓
- ___ ___ ___ Straight and level
- ___ ___ ___ Level turns to headings
- ___ ___ ___ Tracking a straight line—*wind Cx*
- ___ ___ ___ Engine check / traffic check
- ___ ___ ___ Descents ✓—*with turns, Cs, best glide*
- ___ ___ ___ Level-offs from descents

GROUND REFERENCE

- ___ ___ ___ Clearing turns, emerg landing area
- ___ ___ ___ Rectangular patterns
- ___ ___ ___ Turns around a point
- ___ ___ ___ S-turns

ADVANCED MANEUVERS

- ___ ___ ___ PMC, emerg landing area, clearing turns
- ___ ___ ___ Slow flight—*P-factor, torque*
- ___ ___ ___ Stalls—*power-off, power-on*
- ___ ___ ___ Steep turns—*45°*

PRIVATE PILOT LESSON 18
(SOLO) STUDENT REVIEW OF MANEUVERS
(CONTINUED)

LANDING

- ___ ___ ___ Approach—*location, communication*
- ___ ___ ___ Pattern entry
- ___ ___ ___ Landing ✓
- ___ ___ ___ Landing clearance—*copy, confirm, comply*
- ___ ___ ___ Traffic pattern
- ___ ___ ___ Slips to landing
- ___ ___ ___ Flaps 0° -10° -20° -30°
- ___ ___ ___ Stabilized approach
- ___ ___ ___ Landings—*normal, crosswind, short soft*
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Runway incursion avoidance
- ___ ___ ___ Taxi ✓—*wind, speed, braking, hazards*
- ___ ___ ___ Shutdown ✓

POSTFLIGHT

- ___ ___ ___ Postflight inspection of aircraft
- ___ ___ ___ Dual debrief / Update syllabus and logbook

RELEASED FOR SOLO

Date _____ Instructor _____

Date _____ Instructor _____

Date _____ Instructor _____

COMPLETION STANDARDS

This lesson will be complete when the student has practiced all the noted maneuvers.

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

Hours		

PRIVATE PILOT LESSON 19—(AATD OR ACFT) REVIEW OF INSTRUMENT FLIGHT

OBJECTIVE: Instructor and student will review the areas of flight training noted below.

TIME: Approx 0.8 hour of instrument.

PREFLIGHT BRIEFING

___ ___ ___ Discussion of lesson

PREFLIGHT

___ ___ ___ Cockpit ✓

___ ___ ___ Certificates and documents—*ARROW*

STARTUP

___ ___ ___ Engine start ✓

___ ___ ___ Comm radio setup—*freq, vol, transmitter*

___ ___ ___ Nav radio setup—*freq, ID, set course*

TAXI

___ ___ ___ Taxi ✓

___ ___ ___ Taxi clearance—*copy, confirm, comply*

___ ___ ___ Begin taxi—*brake check, steering check*

___ ___ ___ Taxi—*wind speed, braking, hazards*

___ ___ ___ Traffic watch / Call HOLD SHORT lines

___ ___ ___ Runup ✓

TAKEOFF

___ ___ ___ Takeoff ✓

___ ___ ___ Takeoff clearance—*copy, confirm, comply*

___ ___ ___ Takeoffs

BASIC INSTRUMENT FLIGHT

___ ___ ___ Scanning

___ ___ ___ Climbs ✓—*with turns, Cs (Vy, cruise)*

___ ___ ___ Climbs—*with turns, Cs (Vy, cruise)*

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

NAVIGATION

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

___ ___ ___

DESCENT

___ ___ ___

___ ___ ___

___ ___ ___

POSTFLIGHT

___ ___ ___

___ ___ ___

___ ___ ___

Level-off from climb

Cruise ✓

Straight and level

Level turns to headings

Magnetic compass turns

Engine checks

Recovery from unusual attitudes

VOR/HSI—frequencies, ID, set OBS

VOR/HSI—course intercepting

VOR/HSI—course tracking

VOR/HSI—position locating

GPS—entering DIRECT TO identifiers

GPS—using the map page

GPS—using the NEAREST feature

GPS—using other navigation pages

Descent ✓

Descents—*with turns, Cs*

Level-off from descent

Shutdown ✓

Debrief

Update syllabus and logbook

PRIVATE PILOT LESSON 19
(AATD OR ACFT) REVIEW OF INSTRUMENT FLIGHT
(CONTINUED)

COMPLETION STANDARDS

This lesson will be complete when all areas have a grade of 2 or better. Standards are as follows:

1. Altitude ± 200 feet
2. Headings $\pm 10^\circ$
3. Airspeed within ± 10 knots

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											

COMMENTS

Hours		

PRIVATE PILOT LESSON 20— (BRIEFING) PRE-EVALUATION ORAL

OBJECTIVE: The student will demonstrate the knowledge necessary to act as Private Pilot.

TIME: As required.

CERTIFICATES—STUDENT

- ___ ___ ___ Syllabus correct
- ___ ___ ___ Verification of Student Certificate
- ___ ___ ___ Verification of Medical Certificate
- ___ ___ ___ Completing 8710 Form/ IACRA
- ___ ___ ___ Endorsements

PILOT QUALIFICATIONS

- ___ ___ ___ Currency, Privileges, Limitations
- ___ ___ ___ Documents & ID Requirements
- ___ ___ ___ Logbook/Record Keeping
- ___ ___ ___ Compensation
- ___ ___ ___ Medical Certificates
- ___ ___ ___ Drugs and Alcohol/IMSAFE
- ___ ___ ___ Risk Elements

AIRWORTHINESS REQUIREMENTS

- ___ ___ ___ Certificates
- ___ ___ ___ Inspections
- ___ ___ ___ Preventative Maintenance
- ___ ___ ___ Required Equipment
- ___ ___ ___ Inoperative Equipment
- ___ ___ ___ Special Flight Permit
- ___ ___ ___ Risk Elements

WEATHER INFORMATION

Adverse Conditions:

- ___ ___ ___ TFRs
- ___ ___ ___ Closed/Unsafe NOTAMs
- ___ ___ ___ WST/WS/WA/UUA/CWA

Current Weather:

- ___ ___ ___ METARs/UAs
- ___ ___ ___ Wx Depiction/Surf. Analysis Chart
- ___ ___ ___ Radar & Radar Summary Chart

Forecasts:

- ___ ___ ___ TAF/FD
- ___ ___ ___ Surface/SIGWX Prog. Charts

Forecasts: (continued)

- ___ ___ ___ Convective Outlook
- ___ ___ ___ Freezing Level/Icing Prob. & Sev.

General:

- ___ ___ ___ En Route Weather/Wx Sources
- ___ ___ ___ NOTAMs (D and FDC)
- ___ ___ ___ Meteorology (i.e. Wx Theory)
- ___ ___ ___ Risk Elements

CROSS-COUNTRY FLIGHT PLANNING

- ___ ___ ___ Route Planning & Checkpoints
- ___ ___ ___ Applying UTC and Time Zones
- ___ ___ ___ Pilotage and Dead Reckoning
- ___ ___ ___ Time, Speed, and Distance
- ___ ___ ___ True Airspeed & Density Altitude
- ___ ___ ___ Planned vs. Actual Calculations
- ___ ___ ___ Magnetic Compass Errors
- ___ ___ ___ Power Setting Selection
- ___ ___ ___ Terms: MC, TC, TH, MH, CH
- ___ ___ ___ Fuel Planning
- ___ ___ ___ Altitudes and Obstacles
- ___ ___ ___ Sectional and Symbology
- ___ ___ ___ Activating/Closing Flight Plans
- ___ ___ ___ Ground-based Navigation
- ___ ___ ___ GPS, RAIM, WAAS
- ___ ___ ___ Radar Services/Assistance
- ___ ___ ___ Diversion and Lost Procedures
- ___ ___ ___ Risk Elements

NATIONAL AIRSPACE SYSTEM

- ___ ___ ___ Types of Airspace and Classes
- ___ ___ ___ Requirements and Restrictions
- ___ ___ ___ SUA, SFRA, and Other Airspace
- ___ ___ ___ Airspeed Limitations
- ___ ___ ___ Risk Elements

PRIVATE PILOT LESSON 20
(BRIEFING) PRE-EVALUATION ORAL
(CONTINUED)

PERFORMANCE AND LIMITATIONS

___ ___ ___ Charts, Tables, and Data
 ___ ___ ___ Factors Affecting Performance
 ___ ___ ___ Loading on Performance
 ___ ___ ___ Weight and Balance
 ___ ___ ___ Aerodynamics
 ___ ___ ___ Risk Elements

OPERATION OF SYSTEMS

___ ___ ___ Primary Flight Controls and Trim
 ___ ___ ___ Flaps, Leading Edge Devices,
 and Spoilers
 ___ ___ ___ Powerplant and Propeller
 ___ ___ ___ Landing Gear
 ___ ___ ___ Fuel, Oil, and Hydraulic
 ___ ___ ___ Electrical
 ___ ___ ___ Avionics
 ___ ___ ___ Pitot-Static, Vacuum/Pressure &
 Associated Flight Instruments
 ___ ___ ___ Environmental
 ___ ___ ___ Deicing and Anti-Icing
 ___ ___ ___ Normal Operation
 ___ ___ ___ Common Errors
 ___ ___ ___ Abnormal Operation
 ___ ___ ___ Automated Systems
 ___ ___ ___ Risk Elements

HUMAN FACTORS

___ ___ ___ Hypoxia
 ___ ___ ___ Hyperventilation
 ___ ___ ___ Middle Ear and Sinus Problems
 ___ ___ ___ Spatial Disorientation
 ___ ___ ___ Motion Sickness
 ___ ___ ___ Carbon Monoxide Poisoning
 ___ ___ ___ Stress and Fatigue
 ___ ___ ___ Dehydration and Nutrition

HUMAN FACTORS (continued)

___ ___ ___ Hypothermia
 ___ ___ ___ Optical Illusions
 ___ ___ ___ Alcohol, Drugs, OTC Meds
 ___ ___ ___ Nitrogen/Scuba Diving
 ___ ___ ___ ADM & Hazardous Attitudes
 ___ ___ ___ Collision Avoidance
 ___ ___ ___ Risk Elements

COMMUNICATIONS AND LIGHT GUN SIGNALS

___ ___ ___ Obtaining Frequencies
 ___ ___ ___ Communication Procedures and
 Phraseology
 ___ ___ ___ Transponders
 ___ ___ ___ Radar Assistance
 ___ ___ ___ Lost Communication Procedures
 ___ ___ ___ Automated WX and Airport Info
 ___ ___ ___ Risk Elements

TRAFFIC PATTERNS

___ ___ ___ Towered/Non-towered Operations
 ___ ___ ___ Runway Selection
 ___ ___ ___ Right-of-Way Rules
 ___ ___ ___ Wake Turbulence
 ___ ___ ___ Runway Incursion Avoidance
 ___ ___ ___ Parachuting Operations
 ___ ___ ___ Different Types of Aircraft
 ___ ___ ___ Risk Elements

NIGHT PREPARATION

___ ___ ___ Physiology, Equipment
 ___ ___ ___ Airport Lighting Systems
 ___ ___ ___ Airplane Lighting Systems
 ___ ___ ___ Orientation, Nav, & Chart Reading
 ___ ___ ___ Somatogravic/Black Hole
 Approach Illusion
 ___ ___ ___ Visual Scanning
 ___ ___ ___ Inadvertent IMC
 ___ ___ ___ Risk Elements

PRIVATE PILOT LESSON 20
(BRIEFING) PRE-EVALUATION ORAL
(CONTINUED)

EMERGENCY OPERATIONS

System and Equipment Malfunction:

_____	_____	_____	Emergency Descent	_____	_____	_____	Partial or Complete Power Loss
_____	_____	_____	Glide Speed vs. Distance	_____	_____	_____	Engine Roughness or Overheat
_____	_____	_____	Stabilized Approach	_____	_____	_____	Carburetor or Induction Icing
_____	_____	_____	Energy Management	_____	_____	_____	Loss of Oil Pressure
_____	_____	_____	Wind and Effects	_____	_____	_____	Fuel Starvation
_____	_____	_____	Load Factors	_____	_____	_____	Electrical Malfunction
_____	_____	_____	Emergency Procedures	_____	_____	_____	Vacuum/Pressure and Associated Flight Instruments Malfunction
_____	_____	_____	Communications	_____	_____	_____	Pitot/Static System Malfunction
_____	_____	_____	ATC Deviations	_____	_____	_____	Landing Gear or Flap Malfunction
_____	_____	_____	ELTs: Operation/Limitations/ Tests	_____	_____	_____	Inoperative Trim
_____	_____	_____	Radar Assistance/Transponders	_____	_____	_____	Inadvertent Door or Window Opening
_____	_____	_____	Minimum Fuel	_____	_____	_____	Structural Icing
_____	_____	_____	Emergency Equipment	_____	_____	_____	Smoke/Fire/Engine Compartment Fire
_____	_____	_____	Climate Extremes (Hot/Cold)	_____	_____	_____	Glass Cockpit Operations
_____	_____	_____	Mountainous Terrain	_____	_____	_____	Any Other Emergency Appropriate to the Airplane
_____	_____	_____	Overwater Operations	_____	_____	_____	Risk Elements for all Emergency Operations
_____	_____	_____	Gear and Physical Needs	_____	_____	_____	
_____	_____	_____	Supplemental Oxygen	_____	_____	_____	
_____	_____	_____	High Drag Vs. Low Drag	_____	_____	_____	

COMPLETION STANDARDS

The student must demonstrate sufficient knowledge in the lesson areas to rate at least a 3 on each item.

<u>Instructor</u>	<u>Student</u>	<u>Date</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Hours		

PRIVATE PILOT LESSON 21— (DUAL) FINAL REVIEW LESSON

OBJECTIVE: Instructor and student will review the areas of flight training noted below.

TIME: Approx 2.0 hours of flight instruction and (approx) 0.5 hours of instrument instruction.

PREFLIGHT BRIEFING

- ___ ___ ___ Discussion of lesson
- ___ ___ ___ Aircraft lighting systems
- ___ ___ ___ Airport lighting systems
- ___ ___ ___ Night navigation
- ___ ___ ___ Wake turbulence / wind shear
- ___ ___ ___ Collision avoidance
- ___ ___ ___ Weather planning
- ___ ___ ___ Flight planning/filing

EMERGENCY PROCEDURES J (Oral review)

- ___ ___ ___ Fire—*startup, engine or electrical inflight, cabin, wing*
- ___ ___ ___ Icing—*structural inflight, static port blockage, carb ice*
- ___ ___ ___ Systems and equipment malfunctions

PREFLIGHT

- ___ ___ ___ Cockpit ✓
- ___ ___ ___ Certificates and documents—ARROW
- ___ ___ ___ Preflight inspection checklist ✓
- ___ ___ ___ Airplane servicing
- ___ ___ ___ Risk Elements

STARTUP

- ___ ___ ___ Engine start ✓
- ___ ___ ___ Comm radio setup—*freq, vol, transmitter*
- ___ ___ ___ Nav radio setup—*freq, ID, set course*
- ___ ___ ___ Risk Elements

TAXI

- ___ ___ ___ Taxi ✓ / taxi brief
- ___ ___ ___ Taxi clearance—*copy, confirm, comply*
- ___ ___ ___ Begin taxi—*brake check, steering check*
- ___ ___ ___ Positive exchange of controls
- ___ ___ ___ Taxi—*wind, speed, braking, hazards*
- ___ ___ ___ Traffic watch / HOLD SHORT lines
- ___ ___ ___ Runup ✓
- ___ ___ ___ Risk Elements

TAKEOFF / CLIMB / CRUISE

- ___ ___ ___ Takeoff ✓
- ___ ___ ___ Takeoff clearance—*copy, confirm, comply*
- ___ ___ ___ Takeoff—*normal, crosswind, short, soft, aborted*
- ___ ___ ___ Climbs ✓—*with turns, Cs (Vx, Vy, cruise)*
- ___ ___ ___ Traffic pattern departure
- ___ ___ ___ Level-off from climb
- ___ ___ ___ Cruise ✓
- ___ ___ ___ Risk Elements

BASIC INSTRUMENT

- ___ ___ ___ Straight and level—*inst*
- ___ ___ ___ Level turns to headings—*inst*
- ___ ___ ___ Climbs with turns—*inst*
- ___ ___ ___ Descents with turns—*inst*
- ___ ___ ___ Level-offs from climbs and descents—*inst*
- ___ ___ ___ Magnetic compass turns—*inst*
- ___ ___ ___ Unusual attitudes—*inst*
- ___ ___ ___ Radio Communications, Navigation Systems/Facilities, and Radar Services
- ___ ___ ___ Risk Elements

NAVIGATION

- ___ ___ ___ Open flight plan—*simulated*
- ___ ___ ___ VOR intercepting, tracking
- ___ ___ ___ GPS intercepting, tracking
- ___ ___ ___ Pilotage, dead reckoning
- ___ ___ ___ Autopilot/flight director
- ___ ___ ___ Diversion
- ___ ___ ___ Risk Elements

PRIVATE PILOT LESSON 21
(DUAL) FINAL REVIEW LESSON
(CONTINUED)

PERFORMANCE MANEUVERS

____ ____ ____ PMC, emerg landing area,
clearing turns

____ ____ ____ Rectangular patterns

____ ____ ____ Turns around a point

____ ____ ____ S-turns

____ ____ ____ Slow flight—P-factor, torque

____ ____ ____ Stalls—*power-off, power-on*

____ ____ ____ Steep turns—45°

____ ____ ____ Risk Elements

____ ____ ____ Landing ✓

____ ____ ____ Landing clearance—*copy, confirm, comply*

____ ____ ____ Traffic pattern

____ ____ ____ Slips to landing (+400/-0)

____ ____ ____ Flaps 0° -10° -20° -30°

____ ____ ____ Stabilized approach

____ ____ ____ Normal/X-Wind Landing (+400/-0)

____ ____ ____ Short-Field Landing (+200/-0)

____ ____ ____ Soft-Field Landing

EMERGENCY PROCEDURES J (Practical review)

____ ____ ____ Emergency descent

____ ____ ____ Engine failure—*takeoff run, after takeoff, inflight*

____ ____ ____ Forced landings—*power, no power, ditching*

____ ____ ____ Systems and equipment malfunctions

____ ____ ____ Risk Elements

____ ____ ____ Taxi clearance—*copy, confirm, comply*

____ ____ ____ Runway incursion avoidance

____ ____ ____ Taxi ✓—*wind, speed, braking, hazards*

____ ____ ____ Shutdown ✓

____ ____ ____ Risk Elements

POSTFLIGHT

____ ____ ____ Postflight inspection / close flight plan—simulated

____ ____ ____ Debrief / update syllabus and logbook

____ ____ ____ Risk Elements

LANDING

____ ____ ____ Approach—*location, communication*

____ ____ ____ Pattern entry

COMPLETION STANDARDS

This lesson will be complete when all areas have met the Airman Certification Standards and have a grade of 3.

<u>Instructor</u>	<u>Student</u>	<u>Date</u>	<u>Acft Type</u>	<u>N#</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

	Dual Pre/Post	Dual Day	Dual Night	Dual X-Ctry	Dual Inst	Dual AATD	Dual Test Prep	Solo Day	Solo X-Ctry	Total Acft	Inst/AATD
Previous											
This Lesson											
Total											
	(23)	(3.0)	(5.0)	(3.0)	(2.5)	(3.0)	(6.5)	(2.0)	(32.5)	(5.5)	

PRIVATE PILOT END-OF-COURSE EVALUATION

OBJECTIVE: The applicant will display the knowledge, skills and risk management elements to become a Private Pilot.

TIME: As required for thorough evaluation.

Student _____ Examiner _____ Date _____

Note: The evaluator must assess the applicant on all skill elements for each task included in each area of operation of the ACS unless otherwise noted. The evaluator must also assess at least one knowledge element and one risk management element in each task, focusing on any task element (s) the applicant missed on the knowledge exam.

EVALUATION PRELIMINARIES

____ Drivers license—*picture ID*
____ Student Certificate—*current*
____ Medical certificate—*current*
____ 8710 Form—*correct, dated, signed*
____ Knowledge test report—*current*
____ Certificate of Enrollment—*current*
____ Training Course Outline—*completed*
____ Ground school completion—*verified*

I. PREFLIGHT PREPARATION

____ Pilot qualifications
____ Airworthiness requirements
____ Weather information
____ Cross-Country flight planning
____ National Airspace System
____ Performance and limitations
____ Operation of systems
____ Human factors

II. PREFLIGHT PROCEDURES

____ Preflight assessment
____ Flight deck management
____ Engine starting
____ Taxiing
____ Before takeoff check

III. AIRPORT OPERATIONS

____ Communication and light gun signals, runway lighting
____ Traffic patterns

IV. TAKEOFFS, LANDINGS, GO-AROUNDS

____ Normal, crosswind takeoff and climb
____ Normal and crosswind approach and landing
____ Soft-field takeoff and climb
____ Soft-field approach and landing
____ Short-field takeoff and maximum performance climb
____ Short-field approach and landing
____ Forward slip to landing
____ Go-around/Rejected landing

**PRIVATE PILOT END-OF-COURSE EVALUATION
(CONTINUED)**

V. PERFORMANCE & GROUND REFERENCE MANEUVERS

- ___ ___ ___ Steep turns
- ___ ___ ___ Ground reference maneuvers

VI. NAVIGATION

- ___ ___ ___ Pilotage and dead reckoning
- ___ ___ ___ Navigation systems and radar services
- ___ ___ ___ Diversion
- ___ ___ ___ Lost procedures

VII. SLOW FLIGHT AND STALLS

- ___ ___ ___ Slow flight
- ___ ___ ___ Power-off stalls
- ___ ___ ___ Power-on stalls
- ___ ___ ___ Spin awareness

VIII. BASIC INSTRUMENT MANEUVERS

- ___ ___ ___ Straight and level
- ___ ___ ___ Constant airspeed climbs
- ___ ___ ___ Constant airspeed descents
- ___ ___ ___ Turns to headings
- ___ ___ ___ Recovery from unusual attitudes
- ___ ___ ___ Radio communications, Nav systems,
Facilities and Radar services

**PRIVATE PILOT END-OF-COURSE EVALUATION
(CONTINUED)**

IX. EMERGENCY OPERATIONS

- ___ ___ ___ Emergency descents
- ___ ___ ___ Emergency approach and landing
- ___ ___ ___ Emergency equip and survival gear
- ___ ___ ___ Systems and equipment malfunctions

Systems and Equipment Malfunction: Select 3 Skills

- ___ ___ ___ Partial or Complete Power Loss
- ___ ___ ___ Engine Roughness or Overheat
- ___ ___ ___ Carburetor or Induction Icing
- ___ ___ ___ Loss of Oil Pressure
- ___ ___ ___ Fuel Starvation
- ___ ___ ___ Electrical Malfunction
- ___ ___ ___ Vacuum/Pressure and Associated Flight Instruments Malfunction
- ___ ___ ___ Pitot/Static System Malfunction
- ___ ___ ___ Landing Gear or Flap Malfunction
- ___ ___ ___ Inoperative Trim
- ___ ___ ___ Inadvertent Door or Window Opening
- ___ ___ ___ Structural Icing
- ___ ___ ___ Smoke/Fire/Engine Compartment Fire
- ___ ___ ___ Electronic flight deck display malfunction
- ___ ___ ___ Any Other Emergency Appropriate to the Airplane

XI. NIGHT OPERATIONS

- ___ ___ ___ Night preparation

XII. POSTFLIGHT PROCEDURES

- ___ ___ ___ Parking and Securing

COMPLETION STANDARDS

A student pilot must meet the FAA Private Pilot Airman Certification Standards on this evaluation before being awarded a Private Pilot Certificate.

ATTEMPT 1

Examiner _____

Student _____

Date _____

Oral Time _____

Flight Time _____

ATTEMPT 2

Examiner _____

Student _____

Date _____

Oral Time _____

Flight Time _____

ATTEMPT 3

Examiner _____

Student _____

Date _____

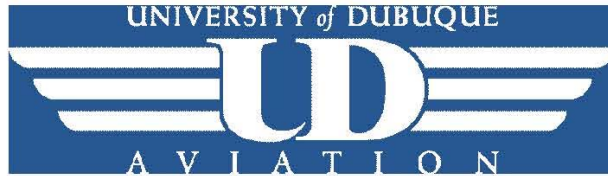
Oral Time _____

Flight Time _____

TOTAL ORAL TEST TIME

TOTAL FLIGHT TEST TIME

AIRCRAFT N #



MEMORANDUM

Date:

To: Chief Flight Instructor; University of Dubuque
Chief Ground Instructor; University of Dubuque

From: Part 141 – Private Pilot Ground Instructor

RE: Private Pilot Ground School Completion

The following students have successfully completed all the requirements for the Private Pilot Ground School Course as detailed in the Private Pilot TCO pursuant to Part 141, Appendix B. This ground school included three stage exams as well as an end-of-course exam, with scores of 80 percent or greater. All exams are then corrected to 100 percent:

NAME	DOB MM/DD/YYYY	NAME	DOB MM/DD/YYYY

Respectfully,

[Title],
University of Dubuque Aviation Department

PRIVATE PILOT CERTIFICATION

Ground Training Course

Hours

Stage 1—approx 12 hours of ground training

Stage 2—approx 12 hours of ground training

Stage 3—approx 12 hours of ground training

Students will receive a minimum of 36 hours of ground training.

Objective

The objective of the ground training course is to provide students with the necessary aeronautical knowledge required to meet the prerequisites specified in 14 CFR 61 and 141 for the FAA Private Pilot Knowledge Examination.

Completion Standards

Students will meet the ground training course completion standards by demonstrating through a combination of oral tests, written tests, and school records, that they meet the prerequisites specified in 14 CFR 61 and 141. A passing grade of 80% on all stage exams and an end-of-course exam will be required.

PRIVATE PILOT CERTIFICATION

Ground Training Course

STAGE 1

12 hours approx of ground training

Lessons 1-6

Objectives

The student will be introduced to pilot training, human factors in aviation, aerodynamic principles, and the flight environment. The student will also obtain a basic knowledge of safety of flight, airports, aeronautical charts, airspace, radio communications, and air traffic control services, including the use of radar. The student will learn radio procedures and the common sources of flight information.

Stage Completion Standards

This stage is complete when the student has completed the stage written examination with a minimum score of 80%. The instructor will review each incorrect response with the student to ensure understanding before the student progresses to the next stage.

LESSON 1

TIME APPROXIMATELY 2 HOURS

OBJECTIVES

- ◆ Become familiar with pilot training and human factors in aviation.
- ◆ Understand the school's pilot training program.

PILOT TRAINING

- How to Get Started
- Role of the FAA
- Fixed-Base Operators
- Eligibility Requirements
- Types of Training Available
- Phases of Training
- Private Pilot Privileges

HUMAN FACTORS

- Aeronautical Decision Making
- Crew Resource Management/SRM Training
- Pilot-In-Command Responsibility
- Communication
- Resource Use
- Workload Management
- Situational Aviation
- Aviation Physiology
- Alcohol, Drugs, and Performance
- Fitness For Fight

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 2

TIME APPROXIMATELY 2 HOURS

OBJECTIVES

- ◆ Understand airplane components and systems.
- ◆ Understand instrument functions and operating characteristics, including errors and common malfunctions.
- ◆ Understand powerplant and related systems.

AIRPLANES

- Fuselage
- Wings
- Empennage
- Landing Gear
- Engine / Propeller
- Pilot's Operating Handbook (POH)

POWERPLANT AND RELATED SYSTEMS

- Reciprocating Engine
- Induction Systems
- Supercharging and Turbocharging
- Ignition Systems
- Fuel Systems
- Refueling
- Oil Systems
- Cooling Systems
- Exhaust Systems
- Propellers
- Propeller Hazards
- Electrical Systems

FLIGHT INSTRUMENTS

- Pitot-Static Instruments
- Gyroscopic Instruments
- Magnetic Compass

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 3

TIME APPROXIMATELY 2 HOURS

OBJECTIVES

- ◆ Understand the four forces of flight, aerodynamics, principles of stability, maneuvering flight, and load factor.
- ◆ Understand stall/spin characteristics as they relate to training airplanes.
- ◆ Understand the importance of prompt recognition of stall indications.

FOUR FORCES OF FLIGHT

- Lift
- Weight
- Thrust
- Drag
- Ground Effect
- Airfoils
- Control of Lift

STABILITY

- Three Axes of Flight
- Longitudinal Stability
- Center of Gravity Position
- Lateral Stability
- Directional Stability
- Stalls
- Spins
- Spin Recoveries

AERODYNAMICS OF MANEUVERING FLIGHT

- Climbing Flight
- Turning Tendencies
- Descending Flight
- Turning Flight
- Load Factor

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 4

TIME APPROXIMATELY 3 HOURS

OBJECTIVES

- ◆ Understand important safety considerations, including collision avoidance precautions, right-of-way rules, and minimum safety altitudes.
- ◆ Understand airport markings and lightings, aeronautical charts, and types of airspace.
- ◆ Understand collision avoidance procedures and runway incursion avoidance.

SAFETY OF FLIGHT

- Collision Avoidance / Visual Scanning
- Airport Operations
- Right-of-Way Rules
- Minimum Safety Altitudes
- Taxiing in Wind
- Positive Exchange of Flight Controls

AIRPORT

- Controlled and Uncontrolled
- Runway Layout
- Traffic Pattern
- Airport Visual Aids
- Taxiway Markings
- Ramp Area Hand Signals
- Runway Incursion Avoidance
- Airport Lighting
- Visual Glideslope Indicators
- Approach Light Systems
- Pilot-Controlled Lighting

AERONAUTICAL CHARTS

- Latitude and Longitude - Projections
- Sectional Charts - World Aeronautical Charts
- Chart Symbolology

AIRSPACE

- Classifications - Uncontrolled Airspace - Class G
- Controlled Airspace - Class A, B, C, D, E
- Special VFR - Special Use Airspace
- Other Airspace - Emergency Air Traffic Rules
- Air Defense Identification Zones
- Temporary Flight Restrictions

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 5

TIME APROXIMATELY 2 HOURS

OBJECTIVES

- ◆ Understand radar, transponder operations, and FAA radar and services for VFR aircraft.
- ◆ Understand the services provided by a FSS.
- ◆ Understand the use of radio for communications.
- ◆ Understand the sources of flight information, i.e., the AIM, and FAA advisory publications.

RADAR AND ATC SERVICES

- Radar
- Transponder Operations
- FAA Radar Systems
- VFR Radar Systems
- Automatic Terminal Information Services
- Flight Service Stations

RADIO PROCEDURES

- VHF Communications Equipment
- Phonetic Alphabet
- Coordinated Universal Time
- Common Traffic Advisory Frequency (CTAF)
- ATC Facilities and Controlled Airports
- Lost Communications Procedures
- Emergency Procedures
- Emergency Locator Transmitters (ELT)

SOURCES OF FLIGHT INFORMATION

- Airport Facility Directory
- Federal Aviation Regulations
- Aeronautical Information Manual
- Notices To Airmen
- Advisory Circulars

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 6 - STAGE EXAMINATION

TIME APPROXIMATELY 1 HOUR

OBJECTIVES

- ◆ Demonstrate comprehension of the materials presented in Lessons 1 through 5.

EXAMINATION

- Airplane Systems
- Aerodynamic Principles
- The Flight Environment
- Communication and Fight Information

LESSON COMPLETION STANDARDS

This lesson and stage are complete when the student has completed the stage examination with a minimum grade of 80%. The instructor will review each incorrect response with the student to ensure understanding before the student progresses to the next stage.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

PRIVATE PILOT CERTIFICATION

Ground Training Course

STAGE 2

12 hours approx of ground training

Lessons 7-10

Objectives

Students will become familiar with weather theory, typical weather patterns, and various weather hazards. In addition, the student will learn how to obtain and interpret various weather reports and forecasts. Students will become familiar with the FARs as they apply to private pilot operations.

Stage Completion Standards

This stage is complete when the student has completed the stage written examination with a minimum score of 80%. The instructor will review each incorrect response with the student to ensure understanding before the student progresses to the next stage.

LESSON 7

TIME APPROXIMATELY 4 HOURS

OBJECTIVES

- ◆ Understand various weather conditions, frontal systems and hazardous weather phenomena.
- ◆ Understand how to recognize critical weather situations from the ground and during flight, including hazards associated with thunderstorms and wind shear.

BASIC WEATHER THEORY

- Atmosphere
- Atmospheric Circulation
- Atmospheric Pressure
- Coriolis Force
- Global Wind Patterns
- Local Wind Patterns

WEATHER PATTERNS

- Atmospheric Stability
- Temperature Inversions
- Moisture
- Humidity
- Dewpoint
- Clouds and Fog
- Precipitation
- Air Masses
- Fronts

WEATHER HAZARDS

- Thunderstorms
- Turbulence
- Wake Turbulence Recognition/Avoidance
- Wind Shear Recognition/Avoidance
- Microbursts
- Icing
- Restrictions to Visibility
- Volcanic Ash

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 8

TIME APPROXIMATELY 3 HOURS

OBJECTIVES

- ◆ Understand the appropriate Federal Aviation Regulations applicable to Private Pilot Certification.
- ◆ Understand FARs that govern student solo flight operations, private pilot privileges and limitations, required pre-flight actions and National Transportation Safety Board (NTSB) accident reporting requirements.

14 CFR PART 1

14 CFR PART 61

14 CFR PART 91

NTSB 830

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 9

TIME APPROXIMATELY 4 HOURS

OBJECTIVES

- ◆ Understand how to obtain and interpret weather reports, forecasts, and charts.
- ◆ Understand the sources of weather during preflight planning and while in flight.
- ◆ Recognize critical weather situations described by weather reports and forecasts.

THE FORECASTING PROCESS

- Forecasting Methods
- Types of Forecasts
- Compiling and Processing Weather Data
- Forecasting Accuracy and Limitations

PRINTED REPORTS AND FORECASTS

- Routine Aviation Weather Reports (METARs)
- Radar Weather Reports
- Pilot Weather Reports
- Terminal Airport Forecasts (TAFs)
- Aviation Area Forecasts (FAs)
- Severe Weather Reports and Forecasts
- AIRMET, SIGMET, Convective SIGMET

WEATHER CHARTS

- Surface Analysis Charts
- Weather Depiction Charts
- Radar Summary Chart
- Satellite Weather Charts
- Low-Level Significant Weather Prog Chart
- Severe Weather Outlook Chart
- Forecast Winds and Temperatures Aloft Chart
- Volcanic Ash Forecast and Dispersion Chart

SOURCES OF WEATHER INFORMATION

- Preflight Weather Sources
- In-Flight Weather Sources
- Weather Radar Services
- Automated Weather Reporting Services
- Cockpit Displays of Digital Weather and Aeronautical Information.

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 10 - STAGE EXAMINATION

TIME APPROXIMATELY 1 HOUR

OBJECTIVES

- ◆ Demonstrate comprehension of the materials presented in Lessons 7 through 9.

EXAMINATION

- Meteorology for Pilots
- Federal Aviation Regulations
- Interpreting Weather Data

LESSON COMPLETION STANDARDS

This lesson and stage are complete when the student has completed the stage examination with a minimum grade of 80%. The instructor will review each incorrect response with the student to ensure understanding before the student progresses to the next stage.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

PRIVATE PILOT CERTIFICATION

Ground Training Course

STAGE 3

12 hours approx of ground training

Lessons 11-15

Objectives

The student will be introduced to aircraft performance, weight and balance information, and cross country flight planning. The student will also obtain a basic knowledge of aviation physiology and decision-making.

Stage Completion Standards

This stage is complete when the student has completed the stage written examination with a minimum score of 80%. The instructor will review each incorrect response with the student to ensure understanding before the student progresses to the end-of-course exam. Additionally, the student must successfully pass the end-of-course exam with a minimum grade of 80% to earn the instructor's endorsement for the FAA Private Pilot Knowledge Exam.

LESSON 11

TIME APPROXIMATELY 3 HOURS

OBJECTIVES

- ◆ Understand use of data supplied by the manufacturer to predict airplane performance, including takeoff and landing distances, and fuel requirements.
- ◆ Understand how to compute and control the weight and balance condition of an airplane.
- ◆ Understand how to perform basic flight planning calculations.
- ◆ Understand the effects of atmospheric conditions on aircraft performance.

PREDICTING PERFORMANCE

- Aircraft Performance and Design
- Chart Presentations
- Factors Affecting Performance
- Effects of Density Altitude
- Takeoff and Landing Performance
- Climb Performance
- Cruise Performance
- Using Performance Charts

WEIGHT AND BALANCE

- Importance of Weight
- Importance of Balance
- Terminology
- Principles of Weight and Balance
- Computation Method
- Table Method
- Graphical Method
- Weight-Shift Formula
- Effects of Operating at High Total Weights
- Flight at Various CG Positions

FLIGHT COMPUTERS

- Mechanical Flight Computers
- Time, Speed, and Distance
- Airspeed and Density Altitude Computations
- Wind Problems - Conversions
- Multi-Part Problems
- Electronic Flight Computers
- Modes and Basic Operations

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 12

TIME APPROXIMATELY 2 HOURS

OBJECTIVES

- ◆ Understand navigation by pilotage and dead reckoning.
- ◆ Understand basic VOR theory and use.
- ◆ Understand the basics of Global Positioning Systems and other navigation systems.

PILOTAGE AND DEAD RECKONING

- Pilotage - Dead Reckoning
- Flight Planning - VFR Cruising Altitudes
- Flight Plan - Lost Procedures

VOR NAVIGATION

- VOR Operations
- Ground and Airborne Equipment
- Basic Procedures
- Orientation and Navigation
- Checkpoints and Test Signals
- Precautions
- Horizontal Situation Indicator
- Distance Measuring Equipment

SATELLITE-BASED NAVIGATION

- Equipment
- Regulations
- Authorized Use of Databases
- Receiver Autonomous Integrity Monitoring (RAIM)

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 13

TIME APPROXIMATELY 2 HOURS

OBJECTIVES

- ◆ Understand the importance of physiological factors related to private pilot operations.
- ◆ Understand aeronautical decision making, judgement, and risk-management.
- ◆ Understand accepted procedures and concepts pertaining to cockpit resource management, and human factors training.

AVIATION PHYSIOLOGY

- Vision in Flight
- Night Vision
- Optical Illusions
- Spatial Disorientation
- Respiration
- Hypoxia
- Hyperventilation
- Dehydration and Nutrition
- Middle Ear and Sinus Block
- Motion Sickness
- Carbon Monoxide Poisoning
- Stress and Fatigue
- Hypothermia
- Effects of Alcohol, Drugs, and Over-the-Counter Medications, and Associated Regulations
- Effects of Dissolved Nitrogen in the Bloodstream of a Pilot or Passenger Inflight Following Scuba Diving

AERONAUTICAL DECISION MAKING

- Applying the Decision Making Process
- Pilot-in-Command Responsibility
- Effects of Hazardous Attitudes on Aeronautical Decision Making
- Communication
- Workload Management
- Situational Awareness
- Resource Use
- Applying Human Factors Training
- Establish Personal Minimums
- Pilot/Airplane Interface: Pilot Monitoring Duties and the Interaction with Charts and Avionics Equipment

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 14

TIME APPROXIMATELY 3 HOURS

OBJECTIVES

- ◆ Understand the cross-country planning process.
- ◆ Understand the details of flying a cross-country flight, including the evaluation in-flight weather and making decisions on alternative actions, such as diversions and precautionary landings.
- ◆ Understand how to plan for an alternative.

FLIGHT PLANNING

- Developing the Route
- Preflight Weather Briefing
- Completing the Navigation Log
- Flight Plan
- Preflight Inspection

THE FLIGHT

- Departure
- Enroute
- Diversion
- Arrival

LESSON COMPLETION STANDARDS

The student will demonstrate understanding of the above material through written or oral questioning, and will answer 80% or greater correctly.

ASSIGNED READING

Reading for the next lesson will be assigned as required.

LESSON 15 - STAGE EXAMINATION

TIME APPROXIMATELY 1 HOUR

OBJECTIVES

- ◆ Demonstrate comprehension of the materials presented in Lessons 11 through 14.

EXAMINATION

- Airplane Performance
- Navigation
- Human Factors Principles
- Aeronautical Decision Making
- Cross-Country Flight Planning

LESSON COMPLETION STANDARDS

This lesson and stage are complete when the student has completed the stage examination with a minimum score of 80%. The instructor will review each incorrect response with the student to ensure complete understanding before the student progresses to the end-of-course examination.

UNIVERSITY OF DUBUQUE PRIVATE PILOT GROUND SCHOOL END-OF-COURSE EXAMINATION

TIME APPROXIMATELY 1 HOUR

OBJECTIVES

- ◆ Demonstrate comprehension of the material presented in this course and the student's readiness to complete the FAA Private Pilot Knowledge Test.

EXAMINATION

- Private Pilot Ground School Final Examination

LESSON COMPLETION STANDARDS

The student must complete a Private Pilot end-of-course examination with a minimum score of 80%.

University of Dubuque Certificate of Graduation

This certifies that

Student Full Name

has satisfactorily completed:

- 1—each required stage of the course of training, including the tests for those stages;
- 2—all cross-country flight training required for the course of training;
- 3—all other course requirements for the course of training as noted in FAR Part 141; and has graduated from the Federal Aviation Administration approved

Private Pilot Certification Course
conducted by the University of Dubuque, School Number GV8S178Q.

Private Pilot Certification Course - Appendix B, Paragraphs 4 and 5
Instrument Rating Course - Appendix C, Paragraph 4(c)(1)(i-iv)
Commercial Pilot Certification Course - Appendix D, Paragraphs 4 and 5
Multi-Engine Course - Additional Aircraft Category or Class Rating - Appendix I, Paragraphs 3 and 4
Flight Instructor Certification Course (Airplane, Single-Engine) - Appendix F
Flight Instructor Standardization Training Course (Special Curricula 141.57)

UNIVERSITY of DUBUQUE



Date of Graduation

I certify that the above statements are true.

Chief Flight Instructor