

# TRAINING COURSE OUTLINE

Bridgewater State University holds Pilot School Certificate No. LY8S311Q.

Bridgewater State University is an accredited four-year degree granting institution within the state of Massachusetts higher educational system. The base of operations/business address is 111 Harrington Hall, Bridgewater, MA 02325.

# FLIGHT INSTRUCTOR AIRPLANE SINGLE ENGINE CERTIFICATION COURSE

The Facilities Manual is Part 1 of the Training Course Outline and meets the requirements of 14 CFR Part 141.55 (c), subsections 1-5.

Ground and Flight Course Manuals are contained in Part 2 and meet the requirements of the Training Course Outline specified in 14 CFR 141.55 (c) 6-7.





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### **RECORD OF REVISIONS**

REV.#	DATE	CONTENT	INITIAL
I	2/18/09	Updates ACFI designation.	
II	6/2/09	Removes reference of QMA-11E aircraft.	
III	11/20/11	Updates header logo and school name, updates stage II ground and reduces total ground training time to 40 hours. Adds multi-engine AATD (Multi-AATD). Adds Flight Instructors in Personnel listing. Updates Stage I Ground to conform to current FAA Aviation Instructor's Handbook. Updates Stage II Ground to require additional practice/role playing experience for applicants. Updates flight lesson objectives and tasks, including addition of pre- and post-flight risk mitigation.	
IV	5/29/18	Change of Chief Instructor/Assistant Chief Instructor(s). Added option for use of C-172 in Stage 2 if complex aircraft not available.	
V	9/24/20	Updates airport and facility diagrams, adds availability of cockpit procedures trainers (CPTs), AATDs, and Technically Advanced Aircraft (TAA), change of Chief Instructor, updates list of reference publications, page numbers, grammatic corrections.	
VI	6/21/21	Change of Chief and Assistant Chief Instructors, addition of distance learning capability, adds satellite location, corrected list of affected pages, minor grammar corrections.	

### **NOTE**

After inserting a revision, enter the date the revision is to be effective, and place your initials in the appropriate column. The manual holder is responsible for maintaining current revisions.



# LIST OF AFFECTED PAGES

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# FLIGHT INSTRUCTOR AIRPLANE SINGLE ENGINE CERTIFICATION COURSE

# **PART I**

# **FACILITIES MANUAL**

The Facilities Manual is Part 1 of the Training Course Outline and meets the requirements of 14 CFR Part 141.55 (c), subsections 1-5.

# **PART I**

# **FACILITIES MANUAL**

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### **Bridgewater State University Facility**

The Bridgewater State University campus in Bridgewater, Massachusetts, serves as the primary business address and administrative office for this course.

#### **Satellite Location**

The Bridgewater State University campus located in Bridgewater, Massachusetts, serves as the satellite location for conduct of the ground training portion of this course.

#### **Academics**

The academics facilities are located on the campus of Bridgewater State University, Harrington Hall, 95 Grove Street, Bridgewater, Massachusetts. Bridgewater State University may elect to conduct the academic ground courses for students at its Flight Training Center, located at New Bedford Regional Airport, New Bedford, Massachusetts.

### **Distance Learning**

Bridgewater State University may deliver ground training in accordance with 14 CFR 141.53(d) utilizing internet-based tools described below.

- All courses are delivered using the Blackboard learning management system that requires a unique login to ensure identification/authorization, confidentiality, and access control. Blackboard allows out-of-class communications, attendance tracking, in-class discussion, participation, questions and answers, assignment feedback, and assessment feedback.
- Access to Blackboard is available through (4) different internet browsers.
- Blackboard monitors attendance for record-keeping compliance. Participants will be noted in their paper records to differentiate participants in the distance learning platform.
- A secure internet proctoring resource (Respondus Lockdown Browser) ensures integrity of stage exams, end-of-course and final exams.
- The Principle Operations Inspector (POI) receives a Blackboard account to allow for remote access to each course in accordance with 14 CFR 141.53(d)(2).

#### Classrooms

Academic classes will typically be conducted in Harrington Hall in two (2) classrooms located on the ground floor of the building. Classroom 001 measures 24' by 20' and accommodates 24 students. Classroom 002 measures 35' by 20' and accommodates 30 students. Both classrooms contain computerized projection equipment and dry erase boards. Other rooms may be available and assigned by the University as necessary. All classrooms and administrative areas comply with current local building, health and sanitation codes, are enclosed, easily accessible, and provide a clean instructional environment free from outside distractions.

# **Ground Training Aids**

- Overhead projector with Audio/Visual capability
- Computer terminal including internet access
- Video projector with DVD capability
- Ceiling-mounted video projector unit
- Wall-mounted dry-erase board



# **Bridgewater State University Classroom Diagram**

Storage	Flight Training Device	Storage
	Classroom 002	
	30 Student Capacity 35' by 20'	
	Classroom 001 24 Student Capacity 24' by 20'	



### **New Bedford (KEWB) Flight Training Center**

Bridgewater State University's Flight Training Center, located at the New Bedford Regional Airport at 1852 Shawmut Avenue, North Dartmouth, MA 02747, is the central location for all flight training activity.

#### **Aircraft**

Bridgewater State University's flight training program may utilize two (2) aircraft for this course of training:

The Piper PA-28R Arrow is a four-place, single-engine, complex aircraft with dual flight controls. The aircraft is rated in the Normal category and certified for Day/Night VFR/IFR Operations. The aircraft meets the requirements of 14 CFR Part 141.39 and 141.75.

The Cessna 172 is a four-place, single-engine, non-complex aircraft with dual flight controls. The aircraft is rated in the Normal and Utility categories and is certified for Day/Night VFR/IFR Operations. The aircraft meets the requirements of 14 CFR Part 141.39 and 141.75. Multiple Cessna 172 aircraft qualify as Technically Advanced Airplanes per the requirements of 14 CFR Part 61.1 and 61.129(j).

Special equipment required for the course includes a VOR receiver, LOC and GS receivers, Transponder with Mode C, and GPS.

#### **AATDs**

Bridgewater State University's flight training program may utilize three (3) advanced aviation training devices for this course of training:

Redbird Models LD (2), FMX (1).

## **New Bedford Regional Airport**

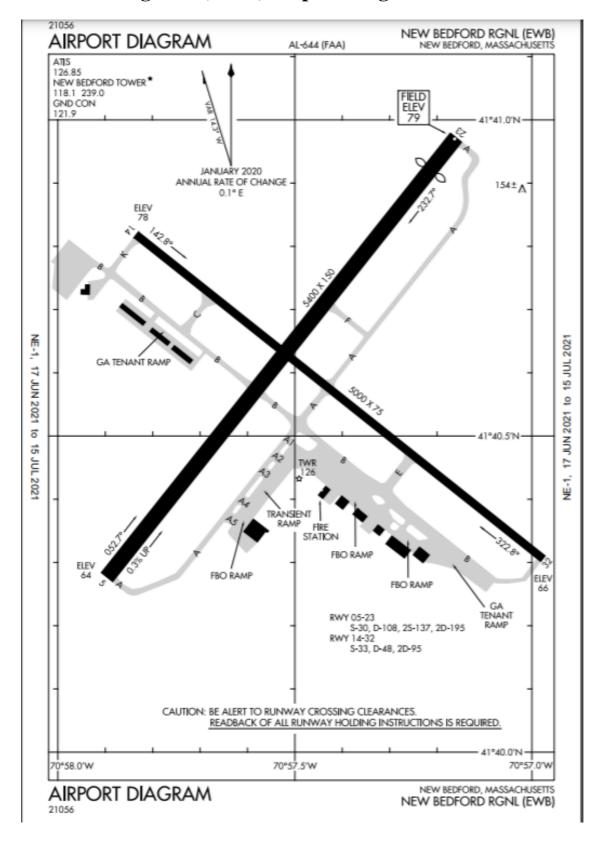
The New Bedford Regional Airport (KEWB) is the main flight training center for the Bridgewater State University aviation program. KEWB contains two (2) hard-surfaced runways and meets the requirements of 14 CFR Part 141.38 for both day and night flight operations. KEWB has an operational control tower that is staffed from 0700-2200 local time. The airport has operable ILS, LOC, LOC/BC, and GPS approaches. Maintenance service is available from 0700-1700 and on call during evening and night flight operations. Fuel service is available 0700-2000 daily, on call at other times.

# **Training Airports**

All airports used for training operations meet the requirements of 14 CFR Part 141.38. Guidance for use of these airports is provided for flight instructors and students via the Approved Airports listing in the Bridgewater State University Aviation Operations Manual. The Chief Flight Instructor or his/her designee may approve the use of any public-use airport listed in the current Chart Supplement.



# New Bedford Regional (EWB) Airport Diagram





### Flight Briefing Area

The main flight briefing area is centrally located within the operations building and measures 22' by 33'. It is equipped with briefing tables, chairs, cubicles (equipped with dry erase boards), a computer-based weather information station that provides textual and graphic weather reports and forecasts, and a landline phone connecting to a FSS Briefer. The room can accommodate up to 30 persons. Additionally, four briefing cubicles and a student study area are located in the Central Bay.

#### Classroom Area

The classroom area is located at the southeast corner of the facility, and is accessible from either the main facility entrance or from the rear of the classroom on the rearward side of the building. The classroom measures 23' by 34' and accommodates up to 30 persons. The room is equipped with tables, chairs, ceiling-mounted video projector, computer terminal with internet access, and dry erase boards.

#### AATD Room

One room measuring 32' by 22' houses three AATD units and a crosswind trainer.

#### **Administrative Offices**

The facility contains multiple administrative offices. Measuring 9' by 11', 9' by '14', 12' by 18', 14' by 24' or 18' by 24', each can accommodate (5) to (10) persons, respectively.

#### **CPTs**

Bridgewater State University's flight training program may utilize C-172R Cockpit Procedures Trainers (CPTs) for this course of training.

# **Ground Training Aids**

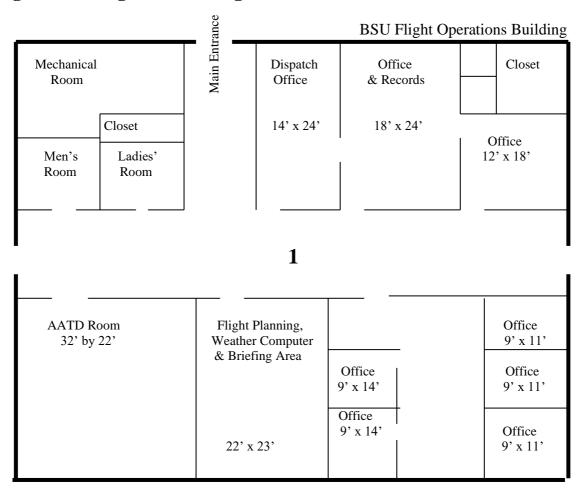
- Overhead projector with audio/visual capability
- Computer terminal including internet access
- Video projector with DVD capability
- Ceiling-mounted video projector unit
- Wall-mounted dry-erase board
- Aeronautical charts, publications, and aircraft components for training purposes only
- Resource library
- C172R Cockpit Procedures Trainers (CPT)

#### **NOTE**

All classrooms and administrative areas comply with current local building, health and sanitation codes. All rooms are enclosed and easily accessible, and provide a clean instructional environment free from outside distractions



# Flight Training Center Diagram



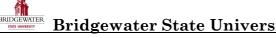
Not to Scale

Ground School Classroom 23' x 34' **2** 

Central Bay Briefing Area  $\bf 3$ 

#### LOCATION KEY

2	3	1



# **PART II**

# **COURSE MANUAL**

# **FLIGHT INSTRUCTOR** AIRPLANE SINGLE ENGINE **CERTIFICATION COURSE**



# FLIGHT INSTRUCTOR AIRPLANE SINGLE ENGINE TRAINING COURSE SYLLABUS

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# **PERSONNEL**

#### CHIEF FLIGHT INSTRUCTOR

The Chief Flight Instructor for this course is Timothy Townsend. The Chief Flight Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

#### CHIEF GROUND INSTRUCTOR

The Chief Ground Instructor for this course is Timothy Townsend. The Chief Ground Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

#### ASSISTANT CHIEF FLIGHT INSTRUCTOR

The Assistant Chief Flight Instructor for this course is Loren Herren. The Assistant Chief Flight Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

#### ASSISTANT CHIEF GROUND INSTRUCTOR

The Assistant Chief Ground Instructor for this course is Loren Herren. The Assistant Chief Ground Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter.

#### **FLIGHT INSTRUCTORS**

Each Flight Instructor for the flight portion of this course holds at least a Flight Instructor certificate with appropriate ratings for the course of training and a Commercial Pilot certificate with rating(s) appropriate to the aircraft used in this course. Each Flight Instructor meets the requirements of 14 CFR 141.33(a)(3) and is designated in the Part 141 Operations Specifications.

#### **GROUND INSTRUCTORS**

Each Ground Instructor assigned to this course must hold a Ground Instructor Certificate or a Flight Instructor Certificate with an Airplane rating. Other individuals may give instruction in this course if the Chief Flight Instructor (or if the Chief Flight Instructor is unavailable, the Chief Ground Instructor is designated) finds that individual qualified to provide instruction. The instruction will be provided under the direct supervision of the appropriate Chief or Assistant Chief Instructor who is present at the facility when such instruction is given.



# STUDENT INFORMATION

#### COURSE ENROLLMENT

To be eligible for enrollment in the flight portion of this course, students must be enrolled as full-time students at Bridgewater State University, be of at least 18 years of age, be able to read, write, speak and understand the English language, and hold at least a Commercial Pilot Certificate with an Airplane Category, Single-Engine Land Class and Instrument (Airplane) Rating.

#### COMPLETION STANDARD FOR GRADUATION

To be eligible for graduation from this course, students must be able to read, speak, write, and understand the English language, be at least 18 years of age, hold at least a current FAA Third Class Medical, and satisfactorily complete the ground and flight training outlined in this syllabus. Students will demonstrate through oral and written exams and flight tests the knowledge and skill requirements needed to pass the FAA Fundamentals of Instructing Knowledge Test and Certified Flight Instructor – Airplane Knowledge and Practical Tests.

#### LESSON DESCRIPTION AND STAGES OF TRAINING

The Bridgewater State University Flight Instructor - Airplane Course (ground) contains two (2) stages and a total of 16 lessons. The Flight portion of the course contains two (2) stages and 18 total lessons. Each lesson is fully described within the syllabus and includes objectives, completion standards, and measurable units of accomplishment. Stage objectives and completion standards are provided at the beginning of each stage within the syllabus.

#### TESTS AND CHECKS

The syllabus incorporates stage checks and end-of-course tests in accordance with CFR Part 141, Appendix F. The Chief Flight Instructor is responsible for ensuring that each student accomplishes the required stage checks and end-of-course tests in accordance with Bridgewater State University's approved training course. However, the Chief Flight Instructor may delegate authority for stage checks and end-of-course tests to the Assistant Chief or Check Instructor.



# **COURSE INTRODUCTION**

The Bridgewater State University Flight Instructor - Airplane Course coordinates academic study assignments and flight training required for pilots learning to operate in a complex aviation environment. New subject matter is introduced during the ground lessons in multimedia formats, including:

- 1. Current FAA Flight Instructor Airplane Practical Test Standards (PTS)
- 2. Current FAA Aircraft Weight and Balance Handbook
- 3. Current FAA Current Risk Management Handbook
- 4. Current FAA Airplane Flying Handbook
- 5. Current FAA Aviation Instructor's Handbook
- 6. Current FAA Instrument Flying Handbook
- 7. Current FAA Pilot's Handbook of Aeronautical Knowledge
- 8. Current Order 8080.6 Conduct of Airman Knowledge Tests
- 9. AC 00-45H Aviation Weather
- 10. AC 00-6B Aviation Weather Services
- 11. AC 60-22 Aeronautical Decision Making
- 12. AC 60-28 English Language Skill Standards as required by 14 CFR parts 61, 63, and 65
- 13. AC 61-65 Certification: Pilots and Flight Instructors
- 14. AC 61-67 Stall and Spin Awareness Training
- 15. AC 61-84 Role of Preflight Preparation
- 16. AC 61-134 General Aviation Controlled Flight Into Terrain Awareness
- 17. AC 90-48 Pilots' Role in Collision Avoidance
- 18. AC 91-13 Cold Weather Operation of Aircraft
- 19. AC 91-73 Parts 91 and 135 Single-Pilot Procedures During Taxi Operations
- 20. AC 150/5340-1 Standards for Airport Markings
- 21. AC 150/5340-18 Standards for Airport Sign Systems
- 22. AC 150/5340-30 Design and Installation Details for Airport Visual Aids
- 23. Current FAA Chart Supplement
- 24. Current FAR/AIM
- 25. Appropriate Pilot's Operating Handbook (POH)
- 26. Appropriate BSU Flight Standards Manual (FSM)
- 27. Multimedia presentations
- 28. Instructor/student discussions
- 29. Stage and end-of-course exams

Whenever possible and practical, ground lessons are completed in ground school just prior to the respective flight lessons outlined in the syllabus. BSU may elect to present all of the ground lessons before introducing the student to the airplane. If a significant amount of time lapses between ground and flight lessons, instructors are expected to conduct review training of essential material. Flight lessons should not be conducted until after the related ground lesson.

In accordance with established FAA practices, this syllabus utilizes the building-block theory of learning, where each item taught must be presented on the basis of previously learned knowledge and skills. It is designed to coordinate academic support materials with the flight lessons.



#### **COURSE ELEMENTS**

The Bridgewater State University Flight Instructor - Airplane Course is designed to be conducted as a combined ground and flight training program, but it may be divided into separate components. This course includes the most current FAA pilot and flight instructor certification requirements. The syllabus and support materials provide necessary information and present the course in a logical manner.

#### **GROUND TRAINING**

In accordance with FAR Part 141, ground school training is an integral part of pilot certification courses. The Bridgewater State University ground training syllabus has been designed to meet this requirement. This course coordinates the sequence of ground and flight events to maximize effectiveness of the academic knowledge and its application during flight events.

Lessons shall be conducted in the numerical order as listed in the ground and flight training segments of the syllabus. Flexibility for adapting to individual student needs and training situations is occasionally required, but the syllabus lesson sequence may be altered *only with the prior approval of the Chief Flight Instructor*. Any deviation should not disturb the course continuity or objective. Each lesson may be presented in one session or divided into multiple sessions, as necessary.

#### USING THE GROUND LESSONS

The Bridgewater State University Flight Instructor - Airplane Course ground lessons are best utilized by using all of the individual elements together in an organized approach as described in the syllabus. The syllabus contains cross-references which direct the user to the appropriate study materials for each lesson. Instructors are reminded to review the study assignment for the next lesson with their students.

#### STAGE CHECKS

Stage exams evaluate the student's understanding of the knowledge areas within a stage of training. Students must successfully complete each stage exam before progressing to the next stage. The Chief Flight Instructor is responsible for the conduct of each stage check, and may designate authority for conducting the stage check to an Assistant Chief or Check Instructor, as necessary. This procedure provides close supervision of training, provides another opinion on the student's progress, and gives the Chief Flight Instructor an opportunity to evaluate training effectiveness. Minimum passing score for any written stage or final exam for the purpose of earning Part 141 credit toward the Flight Instructor - Airplane certificate is 80%.

#### TEXTBOOKS/VIDEO PRESENTATIONS

Prior to each ground lesson, students are expected to study the assigned textbook(s) sections or chapters. This is the primary source for initial study and review. The texts contain concise explanations of the fundamental concepts and ideas and are organized in a logical building-block sequence. Study of the assigned materials prior to the scheduled lesson will improve student preparation and reduce overall training time.



# FLIGHT INSTRUCTOR - AIRPLANE GROUND COURSE

### **COURSE OVERVIEW**

#### **COURSE OBJECTIVE**

The student will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements for a Flight Instructor certificate with an Airplane Category and Single-Engine Land Class rating.

#### COURSE COMPLETION STANDARDS

The student must demonstrate through knowledge tests, flight tests, and show through appropriate records that he/she meets the knowledge, skill, and experience requirements necessary to obtain a Flight Instructor Certificate with an Airplane Category and Single-Engine Land Class rating.

#### TRAINING SYLLABUS

The Bridgewater State University Flight Instructor - Airplane syllabus meets all curriculum requirements of 14 CFR 141, Appendix F.

#### TRAINING COURSE

The Ground Training course contains two (2) stages and a total of 16 lessons.



# FLIGHT INSTRUCTOR - AIRPLANE GROUND COURSE SYLLABUS

#### GROUND TRAINING COURSE OBJECTIVES

The student will obtain the necessary instructional knowledge and experience required to meet or exceed current FAA Part 61 requirements for the Fundamentals of Instructing and Flight Instructor – Airplane Knowledge Tests.

#### GROUND TRAINING COMPLETION STANDARDS

The student will demonstrate through oral and written knowledge tests and records that he/she possesses the instructional knowledge and ability necessary to pass the Stage Exams and Course Final Exam, and is prepared for the Fundamentals of Instructing and Flight Instructor – Airplane FAA Knowledge Tests.



## FLIGHT INSTRUCTOR - AIRPLANE GROUND COURSE

# **Time Allocation Table**

### STAGE 1

LESS	SON SUBJECT		HOURS
		Training	Exam
I	Introduction	1.0	_
II	Human Behavior	1.5	
III	The Learning Process	3.5	
IV	Effective Communication	1.5	
V	The Teaching Process	3.0	
VI	Assessment	2.0	
VII	Planning Instructional Activity	1.5	
VIII	Instructor Responsibilities and Professionalism	1.5	
IX	Techniques of Flight Instruction	1.5	
X	Risk Management	2.0	
XI	Stage I Exam and Review		1.5
Stage	1 Totals	19.0	1.5
		20.5	

### **STAGE 2**

LESSON SUBJECT		HOURS		
			Training	Exam
XII	Technical Subject Area (w/ role playing)	2.0		
XIII	Technical Subject Area (w/ role playing)	4.0		
XIV	Technical Subject Area (w/ role playing)	2.0		
XV	Weather Theory and Analysis	1.0		
XVI	Weather Services	2.0		
XVII	Technical Subject Area (w/ role playing)	3.0		
XVIII	Technical Subject Area (w/ role playing)	2.0		
XIX	Stage II Exam and Review		1.5	
XX	<b>Course Final Exam and Review</b>		2.0	)
Stage 2	2 Totals		16.0	3.5
			<u>19.5</u>	
Cours	e Totals		40.0	5.0



# **STAGE 1**

#### **STAGE 1 OBJECTIVES**

During this stage the student will be introduced to learning theory and teaching processes, including principles of learning, ground and flight lesson planning, organization and conduct, and the responsibilities of a professional flight instructor. The student will obtain practical experience through the planning and execution of mock ground lessons.

#### STAGE I COMPLETION STANDARDS

This stage is complete when the student completes the Stage I Fundamentals of Instructing Exam with a minimum passing score of 80%.



### STAGE 1 **GROUND LESSON 1 Course Introduction**

LESSON REFERENCES:	Instructor Knowledge of PTS		
Aviation Instructor's Handbook	Examiner Responsibilities		
CFI-ASE PTS	Applicant Responsibilities		
Course Syllabus	Knowledge of Publications and		
RECOMMENDED SEQUENCE:	References		
1. Lesson Introduction	Satisfactory vs. Unsatisfactory		
2. Lecture	Performance		
3. Class Discussion			
	<b>Instructional Aids</b>		
LESSON OBJECTIVE:	Guidelines on Use		
The student will learn about the how the	Teaching Aids and Technology		
TCO is written and what is required of a Flight Instructor, including proper knowledge and use of the appropriate PTS, time allocation and other instructional aids.	COMPLETION STANDARDS:  Through oral quizzing the student will demonstrate instructional knowledge of the student will demonstrate the student will demonstrate the student will demonstrate the student will be student will demonstrate the student will be student w		
	lesson material.		
CONTENT:	STUDY ASSIGNMENT:		
<b>Training Course Outlines</b>	Aviation Instructor's Handbook 80839A		
Training Books and Materials	Ch. 1		
Academic Calendar			
Personal vs. Professional Influence			
<ul> <li>Time Constraints</li> <li>Currency vs. Recency</li> <li>Instructional Knowledge &amp;</li> <li>Demonstration</li> <li>Flight Proficiency</li> </ul>			
Safety			
<b>Practical Test Standards</b>			
Flight Instructor Responsibilities			



#### STAGE 1 GROUND LESSON 2 HUMAN BEHAVIOR

#### **LESSON REFERENCES:**

Aviation Instructor's Handbook, Ch. 1

### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

During this lesson the student will be introduced to student behavior patterns, recognizing factors affecting behavior, effective communication, and barriers to effective communication with students.

#### **CONTENT:**

#### **Human Behavior**

_ Definitions of Human Behavior
Human Needs and Motivation
Human Nature and Motivation
Human Factors that Inhibit Learning
 Student Emotional Reactions
Defense Mechanisms and Responses
Teaching Adult Students

#### **COMPLETION STANDARDS**

Through oral quizzing the student will demonstrate instructional knowledge of the material presented during the lesson.

#### STUDY ASSIGNMENT:

#### STAGE 1 GROUND LESSON 3 THE LEARNING PROCESS

THE LEARNING PROCESS	
LESSON REFERENCES:	Retention of Learning

### **RECOMMENDED SEQUENCE:**

Aviation Instructor's Handbook, Ch. 2,

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### LESSON OBJECTIVE:

During this lesson the student will be introduced to learning theory and application during flight training, including principles of learning and their individual importance in the learning process. Memory, retention, practice, multi-tasking, and scenario-based training (SBT) are explored.

#### **CONTENT:**

The learning process
Learning Theory
Perceptions and Insight
Acquiring Knowledge
Laws of Learning
Domains of Learning
Characteristics of Learning
Learning Styles
Acquiring Skill Knowledge
Types of Practice
Evaluation vs. Critique
Multi-tasking Truth and Fiction
Scenario-Based Training
Errors
Motivation
Maintaining Motivation
Memory

# COMPLETION STANDARDS

Through oral quizzing the student will demonstrate instructional knowledge of the material presented during the lesson.

#### STUDY ASSIGNMENT:

\_\_\_ Transfer of Learning

\_\_\_ Obstacles to Learning

# BRIDGEWATER Bridgewater State University

#### STAGE 1 GROUND LESSON 4 EFFECTIVE COMMUNICATION

#### **LESSON REFERENCES:**

Aviation Instructor's Handbook, 3

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

During this lesson the student will be introduced to the

#### **CONTENT:**

The elements of effective communication, the barriers to communication, and the development of communication skills are discussed in this lesson.

#### **Basic Elements of Communication**

 Source, Symbol, Receiver
Barriers to Effective
Communication
Interference
Word Use and Tonality
Body language
Developing Communication Skills
 Active Listening
 Questioning
Instructional Enhancement

#### **COMPLETION STANDARDS**

Through oral quizzing the student will demonstrate instructional knowledge of the material presented during the lesson.

#### STUDY ASSIGNMENT:

#### STAGE 1 GROUND LESSON 5 THE TEACHING PROCESS

LESSON REFERENC	NCTC.	

Aviation Instructor's Handbook, Ch. 4

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

During this lesson the student will be introduced to the teaching process, techniques, and organization. The student will learn how to plan, organize, and execute ground and flight lessons.

#### **CONTENT:**

#### **Teaching Process**

Essential	Teac	hing	Skil	ls

- Instructor's Code of Conduct
- \_\_\_ Course of Training

### **Planning Instructional Activity**

- \_\_\_ Course of Training
- \_\_\_\_ Training Syllabus
- \_\_\_ Lesson Plan

#### **Lesson Preparation**

- \_\_\_\_ Training Objectives and Standards
- \_\_\_\_ Performance-Based Objectives
- \_\_\_ The Importance of the PTS
- \_\_\_\_ Decision-Based Objectives

#### Presentation of a lesson

- \_\_\_ Organization of Material
- \_\_\_ Development of a Lesson

#### **Teaching Delivery Methods**

Lecture
Guided Discussion
Problem-Based Learning
Electronic-Based Learning
Cooperative or Group Learning
Demonstration-Performance
Drill and Practice
Lesson Application and Assessment
Instructional Aids and Teaching
Technologies
Test preparation Material

#### **COMPLETION STANDARDS**

\_\_ Future Developments

Through oral quizzing the student will demonstrate instructional knowledge of the material presented during the lesson.

#### STUDY ASSIGNMENT:



#### **STAGE 1 GROUND LESSON 6 ASSESSMENT**

Aviation Instructor's Handbook, Ch.5 Appendix B-1

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

During this lesson the student will be introduced to assessment and evaluation principles, technique, and methods.

#### **CONTENT:**

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•	harac	teristics	At Hitta	activa
•	Halat.			

	~~	~~~			4
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 Assessment Terminology
Purpose of Assessment
General Characteristics of Effective
Assessment
 Traditional Assessment/Testing
Authentic Assessment
Single-Pilot Resource Mgmt (SRM)
"grades"
 Choosing an Effective Assessment
Method
Critiques and Oral Assessments

#### **COMPLETION STANDARDS**

Through oral quizzing the student will demonstrate instructional knowledge of the material presented during the lesson.

#### STUDY ASSIGNMENT:

Aviation Instructor's Handbook, Ch. 6, Private Pilot TCO and syllabus



#### STAGE 1 GROUND LESSON 7 PLANNING INSTRUCTIONAL ACTIVITY

#### **LESSON REFERENCES:**

Aviation Instructor's Handbook, Ch. 6, Private Pilot TCO and syllabus

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

In this lesson the student will learn the key to developing well-planned and organized aviation instruction including lesson plans and training syllabi that meet all regulatory requirements. The lesson reviews the planning required by the professional CFI for conducting a lesson.

#### **CONTENT:**

 Course of Training
Blocks of Learning
Training Syllabus
Lesson Plans
Scenario-Based Training (SBT)
Single-Pilot Resource Mgmt (SRM)

#### **COMPLETION STANDARDS**

Through oral quizzing student will demonstrate instructional knowledge of the material presented during the lesson.

#### STUDY ASSIGNMENT:

# STAGE 1 GROUND LESSON 8 INSTRUCTOR RESPONSIBILITIES AND PROFESSIONALISM

#### **LESSON REFERENCES:**

#### STUDY ASSIGNMENT:

Aviation Instructor's Handbook, Ch. 7

Aviation Instructor's Handbook, Ch. 8

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

This lesson addresses the responsibilities of CFIs in the training process and their role as safety advocates, discusses how CFIs can enhance their professional image, and offers suggestions and sources of information to assist in professional development.

CONTENT
---------

Aviation Instructor Responsibilities
Flight Instructor Responsibilities
Aviators' Model Code of Conduct
Safety Practices and Accident
Prevention
Professionalism
Evaluation of Student Ability
Aviation Instructors and Exams
Professional Development
Sources of Material

#### **COMPLETION STANDARDS:**

Through oral quizzing student will demonstrate instructional knowledge of the material presented during the lesson.

### STAGE 1 GROUND LESSON 9 TECHNIQUES OF FLIGHT INSTRUCTION

#### **LESSON REFERENCES:**

#### STUDY ASSIGNMENT:

Aviation Instructor's Handbook, Ch. 8 Appendix C-1, E-1

Aviation Instructor's Handbook, Ch. 9

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

This lesson introduces practical strategies flight instructors can use to enhance their instruction, and how to effectively evaluate students. A discussion of CFI recommendations and endorsements are included in this lesson.

#### **CONTENT:**

Flight Instructor Qualifications
Practical flight Instructor Strategies
Obstacles to Learning During Flight
Instruction
Demonstration/Performance Training
Delivery Method
Positive Exchange of Flight Controls
Sterile Cockpit Rule
Use of Distractions
Integrated Flight Instruction
Assessment of Piloting Ability
Aeronautical Decision-Making
Factors Affecting Decision Making
Use of Resources
Endorsements

#### **COMPLETION STANDARDS:**

Through oral quizzing student will demonstrate instructional knowledge of the material presented during the lesson.

STAGE 1 GROUND LESSON 10 RISK MANAGEMENT

#### STUDY ASSIGNMENT:

Prepare for Stage 1 Exam

#### **LESSON REFERENCES:**

Aviation Instructor's Handbook, Ch. 9

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

The student will be introduced to the concept of system safety within the flight training environment, including the process of selecting and employing appropriate controls to mitigate risk, and learn aviation risk management as a preemptive rather than reactive process. Risk management principles and tools for teaching RM in the flight training environment are expanded.

#### **CONTENT:**

D	efining Risk Management
P1	rinciples of Risk Management
Ri	isk Management Process
Le	evel of Risk
A	ssessing Risk
M	litigating Risk
Tl	ne three-P Model for Pilots
Pi	lot Self-Assessment
Si	tuational Awareness
Si	ngle-Pilot Resource Mgmt (SRM)
Te	eaching Decision-Making Skills
A	ssessing SRM and ADM Skills

#### **COMPLETION STANDARDS:**

Through oral quizzing student will demonstrate instructional knowledge of the material presented during the lesson.

# BRIDGEWATER State University

STAGE 1 GROUND LESSON 11 STAGE 1 EXAM

#### **LESSON REFERENCES:**

All texts referenced for lessons 1 - 10

#### **RECOMMENDED SEQUENCE:**

- 1. Testing
- 2. Critique

#### **LESSON OBJECTIVE:**

This lesson is a stage check conducted by the Chief Ground Instructor,
Assistant Chief, or designated Check
Instructor. The student will demonstrate instructional knowledge of the material presented in lessons 1 – 10 in preparation for the Stage I exam, and for the FAA Fundamentals of Instructing Knowledge Test.

#### **CONTENT:**

Material presented during lessons 1 - 10.

#### **COMPLETION STANDARDS:**

This stage is complete and the student eligible to take the FAA Fundamentals of Instructing Knowledge Test when the student has completed the Stage I written exam with a minimum passing score of 80%.



# **STAGE II**

#### STAGE II OBJECTIVES

During this stage the student will review the FAA Private Pilot and Commercial Pilot certificate knowledge areas, and learn the elements necessary for conducting flight instruction in single engine land aircraft, including the maneuvers and procedures required for Private Pilot and Commercial Pilot applicants.

#### STAGE II COMPLETION STANDARDS

This stage is complete when the student completes the Stage II Exam and Course Final Exam with a minimum passing score of 80%.

#### **NOTE**

In the Stage II ground lessons, role-playing will be used to strengthen CFI applicant teaching skills. Role playing within this context refers to the CFI candidate(s) periodically acting as the instructor by presenting the material as assigned. The course ground instructor will provide instruction, feedback and critique regarding the CFI candidate's lesson preparation and presentation.



#### **STAGE II**

GROUND LESSON 12 TECHNICAL SUBJECT AREA (W/ ROLE PLAYING)

#### **LESSON REFERENCES:**

Flight Training Handbook, Ch. 1, Pilot's Handbook of Aeronautical Knowledge (PHAK), Ch. 7, 8, AIM Ch. 8

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

During this lesson the student will review aviation physiology, spatial disorientation, aeronautical decision making and night operations as elements of pre-flight planning and preparation.

#### **CONTENT:**

Part 67, Medical Certification
Fitness for Flight
Alcohol, FARs, and Performance
Drugs, FARs, and Performance
Confirmation Bias
Aeronautical Decision Making and
Judgment
Hypoxia and Hypoxia Prevention
Hyperventilation
Oxygen Requirements and
Equipment
Pressurized Oxygen
Decompression
Eye Physiology
Visual Scanning
Environmental Factors

Empty Field Myopia		
Blind Spots		
Collision Avoidance		
Ear Physiology		
Spatial Disorientation		
Illusions in Flight		
Realistic Distractions		
Division of Attention		
<b>Night Operations</b>		
Preparation		
Night Vision		

Preparation
Night Vision
Preflight Inspection
Flight Instruments
Visibility and Lighting

#### **COMPLETION STANDARDS:**

Through oral quizzing the student will demonstrate instructional knowledge of the material, and will demonstrate instructional ability by teaching the listed material.

#### **STUDY ASSIGNMENT:**

Flight Training Handbook, Ch. 2-4, 12, 17, PHAK Ch. 1, 2, 4, 6-8, AIM Ch. 1, 9, Training Aircraft FSM



STAGE II GROUND LESSON 13 TECHNICAL SUBJECT AREA (W/ ROLE PLAYING)

#### **LESSON REFERENCES:**

Flight Training Handbook, Ch. 2-4, 12, 17, PHAK Ch. 1, 2, 4, 6-8, AIM Ch. 1, 9, Training Aircraft FSM

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture/Teaching Demonstrations
- 3. Class Discussion

#### **LESSON OBJECTIVE:**

During this lesson the student will review and teach on principles of flight, weight and balance, and flight planning/navigation as elements of preflight planning and preparation.

#### **CONTENT:**

#### **Principles of Flight**

Newton's Contribution
Bernoulli's Contribution
Four Forces Acting on an Aircraft
Angle of Attack
Lift Formula/Pilot Control of Lift
Airfoil Design
Primary Flight Controls/Trim
Flaps, Leading Edge Devices, Spoilers
Turning Flight
Climbing and Descending
Changing Airspeed
Stalls
Spins

#### Weight and Balance

Determining Weight and Balance
Use of Performance Charts
Effects of Exceeding Aircraft
Limitations
CG Location
Stability
Factors Considered in Determining
Required Performance is Within
Aircraft Capabilities

#### Flight Planning and Navigation

Flight Planning
Route Selection
Required Information
Navigation Log
Navigational Systems and
Equipment
Pilotage and Dead Reckonin

#### **COMPLETION STANDARDS:**

Through oral quizzing the student will demonstrate instructional knowledge of the material, and will demonstrate instructional ability by teaching the listed material.

#### STUDY ASSIGNMENT:

PHAK Ch. 8, Flight Training Handbook Ch. 7, AIM Ch. 2, 3



#### **Bridgewater State University**

#### STAGE II GROUND LESSON 14 TECHNICAL SUBJECT AREA (W/ ROLE PLAYING)

#### **LESSON REFERENCES:**

PHAK Ch. 8, Flight Training Handbook Ch. 7, AIM Ch. 2, 4, AC 150-5340-1J

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture/Teaching Demonstrations
- 3. Critique

#### **LESSON OBJECTIVE:**

During this lesson the student will review airport operations and learn to instruct student applicants on all aspects of this subject area as elements of preflight planning and preparation.

#### **CONTENT:**

UNICOM/CTAF/Tower/Ground
Control Frequencies
Radio Communications
ATC Light Signals
Taxiway Markings and Lighting
Runway Markings and Lighting
AC 150-5340-1J
Other Airport Markings
Airport Signs and Lighting
Airport Beacons
Visual Approach Slope Indicator
(VASI)
Precision Approach Path Indicator
(PAPI)
Pilot Control of Lighting

#### **COMPLETION STANDARDS:**

Through oral quizzing the student will demonstrate instructional knowledge of the material, and will demonstrate instructional ability by teaching the listed material.

#### STUDY ASSIGNMENT:

AC 00-6 Aviation Weather, AIM Ch. 7



STAGE II GROUND LESSON 15 TECHNICAL SUBJECT AREA (W/ ROLE PLAYING)

#### **LESSON REFERENCES:**

AC 00-6 Aviation Weather, AIM Ch. 7

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture/Teaching Demonstrations
- 3. Critique

#### **LESSON OBJECTIVE:**

During this lesson the student will review aviation weather theory and analysis, and develop his/her instructional skill in teaching the listed topics.

#### **CONTENT:**

Atmosphere
Temperature
Pressure
Altitude
Air Density
Wind
Moisture
Stability
Cloud Types and Formation
Atmospheric Circulation
Air Masses and Fronts

#### **COMPLETION STANDARDS:**

Through oral quizzing the student will demonstrate instructional knowledge of the material, and will demonstrate instructional ability by teaching the listed material.

#### STUDY ASSIGNMENT:

AC 00-45 Aviation Weather Services, AIM Ch. 7, A/FD



#### STAGE II GROUND LESSON 16 TECHNICAL SUBJECT AREA (W/ ROLE PLAYING)

#### **LESSON REFERENCES:**

AC 00-45 Aviation Weather Services, AIM Ch. 7, A/FD 7

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture/Teaching Demonstrations
- 3. Critique

#### **LESSON OBJECTIVE:**

During this lesson the student will review aviation weather services and their sources as elements of teaching pre-flight planning and preparation, and develop his/her instructional skill in teaching the listed topics.

#### **CONTENT:**

 Importance of Obtaining a
Thorough Preflight Weather
Briefing
 Obtaining Weather Information
 Non-Aviation Sources
 Airport Facility Directory
 Textual Observations and Reports
 Graphic Observations
Forecasts
 Weather Charts
Use of real-time Reports, Forecasts,
Charts in Scenario-Based Training
 In-Flight Weather Advisories
 Recognizing Aviation Weather
Hazards, including Wind Shear
 Factors Considered in Making a
Go/No-Go Decision

#### **COMPLETION STANDARDS:**

Through oral quizzing the student will demonstrate instructional knowledge of the material, and will demonstrate instructional ability by teaching the listed material.

#### **STUDY ASSIGNMENT:**

FARs, Logbook, and Endorsements for Certificates and Ratings



#### **STAGE II**

GROUND LESSON 17 TECHNICAL SUBJECT AREA (W/ ROLE PLAYING)

#### **LESSON REFERENCES:**

FARs, Logbook, and Endorsements for Certificates and Ratings

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture/Teaching Demonstrations
- 3. Critique

#### **LESSON OBJECTIVE:**

During this lesson the student will learn about federal aviation regulations as they apply to instructor responsibilities for pilot logbooks and endorsements for certificates and ratings. The student will review the following areas as elements of pre-flight planning and preparation.

#### **CONTENT:**

CFR Part 43
CFR Part 61, including Class and
Duration of Medical Certificates
CFR Part 91
CFR Part 141
NTSB 830
Student Pilot
Training Requirements:
Recreational Pilot Certificate
Training Requirements for Issuance
of Private Pilot Certificate
Training Requirements for an
Instrument Pilot Rating
Training Requirements a
Commercial Pilot Certificate
CFI Records/Limitations

Recency and Currency
Requirements/Flight
Review
Required Entries, Pilot Logbook or
Flight Record

#### **COMPLETION STANDARDS:**

Through oral quizzing the student will demonstrate instructional knowledge of the material, and will demonstrate instructional ability by teaching the listed material.

#### **STUDY ASSIGNMENT:**

Flight Training Handbook, Ch. 7, PHAK Ch. 8, AIM Ch. 3



#### STAGE II GROUND LESSON 18

TECHNICAL SUBJECT AREA (W/ ROLE PLAYING)

#### **LESSON REFERENCES:**

Flight Training Handbook, Ch. 7, PHAK Ch. 8, AIM Ch. 3

#### **RECOMMENDED SEQUENCE:**

- 1. Lesson Introduction
- 2. Lecture/Teaching Demonstrations
- 3. Critique

#### **LESSON OBJECTIVE:**

During this lesson the student will review aeronautical publications, airspace, and airworthiness requirements as elements of pre-flight planning and preparation.

#### **CONTENT:**

#### **Publications**

Airport/Facility Directory
NOTAMS

\_\_\_ Advisory Circulars

\_\_\_\_ Pilot's Operating Handbook

\_\_\_\_ Airplane Flight Manual

\_\_\_ FAR/AIM

\_\_\_ Online Resources

#### **Airspace**

Controlled Airspace
Uncontrolled Airspace

\_\_\_ Other Airspace

\_\_\_ Special Use Airspace

#### **Airworthiness Requirements**

Inoperative Instruments or
Equipment
Minimum Equipment List
Supplemental Type Certificate
Letter of Authorization
Special Flight Permit
Maintenance Programs

#### **COMPLETION STANDARDS:**

Through oral quizzing the student will demonstrate instructional knowledge of the material, and will demonstrate instructional ability by teaching the listed material.

#### STUDY ASSIGNMENT:

Preparation for Stage II Exam.

#### **Bridgewater State** University

STAGE II GROUND LESSON 19 STAGE II EXAM

#### **LESSON REFERENCES:**

All references used during lessons 12 - 18.

#### **RECOMMENDED SEQUENCE:**

- 1. Testing
- 2. Critique

#### **LESSON OBJECTIVE:**

This lesson is a stage check conducted by the Chief Ground Instructor, Assistant Chief, or designated Check Instructor. The student will demonstrate instructional knowledge of the material presented in lessons 12-18.

#### **CONTENT:**

Contents of lessons 12 - 18.

#### STUDY ASSIGNMENT:

Prepare for Course Final Exam

STAGE II GROUND LESSON 20 COURSE FINAL EXAM

#### **LESSON REFERENCES:**

All text references for material presented during lessons 1 - 18.

#### **RECOMMENDED SEQUENCE:**

- 1. Testing
- 2. Critique

#### **LESSON OBJECTIVE:**

This is the Course Final Exam conducted by the Chief Ground Instructor, Assistant Chief, or designated Check Instructor. The student will demonstrate instructional knowledge of the material presented in lessons 1 – 18 in preparation for the FAA Flight Instructor – Airplane Knowledge Test.

#### **CONTENT:**

Material presented during lessons 1 - 18.

#### **COMPLETION STANDARDS:**

This course is complete and the student eligible to take the FAA Flight Instructor - Airplane Knowledge Test when the student has completed the Course Final Exam with a minimum passing score of 80%.



# FLIGHT INSTRUCTOR - AIRPLANE FLIGHT TRAINING SYLLABUS

#### **COURSE OBJECTIVES**

The student will obtain the necessary aeronautical skill and experience necessary to meet the requirements for an Flight Instructor Certificate with an Airplane Category and Single-Engine Land class rating.

#### **COMPLETION STANDARDS**

The student must demonstrate through flight tests and school records that the necessary aeronautical skill and experience requirements to obtain Flight Instructor Certificate with an Airplane Category and Single-Engine Land Class rating have been met.



## FLIGHT INSTRUCTOR – AIRPLANE FLIGHT COURSE TIME ALLOCATION TABLE

PRACTICE									
CTL A CIT	T EGGON "	SCHED.	DILLI	PRACTICE	FLIGHT	INSTRUMENT		E CHECK	
STAGE	LESSON #	TIME	DUAL	BRIEFING	INSTRUCTION	TRAINING	OKAL	FLIGHT	A/C TYPE
I	1	2.0	1.5	0.5	1.5				Non-Cplx
I	2	1.5	1.2	0.5	1.2				Non-Cplx
I	3	2.0	1.5	0.5	1.5				Non-Cplx
I	4	1.5	1.2	0.5	1.2				Non-Cplx
I	5	2.0	1.5	0.5	1.5				Non-Cplx
I	6	2.0	1.5	0.5	1.5				Non-Cplx
I	7	2.0	1.5	0.5	1.5				Non-Cplx
I	8	2.0	1.5	0.5	1.5	1.2			Non-Cplx
I	9	2.0	1.5	0.5	1.5	.6			Non-Cplx
I	10	2.0	1.5	0.5	1.5	0.2	1.5	1.5	Non-Cplx
									Non-Cplx or
II	11	2.0	1.5	0.5	1.5				Complex
II	10	1.5	1.2	0.5	1.2				Non-Cplx or
11	12	1.5	1.2	0.5	1.2				Complex Non-Cplx or
II	13	2.0	1.5	0.5	1.5				Complex
	-								Non-Cplx or
II	14	1.5	1.2	0.5	1.2				Complex
***	1.5	2.0	1.5	0.5	1.5				Non-Cplx or
II	15	2.0	1.5	0.5	1.5				Complex Non-Cplx or
II	16	2.0	1.5	0.5	1.5	0.3			Complex
									Non-Cplx or
II	17	2.0	1.5	0.5	1.5				Complex
	10	2.0	1.7	0.5	1.5	0.2	<b>-</b> 0	2.0	Non-Cplx or
	18	2.0	1.5	0.5	1.5	0.2	5.0	2.0	Complex
	Tota	al	25.8	9.0		2.5	6.5	3.5	

#### **NOTE**

The times shown in the above table are for instructor and student guidance, and are not mandatory. Students must complete the course with not less than 25 hours of instruction provided by an authorized flight instructor.

#### MINIMUM COURSE HOURS DUAL 25.0

#### **NOTE**

Instructors shall provide not less than .5 briefing (combined pre-and post-flight) for every event.



#### STAGE I

#### STAGE I OBJECTIVES

During this stage, the student will learn to perform all visual and instrument maneuvers from the right seat of the aircraft. Special emphasis will be placed on conducting all VFR maneuvers visually with proper division of attention and minimal reference to flight instruments, and minimizing transition time between any maneuvers required for a lesson. Maneuvers will encompass those found in the Private Pilot and Commercial Pilot FAA Practical Test Standards.

#### STAGE I COMPLETION STANDARDS

At the completion of this stage, the student will demonstrate instructional knowledge and skill in the planning and execution of each lesson and task. The student will be able to perform, analyze, and critique maneuvers and procedures, and maneuvers will be performed at a level that meets or exceeds current FAA Private Pilot or Commercial Pilot Practical Test Standards, as appropriate.



#### **STAGE I** FLIGHT LESSON 1 DUAL — LOCAL

RECOMMENDED SEQUENCE:	Climb	
1. Preflight Briefing	Traffic Pattern Operations	
2. Flight	Straight and Level Flight	
3. Post-flight Briefing and Evaluation	Use of Trim	
	Level Turns	
LESSON OBJECTIVE:	Maneuvering During Slow Flight	
During this lesson the student is introduced	Power-On Stall	
to flight from the right seat of the airplane.	Power-Off Stall	
The student will learn to apply instructional	Turning Stall	
techniques and methods to perform and	Normal and/or Crosswind Approach	
analyze the listed maneuvers and	and Landing	
procedures, and minimize transition time	Postflight Procedures	
between maneuvers in order to increase	Debrief and Risk Mitigation Evaluation	
lesson efficiency.		
CONTENT	COMPLETION STANDARDS:	
CONTENT:	At the completion of this lesson the student	
	will demonstrate increasing instructional	
INTRODUCTION	knowledge and proficiency in all listed	
Risk Assessment and Mitigation	maneuvers. Altitude will be maintained +/-	
Certificates and Documents	100', headings $\pm 10^{-1}$ , airspeeds $\pm 10^{-1}$	
Airworthiness Requirements	knots. Takeoff and landing must meet or	
<ul><li>Weather Information</li><li>Performance and Limitations</li></ul>	exceed FAA Commercial Pilot PTS.	
Systems		
Avionics Failure		
Preflight Inspection	DATE: GRADE (C/INC):	
Single Pilot Resource Management	, , , , , , , , , , , , , , , , , , , ,	
Engine Starting	Student Name / Signature / Student #	
Ground Operations	Student Name / Signature / Student #	
Airport and Runway Markings and		
Lighting	CFI Name / Signature / CFI # & EXP.	
Runway Incursion Avoidance		
Radio Communications	RTE OF FLIGHT X-CTRY TIME	
Before Takeoff Check	W= 1	
Departure Briefing	# DAY/NT LDGS (& Location):	
Collision Avoidance		
Normal and/or Crosswind Takeoff and	HOOD/ACT: TOTAL: DUAL:	



#### STAGE I FLIGHT LESSON 2 DUAL — LOCAL

DECOMMENDED CECUENCE.	С. Т А В 1
RECOMMENDED SEQUENCE:	S-Turns Across a Road
1. Preflight Briefing	Turns Around a Point
2. Flight	Eights On Pylons
3. Post-flight Briefing and Evaluation	Steep Turns
	Chandelles
LESSON OBJECTIVE:	Lazy Eights
During this lesson the student will increase	Forward Slip to a Landing
his/her proficiency in demonstrating and teaching attitude instrument flying, and be	Short-Field Approach and Landing
introduced to the instruction of specialized	Soft-Field Approach and Landing
takeoffs and landings, ground reference	Power-Off 180 <sup>0</sup> Accuracy Landing
maneuvers, and emergency procedures.	Go Around/Rejected Landing
Students will continue to develop skill in	Systems and Equipment Malfunctions
transitioning between maneuvers in order to	Emergency Approach and Landing
increase lesson efficiency.	
	<b>COMPLETION STANDARDS:</b>
CONTENT:	At the completion of this lesson the student will
REVIEW:	demonstrate increasing instructional knowledge
Risk Assessment and Mitigation	and proficiency in all listed maneuvers. Altitude
Preflight Inspection	will be maintained +/- 100', headings +/- $10^0$ ,
Single Pilot Resource Management	airspeeds +/- 10 knots. Takeoff and landing
Airport, Runway and Taxiway	must meet or exceed FAA Commercial PTS.
Markings, and Lighting	DATE: GRADE (C/INC):
Runway Incursion Avoidance	
Radio Communications	Student Name / Signature / Student #
Before Takeoff Check	Student Name / Signature / Student #
Departure Briefing	
Collision Avoidance	CFI Name / Signature / CFI # & EXP.
Postflight Procedures	
Debrief and Risk Mitigation Evaluation	RTE OF FLIGHT X-CTRY TIME
	# DAY/NT LDGS (& Location):
	" DITING EDGS (& Escation).
INTRODUCTION	HOOD/ACT. TOTAL DUAL
GPS Set-Up and Use	HOOD/ACT: TOTAL: DUAL:
Short-Field Takeoff and Climb	
Soft-Field Takeoff and Climb	
Rectangular Course	



#### STAGE I FLIGHT LESSON 3 DUAL — LOCAL

RECOMMENDED SEQUENCE	RECON	MMEN	IDED	SEOI	JENCE
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- 1. Preflight Briefing
- 2. Flight
- 3. Post-flight Briefing and Evaluation

#### **LESSON OBJECTIVE:**

During this lesson the student will increase instructional proficiency in minimizing transition time between maneuvers while reviewing previously learned maneuvers and procedures, and will be introduced to demonstration stalls and demonstration of the impossible turn. Students will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

#### **CONTENT:**

RE	<b>T</b> 7	TT	<b>4 X</b> 7	
NL	ν.	LL	<b>v</b> v	•

 Risk Assessment and Mitigation
 GPS Set-Up and Use
 Departure Briefing
 Short-Field Takeoff and Climb
 Soft-Field Takeoff and Climb
 Slip to a Landing
 Short-Field Approach and Landing
 Soft-Field Approach and Landing
 Power-Off 180 <sup>0</sup> Accuracy Landing
 Emergency Approach and Landing
 Postflight Procedures
 Debrief and Risk Mitigation Evaluation

<b>INTRODUCTION:</b>
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Steep Spirals
Crossed-Control Stall (Demonstration)
Elevator Trim Stall (Demonstration)
Accelerated Stall (Demonstration)
Secondary Stall Demonstration)
The Impossible Turn (Demonstration)
Emergency Equipment and Survival
Gear

#### **COMPLETION STANDARDS:**

At the completion of this lesson the student will demonstrate increasing instructional knowledge and proficiency in all listed maneuvers. Flight maneuvers will be performed at a level that meets or exceeds FAA Commercial Pilot PTS.

DATE: GRADE (C/INC):			
Student Name /	Signature /	Student #	
CFI Name / Sign	nature / CFI	I # & EXP.	
RTE OF FLIGI	HT	X-CTRY TIME	
# DAY/NT LDG	GS (& Locati	ion):	
HOOD/ACT:	TOTAL:	DUAL:	

STAGE I FLIGHT LESSON 4 DUAL — LOCAL

- 1. Preflight Briefing
- 2. Flight
- 3. Post-flight Briefing and Evaluation

#### **LESSON OBJECTIVE:**

During this lesson the student will be introduced to spin entry, spins, and spin recovery. The student will increase instructional proficiency in teaching of all required maneuvers and procedures, and will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

#### **CONTENT:**

#### **REVIEW:**

111511 1 155 0 55111 0 111 0 1111 5 0 0 11
Preflight Inspection
Airworthiness
Single Pilot Resource Management
Use of Airport Diagram
Normal and/or Crosswind Takeoff and
Climb
Traffic Pattern Operations
Slip to a Landing
Short-Field Approach and Landing
The Impossible Turn (Demonstration)
Normal and/or Crosswind Approach
and Landing
Postflight Procedures
Debrief and Risk Mitigation Evaluation

Risk Assessment and Mitigation

#### **INTRODUCTION:**

Stall Awareness
Spin Entries, Spins, and Spin Recovery
Recovery from Unusual Flight Attitudes

#### **COMPLETION STANDARDS:**

At the completion of this lesson the student will demonstrate increasing instructional knowledge and proficiency in all listed maneuvers. During spins, the student will conduct 1-turn spins to the left and to the right, and demonstrate clear understanding and execution of proper entry and recovery techniques. Flight maneuvers will be performed at a level that meets or exceeds FAA Commercial Pilot PTS.

DATE: GRAD	DE (C/INC):
Student Name / Signatur	re / Student #
CFI Name / Signature /	CFI # & EXP.
RTE OF FLIGHT	X-CTRY TIME
# DAY/NT LDGS (& Lo	cation):
HOOD/ACT: TOTA	I. DIMI.



#### STAGE I FLIGHT LESSON 5 DUAL — LOCAL

#### **RECOMMENDED SEQUENCE:**

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

During this lesson the student will be introduced to common student errors in the performance of the listed maneuvers, and will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

#### **CONTENT:**

REV	TEW:
I	Risk Assessment and Mitigation
1	Normal and/or Crosswind Takeoff and
(	Climb
\$	Short-Field Takeoff and Climb
I	Positional Awareness
1	Use of Trim
(	Crossed-Control Stall
\$	Secondary Stall
	Accelerated Stall
5	Steep Turns
1	Power-On Stall
I	Power-Off Stall
(	Chandelles
I	Lazy Eights
5	Steep Spirals
1	Emergency Approach and Landing
\$	Short-Field Approach and Landing
1	Power-Off 180 <sup>0</sup> Accuracy Landing
I	Postflight Procedures
I	Debrief and Risk Mitigation Evaluation

#### **COMPLETION STANDARDS:**

At the completion of this lesson the student will demonstrate increasing instructional knowledge and proficiency in all listed maneuvers. Flight maneuvers will be performed at a level that meets or exceeds FAA Commercial Pilot PTS.

DATE: GRAI	DE (C/INC):
Student Name / Signatu	re / Student #
CFI Name / Signature /	CFI # & EXP.
RTE OF FLIGHT	X-CTRY TIME
# DAY/NT LDGS (& Location):	
HOOD/ACT: TOTA	AL: DUAL:

#### STAGE I FLIGHT LESSON 6 DUAL — LOCAL

RECOMMENDED	SEOUENCE
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- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

During this lesson the student will demonstrate increased instructional proficiency in the listed maneuvers and procedures, will be introduced to additional systems and equipment failures/abnormalities, and will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

REVIEW:
Risk Assessment and Mitigation
Departure Briefing
Normal and/or Crosswind Takeoff and
Climb
Short-Field Takeoff and Climb
Soft-Field Takeoff and Climb
Maneuvering During Slow Flight
Turning Stall
Elevator Trim Stall
Cross-Control Stall
Accelerated Stall
The Impossible Turn (Demonstration)
Steep Turns
Chandelles
Lazy Eights
Steep Spirals
Eights On Pylons
S-Turns Across a Road
Avionics Failure
Emergency Approach and Landing

Positional Awareness
Normal and/or Crosswind Approach
and Landing
Short-Field Approach and Landing
Soft-Field Approach and Landing
Debrief and Risk Mitigation Evaluation
INTRODUCTION:
Simulated Communications Failure
Emergency Descent
No-Flap Landing
Postflight Procedures

#### **COMPLETION STANDARDS:**

At the completion of this lesson the student will demonstrate increased instructional proficiency in analyzing and performing the listed maneuvers and procedures, including correct procedures and instruction during systems and equipment failures.

DATE: GRAI	DE (C/INC):
Student Name / Signatur	re / Student #
CFI Name / Signature /	CFI # & EXP.
RTE OF FLIGHT	X-CTRY TIME
# DAY/NT LDGS (& Lo	ocation):
HOOD/ACT: TOTA	AL: DUAL:

(Simulated)

**STAGE I FLIGHT LESSON 7** DUAL — LOCAL

RECOMMENDED SEQUENCE:	Simulated Communications Failure
1. Preflight Briefing	Go-Around/Rejected Landing
2. Flight	Power-Off 180 <sup>0</sup> Accuracy Landing
3. Post-Flight Brief and Evaluation	Short-Field Approach and Landing
	Soft-Field Approach and Landing
LESSON OBJECTIVE:	No-Flap Landing
The student will demonstrate increased	Postflight Procedures
instructional proficiency in the performance	Debrief and Risk Mitigation Evaluation
and analysis of the listed maneuvers and will	
continue to develop skill in transitioning between maneuvers in order to increase	
lesson efficiency.	COMPLETION STANDARDS:
lesson emerciney.	At the completion of this lesson the student
	will demonstrate increased instructional
CONTENT:	proficiency including analyzing and
CONTENT	performing the listed maneuvers and
REVIEW:	procedures, and will demonstrate
Risk Assessment and Mitigation	correct procedures and instruction during
Normal and/or Crosswind Takeoff and	systems and equipment failures.
Climb	
Short-Field Takeoff and Climb	
Soft-Field Takeoff and Climb	
Steep Turns	
Turning Stalls	DATE: GRADE (C/INC):
The Impossible Turn (Demonstration)	
Chandelles	Student Name / Signature / Student #
Lazy Eights	
Steep Spirals	CFI Name / Signature / CFI # & EXP.
Eights On Pylons	Critaine, Signature, Crita & Exi.
Rectangular Course	
Emergency Descent	RTE OF FLIGHT X-CTRY TIME
Emergency Approach and Landing	# DAY/NT LDGS (& Location):
(Simulated)	2127/12 22 00 (& 200mon).
Positional Awareness	
Avionics Failure	HOOD/ACT: TOTAL: DUAL:



#### **Bridgewater State University**

#### STAGE I FLIGHT LESSON 8 DUAL — LOCAL

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

The student will be introduced to full and partial panel instrument flight and navigation instruction from the right seat of the aircraft, and increase instructional knowledge and proficiency with partial panel instrument navigation procedures. The student will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

#### **CONTENT:**

#### **INTRODUCTION:**

#### **Full and Partial Panel**

Risk Assessment and Mitigation
Departure Briefing
Normal and/or Crosswind Takeoff and
Climb
Straight and Level Flight (IR)
Use of Trim (IR)
Standard Rate Turns (IR)
Turns to Headings (IR)
Constant Rate Climbs and Descents (IR)
Constant Airspeed Climbs/Descents(IR)
Climbing and Descending Turns (IR)
Maneuvering During Slow Flight (IR)
Power-Off Stall (Imminent) (IR)
Power-On Stall (Imminent) (IR)
Steep Turns (Full Panel) (IR)

\_\_ Recovery from Un. Flight Attitudes (IR)

Systems and Equip. Mairunctions (IR)
Simulated Communications Failure (IR)
Malfunction Reports (IR)
Compass Turns (IR)
Timed Turns to Compass Headings (IR)
VOR Orientation, Intercepting and
Tracking (IR)
VOR Receiver Failure
GPS Orientation, Intercepting and
Tracking (IR)
Normal and/or X-wd Approach & Ldg
Debrief and Risk Mitigation Evaluation

#### **COMPLETION STANDARDS:**

The student will demonstrate instructional knowledge and correctly analyze, describe and correct common student errors during the performance of all listed tasks.

Instrument flight maneuvers will be performed at a level that meets or exceeds current FAA Instrument Rating PTS.

DATE: GRAI	DE (C/INC):
Student Name / Signatur	re / Student #
CFI Name / Signature /	CFI # & EXP.
RTE OF FLIGHT	X-CTRY TIME
# DAY/NT LDGS (& Location):	



#### STAGE I FLIGHT LESSON 9 DUAL — LOCAL

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### LESSON OBJECTIVE:

During this lesson the student will review full and partial panel instrument flying, navigational system orientation, intercepting and tracking. The student will review visual maneuvers and procedures in preparation for the upcoming stage check, and will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

#### **CONTENT:**

#### **REVIEW:**

Risk Assessment and Mitigation
Normal and/or Crosswind Takeoff and
Climb
Short-Field Takeoff and Climb
Soft-Field Takeoff and Climb
Maneuvering During MCA (VR/IR)
Power-Off Stall (Imminent) (VR/IR)
Power-On Stall (Imminent) (VR/IR)
Steep Turns (Full Panel) (VR)
Recovery from Unusual Flight Attitudes
(VR/IR)
Simulated Comms Failure (VR/IR)
Malfunction Reports
Compass Turns (IR)
Timed Turns to Compass Headings (IR)
VOR Orientation, Intercepting and
Tracking (IR)
GPS Orientation, Intercepting and
Tracking (IR)

Emergency Descent
Eights On Pylons
Emergency Approach and Landing
(Simulated)
Go-Around/Rejected Landing
Power-Off 180 <sup>0</sup> Accuracy Landing
Short-Field Approach and Landing
Soft-Field Approach and Landing
Postflight Procedures
As Required By Instructor
Debrief and Risk Mitigation Evaluation

#### **COMPLETION STANDARDS:**

Emergency Descent

The student will demonstrate instructional knowledge and correctly analyze, describe and correct common student errors during the performance of all maneuvers and procedures. Instrument flight maneuvers will be performed at a level that meets or exceeds current FAA Instrument Rating Practical Test Standards.

DATE: GRAD	DE (C/INC):	
Student Name / Signatur	re / Student #	
CFI Name / Signature /	CFI # & EXP.	
RTE OF FLIGHT	X-CTRY TIME	
# DAY/NT LDGS (& Location):		
HOOD/ACT: TOTA	AL: DUAL:	



#### STAGE I FLIGHT LESSON 10 DUAL — STAGE CHECK

#### **RECOMMENDED SEQUENCE:**

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

This lesson is the intermediate stage check conducted by the Chief Flight Instructor, Assistant Chief, or designated Check Instructor. During this lesson the student will be evaluated on his/her ability to plan and conduct the lesson sequence efficiently and provide an effective instructional explanation and demonstration for the listed tasks.

#### **CONTENT:**

#### ORAL

Certificates and Documents	
Airworthiness Requirements	S
Flight Instructor Privileges a	and
Limitations	
Aircraft Systems and Opera	tion
Performance and Limitation	ıs
Flight Instructor Responsibi	lities
Aeronautical Decision Maki	ing
Risk Assessment and Mitiga	_

#### **FLIGHT**

### Preflight Procedures (Select At Least B, D, F, And One Other Task)

A	Preflight Inspection
R	Single Pilot Resource

B. \_\_\_ Single Pilot Resource Management

C. \_\_\_ Engine Starting

D. \_\_\_ Taxiing

E. \_\_\_ Before Takeoff Check

F. \_\_\_ Risk Assessment and Mitigation

#### Airport Operations (Select At Least C And One Other Task)

A. \_\_\_ Radio Communications and ATC Light Signals

B. \_\_\_ Traffic Patterns

C. \_\_\_ Airport, Runway and Taxiway Signs, Markings, and Lighting

### Takeoffs, Landings, And Go-Arounds (ALL Tasks Required)

A. \_\_\_\_ Normal and/or Crosswind Takeoff and Climb

B. \_\_\_ Short-Field Takeoff and Climb

C. \_\_\_ Soft-Field Takeoff and Climb

D. \_\_\_ Slip to a Landing

E. \_\_\_ Go-Around/Rejected Landing

F. \_\_\_ Normal and/or Crosswind Approach and Landing

G. \_\_\_ Power-Off 180<sup>o</sup> Accuracy Landing

H. \_\_\_ Short-Field Approach and Landing

I. \_\_\_ Soft-Field Approach and Landing

### Fundamentals of Flight (Select At Least One Task)

A. \_\_\_ Straight and Level Flight

B. \_\_\_ Level Turns

C. \_\_\_ Straight Climbs and Climbing Turns

D. \_\_\_\_ Turning Climbs and Descending Turns

### Performance Maneuvers (ALL Tasks Required)

A. \_\_\_ Steep Turns

B. \_\_\_ Chandelles

C. \_\_\_ Lazy Eights

D. \_\_\_ Steep Spirals



Ground Reference Maneuvers (Select At	Post-Flight Procedures
Least D And One Other Task)	Post-flight Procedures
A Rectangular Course	Debrief and Risk Mitigation Evaluation
B S-Turns Across a Road	
C Turns Around a Point	
D Eights on Pylons	
Slow Flight, Stalls, and Spins (Select At Least B or C, one of D, E, F, or G, and	COMPLETION STANDARDS:
select H)	The student will demonstrate instructional
A Maneuvering During Slow Flight	knowledge and correctly analyze, describe
B Power-On Stall (Proficiency)	and correct common student errors during
C Power-Off Stall (Proficiency)	the performance of all maneuvers and
D Elevator Trim Stall (Demonstration)	procedures. All maneuvers and procedures
E Cross-Control Stall (Demonstration)	will be performed at a level that meets or
F Accelerated Stall (Demonstration)	exceeds current FAA Private Pilot and
G. Secondary Stall (Demonstration)	Commercial Pilot Practical Test Standards,
H Spins (Present Endorsement)	as appropriate.
Ti Spins (Tesent Endorsement)	из ирргорише.
<b>Basic Instrument Maneuvers (Select At</b>	
Least A and E, and One Other Task)	
A Straight and Level Flight (IR)	
B Turns to Headings (IR)	
C Constant Airspeed Climbs (IR)	DATE: GRADE (C/INC):
D Constant Airspeed Descents (IR)	
E Recovery From Unusual Flight	
Attitudes (IR)	Student Name / Signature / Student #
	CFI Name / Signature / CFI # & EXP.
<b>Emergency Operations (Select At Least</b>	8
A, B, and One Other Task)	
A Systems and Equipment	RTE OF FLIGHT X-CTRY TIME
Malfunctions	
B Emergency Approach and Landing	# DAY/NT LDGS (& Location):
(Simulated)	
C Emergency Equipment and Survival	HOOD/ACT: TOTAL: DUAL:
Gear	100D/AC1101AL;DUAL;
D Emergency Descent	



### **STAGE II**

#### STAGE II OBJECTIVES

During this stage, the student will learn to perform all visual and instrument maneuvers from the right seat of the complex aircraft\*, with special emphasis placed on accurate execution of maneuvers and procedures involving propeller and landing gear configuration changes. Special emphasis will also be placed on conducting the VFR maneuvers visually with proper division of attention and minimal reference to flight instruments, and on increasing proficiency in minimizing transition time between maneuvers. Maneuvers will encompass those found in the Private Pilot and Commercial Pilot FAA Practical Test Standards.

#### STAGE II COMPLETION STANDARDS

At the completion of this stage, the student will demonstrate instructional knowledge and skill in the planning and execution of each lesson and task. The student will be able to perform, analyze, and critique maneuvers and procedures, and maneuvers will be performed at a level that meets or exceeds current FAA Private Pilot, Commercial Pilot, and Flight Instructor - Airplane Practical Test Standards, as appropriate.

\*Lessons may be conducted in a non-complex aircraft if no complex aircraft are available at the scheduled time



#### STAGE II FLIGHT LESSON 11 DUAL — LOCAL

DUAL — LOCAL	
RECOMMENDED SEQUENCE:	Level Turns
1. Preflight Briefing	Constant Rate Climbs and Descents
2. Flight	Constant Airspeed Climbs and Descents
3. Post-Flight Brief and Evaluation	Maneuvering During Slow Flight
<u> </u>	Power-On Stall
LESSON OBJECTIVE:	Power-Off Stall
The student will be introduced to practice	Steep Turns
flight instruction conducted from the right	Rectangular Course
seat of a complex or non-complex aircraft.	S-Turns Across a Road
The lesson will focus on developing the	Turns Around a Point
correct visual perspective from the right seat of the aircraft. The student will continue to	Emergency Approach Ldg (Simulated)
develop skill in transitioning between	Go-Around/Rejected Landing
maneuvers in order to increase lesson	Normal and/or X-wd Approach & Ldg
efficiency.	Postflight Procedures
	Debrief and Risk Mitigation Evaluation
CONTENT:	COMPLETION STANDARDS:
INTRODUCTION:	The student will demonstrate instructional
PREFLIGHT DISCUSSION	knowledge and proficiency during the
Risk Assessment and Mitigation	performance of all maneuvers and
Certificates and Documents	procedures in the complex aircraft.
Airworthiness Requirements	Maneuvers will be performed at a level that
Aircraft Systems and Operation	meets or exceeds current FAA Private Pilot,
Performance and Limitations	or Commercial Pilot, as appropriate.
Flight Instructor Responsibilities	rr r
Aeronautical Decision Making	
FLIGHT	DATE: GRADE (C/INC):
Preflight Inspection	
Use of Checklists	Student Name / Signature / Student #
Single Pilot Resource Management	Student Name / Signature / Student //
Engine Starting	
Taxiing	CFI Name / Signature / CFI # & EXP.
Departure Briefing	
Before Takeoff Check	RTE OF FLIGHT X-CTRY TIME
Runway Incursion Avoidance	

\_\_\_ Use of Trim

\_\_\_ Straight and Level Flight

Normal and/or Crswd Takeoff/Climb

**HOOD/ACT:** 

TOTAL: \_

**DUAL:** 



#### **STAGE II FLIGHT LESSON 12 DUAL -- LOCAL**

RECON	MEND	ED SE	OUEN	CE:
		ישט טעי		···

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

The student will review practice flight instruction conducted from the right seat of a complex or non-complex aircraft, and will be introduced to specialized takeoffs and landings. The student will increase checklist proficiency and accuracy with configuration changes in the complex or non-complex aircraft. The student will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

#### **CONTENT:**

REVIEW:
Risk Assessment and Mitigation
Preflight Inspection
Use of Checklists
Cockpit Management
Before Takeoff Check
Runway Incursion Avoidance
Normal and/or X-wd Takeoff
Maneuvering During Slow Flight
Power-On Stall
Power-Off Stall
Emergency Appch & Ldg (Sim)
Go-Around/Rejected Landing
Normal and/or X-wd Appch & Ldg
Debrief and Risk Mitigation Evaluation

#### **INTRODUCTION:**

Short-Field Takeoff and Climb
Soft-Field Takeoff and Climb
Simulated Communications Failure
Recovery From Unusual Flight
Attitudes
The Impossible Turn (Demonstration)
Short-Field Approach and Landing
Soft-Field Approach and Landing
Power-Off 180 <sup>0</sup> Accuracy Landing
No-Flap Landing
Systems and Equipment Malfunctions
Postflight Procedures

#### **COMPLETION STANDARDS:**

The student will demonstrate instructional knowledge and proficiency on all areas and tasks, at a level that meets or exceeds current FAA Private Pilot, or Commercial Pilot Practical Test Standards, as appropriate.

DATE:	GRADE (	C/INC):
Student Name / S	Signature /	Student #
CFI Name / Sign	ature / CFI	# & EXP.
RTE OF FLIGH		X-CTRY TIME
# DAY/NT LDGS (& Location):		
HOOD/ACT:	TOTAL	D11.1





#### **STAGE II FLIGHT LESSON 13** DITAL LOCAL

DUAL — LOCAL	
RECOMMENDED SEQUENCE:  1. Preflight Briefing 2. Flight 3. Post-Flight Brief and Evaluation	<ul> <li>Soft-Field Approach and Landing</li> <li>Power-Off 180<sup>0</sup> Accuracy Landing</li> <li>Debrief and Risk Mitigation Evaluation</li> </ul>
3. Tost-Fright Brief and Evaluation	INTRODUCTION:
LESSON OBJECTIVE: The student will review the listed maneuvers and procedures, be introduced to additional commercial-level maneuvers, and increase his/her ability to provide effective flight instruction in the complex or non-complex aircraft. Special emphasis will be placed on conducting the maneuvers visually with proper division of attention. The student will continue to develop skill in transitioning	<ul> <li>Chandelles</li> <li>Lazy Eights</li> <li>Steep Spirals</li> <li>Eights on Pylons</li> <li>Crossed-Control Stall (Demonstration)</li> <li>Elevator Trim Stall (Demonstration)</li> <li>Accelerated Stall (Demonstration)</li> <li>Secondary Stall (Demonstration)</li> </ul>
between maneuvers in order to increase	COMPLETION CTANDADDC.

#### **CONTENT:**

lesson efficiency.

#### **REVIEW:**

Risk Assessment and Mitigation
GPS Set-Up and Use
Departure Briefing
Normal and/or Crosswind Takeoff and
Climb
Maneuvering During Slow Flight
Power-On Stall
Power-Off Stall
Emergency Appch & Ldg (Simulated)
Go-Around/Rejected Landing
Normal and/or X-wd Approach & Ldg
Recovery from Unusual Flight
Attitudes
Short-Field Takeoff and Climb
Soft-Field Takeoff and Climb
Short-Field Approach and Landing

#### **COMPLETION STANDARDS:**

The student will demonstrate instructional knowledge and proficiency on all areas and tasks, at a level that meets or exceeds current FAA Private Pilot, or Commercial Pilot Practical Test Standards, as appropriate.

DATE: GRAI	DE (C/INC):
Student Name / Signatu	re / Student #
CFI Name / Signature /	CFI # & EXP.
RTE OF FLIGHT	X-CTRY TIME
# DAY/NT LDGS (& Lo	ocation):



#### **Bridgewater State University**

#### STAGE II FLIGHT LESSON 14 DUAL — LOCAL

#### **RECOMMENDED SEQUENCE:**

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

The student will perform, analyze, and critique the listed maneuvers and procedures in the complex or non-complex aircraft, while describing and correcting common student errors. The student will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency.

Risk Assessment and Mitigation

#### **CONTENT:**

$\mathcal{U}$
Normal and/or Crosswind Takeoff and
Landing
 Short-Field Takeoff and Climb
 Soft-Field Takeoff and Climb
 Rectangular Course
Traffic Patterns
 Slip to a Landing
 Systems and Equipment Malfunctions
 Emergency Approach and Landing
 Short-Field Approach and Landing
 Soft-Field Approach and Landing
 Power-Off 180 <sup>0</sup> Accuracy Landing
 Go Around/Rejected Landing
 Normal and/or Crosswind Approach
and Landing
Postflight Procedures
Debrief and Risk Mitigation Evaluation

#### **COMPLETION STANDARDS:**

The student will demonstrate instructional knowledge and proficiency on all areas and tasks, while describing and correcting common student errors, at a level that meets or exceeds current FAA Private Pilot, or Commercial Pilot Practical Test Standards, as appropriate.

DATE: GRAI	DE (C/INC):	
Student Name / Signatu	re / Student #	
CFI Name / Signature /	CFI # & EXP.	
RTE OF FLIGHT	X-CTRY TIME	
# DAY/NT LDGS (& Location):		
HOOD/ACT: TOTA	AL: DUAL:	



#### **STAGE II FLIGHT LESSON 15** DUAL — LOCAL

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

The student will demonstrate increased instructional knowledge and proficiency on all tasks. Tasks will be performed while describing and correcting common student errors and demonstrating Single Pilot Resource Management (SRM) and Aeronautical Decision-Making at a level that meets or exceeds current FAA Private Pilot, or Commercial Pilot Practical Test Standards, as appropriate.

CONTENT:
Risk Assessment and Mitigation
GPS Set-Up and Use
Before Takeoff Check
Runway Incursion Avoidance
Radio Communications and ATC Light
Signals
Airport, Taxiway, and Runway
Markings, and Lighting
Use of Checklists
Short-Field Takeoff and Climb
Soft-Field Takeoff and Climb
Use of Trim
Steep Turns
Chandelles
Lazy Eights
Steep Spirals
Turning Stall
Rectangular Course

S-Turns Across a Road
Eights on Pylons
Systems and Equipment Malfunctions
Emergency Equip. and Survival Gear
Emergency Approach and Landing
Power-Off 180 <sup>0</sup> Accuracy Landing
Short-Field Approach and Landing
Soft-Field Approach and Landing
Go-Around/Rejected Landing
Post-flight Procedures
Debrief and Risk Mitigation Evaluation

#### **COMPLETION STANDARDS:**

The student will demonstrate instructional knowledge and proficiency on all areas and tasks, while describing and correcting common student errors, at a level that meets or exceeds current FAA Private Pilot, or Commercial Pilot Practical Test Standards, as appropriate.

DATE: GRAI	DE (C/INC):	
Student Name / Signature / Student #		
CFI Name / Signature / CFI # & EXP.		
RTE OF FLIGHT	X-CTRY TIME	
# DAY/NT LDGS (& Location):		
HOOD/ACT: TOTA	AL: DUAL:	



#### **Bridgewater State University**

STAGE II FLIGHT LESSON 16 DUAL — LOCAL

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- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

The student will review instrument maneuvers and procedures as necessary in preparation for the end-of-course stage check. The student will continue to develop skill in transitioning between maneuvers in order to increase lesson efficiency, and demonstrate Single Pilot Resource Management (SRM) and Aeronautical Decision-Making at a level that meets or exceeds current FAA Private Pilot, or Commercial Pilot Practical Test Standards, as appropriate.

#### **CONTENT:**

#### **REVIEW:**

Risk Assessment and Mitigation
Departure Briefing
Short-Field Takeoff and Climb
Soft-Field Takeoff and Climb
Steep Turns
Maneuvering During Slow Flight (VR)
Turning Stall
Chandelles
Lazy Eights
Steep Spirals
Rectangular Course
S-Turns Across a Road
Turns Around a Point
Eights on Pylons
Systems and Equipment Malfunctions
Emergency Equip. and Survival Gear

Emergency Approach and Eanding
Power-Off 180 <sup>0</sup> Accuracy Landing
Short-Field Approach and Landing
Soft-Field Approach and Landing
Go-Around/Rejected Landing
Post-flight Procedures
Debrief and Risk Mitigation Evaluation
Debrief and Risk Witigation Evaluation
INTRODUCTION:
INTRODUCTION:
INTRODUCTION: Straight Climbs & Climbing Turns(IR)
INTRODUCTION:  Straight Climbs & Climbing Turns(IR)  Maneuvering During Slow Flight (IR)
INTRODUCTION:  Straight Climbs & Climbing Turns(IR)  Maneuvering During Slow Flight (IR)  Turns to Headings (IR)

Emergency Approach and Landing

#### **COMPLETION STANDARDS:**

The student will demonstrate instructional knowledge and proficiency on all areas and tasks, at a level that meets or exceeds current FAA Private Pilot, Instrument Rating, or Commercial Pilot Practical Test Standards, as appropriate.

DATE: GRAI	DE (C/INC):	
Student Name / Signatur	re / Student #	
CFI Name / Signature /	CFI # & EXP.	
RTE OF FLIGHT	X-CTRY TIME	
# DAY/NT LDGS (& Location):		
HOOD/ACT: TOTA	AL: DUAL:	



STAGE II FLIGHT LESSON 17 DUAL — LOCAL

RECOMMENDED	SEOUENCE
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- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

The student will demonstrate increased instructional knowledge and proficiency on all tasks. Tasks will be performed while describing and correcting common student errors. The student will demonstrate skill in transitioning between maneuvers in order to increase lesson efficiency, and demonstrate SRM and ADM at a level that meets or exceeds current FAA Flight Instructor Practical Test Standards, as appropriate.

#### **CONTENT:**

Risk Assessment and Mitigation
 Preflight Inspection
 Runway Incursion Avoidance
Use of Checklists
Short-Field Takeoff and Climb
 Soft-Field Takeoff and Climb
Steep Turns
Chandelles
 Lazy Eights
Steep Spirals
Eights on Pylons
Maneuvering During Slow Flight
Secondary Stall
Elevator Trim Stall
 Crossed-Control Stall
Accelerated Stall

Slip to a Landing
Systems and Equipment Malfunctions
Emergency Approach and Landing
(Simulated)
Go-Around/Rejected Landing
Power-Off 180 <sup>0</sup> Accuracy Landing
Short-Field Approach and Landing
Soft-Field Approach and Landing
Post-flight Procedures
Debrief and Risk Mitigation Evaluation

#### **COMPLETION STANDARDS:**

The student will demonstrate instructional knowledge and proficiency on all areas and tasks, at a level that meets or exceeds current FAA Private Pilot, Instrument Rating, or Commercial Pilot Practical Test Standards, as appropriate.

DATE: GRAI	DE (C/INC):
Student Name / Signatur	re / Student #
CFI Name / Signature / CFI # & EXP.	
RTE OF FLIGHT	X-CTRY TIME
# DAY/NT LDGS (& Location):	
HOOD/ACT: TOTA	AL: DUAL:

### BRIDGEWATER State University

STAGE II FLIGHT LESSON 18 DUAL — LOCAL END-OF-COURSE STAGE CHECK

#### **RECOMMENDED SEQUENCE:**

- 1. Preflight Briefing
- 2. Flight
- 3. Post-Flight Brief and Evaluation

#### **LESSON OBJECTIVE:**

This lesson is the end-of-course stage check conducted by the Chief Flight Instructor, Assistant Chief, or designated Check Instructor. During this lesson the student will be evaluated on his/her ability to provide an effective instructional explanation and demonstration for the listed tasks at a level that meets or exceeds current FAA Private Pilot, Commercial Pilot, and Flight Instructor – Airplane Practical Test Standards, as appropriate.

#### **CONTENT:**

#### ORAL

Α

#### Fundamentals of Instruction (Select At Least Tasks B, F, G, And One Other Task)

The Learning Process

· · · ——	The Bearing Trocess
В	Human Behavior and Effective
	Communication
C	The Teaching Process
D	Teaching Methods
E	Critique and Evaluation
F	Flight Instructor Characteristics and
	Responsibilities
G	Planning Instructional Activity

#### Technical Subject Areas (Select At Least Tasks B through F, I, L, and M, and One Other Task)

Α.	 Aeromedical Factors
В.	 Visual Scanning and Collision
	Avoidance
C	 Principles of Flight
D.	 Airplane Flight Controls
E. <sub>-</sub>	Airplane Weight and Balance
F	 Navigation and Flight Planning
G.	 Night Operations
Н.	 High Altitude Operations
I	 Federal Aviation Regulations and
	Publications
J	 National Airspace System
K.	Navigation Systems and Radar
	Services
L. <sub>-</sub>	Logbook Entries and Certificate
	Endorsements
M.	Risk Assessment and Mitigation

## **Pre-Flight Preparation (ALL Tasks Required)**

A	Certificates and Documents
В	Airworthiness Requirements
C	Weather Information
D	Operation of Systems
E	Performance and Limitations



Lesson on a Maneuver to be Performed in
Flight (Select at least one maneuver from
PTS Areas of Operation VII through
XIII)

Maneuver Lesson

#### **FLIGHT**

Preflight Procedures (Select At Least A	١
B, D, And One Other Task)	

- A. \_\_\_ Risk Assessment and Mitigation
- B. \_\_\_ Preflight Inspection
- C. \_\_\_ Single Pilot Resource Management
- D. \_\_\_ Engine Starting
- E. \_\_\_ Taxiing
- F. \_\_\_ Before Takeoff Check

#### **Airport Operations (Select At Least C And One Other Task)**

- A. \_\_\_ Radio Communications and ATC Light Signals
- B. \_\_\_ Traffic Patterns
- C. \_\_\_ Airport, Runway and Taxiway Signs, Markings, and Lighting

#### Takeoffs, Landings, And Go-Arounds (ALL Tasks Required)

- A. Normal and/or Crosswind Takeoff and Climb
- B. \_\_\_ Short-Field Takeoff and Climb
- C. \_\_\_ Soft-Field Takeoff and Climb
- D. \_\_\_ Slip to a Landing
- E. \_\_\_ Go-Around/Rejected Landing
- F. Normal and/or Crosswind Approach and Landing
- G. Power-Off 180<sup>o</sup> Accuracy Landing
- H. \_\_\_ Short-Field Approach and Landing
- I. \_\_\_ Soft-Field Approach and Landing

#### **Fundamentals of Flight (Select At Least** One Task)

- A. \_\_\_ Straight and Level Flight
- B. \_\_\_ Level Turns
- C. \_\_\_ Straight Climbs and Climbing Turns
- D. \_\_\_ Turning Climbs and Descending Turns

#### **Performance Maneuvers (ALL Tasks** Required)

- A. \_\_\_ Steep Turns
- B. Chandelles
- C. \_\_\_ Lazy Eights
- D. Steep Spirals

#### **Ground Reference Maneuvers (Select At Least D And One Other Task)**

- A. \_\_\_ Rectangular Course
- B. \_\_\_ S-Turns Across a Road
- C. \_\_\_ Turns Around a Point
- D. \_\_\_ Eights on Pylons

#### Slow Flight, Stalls, and Spins (Select At Least B or C, one of D, E, F, or G, and select H)

- A. \_\_\_ Maneuvering During Slow Flight
- B. \_\_\_ Power-On Stall (Proficiency)
- C. \_\_\_ Power-Off Stall (Proficiency)
- D. Elevator Trim Stall (Demonstration)
- E. \_\_\_ Cross-Control Stall (Demonstration)
- F. \_\_\_ Accelerated Stall (Demonstration)
- G. \_\_\_ Secondary Stall (Demonstration)
- H. \_\_\_ Spins (Present Endorsement)

bridgewater State University	CF1-A Course Manual
<b>Basic Instrument Maneuvers (Select At</b>	
Least A and E, and One Other Task)	
A Straight and Level Flight (IR)	
B Turns to Headings (IR)	
C Constant Airspeed Climbs (IR)	
D Constant Airspeed Descents (IR)	
E Recovery From Unusual Flight	
Attitudes (IR)	
<b>Emergency Operations (Select At Least</b>	
A, B, and One Other Task)	
A Systems and Equipment	
Malfunctions	
B Avionics Failure	
C Emergency Approach and Landing	
(Simulated)	
D Emergency Equipment and Survival	
Gear	
E Emergency Descent	
Post-Flight Procedures	
Post-flight Procedures	
Debrief and Risk Mitigation Evaluation	DATE: GRADE (C/INC):
COMPLETION STANDARDS:	Student Name / Signature / Student #
The student will demonstrate his/her ability	
to provide an effective instructional	CFI Name / Signature / CFI # & EXP.
explanation and demonstration for the listed	CFI Name / Signature / CFI # & EAI.
subject areas and flight	
procedures/maneuvers at a level that meets	RTE OF FLIGHT X-CTRY TIME
or exceeds current FAA Private Pilot,	

appropriate.

Commercial Pilot, and Flight Instructor – Airplane Practical Test Standards, as

**HOOD/ACT:** 

# DAY/NT LDGS (& Location):

TOTAL:

**DUAL:**