

AVI 114 Course Number Flight II Course Title 2 Credits

Hours: 1 / 86.9 Lecture / Field Hours Pre-requisite: AVI132 Co-requisite: AVI 132 Implementation Spring 2024

<u>Catalog description</u>: Required flight training for the commercial pilot certificate for the student who has met the requirements for the private pilot certificate in AVI 113. Consists of 54.0 flight hours, 17.4 preflight planning hours, and 15.5 ground/pre/post instruction. Fee required (see Mercer County Community College's Aviation Policies and Procedures Manual).

General Ed	ucation	Category:
Not GenEd		

Course coordinator:

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Pre-requisites:

- 1. AVI 113 with a minimum C grade
- 2. Private Pilot Certificate
- 3. FAA-approved Medical
- 4. US citizenship or TSA approval

Required texts & Other materials:

- 1. Owner's or Operator's Manual of Aircraft used in training
- 2. Airplane Flying Handbook (ISBN 1619545128)
- 3. Commercial Pilot Airman Certification Standards (ISBN 1619549077)
- 4. The Advanced Pilot's Flight Manual by William K. Kershner (ISBN 1644250101)
- 5. Guided Flight Discovery Instrument/Commercial by Jeppesen Sanderson (ISBN 0884872785)

Flight Training Content:

Commercial course and Instrument course are being conducted concurrently.

This course consists of Block 1 of the Instrument Rating Course as well as Blocks 1 and 2 of the Commercial Pilot Certification Course. Details can be found in the latest version of the FAA-approved Training Course Outlines (TCO) and Flight Syllabi

Flight Training Course Objectives:

The student obtains the aeronautical skills and experience necessary to meet the requirements of a commercial pilot certificate with an airplane category rating and a single-engine land class rating.

Flight Training Course Completion Standards:

The course completion standards are based upon the Commercial Pilot Airman Certification Standards as outlined by the Federal Aviation Administration. The student demonstrates through flight test and school records that he/she has the aeronautical skills and experience necessary to obtain a commercial pilot certificate with an airplane rating and a single-engine land class rating.

* ADDITIONAL TIME MAY BE NEEDED TO MEET COMPLETION STANDARDS AND PROFICIENCY.

Course Student Learning Outcomes (SLO):

At the completion of the course, the student will be able to:

- 1. Pre-flight Preparation and Procedures Items A, B, C, D, E, F, G, and J (ILG 1,10,11) (PLO 1,4)
- 2. Airport Operations including Takeoffs, Landings, and Go-Arounds Items A, B, C, D, E, F, K, and L (ILG1,2,3,4,5) (PLO 1,4)
- 3. Performance Maneuvers and Ground Reference Maneuvers Items A, B, C, and D (ILG 2,3) (PLO 1,4,6)
- 4. Navigation Items A, B, C, and D (ILG 2,3,4,10,11) (PLO 1,4,6)
- 5. Slow Flight and Stalls Items A, B, C, and D (ILG 2,3) (PLO 4)
- 6. Emergency Operations Items A, B, and C (ILG 1,3,4,11) (PLO 1,4)
- 7. High Altitude and Operations Items A and B (ILG 1,2,3,11) (PLO 1,4)
- 8. Post-flight Procedures After-Landing, Parking, and Securing the Aircraft (ILG 1,4) (PLO 1,4)

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.

Institutional Learning Goal 2. Mathematics. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

Institutional Learning Goal 3. Science. Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

Institutional Learning Goal 4. Technology. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

Institutional Learning Goal 5. Social Science. Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.

Institutional Learning Goal 10. Information Literacy: Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Program Learning Outcomes for Aviation Technology (PLO)

Students will be able to:

- 1. Demonstrate the knowledge and skills required to obtain the private and commercial certificates and instrument rating, including aeronautical technical skills and decision making, while demonstrating safety as their primary focus.
- 4. Demonstrate effective and correct written and verbal communication.
- 6. Demonstrate an awareness of the ethical and professional issues associated with the aviation industry, including the importance of becoming a life-long learner in the aviation world.

Units of study in detail - Unit Student Learning Outcomes:

Unit I Instrument Block 1 [Supports Course SLOs 1 and 8] Learning Objectives

The student will be able to:

• Become familiar with the G1000 glass cockpit.

Unit II Commercial Block 1 [Supports Course SLOs 1, 2, 3, 5, 6, and 8

Learning Objectives

The student will be able to:

- Perform precision flight maneuvers.
- Review previously learned maneuvers.

Unit III Commercial Block 2 [Supports Course SLOs 1, 2, 4, 6, 7, and 8]

Learning Objectives

The student will be able to:

- Develop skills flying precision flight maneuvers.
- Develop cross-country skills with the addition of more advanced VOR navigation.

Evaluation of student learning:

Specific Grading:

Letter Grade	Nominal%
А	93-100
A-	90-92
B+	87-89
В	83-86
В-	80-82
C+	77-79
С	70-76
D	60-69
F	0-59

- The flight grade is dependent on a practical outcome of the progress check flights, class attendance, and participation policy. Attendance and completion of class assignments are mandatory.
- A Rubric for the Flight Class is as follows:

The practical assessment is based upon the current Airman Certification Standard (ACS) utilized for grading purposes. The examiner is obligated by the Federal Aviation Administration to make sure the applicant (student) meets these standards in all Areas of Airman Certification Standards. A final grade for this course will be determined as follows:

- A = Completes all progress checks on first attempt with a Satisfactory grade, perfect attendance in flight class, and participates as per MCCC policy.
- B = Completes 1 out of 2 progress checks on first attempt with a satisfactory grade, perfect attendance in flight class, and participates as per MCCC policy.
- C = Completes at least 1 out of 2 progress checks on first attempt with as satisfactory, no more than 2 absences from flight class, and participates as per MCCC policy.
- D = Completes at least 1 out of 2 progress checks on first attempt with a satisfactory grade, no more than 3 absences from flight class, and participates as per MCCC policy.
- F = Does not complete progress checks on first attempt, does not attend class regularly and does not participate in class and/or student does not complete final progress check within time period designated.