AT113 : Private Pilot Laboratory II

General Information

Author:	• Curtis G Potter
Course Code (CB01) :	AT113
Course Title (CB02) :	Private Pilot Laboratory II
Department:	AT
Proposal Start:	Spring 2025
TOP Code (CB03) :	(3020.20) Piloting
CIP Code:	(49.0102) Airline/Commercial/Professional Pilot and Flight Crew.
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000548744
Curriculum Committee Approval Date:	05/22/2024
Board of Trustees Approval Date:	07/16/2024
Last Cyclical Review Date:	05/22/2024
Course Description and Course Note:	AT 113 is a flight training laboratory course intended to complete the student's preparation for the Federal Aviation Administration Private Pilot Certificate Oral and Practical Tests. Topics covered include: night flying techniques, short and soft field takeoffs and landings, navigation, emergency procedures, power on/off stalls, s-turns across a road, turns around a point, and instrument flight procedures.
Justification:	Mandatory Revision
Academic Career:	• Credit
Mode of Delivery:	
Author:	Curtis G Potter
Course Family:	

Academic Senate Discipline

Primary Discipline:	• Aviation (Flight, navigation, ground school, air traffic control)
Alternate Discipline:	No value
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is not a basic skills course.

☐ Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

- Grade with Pass / No-Pass Option

Course Support Course Status (CB26)

Course is not a support course

General Education and C-ID

General Education Status (CB25)

Not Applicable

Transferability

Transferable to CSU only

Transferability Status

Approved

Units and Hours

Summary

Minimum Credit Units (CB07)	3
Maximum Credit Units (CB06)	3
Total Course In-Class (Contact) Hours	162
Total Course Out-of-Class Hours	0
Total Student Learning Hours	162

Credit / Non-Credit Options

Course Type (CB04)

Credit - Degree Applicable

Noncredit Course Category (CB22)

Credit Course.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Credit Course.

☐ Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0	0
Laboratory Hours	9	0
Studio Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	0
Course In-Class (Contact) Hours	
Lecture	0
Laboratory	162
Studio	0

Total	162

Course Out-of-Class Hours

Lecture	0
Laboratory	0
Studio	0
Total	0

Time Commitment Notes for Students

No value

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Prerequisite

AT112 - Private Pilot Laboratory I (in-development)

Objectives

- Apply Federal Aviation Regulations (FAR) Parts 61 and 91 to flight planning.
- Articulate airspace rules and procedures for the airport where the student is receiving instruction.
- Explain the flight characteristics and operational limitations for the airplane make and model in which the student is receiving the training.
- demonstrate proficiency in the procedures and maneuvers required for solo flight in the make and model airplane;
- obtain a Federal Aviation Administration Student Pilot Certificate;
- safely complete a first supervised solo flight.

Entry Standards

Entry Standards

Course Limitations

Cross Listed or Equivalent Course

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Methods of Instruction	Laboratory
Methods of Instruction	Demonstrations

Out of Class Assignments

- Homework reading assignments
- Laboratory notebook assignments and daily journal

Methods of Evaluation	Rationale
Exam/Quiz/Test	Successful completion of FAA private pilot airplane knowledge examination
Evaluation	Observation and evaluation during all phases of flight preparation and flight

Textbook Rationale

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
Hayes, Michael D.	Private Pilot Oral Exam Guide	Aviation Supplies & Academics	2023	978-1-64425-302-1
FAA	Airman Certification Standards Private Pilot Airplane	FAA	2018	978-1-61954-903-6

Other Instructional Materials (i.e. OER, handouts)

No Value

Materials Fee

A material/lab fee may be required for this course.

Learning Outcomes and Objectives

Course Objectives

Demonstrate proficiency in pre-flight preparation and procedures.

Demonstrate proficiency in airport operations.

Perform takeoffs, landings and go-arounds including soft and short field, and during crosswinds.

Perform ground reference maneuvers.

Safely navigate the airplane to a destination.

Perform slow flight and stalls.

Perform basic instrument maneuvers.

Apply emergency procedures appropriate to all phases of flight.

Safely operate the airplane at night.

Demonstrate proficiency in post flight procedures.

Pass the Federal Aviation Administration Private Pilot Certificate Oral and Practical Tests.

SLOs

Pass the Federal Aviation Administration Private Pilot Certificate Oral and Practical Tests. Expected Outcome Performance: 70.0

ILOs Core ILOs	Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
AT Pilot Training - Certificate	demonstrate an understanding of Federal Aviation Regulations.
	demonstrate practical skills required to pass FAA practical testing for the rating sought.
	demonstrate the skills required to successfully pass the FAA knowledge exam appropriate to the rating sought.
AT Pilot Training - A.S. Degree Major	demonstrate an understanding of Federal Aviation Regulations.
	demonstrate practical skills required to pass FAA practical testing for the rating sought.
	demonstrate the skills required to successfully pass the FAA knowledge exam appropriate to the rating sought.

Plan, prepare and safely complete cross-country flight. Expected Outcome Performance: 70.0

ILOs Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.
	Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
AT Pilot Training - Certificate	demonstrate proficiency in cross country flight planning.
AT Pilot Training - A.S. Degree Major	demonstrate proficiency in cross country flight planning.

Apply emergency procedures and simulate an emergency landing. Expected Outcome Performance: 70.0

ILOs Core ILOs	Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.
	Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
AT Pilot Training - A.S. Degree Major	demonstrate practical skills required to pass FAA practical testing for the rating sought.
AT Pilot Training - Certificate	demonstrate practical skills required to pass FAA practical testing for the rating sought.

Additional SLO Information

Does this proposal include revisions that might improve student attainment of course learning outcomes?

No

Is this proposal submitted in response to learning outcomes assessment data?

No

If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.

No Value

SLO Evidence

No Value

Course Content

Lecture Content

No value

Laboratory/Studio Content

Basic Instrument Review-Dual (8 hours)

- Climbs
- Steep turns
- Descents
- Straight-and-level

- Slow flight
- Stalls
- Unusual attitude recovery
- VOR interception and tracking
- ASR approaches (emergency procedure)

Proficiency Maneuvers Review-Dual (10 hours)
- Navigating to and from the practice area
- Slow flight
- Stalls (power-on, power-off, accelerated)
- S-turns across a road
- Turns around a point
- Rectangular patterns
- Emergencies and emergency landings
- Review of instrument flying fundamentals
- Return to airport and proper pattern entries

Proficiency Maneuvers (10 hours)
- Slow flight
- Stalls
- S-turns across a road
- Turns around a point
- Rectangular patterns
- Normal and cross wind takeoffs and landings

Specialized Takeoffs and Landings-Dual (10 hours)
- Cross wind takeoffs and landings (review)
- Short field takeoffs and landings
- Soft field takeoffs and landings

Specialized Takeoffs and Landings-Solo (10 hours)
- Cross wind takeoffs and landings
- Short field takeoffs and landings
- Soft field takeoffs and landings

Night Flying-Dual (10 hours)
- Review of night flight physiology and aircraft/airport lighting
- Night pre-flight inspections
- Night taxi procedures
- Night takeoffs and landings
- Night navigation and night emergency procedures

Cross Country Flight-Dual (WHP-IYK-WHP) (10 hours)
- Review planning
- Weather briefing review
- Flight plan procedures
- Use of pilotage and dead reckoning
- Unfamiliar airport recognition and orientation

Cross Country Flight-Dual (WHP-SBA-WHP) (10 hours)
- Review planning/flight log preparation
- Weather briefing review
- Flight plan procedures
- Use of pilotage, dead reckoning, and radio navigation
- Unfamiliar airport recognition and orientation

Cross Country Flight-Solo (WHP-SBA-WHP) (10 hours)
- Review planning/flight log
- Weather briefing review
- Flight plan review
- Solo cross country flight
- Debrief of flight

Cross Country Flight-Solo (WHP-IYK-WHP) (10 hours)
- Review planning/flight log
- Weather briefing review
- Flight plan review
- Solo cross country flight
- Debrief of flight

Night Cross Country Flight-Dual (WHP-CRQ-WHP) (10 hours)
- Review planning/flight log preparation
- Weather briefing review
- Flight plan procedures
- Use of pilotage, dead reckoning, and radio navigation

- Unfamiliar airport recognition and orientation

Cross Country Flight-Solo (WHP-SBA-SBP-WHP) (12 hours)
- Review planning/flight log
- Weather briefing review
- Flight plan review
- Solo cross country flight
- Debrief of flight

Proficiency Maneuvers Review (Check Ride Preparation)-Dual (10 hours)
- Navigating to and from the practice area
- Slow flight
- Stalls (power-on, power-off, accelerated)
- S-turns across a road
- Turns around a point
- Rectangular patterns
- Emergencies and emergency landings
- Review of instrument flying fundamentals

Specialized Takeoffs and Landings (Check Ride Preparation)-Dual (8 hours)
- Cross wind takeoffs and landings (review)
- Short field takeoffs and landings
- Soft field takeoffs and landings

Solo Practice as Directed by Instructor-Solo (8 hours)

Simulated Check Ride-Dual (Check Airman Instructor) (16 hours)
- Pre-flight procedures
- Starting, taxi, and run-up procedures
- Normal takeoff and landing
- Short field takeoff and landing
- Soft field takeoff and landing
- Simulated emergency landing
- Slips
- Go-arounds
- Steep turns
- S-turns across a road
- Turns around a point
- Slow flight
- Stalls (power-on, power-off, accelerated)
- Basic instrument flying
- Recovery from unusual attitudes in simulated IMC

Total hours: 162

Additional Information

Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.

No

GCC Major Requirements

No Value

GCC General Education Graduation Requirements

No Value

Repeatability

Not Repeatable

Justification (if repeatable was chosen above)

No Value

Resources

Did you contact your departmental library liaison?

Yes

If yes, who is your departmental library liason?

Adina Lerner (Technology & Aviation, Visual & Performing Arts)

Did you contact the DEIA liaison?

Yes

Were there any DEIA changes made to this outline?

No

If yes, in what areas were these changes made:

No Value

Will any additional resources be needed for this course? (Click all that apply)

- No

If additional resources are needed, add a brief description and cost in the box provided.

No Value