

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.

COMMERCIAL PILOT COURSE –141.55 (E)

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 (D) and (E).





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COMMERCIAL PILOT - 141.55 (E)

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 located in Bridgewater, Massachusetts, serves as the primary business address and administrative office for 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 facility, located at New Bedford Regional Airport, New Bedford, Massachusetts.

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 can accommodate 24 students. Classroom 002 measures 35' by 20' and can accommodate 30 students. Both classrooms contain computerized projection equipment and dry erase boards. Other rooms may be available and assigned by the University as necessary.

Ground Training Aids

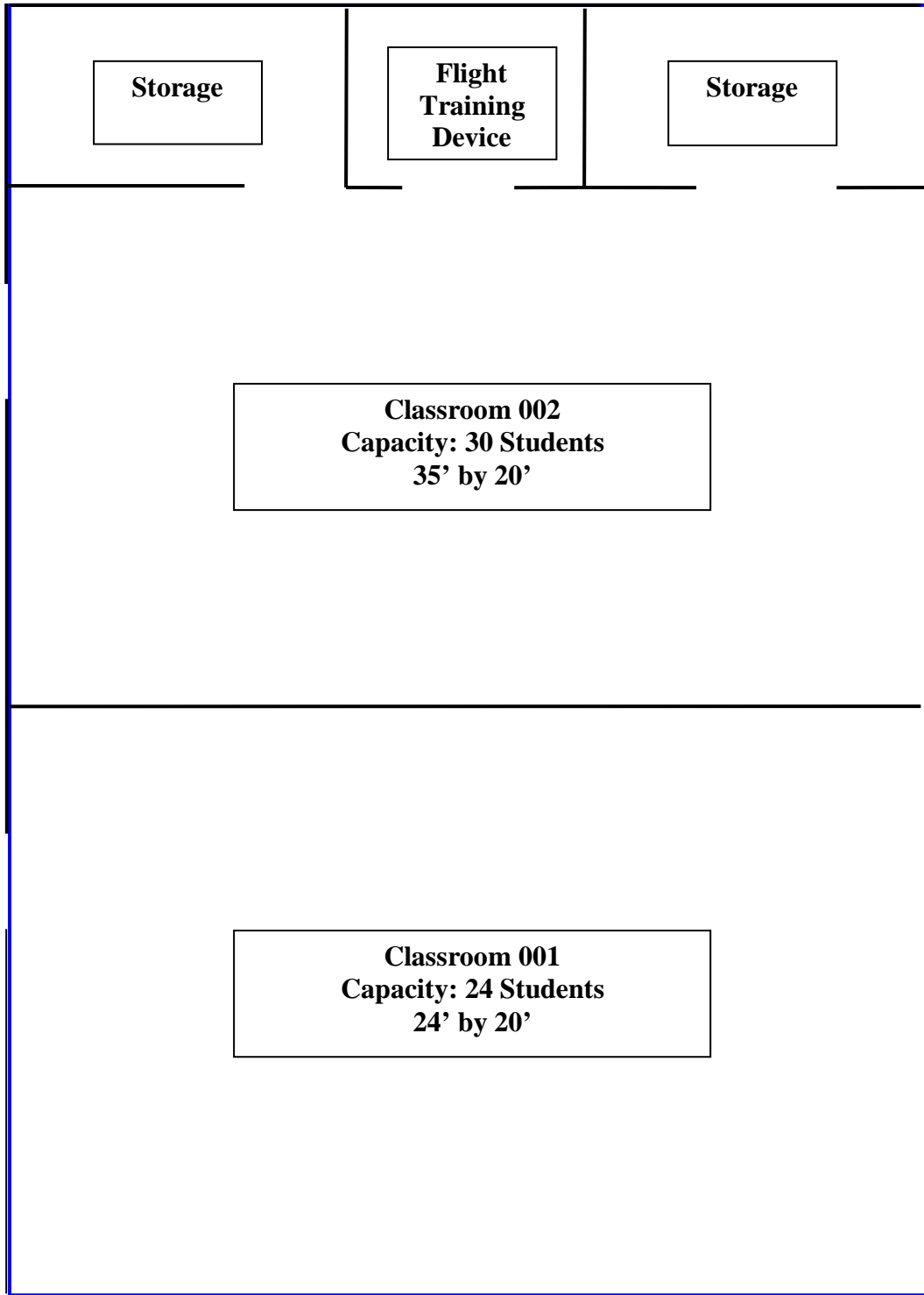
- ⊕ Overhead projector with Audio/Visual capability
- ⊕ Computer terminal including internet access
- ⊕ Video projector with DVD capability
- ⊕ Ceiling-mounted video projector unit
- ⊕ Wall-mounted dry-erase board

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.



Bridgewater State University Classroom Diagram



New Bedford (EWB) Aviation Training Center

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

Aircraft

Bridgewater State University's flight training program may utilize three (3) 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.

The Piper PA-34-200 Seneca is a six-place, twin-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.

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:

- 1) Elite Model RC - 1
- 2) Redbird Model LD, SD, FMX, MCX version 4.4
- 3) iGate Model G501

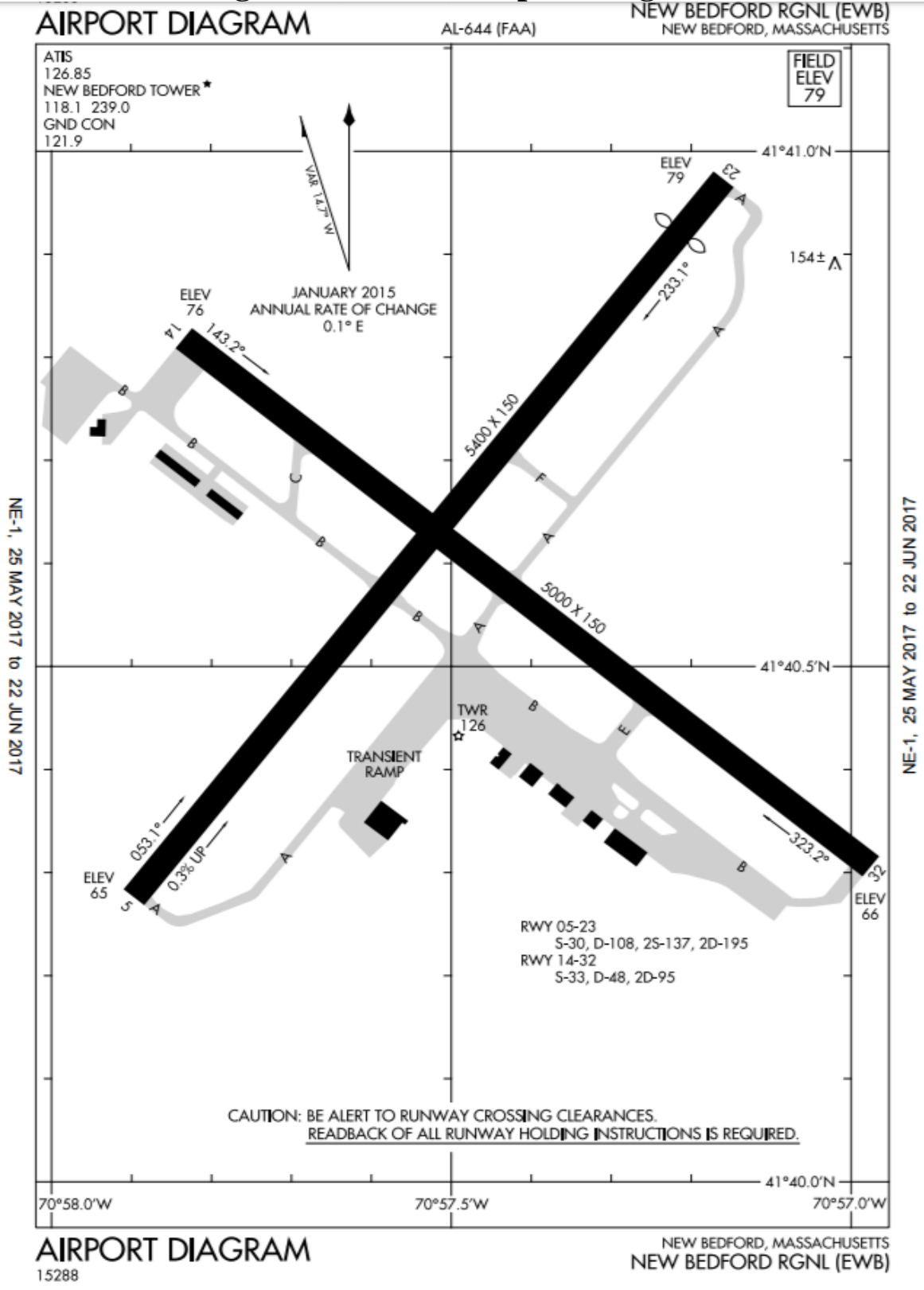
New Bedford Regional Airport

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 in the Bridgewater State University Aviation Operations Manual. The Chief Flight Instructor or his designee may approve the use of any public-use airport listed in the current Chart Supplement.

New Bedford Regional (KEWB) 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 40 persons. There is a partition between the briefing area and the pilot lounge area (described below) that when removed allows for a 44' by 33' space that can be used for large meetings.

Pilot Lounge Area

The pilot lounge area contains beverage and snack vending machines and accommodates up to 15 persons. The room measures 22' by 16'.

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 50 persons. The room is equipped with tables, chairs, and dry erase boards.

AATD Rooms

Two rooms measuring 16' by 22' house three (3) AATD units.

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.

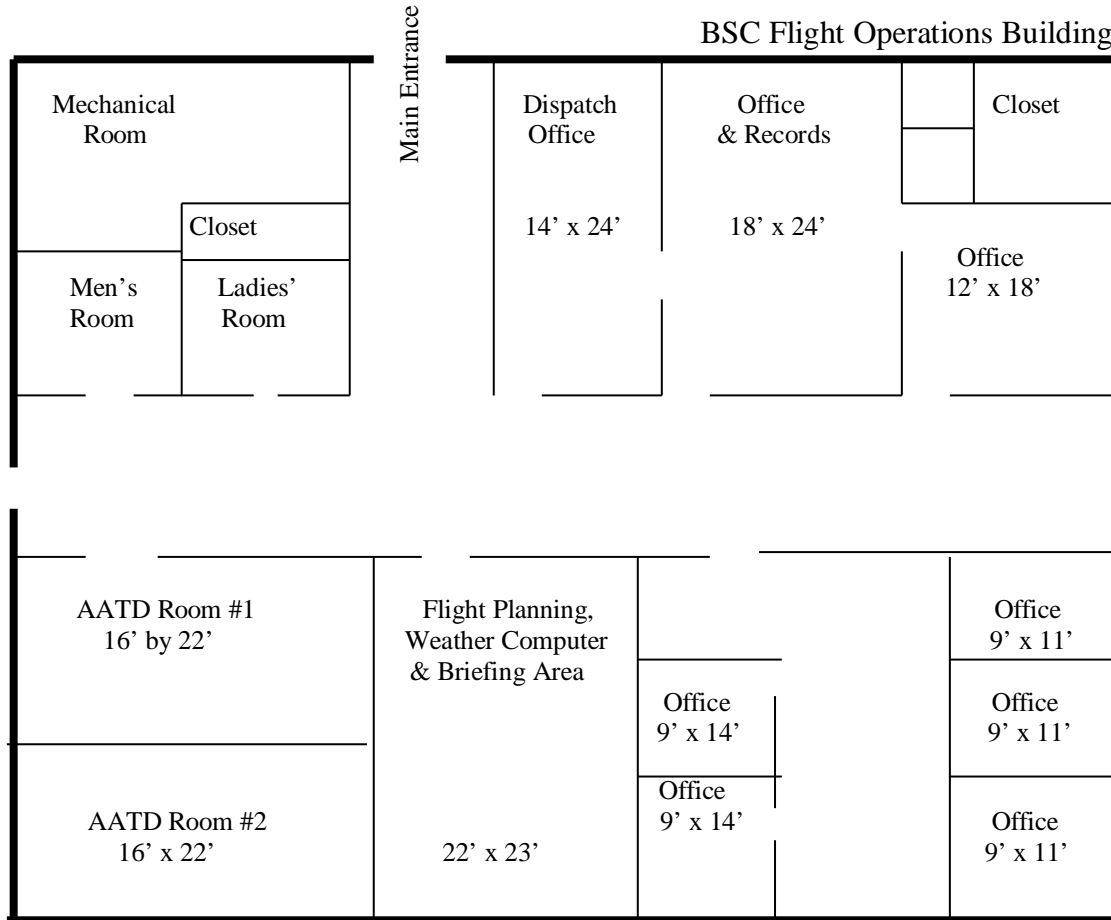
Ground Training Aids

1. Overhead projector with audio/visual capability
2. Computer terminal including internet access
3. Video projector with DVD capability
4. Ceiling-mounted video projector unit
5. Wall-mounted dry-erase board
6. Aeronautical charts, publications, and aircraft components for training purposes only
7. Resource library

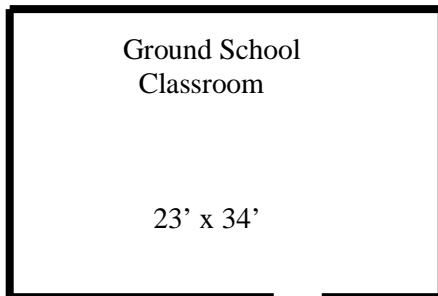
NOTE

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 and operational environment free from outside distractions

Operations Center Diagram



Not to Scale





PART II

COURSE MANUAL

**COMMERCIAL PILOT
CERTIFICATION COURSE
141.55(e)**

COMMERCIAL TRAINING COURSE SYLLABUS

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PERSONNEL

CHIEF FLIGHT INSTRUCTOR

The Chief Flight Instructor for this course is Evan Cushing, 2744804CFI. 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 Evan Cushing, 2744804CFI. The Chief Ground Instructor meets the requirements of 14 CFR 141.35(e) and is designated by letter. Whenever a Chief or Assistant Chief Ground Instructor is either undesignated or unavailable, the Chief or Assistant Chief Flight Instructor(s) will assume these duties.

ASSISTANT CHIEF FLIGHT INSTRUCTOR

The Assistant Chief Flight Instructors for this course are Loren Herren, 2732117CFI and Christi Cushing, 3577516CFI. The Assistant Chief Flight Instructors meet the requirements of 14 CFR 141.36(e) and is designated in the Part 141 Operations Specifications.

ASSISTANT CHIEF GROUND INSTRUCTOR

The Assistant Chief Ground Instructors for this course are Loren Herren, 2732117CFI and Christi Cushing, 3577516CFI. The Assistant Chief Flight Instructors meet the requirements of 14 CFR 141.36(e) and is designated in the Part 141 Operations Specifications.

GROUND INSTRUCTORS

Each Ground Instructor assigned to this course must possess a valid Ground Instructor Certificate or a valid 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 Assistant Chief Ground Instructors) finds that individual qualified to provide instruction. The instruction will be provided under the direct supervision of the Chief or Assistant Chief Instructor who is present at the facility when such instruction is given.

FLIGHT INSTRUCTORS

Each Flight Instructor assigned to this course must possess a valid Flight Instructor-Airplane certificate. Instructors who provide instrument training in the course must possess a Flight Instructor-Instrument certificate. Each CFI approved for training in this course will meet the requirements of 141.79 and be designated in the Part 141 Operations Specifications.

STUDENT INFORMATION

COURSE ENROLLMENT

Eligibility for enrollment in the ground portion of this course requires the student to be enrolled as a student at Bridgewater State University, be at least 18 years of age, and possess an FAA Private Pilot Certificate. Enrollment in the flight portion of this course requires the student to be enrolled as a student at Bridgewater State University, be at least 18 years of age, and possess an FAA Private Pilot Certificate with an Instrument Rating.

COMPLETION STANDARD FOR GRADUATION

To graduate from this course the student must be able to read, speak, write, and understand the English language, and satisfactorily complete the ground and flight training outlined in this syllabus. Through oral and written exams and flight tests, the student must demonstrate the required aeronautical knowledge, flight proficiency, and risk management capability at a level that meets or exceeds requirements specified in the current FAA Commercial Pilot Knowledge Test and Airman Certification Standards.

LESSON DESCRIPTION AND STAGES OF TRAINING

The BSU Commercial Pilot Course (ground) contains two (2) stages and a total of 16 lessons. The flight portion of the course contains two (2) stages and 22 total lessons. All lessons and tasks (including stage checks) are listed within the syllabus and include objectives, tasks, and completion standards.

TESTS AND CHECKS

The syllabus incorporates stage checks and end-of-course tests in accordance with 14 CFR Part 141.55 (D) and (E). The Chief 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. The Chief 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 Commercial 141.55 (E) course coordinates academic study assignments and flight training designed for pilots learning to operate in a complex aviation environment. New subject matter is introduced and reviewed during ground lessons in multimedia formats, including but not limited to current editions of the following:

1. FAA Commercial Pilot Airman Certification Standards (ACS)
2. FAA Aviation Instructor's Handbook FAA-H-8083-9
3. FAR/AIM
4. FAA Pilot's Handbook of Aeronautical Knowledge FAA-H-8083-25
5. FAA Airplane Flying Handbook FAA-H-8083-3
6. FAA Instrument Flying Handbook FAA-H-8083-15
7. FAA Risk Management Handbook FAA-H-8083-2
8. FAA AC 00-45 Aviation Weather
9. FAA AC 00-6 Aviation Weather Services
10. NACO Instrument Approach Procedure Charts (IAPs)
11. NACO IFR Low En Route Charts
12. NACO Departure Procedures (DPs)
13. NACO Standard Terminal Arrivals (STARs)
14. FAA Chart Supplement (Former Airport/Facility Directory)
15. Bridgewater State University Aviation Emergency Response Plan (ERP)
16. Bridgewater State University Aviation Hazardous Information Tracking (HIT) form
17. Cessna 172R Skyhawk and Piper PA-28R Arrow Pilot's Information Manual (PIM)
18. Cessna 172R Skyhawk and Piper PA-28R Arrow BSU Flight Standards Manual (FSM)
19. Multi-media presentations
20. Instructor/student discussions
21. 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 the student is introduced to the airplane. Instructors are expected to ensure the student has retained and can apply previously learned material. Prior to each flight, students are expected to demonstrate the associated knowledge and risk management capability required in the lesson completion standards.

In accordance with established FAA educational best 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.

COURSE ELEMENTS

The Bridgewater State University Commercial 141.55 (E) course is designed to be conducted as a combined ground and flight training program, but may be divided into separate components. This course includes the most current FAA pilot certification requirements.

GROUND TRAINING

In accordance with 14 CFR 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 in both letter and spirit. 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 or Assistant Chief Ground 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 Commercial Pilot 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 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 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 Commercial Pilot certificate is 80%.

TEXTBOOKS/MULTI-MEDIA PRESENTATIONS

Prior to each ground lesson, students are expected to study the assigned textbook(s) sections or chapters. The texts are the primary source for initial study and review and 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.

COMMERCIAL PILOT GROUND COURSE

COURSE OVERVIEW

COURSE OBJECTIVE

The student will obtain the knowledge, skill, and aeronautical experience necessary to meet the requirements for a Commercial Pilot certificate with an Airplane category and single or multi-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, risk management and skill requirements necessary to obtain a Commercial Pilot certificate with an airplane category and single or multi-engine land class rating.

TRAINING SYLLABUS

The Bridgewater State University Commercial 141.55 (E) syllabus meets all curriculum requirements of 14 CFR 141, Appendix D.

TRAINING COURSE

The Ground Training course contains two (2) stages and a total of 15 lessons.

COMMERCIAL PILOT GROUND COURSE SYLLABUS

GROUND TRAINING COURSE OBJECTIVES

The student will obtain and demonstrate knowledge and aeronautical decision-making at a level that meets or exceeds FAA Commercial Pilot Airman Certification Standard and which is required to pass the FAA Commercial Pilot Airman Knowledge test.

LESSON GRADING AND COMPLETION STANDARD

Each ground lesson is graded across three (3) elements; Knowledge (defined by the applicant's ability to demonstrate understanding of the task elements), Risk Management (defined by the applicant's ability to identify, assess and mitigate risks associated with the task) and Skill (defined by the applicant's ability to apply the skill necessary to achieve the listed objective).

GROUND TRAINING COMPLETION STANDARDS

The student must demonstrate through written, oral and practical examination that s/he has obtained the knowledge (defined by the applicant's ability to demonstrate understanding of the task elements), risk management ability (defined by the applicant's ability to identify, assess and mitigate risks associated with the task) and skill (defined by the applicant's demonstrated ability to apply the skill necessary to achieve the listed objective) at a level that meets or exceeds FAA Commercial Pilot Airman Certification Standards and which is required to pass the FAA Commercial Pilot Airmen Knowledge test.

**COMMERCIAL PILOT GROUND COURSE
TIME ALLOCATION TABLE**

STAGE I

LESSON	SUBJECT	HOURS	
		Training	Exam
I	Pilot Qualifications	2.0	
II	Airworthiness Requirements	1.0	
III	National Airspace System	1.0	
IV	Weather Information	3.0	
V	Cross-Country Flight Planning	2.0	
VI	Human Factors and Night Operations	2.0	
VII	Federal Aviation Regulations	2.0	
VIII	Stage I Exam		2.0
Stage I Totals		13.0	2.0

STAGE II

LESSON	SUBJECT	HOURS	
		Training	Exam
IX	Aircraft Systems	6.0	
X	Advanced Aerodynamics	2.0	
XI	Performance	2.0	
XII	Weight and Balance	1.0	
XIII	Maneuvers and Procedures	2.0	
XIV	Instrument Procedures	1.0	
XV	Stage II Exam		2.0
XVI	Final Exam		2.0
Stage II Totals		14.0	4.0
Course Totals		27.0	6.0

STAGE I

STAGE I OBJECTIVES

During this stage the student will obtain and demonstrate knowledge and risk management ability associated with commercial pilot qualifications, human factors and decision-making, principles of flight including the use, capabilities and limitations of flight instruments and navigation systems, use of publications for flight planning and execution, and the air traffic control system and regulatory requirements related to commercial operations.

STAGE I COMPLETION STANDARDS

The stage is complete when the student completes the Stage I written exam with a minimum passing score of 80%.

STAGE I
GROUND LESSON 1
PILOT QUALIFICATIONS

LESSON REFERENCES

14 CFR Parts 61, 67, 91, Pilot's Handbook of Aeronautical Knowledge, Risk Management Handbook, Aviation Instructor's Handbook Chapters 1 – 3, BSU Aviation Hazardous Incident Tracking (HIT) form, BSU Aviation Emergency Response Plan (ERP)

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge, risk management and proficiency associated with operating as pilot in command (PIC) as a commercial pilot.

CONTENT

- ___ Pilot Qualifications
- ___ Aeronautical Decision Making
- ___ Risk Assessment and Management
- ___ Pilot Fitness for Flight
- ___ Single Pilot Resource Management
- ___ BSU Aviation Hazardous Incident Tracking (HIT) Form Applications
- ___ BSU Emergency Response Plan

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with operating as pilot in command (PIC) as a commercial pilot.

STUDY ASSIGNMENT

14 CFR Part 23, 14 CFR 91.213, AC 91-67, Cessna 172 Information Manual, BSU C-172R FSM, Pilot's Handbook of Aeronautical Knowledge, Ch. 3

STAGE I
GROUND LESSON 2
AIRWORTHINESS REQUIREMENTS

LESSON REFERENCES

14 CFR Part 23, 14 CFR 91.213, AC 91-67,
Cessna 172 Information Manual, BSU C-
172R FSM, Pilot's Handbook of
Aeronautical Knowledge, Ch. 3

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge,
risk management and proficiency
associated with airworthiness
requirements, including aircraft
certificates and records.

CONTENT

- ___ 14 CFR Part 23, Normal, Utility,
Aerobatic and Commuter Category
Aircraft
- ___ Aircraft Preflight Inspection
- ___ Certificate Type, Location,
Expiration Date
- ___ Airworthiness Directives
- ___ 14 CFR 91.409 Required

Inspections and Documentation

___ 14 CFR 91.213 Inoperative

Instrument and Equipment

___ 14 CFR Part 43 Maintenance,
Preventive Maintenance, Rebuilding,
and Alteration

___ Minimum Equipment List (MEL),
Kinds of Operation Equipment List
(KOEL)

___ Aircraft Maintenance Logbooks

___ Pilot-performed Preventive
Maintenance

___ Special Flight Permit

___ Aircraft Security Concerns

COMPLETION STANDARDS

Through in-class oral and/or written
quizzing students will exhibit satisfactory
knowledge, risk management, and skills
associated with airworthiness requirements,
including aircraft certificates and records.

STUDY ASSIGNMENT

Pilot's Handbook of Aeronautical
Knowledge, 14 CFR Parts 71, 91, 93, Risk
Management Handbook, Navigation Charts,
AIM

**STAGE I
GROUND LESSON 3
NATIONAL AIRSPACE SYSTEM**

LESSON REFERENCES

Pilot's Handbook of Aeronautical Knowledge, 14 CFR Parts 71, 91, 93, Risk Management Handbook, Navigation Charts, AIM

LESSON SEQUENCE

1. Lesson Introduction
2. Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge, risk management and proficiency associated with the National Airspace System (NAS), operating under VFR as a commercial pilot, airports and sources of flight planning information.

CONTENT

Airports

- ___ Rwy and Txwy Mrkgs and Lighting
- ___ Lighting Systems
- ___ Runway Incursion Avoidance
- ___ Collision Avoidance
- ___ Situational Awareness

National Airspace System

- ___ Airspace, Airspace Classes, Associated Requirements and Limitations
- ___ Charting Symbology
- ___ Special Use Airspace, (SUA), Special Flight Rules Areas, Temporary Flight Restrictions (TFR), and Other Airspace Areas
- ___ Emergency Air Traffic Rules

Sources of Flight Information

- ___ Chart Supplement
- ___ Federal Aviation Regulations
- ___ Aeronautical Information Manual
- ___ Notices to Airmen (NOTAMS)
- ___ Advisory Circulars

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with airports, airspace and flight information.

STUDY ASSIGNMENT

14 CFR Part 91, PHAK, AC-00-6, AC-00-45, AC-00-54, AIM

**STAGE I
GROUND LESSON 4
WEATHER INFORMATION**

LESSON REFERENCES

14 CFR Part 91, PHAK, AC-00-6, AC-00-45, AC-00-54, AIM

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge, risk management and proficiency associated with obtaining, interpreting, and applying weather information for flight under VFR.

CONTENT

Weather and Weather Hazards

- ___ Atmospheric Composition and Stability
- ___ Temperature, Moisture, Precipitation
- ___ Clouds
- ___ Weather System Formation, Air Masses and Fronts
- ___ Thunderstorms and Microbursts
- ___ Wind Shear / Avoidance Procedures
- ___ Turbulence
- ___ Icing and Freezing Level Information
- ___ Hydroplaning

Weather Reports and Forecasts

- ___ METAR
- ___ AWOS, ASOS, ATIS
- ___ PIREPS
- ___ Terminal Aerodrome Forecast (TAF)
- ___ Area Forecast (FA)
- ___ Winds and Temps Aloft Forecast (FD)
- ___ Severe Weather Reports and Forecasts
- ___ WA/WS/WST
- ___ Surface Analysis Chart
- ___ Weather Depiction Chart
- ___ Satellite Weather

- ___ Low-Level Significant Weather Prog
- ___ Convective Outlook Chart
- ___ Volcanic Ash Forecast and Dispersion Chart

Weather Information

- ___ Preflight and In-Flight Weather Sources
- ___ Weather Radar Services
- ___ Automated Weather Reporting Systems
- ___ Personal Weather Minimums

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with weather and sources of weather information.

STUDY ASSIGNMENT

14 CFR Part 91, Risk Management Handbook, Navigation Charts, Chart Supplement, AIM, NOTAMs, Pilot's Handbook of Aeronautical Knowledge, C172R FSM

**STAGE I
GROUND LESSON 5
CROSS-COUNTRY FLIGHT PLANNING**

LESSON REFERENCES

14 CFR Part 91, Risk Management Handbook, Navigation Charts, Chart Supplement, AIM, NOTAMs, Pilot's Handbook of Aeronautical Knowledge, C172R FSM

RECOMMENDED SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge, risk management and proficiency associated with cross-country flights, flight planning and risk analysis.

CONTENT

- ___ Pilotage and Dead Reckoning
- ___ Route Planning, Including Airspace, Altitude, Navigation Aid Availability, Fuel,
- ___ Pilot, Aircraft, Environmental, External Pressures
- ___ Complete a Flight Planning Scenario Including Flight Log, and Risk Analysis

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with cross-country flights, flight planning and risk analysis.

STUDY ASSIGNMENT

14 CFR Part 91, Risk Management Handbook, AIM, Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, C172R FSM

**STAGE I
GROUND LESSON 6
HUMAN FACTORS AND NIGHT OPERATIONS**

LESSON REFERENCES

14 CFR Part 67, Part 91, Risk Management Handbook, AIM, Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, C172R FSM

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge, risk management and proficiency associated with personal health, flight physiology, aeromedical and human factors related to flight.

CONTENT

Aviation Physiology

- ___ 14 CFR Part 67 Medical Standards and Certification
- ___ Hazardous Attitudes
- ___ Optical Illusions
- ___ Stress and Fatigue
- ___ Dehydration and Nutrition
- ___ Hypothermia
- ___ Spatial Disorientation and Motion Sickness
- ___ Carbon Monoxide Poisoning
- ___ Hypoxia and Hyperventilation
- ___ Nitrogen/Decompression Sickness
- ___ Alcohol & Drugs; FARs and Performance
- ___ High Altitude Operations

Night Operations

- ___ Night Equipment
- ___ Night Ground and Flight Operations

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with personal health, flight physiology, aeromedical and human factors related to flight.

STUDY ASSIGNMENT

14 CFR Parts 1, 23, 61, 91, 119, 125, 121, 135, NTSB 830, AIM

**STAGE I
GROUND LESSON 7
FEDERAL AVIATION REGULATIONS**

LESSON REFERENCES

14 CFR Parts 23, 61, 91, 119, 125, 121, 135, NTSB 830, AIM

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE:

Students will increase their knowledge, risk management and proficiency associated with Federal Aviation Regulations and NTSB 830 related to commercial pilot operations.

CONTENT

- ___ 14 CFR Part 1 Definitions and Abbreviations
- ___ 14 CFR Part 23 Related to Aircraft Performance Requirements
- ___ 14 CFR Part 61 Related to Additional Pilot Privileges and Ratings
- ___ 14 CFR Part 91
- ___ 14 CFR Part 119 Air Carriers and Commercial Operators
- ___ 14 CFR Part 121 Air Carrier Certification Process
- ___ 14 CFR Part 135 Commuter and On-Demand Operations
- ___ NTSB 830
- ___ AIM

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with applicable parts of 14 CFR, NTSB 830, and AIM

STUDY ASSIGNMENT

As necessary in preparation for the Stage I Exam.

**STAGE I
GROUND LESSON 8
STAGE I EXAM**

LESSON REFERENCES

All texts and references utilized during lessons 1 – 7.

LESSON SEQUENCE

1. Testing
2. Critique

LESSON OBJECTIVE

Students will demonstrate the knowledge, risk management and proficiency associated with lesson content presented during lessons 1 – 7.

CONTENT

- ___ Pilot Qualifications
- ___ Airworthiness Requirements
- ___ National Airspace System
- ___ Weather Information
- ___ Cross-Country Flight Planning
- ___ Human Factors and Night Operations
- ___ Federal Aviation Regulations

COMPLETION STANDARDS

This lesson and stage are complete, and the student eligible to progress to the next stage of the course, when the student has completed the Stage I Exam with a minimum score of 80%.

STUDY ASSIGNMENT

Pilot's Handbook of Aeronautical Knowledge, Ch. 6, Airplane Flying Handbook, Ch. 11.

STAGE II

STAGE II OBJECTIVES

During this stage the student will increase knowledge of high performance and high altitude, aerodynamics, aircraft performance, weight and balance, complex aircraft systems, Commercial pilot-level maneuvers and procedures, and review instrument procedures.

STAGE II COMPLETION STANDARDS

This stage is complete and the student eligible to take the Course Final Exam when the student has completed the Stage II written exam with a minimum passing score of 80%.

**STAGE II
GROUND LESSON 9
AIRCRAFT SYSTEMS**

LESSON REFERENCES

Risk Management Handbook, Airplane
Flying Handbook, PHAK, C172R
Information Manual

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge,
risk management and proficiency
associated with aircraft systems and high
altitude operational effects related to
commercial pilot operations.

CONTENT

- ___ Powerplant, Including Injected v.
Carburated Systems, Turbo/Super-
Charging, and High Altitude
Performance
- ___ Propeller, Including Constant-
Speed Propeller Design and
Operation
- ___ Fuel System, Including Fuel
Management
- ___ Oil and Hydraulic Systems
- ___ EGT and CHT Gauges and Use

- ___ Fuel Management
- ___ Electrical
- ___ Avionics, Including Conventional
and Glass Cockpit
- ___ Pitot-Static, Vacuum, and Associated
Instruments
- ___ Landing Gear, Including Fixed
and Retractable, Warning Systems
- ___ Environmental, Including Oxygen
Systems, Storage and Servicing,
Cabin Pressurization, Warning
Systems and Emergencies
- ___ Anti-Ice and De-Ice Systems,
Including Engine, Propeller,
Windshield, Airfoils(s)

COMPLETION STANDARDS

Through in-class oral and/or written
quizzing students will exhibit
satisfactory knowledge, risk
management, and skills associated
with single and multi-engine aircraft
systems.

STUDY ASSIGNMENT

Pilot's Handbook of Aeronautical
Knowledge, Airplane Flying Handbook

**STAGE II
GROUND LESSON 10
ADVANCED AERODYNAMICS**

LESSON REFERENCES

Pilot's Handbook of Aeronautical
Knowledge, Airplane Flying Handbook

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge,
risk management and proficiency
associated with advanced aerodynamics
and their application in commercial
flight operations.

CONTENT

- ___ High Altitude /High Speed
Aerodynamics
- ___ Pilot Control of Lift
- ___ Leading & Trailing Edge Devices
for Creating Lift and Drag
- ___ Weight and Load Factor
- ___ V_G Diagram

Stability

- ___ Static
- ___ Dynamic
- ___ Lateral
- ___ Longitudinal
- ___ Directional

Aerodynamics and Flight Maneuvers

- ___ Climbs
- ___ Glides
- ___ Stall and Spin Awareness
- ___ Spin Recovery

COMPLETION STANDARDS

Through in-class oral and/or written
quizzing students will exhibit
satisfactory knowledge, risk
management, and skills associated with
aerodynamics, stability and applications
in various flight maneuvers.

STUDY ASSIGNMENT

Pilot's Handbook of Aeronautical
Knowledge, Airplane Flying Handbook,
BSU FSM(s) Appropriate Pilot
Information Manual(s)

STAGE II

GROUND LESSON 11

PERFORMANCE: SE vs ME, ME w/ One Engine Inoperative

LESSON REFERENCES

Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s)

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge, risk management and proficiency associated with airplane performance capability and limitations pertinent to commercial flight operations.

CONTENT

Factors Affecting Performance

- ___ Weight and Loading
- ___ Environmental Conditions
- ___ Runway Conditions

Calculating Performance

- ___ Performance Charts
- ___ Takeoff and Landing Distance
- ___ Accelerate – Stop Distance
- ___ Climb and Cruise Performance
- ___ Factors Affecting V_{MC}
- ___ Descent Planning Charts
- ___ Hydroplaning
- ___ Glide Distance

COMPLETION STANDARDS

Through in-class oral and/or written quizzing students will exhibit satisfactory knowledge, risk management, and skills associated with single and multi-engine aircraft performance.

STUDY ASSIGNMENT

Pilot's Handbook of Aeronautical Knowledge, Airplane Flying Handbook, BSU FSM(s) Appropriate Pilot Information Manual(s)

STAGE II
GROUND LESSON 12
WEIGHT AND BALANCE
SE VS ME, ME W/ ONE ENGINE INOPERATIVE

LESSON REFERENCES

Pilot's Handbook of Aeronautical
Knowledge, Airplane Flying Handbook,
BSU FSM(s) Appropriate Pilot
Information Manual(s)

___ Graphical Method
___ Tabular Method
___ Weight Shift Calculations

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge,
risk management and proficiency
associated with weight and balance
scenarios related to commercial flight
operations.

COMPLETION STANDARDS

Through in-class oral and/or written
quizzing students will exhibit
satisfactory knowledge, risk
management, and skills associated with
aircraft weight and balance.

CONTENT

___ Weight and Balance Limitations
___ CG Limitations
___ Effects of Exceeding Limitations
___ Weight and Balance Documents
___ Computations
___ Condition Checks
___ Computational Method

STUDY ASSIGNMENT

Pilot's Handbook of Aeronautical
Knowledge, Airplane Flying Handbook,
BSU FSM(s) Appropriate Pilot
Information Manual(s), Commercial
Pilot ACS

STAGE II
GROUND LESSON 13
MANEUVERS AND PROCEDURES

LESSON REFERENCES

Pilot's Handbook of Aeronautical
Knowledge, Airplane Flying Handbook,
BSU FSM(s) Appropriate Pilot
Information Manual(s), Commercial
Pilot ACS

- ___ Landing (ASEL only)
- ___ Eights-On-Pylons (ASE)
- ___ Chandelles (ASE)
- ___ Lazy Eights (ASE)
- ___ Steep Turns
- ___ Steep Spirals (ASE)

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge,
risk management and proficiency
associated with commercial-level
aircraft maneuvers and procedures.

Emergency Procedures

- ___ Emergency Equip. & Survival Gear
- ___ Emergency Approach and Landing
- ___ Impossible Turn
- ___ Emergency Descent
- ___ In-Flight Fire
- ___ Partial Power Loss
- ___ Comm/Nav Equipment Failure

CONTENT

Airman Certification Standards

- ___ Mastery of the Aircraft
- ___ Importance of Visual Scanning
- ___ Demonstration of Sound Judgment
and Aeronautical Decision Making

COMPLETION STANDARDS

Through in-class oral and/or written
quizzing students will exhibit
satisfactory knowledge, risk
management, and skills associated with
commercial maneuvers and procedures.

Normal Maneuvers and Procedures

- ___ Short-Field Takeoff
- ___ Soft-Field Takeoff
- ___ Short-Field Approach and Landing
- ___ Soft-Field Approach and Landing
- ___ Power-Off Accuracy Approach and

STUDY ASSIGNMENT

Instrument Flying Handbook, Instrument
Approach Charts, appropriate BSU
FSM(s)

**STAGE II
GROUND LESSON 14
INSTRUMENT PROCEDURES
SE VS ME, ME W/ ONE ENGINE INOPERATIVE**

LESSON REFERENCES

Instrument Flying Handbook, Instrument
Approach Charts, appropriate BSU
FSM(s)

LESSON SEQUENCE

1. Lesson Introduction
2. Material Presentation and Discussion
3. Knowledge Review

LESSON OBJECTIVE

Students will increase their knowledge,
risk management and proficiency
associated with instrument approach
procedures in complex aircraft and
related to commercial flight operations.

CONTENT

- ___ Instrument Approach Charts
- ___ Instrument Approach Procedures
- ___ Executing Instrument Approaches in
Complex SE and ME Aircraft
- ___ Engine-out Instrument Procedures in
Multi-engine Aircraft

COMPLETION STANDARDS

Through in-class oral and/or written
quizzing students will exhibit
satisfactory knowledge, risk
management, and skills associated with
commercial instrument procedures in
single and multi-engine aircraft.

STUDY ASSIGNMENT

Texts as necessary in preparation for the
Stage II Exam.

**STAGE II
GROUND LESSON 15
STAGE II EXAM**

LESSON REFERENCES

All texts referenced in presenting lessons
9 – 14.

RECOMMENDED SEQUENCE

1. Testing
2. Critique

LESSON OBJECTIVE

The student will demonstrate
understanding of the concepts presented
during lessons 9-14.

CONTENT

- ___ Aircraft Systems
- ___ Advanced Aerodynamics
- ___ Performance
- ___ Weight and Balance
- ___ Maneuvers and Procedures
- ___ Instrument Procedures

COMPLETION STANDARDS

This lesson and stage are complete, and the
student eligible to progress to the course
final exam, when the student has completed
the Stage II Exam with a minimum score of
80%.

STUDY ASSIGNMENT

As necessary in preparation for the
Course Final Exam.

**STAGE II
GROUND LESSON 16
COURSE FINAL EXAM**

LESSON REFERENCES

All texts referenced in presenting lessons
1 – 14.

LESSON SEQUENCE

1. Testing
2. Critique

LESSON OBJECTIVE

The student will demonstrate his/her understanding of the concepts presented during lessons 1 – 14.

CONTENT

___ All material presented in lessons
1 - 14.

COMPLETION STANDARDS

The course is complete, and the student eligible to progress to the FAA Commercial Pilot Airman Knowledge Test, when the student has completed the Course Final Exam with a minimum score of 80%.

STUDY ASSIGNMENT

As necessary in preparation for the FAA Commercial Pilot Knowledge Test.

COMMERCIAL PILOT FLIGHT TRAINING SYLLABUS

COURSE OBJECTIVES

Students will obtain the necessary aeronautical skill and experience necessary to meet the requirements for an FAA Commercial Pilot certificate with an Airplane category single and/or multi-engine land class rating.

COMPLETION STANDARDS

Students must demonstrate through knowledge and flight tests the necessary aeronautical knowledge and skill required to obtain an FAA Commercial Pilot Certificate with an Airplane category single and/or multi-engine land class rating.

STAGE I OBJECTIVES

Students will increase their aeronautical knowledge, understanding and ability to safely and accurately demonstrate proficiency with VFR cross-country procedures during local and cross-country day and night operations.

STAGE I COMPLETION STANDARDS

The stage will be complete when students demonstrate safe, complete and competent planning and execution of VFR day and night local and cross country flight operations using pilotage, dead reckoning, navigation systems and radar services at a level that meets current FAA Commercial Pilot Airman Certification Standard.

STAGE II OBJECTIVES

During this stage, students will be introduced to complex aircraft operations and commercial maneuvers. Emphasis is placed on safe and accurate performance of required maneuvers and procedures.

STAGE II COMPLETION STANDARDS

The stage will be complete when students demonstrate safe and competent operation of the complex aircraft during all required flight maneuvers at a level that exceeds current FAA Commercial Pilot Airman Certification Standard.

**COMMERCIAL PILOT FLIGHT COURSE
TIME ALLOCATION TABLE**

STAGE	LESSON #	SCHEDULED TIME	DUAL A/C	SOLO	BRIEFING	INSTRUMENT	STAGE ORAL	STAGE FLIGHT	EQUIPMENT TYPE
STAGE I									
I	1	2.0	2.0DXC		0.5	As Req.			NON-COM-ASE
I	2	2.0	2.0N		0.5				NON-COM-ASE
I	3	2.0		2.0N					NON-COM-ASE
I	4	2.0		2.0N					NON-COM-ASE
I	5	2.0	2.5NXC						NON-COM-ASE
I	6	4.0		2.0NXC					NON-COM-ASE
I	7	2.0	2.0		0.5	As Req.			NON-COM-ASE
I	8	2.5		4.0DXC	0.5				NON-COM-ASE
I	9	2.0	2.0		0.5	As Req.			NON-COM-ASE
I	10	2.0	2.0		0.5	As Req.			NON-COM-ASE
I	11	2.0	2.0		.5	As Req.	2.0	2.0	NON-COM-ASE
	Totals	24.5	14.5	10.0	3.5		2.0	2.0	
STAGE II									
II	12	2.0			0.5	As Req.			AATD
II	13	2.0			0.5	As Req.			AATD
II	14	2.0	2.0		0.5	As Req.			COMPLEX
II	15	2.0	2.0		0.5	As Req.			COMPLEX
II	16	2.0		2.0					COM-ASE
II	17	2.0	2.0XC		0.5				COMPLEX
II	18	2.0		2.0 XC					COM-ASE
II	19	2.0		2.0 XC					COM-ASE
II	20	2.0	2.0		0.5	As Req.			COMPLEX
II	21	2.0	2.0		0.5	As Req.			COMPLEX
II	22	2.5	2.5		.5	As Req.	2.0	2.0	COMPLEX
	Stage Total	22.5	12.5	6.0	4.0		2.0	2.0	
	Course Total	49.0	27.0	16.0	7.5		4.0	4.0	

NOTE

Students must meet minimum course total flight and briefing time requirements.

NOTE

Students must obtain 5.0 hours of instrument training before completing the course.

STAGE I

STAGE I OBJECTIVES

Students will increase their knowledge, understanding and ability to safely and accurately demonstrate proficiency with VFR cross-country procedures during local and cross-country day and night flight operations in a non-complex aircraft.

STAGE I COMPLETION STANDARDS

The stage will be complete when students demonstrate safe, complete and competent planning and execution of VFR day and night local and cross country flight operations using pilotage, dead reckoning, navigation systems and radar services at a level that meets current FAA Commercial Pilot (ASEL) Airman Certification Standards.

**STAGE I
FLIGHT LESSON 1
DUAL CROSS COUNTRY (ASE)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will review VFR cross country, instrument, and emergency procedures. The flight will be at least 2.0 hours, and travel a straight-line distance of at least 100 nautical miles from the original departure point.

NOTE: Conduct required IR training only AFTER the final landing of the VFR cross-country portion of the lesson.

CONTENT

INTRODUCTION

Preflight Briefing

- Risk Assessment and Mitigation
- Cross-Country Flight Planning
- Performance and Limitations
- National Airspace System
- Weather Information
- Aircraft Systems
- Single Pilot Resource Management
- Aeronautical Decision Making
- Commercial Pilot Privileges and Limitations

Flight

- Risk Assessment and Mitigation
- Normal and/or Crswd Takeoff/Climb
- Steep Turns
- Maneuvering During Slow Flight
- Radio Comms. & ATC Light Signals
- Radio Navigation and Radar Services
- Pilotage and Dead Reckoning
- Diversion
- Lost Procedures
- Power Settings and Fuel Management

- Systems and Equipment Malfunctions
- Low Fuel Supply
- Adverse Weather
- Engine and Airframe Icing
- Emergency Descent
- Emergency Appch & Ldg (Sim)
- Go-Around/Rejected Landing
- Normal and/or X-wind Appch & Ldg.
- Emergency Equip. and Survival Gear
- Wake Turbulence Avoidance
- Traffic Pattern Operations
- Airport and Rwy Mrkgs and Lghtg

Instrument Procedures (IR)

- Basic Instrument Maneuvers

Postflight

- Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	X-COUNTRY _____
LANDINGS & LOCATION _____	
DUAL _____	HOOD/ACTUAL _____ BRIEF _____

**STAGE I
FLIGHT LESSON 2
DUAL LOCAL/NIGHT(ASE)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will review night VFR flight operations including emergency procedures. in preparation for the first night solo.

CONTENT

REVIEW

- ___ Risk Assessment and Mitigation
- ___ Normal and/or Crswd Takeoff / Climb
- ___ Normal and/or Crswd Approach/Lndg
- ___ Go-Around/Rejected Landing
- ___ Steep Turns
- ___ Maneuvering During Slow Flight
- ___ Systems and Equipment Malfunctions

INTRODUCTION

- ___ Aeromedical Factors
- ___ Personal Equipment
- ___ Risk Assessment and Mitigation
- ___ Night Preflight
- ___ Aircraft Lighting and Equipment
- ___ Engine Start/Taxi/Before Takeoff Check
- ___ Night Scanning/Collision Avoidance
- ___ CFIT Avoidance
- ___ Power-On Stall (Imminent)
- ___ Power-Off Stall (Imminent)
- ___ Lost Procedures
- ___ Engine Failure (Simulated)

Postflight

___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds current FAA Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
NIGHT LANDINGS & LOCATION _____	
DUAL _____ NIGHT _____ BRIEF _____	

**STAGE I
FLIGHT LESSON 3
SOLO NIGHT (ASE)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will review VFR night flight procedures, *obtain 1.5 hours solo night experience and conduct no fewer than five (5) full-stop night landings at a controlled airport.*

CONTENT

REVIEW

- ___ Risk Assessment and Mitigation
- ___ Aeromedical Factors
- ___ Personal Equipment
- ___ Night Preflight
- ___ Start, Taxi, Before Takeoff Check
- ___ Nrml and/or Crswd Takeoff and Climb
- ___ Collision Avoidance
- ___ Steep Turns
- ___ Power-On Stall (Imminent Only)
- ___ Power-Off Stall (Imminent Only)
- ___ Lost Procedures
- ___ Adverse Weather
- ___ Low Fuel Supply
- ___ Go-Around/Rejected Landing
- ___ Normal and/or Crswd Appch & Ldng

Postflight

- ___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
NIGHT LANDINGS & LOCATION _____	
NIGHT SOLO _____	BRIEF _____

**STAGE I
FLIGHT LESSON 4
SOLO NIGHT (ASE)**

LESSON SEQUENCE

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

Postflight

___ Postflight Procedures

LESSON OBJECTIVE

The student will review VFR night flight procedures, obtain 1.5 hours solo night experience and conduct no fewer than five (5) full-stop night landings at a controlled airport. *At lesson completion the student will have obtained no less than 3.0 hours solo night flight experience.*

CONTENT

REVIEW

- ___ Risk Assessment and Mitigation
- ___ Aeromedical Factors
- ___ Personal Equipment
- ___ Night Preflight
- ___ Start, Taxi, Before Takeoff Check
- ___ Nrml and/or Crswd Takeoff and Climb
- ___ Collision Avoidance
- ___ Steep Turns
- ___ Power-On Stall (Imminent Only)
- ___ Power-Off Stall (Imminent Only)
- ___ Lost Procedures
- ___ Adverse Weather
- ___ Low Fuel Supply
- ___ Go-Around/Rejected Landing
- ___ Normal and/or Crswd Appch & Ldng

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

At lesson completion the student will have obtained no less than 3.0 hours solo night flight experience.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
NIGHT LANDINGS & LOCATION _____	
NIGHT SOLO _____	BRIEF _____

**STAGE I
FLIGHT LESSON 5
DUAL NIGHT CROSS-COUNTRY (ASE)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will conduct a night VFR cross country flight of at least 2.0 hours including a straight-line distance of at least 100 nautical miles from the original departure point.

NOTE: Conduct required IR training only after the final landing of the VR portion of the lesson.

CONTENT

INTRODUCTION

Preflight Discussion

- Risk Assessment and Mitigation
- Cross-Country Flight Planning
- Performance and Limitations
- National Airspace System
- Weather Information
- Aircraft Systems
- Single Pilot Resource Management
- Aeronautical Decision Making

Flight

- Risk Assessment and Mitigation
- Normal and/or Crswd Takeoff/Climb
- Steep Turns
- Maneuvering During Slow Flight
- Radio Comms. & ATC Light Signals
- Radio Navigation and Radar Services
- Pilotage and Dead Reckoning
- Diversion
- Lost Procedures
- Power Settings and Fuel Management
- Systems and Equipment Malfunctions
- Low Fuel Supply
- Adverse Weather
- Power plant and Airframe Icing

- Emergency Descent
- Emergency Appch & Ldg (Sim)
- Go-Around/Rejected Landing
- Normal and/or X-wind Appch & Ldg.
- Emergency Equip. and Survival Gear
- Wake Turbulence Avoidance
- Traffic Pattern Operations

Instrument Procedures

- Non-precision IAP

Postflight

- Postflight Procedures

COMPLETION STANDARDS:

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	X-COUNTRY _____
NIGHT LANDINGS & LOCATION _____	
HOOD/ACTUAL _____ DUAL _____ BRIEF _____	

**STAGE I
FLIGHT LESSON 6
SOLO NIGHT CROSS-COUNTRY
(ASE)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will conduct a night VFR cross country flight to/from an airport further than 50 NM from the departure point.

CONTENT

Preflight Planning

- ___ Risk Assessment and Mitigation
- ___ Night Cross-Country Flight Planning
- ___ Performance and Limitations
- ___ National Airspace System
- ___ Weather
- ___ Emergency Equip. and Survival Gear
- ___ Cockpit Management
- ___ Single Pilot Resource Management

Flight

- ___ Risk Assessment and Mitigation
- ___ Normal and/or Crswd Takeoff/Climb
- ___ Steep Turns
- ___ Maneuvering During Slow Flight
- ___ Radio Comms. & ATC Light Signals
- ___ Radio Navigation and Radar Services
- ___ Pilotage and Dead Reckoning
- ___ Lost Procedures
- ___ Power Settings and Fuel Management
- ___ Go-Around/Rejected Landing
- ___ Normal and/or X-wind Appch & Ldg.

- ___ Traffic Pattern Operations
- ___ Aprt and Rwy Mrkngs & Lighting

Postflight

- ___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

At lesson completion the student will have obtained at least 6.0 hours solo night flight experience, and (10) night take-offs and landings.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	X-COUNTRY _____
LANDINGS & LOCATION _____	
NIGHT SOLO _____	BRIEF _____



STAGE I
FLIGHT LESSON 7
DUAL LOCAL (ASE)

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student is introduced to commercial flight maneuvers, takeoffs and landings, and Instrument approach procedures.

NOTE: Conduct required IR training only AFTER the final landing of the VFR portion of the lesson.

CONTENT

INTRODUCTION

- Short Field Takeoff and Climb
Soft Field Takeoff and Climb
The Impossible Turn (Demonstration)
Chandelles
Lazy Eights
Steep Spiral
Emergency Descent
Eights On Pylons
Accelerated Stall (Imminent Only)
GPS Instrument Approach (IR)
Short Field Appch and Ldg
Soft Field Appch and Ldg

Power-Off Accuracy Appch and Ldg

REVIEW

Risk Assessment and Mitigation

Postflight

Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

Form with fields for DATE, GRADE (C/INC), STUDENT NAME / SIGNATURE, CFI NAME / SIGNATURE / CFI # & EXP., RTE OF FLIGHT, LANDINGS AND LOCATION, HOOD/ACTUAL, DUAL, BRIEF



STAGE I
FLIGHT LESSON 8
SOLO 250NM CROSS-COUNTRY
(ASE)

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will increase aeronautical knowledge and flight proficiency by conducting a VFR cross-country flight to a minimum of three airports with one leg of the route being not less than 250 NM straight-line distance from the original departure point. The student shall file, open, execute and close an FAA flight plan.

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards on a solo VFR cross country flight with landings at three different airports and one leg of the route being not less than 250 NM straight-line distance from the original departure point. At the completion of this lesson the student shall have obtained not less than 10 hours solo flight experience in the airplane.

CONTENT

Flight

- ___ Risk Assessment and Mitigation
___ Departure Procedures
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Single Pilot Resource Management
___ Aprt and Rwy Mrkngs & Lighting
___ Collision Avoidance
___ Runway Incursion Avoidance
___ Normal and/or X-wind Appch & Ldg.
___ Airport and Runway Markings and Lighting

Postflight

- ___ Postflight Procedures

Form with fields for DATE, GRADE (C/INC), STUDENT NAME / SIGNATURE, CFI NAME / SIGNATURE / CFI # & EXP., ROUTE OF FLIGHT, X-COUNTRY, LANDINGS & LOCATION, SOLO, BRIEF.



STAGE I
FLIGHT LESSON 9
DUAL LOCAL (ASE)

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will review commercial flight maneuvers, including takeoffs and landings, and instrument approach procedures.

NOTE: *Conduct required IR training only after the final landing of the VR portion of the lesson.*

CONTENT

REVIEW

- ___ Risk Assessment and Mitigation
- ___ Short Field Takeoff and Climb
- ___ Soft Field Takeoff and Climb
- ___ Chandelles
- ___ Lazy Eights
- ___ Steep Spiral
- ___ The Impossible Turn (Demonstration)
- ___ Emergency Descent
- ___ Eights On Pylons
- ___ Power-On Stall (Imminent)
- ___ Power-Off Stall (Imminent)
- ___ Short Field Appch and Ldg
- ___ Soft Field Appch and Ldg
- ___ Power-Off Accuracy Appch and Ldg

- ___ Accelerated Stall (Imminent)
- Instrument Procedures (IR)**
- ___ Non-precision Instrument Approach

Postflight

- ___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION _____	
HOOD/ACT _____	DUAL _____
BRIEF _____	



**STAGE I
FLIGHT LESSON 10
DUAL LOCAL (ASE)**

LESSON SEQUENCE

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

___ Non-precision Approach (IR)

Postflight

___ Postflight Procedures

LESSON OBJECTIVE

The student will review the listed tasks in preparation for the stage check.

CONTENT

REVIEW

- ___ Cross-Country Flight Planning
- ___ Performance and Limitations
- ___ National Airspace System
- ___ Weather Information
- ___ Aircraft Systems
- ___ Aeronautical Decision Making
- ___ Commercial Pilot Privileges and Limitations
- ___ Risk Assessment and Mitigation
- ___ Short Field Takeoff and Climb
- ___ Soft Field Takeoff and Climb
- ___ Chandelles
- ___ Lazy Eights
- ___ Steep Spiral
- ___ The Impossible Turn (Demonstration)
- ___ Emergency Descent
- ___ Eights On Pylons
- ___ Power-On Stall
- ___ Power-Off Stall
- ___ Accelerated Stall
- ___ Short Field Appch and Ldg
- ___ Soft Field Appch and Ldg
- ___ Power-Off Accuracy Appch and Ldg

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
_____ STUDENT NAME / SIGNATURE	
_____ CFI NAME / SIGNATURE / CFI # & EXP.	
_____ ROUTE OF FLIGHT	
_____ LANDINGS & LOCATION	
_____ HOOD/ACT _____ DUAL _____ BRIEF _____	



STAGE I
FLIGHT LESSON 11
DUAL LOCAL STAGE CHECK (ASE)

LESSON SEQUENCE

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

LESSON OBJECTIVE

This lesson is a stage check conducted by the Chief Instructor, Assistant Chief Instructor, or Check Instructor. The student will be evaluated on his/her knowledge and proficiency of/with the listed tasks according to current FAA Commercial Pilot Airman Certification Standard.

CONTENT

ORAL

- Cross-Country Flight Planning
Performance and Limitations
National Airspace System
Weather Information
Aircraft Systems
Aeronautical Decision Making
Commercial Pilot Privileges and Limitations
Risk Assessment and Mitigation

FLIGHT

- Risk Assessment and Mitigation
Short Field Takeoff and Climb
Soft Field Takeoff and Climb
X-Country Departure
Pilotage and Dead Reckoning
Radio Navigation and Radar Svcs
Chandelles
Lazy Eights
Steep Spiral
The Impossible Turn (Demonstration)
Emergency Descent
Eights On Pylons

- Departure/Power-On Stall (Imm)
Appch to Lndg/Power-Off Stall (Imm)
Accelerated Stall (Imm)
System and Equipment Malfunctions
Engine Failure In Flight (Sim)
Emergency Appch & Ldg (Sim)
Short Field Appch and Ldg
Soft Field Appch and Ldg
Power-Off Accuracy Appch and Ldg
Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

Form with fields for DATE, GRADE (C/INC), STUDENT NAME / SIGNATURE, CFI NAME / SIGNATURE / CFI # & EXP., ROUTE OF FLIGHT, LANDINGS & LOCATION, HOOD/ACT, DUAL, BRIEF.

STAGE II

STAGE II OBJECTIVE

The student is introduced to dual and solo flight operations in the complex aircraft and learns to conduct all previously learned normal and emergency maneuvers in procedures in a complex airplane. Procedures and maneuvers will be conducted in the single or multi-engine airplane, as appropriate.

STAGE II COMPLETION STANDARD

The stage and course is complete when the student demonstrates knowledge of and performs all required maneuvers and procedures at a level that exceeds current FAA Commercial Pilot Airman Certification Standards.

**STAGE II
FLIGHT LESSON 12
DUAL AATD - COMPLEX**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student is introduced to complex aircraft systems, maneuvers, and procedures in the AATD. Special emphasis is placed on developing proficiency in the execution of checklist procedures and configuration changes throughout flight operations.

CONTENT

INTRODUCTION

- ___ Use of Checklists and Flows
- ___ Before Takeoff Check
- ___ Normal Takeoff and Climb
- ___ Short-Field Takeoff and Climb
- ___ Use of Constant Speed Propeller
- ___ Use of Retractable Lndg Gear / Flaps
- ___ Power Settings & Fuel Management
- ___ Maneuvering During Slow Flight
- ___ Power-Off Stall
- ___ Accelerated Stall
- ___ Power-On Stall
- ___ Landing Gear System Malfunctions
- ___ Propeller System Malfunction
- ___ Go-Around/Rejected Landing
- ___ Rcvry From Unusual Flight Att. (IR)
- ___ The Impossible Turn (Demo ASE Only)
- ___ Emergency Descent
- ___ Emer. Appch & Ldg (Sim) (ASE Only)
- ___ Normal Approach and Landing

Multi-Engine Procedures (If Applicable)

- ___ Engine Failure on Takeoff
- ___ Engine Failure on Climbout
- ___ Engine Failure During Cruise
- ___ V_{MC} Demonstration
- ___ V_X and V_Y Climb profiles
- ___ Basic Instrument Maneuvers (IR) (Both engines and one engine inoperative)
- ___ Single Engine Shutdown and Restart
- ___ Emergency Landing Gear Extension
- ___ Steep Turns
- ___ Flight and Min. Controllable Airspeed
- ___ Turning Stall
- ___ Power Off Stall
- ___ Power On Stall
- ___ Single-Engine Approach and Landing

COMPLETION STANDARDS

The student will demonstrate proficiency in the knowledge and use of complex aircraft systems.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION _____	
AATD _____ HOOD _____ BRIEF _____	



STAGE II
FLIGHT LESSON 13
DUAL AATD - COMPLEX

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student reviews complex aircraft systems, maneuvers and procedures in the AATD. Special emphasis is placed on increasing knowledge and procedural proficiency prior to flight in a complex aircraft.

CONTENT (REVIEW)

- Cockpit Management
Use of Checklists
Preflight Inspection
Before Takeoff Check
Normal Takeoff and Climb
Short-Field Takeoff and Climb
Use of Constant Speed Propeller
Use of Retractable Lndg Gear / Flaps
Power Settings & Fuel Management
Maneuvering During Slow Flight
Power-Off Stall
Accelerated Stall
Power-On Stall
Landing Gear System Malfunctions
Propeller System Malfunction
Rcvry From Unusual Flight Att. (IR)
The Impossible Turn (Demo ASE Only)
Emergency Descent
Emer. Appch & Ldg (Sim) (ASE Only)
Normal Approach and Landing

Multi-Engine Procedures (If Applicable)

- Engine Failure on Takeoff
Engine Failure on Climbout
Engine Failure During Cruise
V_MC Demonstration
V_X and V_Y Climb profiles
Basic Instrument Maneuvers (IR) (Both engines and one engine inoperative)
Single Engine Shutdown and Restart
Steep Turns
Flight and Min. Controllable Airspeed
Turning Stall
Power Off Stall
Power On Stall
Single-Engine Approach and Landing

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

Form with fields for DATE, GRADE (C/INC), STUDENT NAME / SIGNATURE, CFI NAME / SIGNATURE / CFI # & EXP., ROUTE OF FLIGHT, LANDINGS & LOCATION, AATD, HOOD, BRIEF.

**STAGE II
FLIGHT LESSON 14
DUAL LOCAL – COMPLEX (ASE or AME)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student is introduced to flight operations in the complex airplane. Special emphasis will be placed on the proper execution of collision avoidance, checklist procedures and configuration changes.

CONTENT

INTRODUCTION

- ___ Risk Assessment and Mitigation
- ___ Operation of Systems
- ___ Performance and Limitations
- ___ Use of Checklists
- ___ Preflight Inspection
- ___ Engine Start, Taxi, Before T.O. Check
- ___ Normal and/or Crswd T.O. and Climb
- ___ Short-Field Takeoff and Climb
- ___ Soft-Field T.O. & Climb (ASE Only)
- ___ Use of Constant Speed Propeller
- ___ Use of Retractable Ldg Gear/Flaps
- ___ Power Setting & Fuel Management
- ___ Maneuvering During Slow Flight
- ___ Turning Stall
- ___ Accelerated Stall
- ___ Power-Off Stall
- ___ Go-Around/Rejected Landing
- ___ Power-On Stall
- ___ Steep Turns (ASE Only)
- ___ Chandelles (ASE Only)
- ___ Lazy-Eights (ASE Only)
- ___ Steep Spiral (ASE Only)
- ___ Eights-On-Pylons (ASE Only)
- ___ Basic Attitude IR Maneuvers (IR)
- ___ Recovery from Unusual Attitudes (IR)
- ___ Systems and Equipment Malfunctions

- ___ Emer. Appch & Ldg (Sim) (ASE Only)
- ___ Short-Field Approach and Landing
- ___ Soft-Field Approach and Landing
- ___ Normal and/or Crswd Appch/Lndg
- ___ Power-Off 180⁰ Accuracy Appch & Ldg. (ASE Only)

Multi-Engine Procedures (If Applicable)

- ___ Engine Failure on Takeoff
- ___ Engine Failure on Climbout
- ___ Engine Failure During Cruise
- ___ V_{MC} Demonstration
- ___ Basic Instrument Maneuvers (IR) (Both engines and one engine inoperative)
- ___ Single Engine Shutdown and Restart
- ___ Flight and Min. Controllable Airspeed
- ___ Instrument Approach Procedure (IR)
- ___ Instrument Approach Procedure (One Engine Inoperative) (IR)
- ___ Single-Engine Approach and Landing

Postflight Procedures

- ___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards and warrants issuance of an endorsement to operate complex aircraft per 14 CFR Part 61.31(e).

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION _____	
HOOD ___ DUAL ___ BRIEF ___	



STAGE II

FLIGHT LESSON 15

DUAL LOCAL – COMPLEX (ASE or AME)

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student reviews flight operations to gain proficiency in the complex airplane, with emphasis placed on proper execution of checklist procedures and configuration changes. This lesson prepares the student for cross-country flight operations in the complex aircraft.

CONTENT

REVIEW

- ___ Risk Assessment and Mitigation
- ___ Use of Checklists
- ___ Preflight Inspection
- ___ Engine Start, Taxi, Before T.O. Check
- ___ Normal and/or Crswd T.O. and Climb
- ___ Short-Field Takeoff and Climb
- ___ Soft-Field T.O. & Climb (ASE Only)
- ___ Power Setting & Fuel Management
- ___ Maneuvering During Slow Flight
- ___ Turning Stall
- ___ Accelerated Stall
- ___ Power-Off Stall
- ___ Go-Around/Rejected Landing
- ___ Power-On Stall
- ___ Steep Turns
- ___ Chandelles (ASE Only)
- ___ Lazy-Eights (ASE Only)
- ___ Steep Spiral (ASE Only)
- ___ Eights-On-Pylons (ASE Only)
- ___ Recovery from Unusual Attitudes (IR)
- ___ Systems and Equipment Malfunctions
- ___ Emerg. Appch & Ldg (Sim) (ASE Only)
- ___ Short-Field Approach and Landing
- ___ Soft-Field Approach and Landing

- ___ Normal and/or Crswd Appch/Lndg
- ___ Power-Off 180° Accuracy Appch & Ldg. (ASE Only)

Multi-Engine Procedures (If Applicable)

- ___ Engine Failure on Takeoff
- ___ Engine Failure on Climbout
- ___ Engine Failure During Cruise
- ___ V_{MC} Demonstration
- ___ Basic Instrument Maneuvers (IR) (Both engines and one engine inoperative)
- ___ Single Engine Shutdown and Restart
- ___ Flight and Min. Controllable Airspeed
- ___ Instrument Approach Procedure (IR)
- ___ Instrument Approach Procedure (One Engine Inoperative) (IR)
- ___ Single-Engine Approach and Landing

Postflight Procedures

- ___ Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION _____	
HOOD _____ DUAL _____ BRIEF _____	



STAGE II

FLIGHT LESSON 16

SOLO COMPLEX LOCAL (ASE)

LESSON SEQUENCE

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

Postflight Procedures

___ Postflight Procedures

LESSON OBJECTIVE

The student reviews flight operations to gain proficiency in the complex airplane, with emphasis placed on proper execution of checklist procedures and configuration changes.

CONTENT

REVIEW

- ___ Risk Assessment and Mitigation
- ___ Use of Checklists
- ___ Preflight Inspection
- ___ Normal and/or Crswd T.O. and Climb
- ___ Short-Field Takeoff and Climb
- ___ Soft-Field T.O. & Climb
- ___ Power Setting & Fuel Management
- ___ Maneuvering During Slow Flight
- ___ Turning Stall
- ___ Accelerated Stall
- ___ Power-Off Stall
- ___ Go-Around/Rejected Landing
- ___ Power-On Stall
- ___ Steep Turns
- ___ Chandelles
- ___ Lazy-Eights
- ___ Steep Spiral
- ___ Eights-On-Pylons
- ___ Short-Field Approach and Landing
- ___ Soft-Field Approach and Landing
- ___ Normal and/or Crswd Appch/Lndg
- ___ Power-Off 180⁰ Accuracy Appch & Ldg.

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION _____	
SOLO _____ BRIEF _____	

**STAGE II
FLIGHT LESSON 17
DUAL COMPLEX CROSS-COUNTRY
(ASE or AME)**

LESSON SEQUENCE

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

- ___ Emer. Appch & Ldg (Sim) (ASE Only)
- ___ Go-Around/Rejected Landing
- ___ Normal and/or X-wind Appch & Ldg.
- ___ Emergency Equip. and Survival Gear
- ___ Wake Turbulence Avoidance
- ___ Traffic Pattern Operations

LESSON OBJECTIVE

The student increases proficiency with VFR cross-country flight operations in the complex aircraft during a flight of not less than 50 NM distance from the departure airport. Special emphasis is placed on proper planning and execution of VFR navigation, collision avoidance, checklist usage and configuration changes. *Minimum flight time for this lesson is 2.0 hours.*

Postflight Procedures

- ___ Postflight Procedures

CONTENT

INTRODUCTION

Flight

- ___ Risk Assessment and Mitigation
- ___ Cross-Country Flight Planning
- ___ Performance and Limitations
- ___ National Airspace System
- ___ Weather Information
- ___ SRM and ADM
- ___ Cross-Country Departure
- ___ Normal and/or Crswd Takeoff/Climb
- ___ Radio Comms. & ATC Light Signals
- ___ Radio Navigation and Radar Services
- ___ Pilotage and Dead Reckoning
- ___ Diversion
- ___ Lost Procedures
- ___ Power Settings and Fuel Management
- ___ Systems and Equipment Malfunctions
- ___ Low Fuel Supply
- ___ Adverse Weather
- ___ Recovery From Unusual Atts. (IR)
- ___ Power plant and Airframe Icing
- ___ Emergency Descent

COMPLETION STANDARDS

The student will complete a VFR cross-country flight in the complex aircraft during a flight of not less than 50 NM distance from the departure airport. The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	X-COUNTRY _____
LANDINGS & LOCATION _____	
HOOD _____ DUAL _____ BRIEF _____	

**STAGE II
FLIGHT LESSON 18
SOLO COMPLEX CROSS-COUNTRY (ASE)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will increase proficiency with VFR solo cross-country flight operations in a complex aircraft and will demonstrate knowledge, risk management and skill on all tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standard. Special emphasis is placed on proper planning and execution of VFR navigation, collision avoidance, checklist usage and configuration changes. The student will log a minimum 2.0 hours of solo cross country flight time, and travel a straight-line distance of at least 100 nautical miles from the original departure point.

CONTENT

REVIEW

Flight

- ___ Risk Assessment and Mitigation
- ___ Cross-Country Flight Planning
- ___ Performance and Limitations
- ___ National Airspace System
- ___ Weather Information
- ___ SRM and ADM
- ___ Cross-Country Departure
- ___ Normal and/or Crswd Takeoff/Climb
- ___ Radio Comms. & ATC Light Signals
- ___ Radio Navigation and Radar Services
- ___ Pilotage and Dead Reckoning
- ___ Lost Procedures
- ___ Power Settings and Fuel Management

- ___ Systems and Equipment Malfunctions
- ___ Go-Around/Rejected Landing
- ___ Normal and/or X-wind Appch & Ldg.
- ___ Emergency Equip. and Survival Gear
- ___ Wake Turbulence Avoidance
- ___ Traffic Pattern Operations

Postflight Procedures

- ___ Postflight Procedures

COMPLETION STANDARDS

The student will complete a VFR cross-country flight in the complex aircraft during a flight of not less than 100 NM distance from the departure airport, and demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards. The student must log a minimum 2.0 hours of solo cross country flight time, and travel a straight-line distance of at least 100 nautical miles from the original departure point.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	X-COUNTRY _____
LANDINGS & LOCATION _____	
SOLO _____ BRIEF _____	



STAGE II
FLIGHT LESSON 19
SOLO COMPLEX CROSS-COUNTRY (ASE)

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will increase proficiency with VFR solo cross-country flight operations in a complex aircraft and will demonstrate knowledge, risk management and skill on all tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standard.

CONTENT

REVIEW

Flight

- ___ Risk Assessment and Mitigation
___ Cross-Country Flight Planning
___ Performance and Limitations
___ National Airspace System
___ Weather Information
___ SRM and ADM
___ Cross-Country Departure
___ Normal and/or Crswd Takeoff/Climb
___ Radio Comms. & ATC Light Signals
___ Radio Navigation and Radar Services
___ Pilotage and Dead Reckoning
___ Lost Procedures
___ Power Settings and Fuel Management
___ Systems and Equipment Malfunctions

- ___ Low Fuel Supply
___ Adverse Weather
___ Power plant and Airframe Icing
___ Go-Around/Rejected Landing
___ Normal and/or X-wind Appch & Ldg.
___ Emergency Equip. and Survival Gear
___ Wake Turbulence Avoidance
___ Traffic Pattern Operations

Postflight Procedures

- ___ Postflight Procedures

COMPLETION STANDARDS

The student will complete a VFR cross-country flight in the complex aircraft during a flight of not less than 100 NM distance from the departure airport, and demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

Form with fields for DATE, GRADE (C/INC), STUDENT NAME / SIGNATURE, CFI NAME / SIGNATURE / CFI # & EXP., ROUTE OF FLIGHT, X-COUNTRY, LANDINGS & LOCATION, SOLO, BRIEF.

**STAGE II
FLIGHT LESSON 20
DUAL COMPLEX (ASE or AME)**

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student will review flight operations in the complex airplane in preparation for the end-of-course exam and demonstrate knowledge, risk management and skill on all tasks at a level that exceeds current FAA Commercial Pilot Airman Certification Standard.

CONTENT (REVIEW)

- Risk Assessment and Mitigation
- Use of Checklists
- Preflight Inspection
- Engine Start, Taxi, Before T.O. Check
- Normal and/or Crswd T.O. and Climb
- Short-Field Takeoff and Climb
- Soft-Field T.O. and Climb (ASE Only)
- Power Setting & Fuel Management
- Maneuvering During Slow Flight
- Turning Stall
- Accelerated Stall
- Power-Off Stall
- Go-Around/Rejected Landing
- Power-On Stall
- Steep Turns
- Chandelles (ASE Only)
- Lazy-Eights (ASE Only)
- Steep Spiral (ASE Only)
- Eights-On-Pylons (ASE Only)
- Recovery from Unusual Attitudes (IR)
- The Impossible Turn (Demo ASE Only)
- Systems and Equipment Malfunctions
- Emer. Appch & Ldg (Sim) (ASE Only)
- Short-Field Approach and Landing

- Soft-Field Approach and Landing
- Normal and/or Crswd Appch/Lndg
- Power-Off 180⁰ Accuracy Appch & Ldg. (ASE Only)

Multi-Engine Procedures (If Applicable)

- Engine Failure on Takeoff
- Engine Failure on Climbout
- Engine Failure During Cruise
- V_{MC} Demonstration
- Basic Instrument Maneuvers (IR) (Both engines and one engine inoperative)
- Single Engine Shutdown and Restart
- Flight and Min. Controllable Airspeed
- Instrument Approach Procedure (IR)
- Instrument Approach Procedure (One Engine Inoperative) (IR)
- Single-Engine Approach and Landing

Postflight Procedures

- Postflight Procedures

COMPLETION STANDARDS

The student will demonstrate knowledge, risk management and skill on all required tasks at a level that meets or exceeds Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION _____	
HOOD/ACT _____ DUAL _____ BRIEF _____	



STAGE II
FLIGHT LESSON 21
DUAL COMPLEX (ASE or AME)

LESSON SEQUENCE

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

LESSON OBJECTIVE

The student reviews flight operations in the complex airplane in preparation for the end-of-course exam.

CONTENT

REVIEW

- Certificates and Documents
Comm. Pilot Prvlgs and Lmtns.
Airworthiness Requirements
Performance and Limitations
Aircraft Systems
Cross-Country Flight Planning
Navigation Log
Risk Assessment and Mitigation
Use of Checklists
Preflight Inspection
Engine Start, Taxi, Before T.O. Check
Normal and/or Crswd T.O. and Climb
Short-Field Takeoff and Climb
Soft-Field T.O. and Climb (ASE Only)
Power Setting & Fuel Management
Maneuvering During Slow Flight
Turning Stall
Accelerated Stall
Power-Off Stall
Go-Around/Rejected Landing
Power-On Stall
Steep Turns
Chandelles (ASE Only)
Lazy-Eights (ASE Only)
Steep Spiral (ASE Only)
Eights-On-Pylons (ASE Only)
Recovery from Unusual Attitudes (IR)
Systems and Equipment Malfunctions

- Emer. Appch & Ldg (Sim) (ASE Only)
Short-Field Approach and Landing
Soft-Field Approach and Landing
Normal and/or Crswd Appch/Lndg
Power-Off 180° Accuracy Appch & Ldg. (ASE Only)

Multi-Engine Procedures (If Applicable)

- Engine Failure on Takeoff
Engine Failure on Climbout
Engine Failure During Cruise
Vmc Demonstration
Basic Instrument Maneuvers (IR) (Both engines and one engine inoperative)
Single Engine Shutdown and Restart
Flight and Min. Controllable Airspeed
Instrument Approach Procedure (IR)
Instrument Approach Procedure (One Engine Inoperative) (IR)
Single-Engine Approach and Landing

Postflight Procedures

- Postflight Procedures

COMPLETION STANDARDS

All tasks will be performed at a level that exceeds current FAA Commercial Pilot Airman Certification Standards.

Form with fields for DATE, GRADE (C/INC), STUDENT NAME / SIGNATURE, CFI NAME / SIGNATURE / CFI # & EXP., ROUTE OF FLIGHT, LANDINGS & LOCATION, HOO/ACT, DUAL, BRIEF

STAGE II
FLIGHT LESSON 22
END-OF-COURSE STAGE CHECK
DUAL COMPLEX (ASE or AME)

LESSON SEQUENCE

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

LESSON OBJECTIVE

During the end-of-course stage check conducted by the Chief Flight Instructor or his/her designee, the student will be evaluated on his/her aeronautical knowledge, flight proficiency and risk management skills on all subject areas and tasks in accordance with current FAA Commercial Pilot Airman Certification Standards.

CONTENT

ORAL

- ___ Certificates and Documents
- ___ Comm. Pilot Prvlgs and Lmtns.
- ___ Airworthiness Requirements
- ___ Performance and Limitations
- ___ Aircraft Systems
- ___ Cross-Country Flight Planning
- ___ Navigation Log

FLIGHT

- ___ Risk Assessment and Mitigation
- ___ Use of Checklists
- ___ Preflight Inspection
- ___ Engine Start, Taxi, Before T.O. Check
- ___ Normal and/or Crswd T.O. and Climb
- ___ Short-Field Takeoff and Climb
- ___ Soft-Field T.O. and Climb (ASE Only)
- ___ Maneuvering During Slow Flight
- ___ Turning Stall
- ___ Accelerated Stall
- ___ Power-Off Stall
- ___ Go-Around/Rejected Landing
- ___ Power-On Stall
- ___ Steep Turns
- ___ Chandelles (ASE Only)

- ___ Lazy-Eights (ASE Only)
- ___ Steep Spiral (ASE Only)
- ___ Eights-On-Pylons (ASE Only)
- ___ Recovery from Unusual Attitudes (IR)
- ___ Systems and Equipment Malfunctions
- ___ The Impossible Turn (Demo ASE Only)
- ___ Emer. Appch & Ldg (Sim) (ASE Only)
- ___ Short-Field Approach and Landing
- ___ Soft-Field Approach and Landing
- ___ Normal and/or Crswd Appch/Lndg
- ___ Power-Off 180⁰ Acc. Appch & Ldg. (ASE Only)

Multi-Engine Procedures (If Applicable)

- ___ Engine Failure on Takeoff
- ___ Engine Failure on Climbout
- ___ Engine Failure During Cruise
- ___ V_{MC} Demonstration
- ___ Basic Instrument Maneuvers (IR) (Both engines and one engine inoperative)
- ___ Single Engine Shutdown and Restart
- ___ Instrument Approach Procedure (IR)
- ___ IAP (One Engine Inoperative) (IR)
- ___ Single-Engine Approach and Landing

Postflight Procedures

- ___ Postflight Procedures

COMPLETION STANDARDS

At the completion of this lesson the student will demonstrate knowledge and proficiency that exceeds current FAA Commercial Pilot Airman Certification Standards.

DATE _____	GRADE (C/INC) _____
STUDENT NAME / SIGNATURE _____	
CFI NAME / SIGNATURE / CFI # & EXP. _____	
ROUTE OF FLIGHT _____	
LANDINGS & LOCATION _____	
HOOD/ACT ___ DUAL ___ BRIEF ___	