#### 1

# **FLIGHT SCIENCE (FSCI)**

#### FSCI 1150 - Flight 1

0 or 3 Credits

This course will provide the fundamental knowledge required for the student to successfully learn the maneuvers and procedures for pre-solo flight, dual and solo local operations, and an introduction to VFR cross-country operations.

## FSCI 1155 - Flight 1 Supplemental

1 or 2 Credits

This course will provide the supplemental coursework necessary for the student to perform the maneuvers and procedures for pre-solo flight, dual and solo local operations, and an introduction to VFR cross-country operations.

Prerequisite(s): FSCI 1150 with a grade of C or higher

## FSCI 1250 - Basic Flight Foundations

3 Credits

This course will provide the fundamental knowledge of the pilot's role in operations including aircraft design, aircraft operating characteristics, aircraft maintenance, airports, airspace, air traffic control, VFR and IFR communications and aircraft performance.

## FSCI 1550 - Flight 2

0 or 3 Credits

This course provides the fundamentals of cross-country flight from solo pilot in command to the Private Pilot Certificate; introduction to commercial maneuvers. This will include the elements of airmanship, night flight, practical weather, and other cross-country skills.

Prerequisite(s): FSCI 1150 with a grade of C or higher

## FSCI 1555 - Flight 2 Supplemental

1 or 2 Credits

This course provides the supplemental coursework necessary for the student to perform cross-country flight from solo pilot in command to the Private Pilot Certificate; introduction to commercial maneuvers. This will include the elements of airmanship, night flight, practical weather, and other cross-country skills.

Prerequisite(s): FSCI 1550 with a grade of C or higher

#### FSCI 1560 - Flight 2 Transition

0-1 Credits

This course provides a transition for holders of a Private Pilot Certificate into the curriculum and will introduce them to commercial maneuvers. This will include the elements of airmanship, practical weather, and other cross-country skills.

## FSCI 2150 - Flight 3

0 or 3 Credits

This course provides instruction for the application of previously learned commercial maneuvers; introduction of instrument flying and navigation skills in the flight environment.

Prerequisite(s): FSCI 1250 with a grade of C or higher

## FSCI 2155 - Flight 3 Supplemental

1 or 2 Credits

Instrument Flying Handbook, Instrument Rating Practical Test Standards (PTS), IFR Low Altitude Enroute Chart, Terminal Procedures Publication.

Prerequisite(s): FSCI 2150 with a grade of C or higher

## FSCI 2250 - Instrument Flight Foundations

3 Credits

This course will provide instruction in the advanced knowledge areas of aviation law for instrument flight, mass & balance, flight planning, and radio navigation for high performance aircraft as pilot in command.

Prerequisite(s): FSCI 1250 with a grade of C or higher

#### FSCI 2550 - Flight 4

0 or 3 Credits

This course will provide the principles of flight to qualify for the Instrument Rating for Single engine. These principles will include airmanship, complex aircraft systems, high altitude operations and weather, and flight planning.

**Prerequisite(s):** FSCI 2150 with a grade of C or higher; Minimum Earned Credits of 30

## FSCI 2555 - Flight 4 Supplemental

1 or 2 Credits

This course provides the supplemental coursework necessary for the student to provide the principles of flight to qualify for the Instrument Rating for Single engine. These principles will include airmanship, complex aircraft systems, high altitude operations and weather, and flight planning.

Prerequisite(s): FSCI 2550 with a grade of C or higher

## **FSCI 2650 - Navigation Foundations**

3 Credits

This course will provide instruction in the advanced knowledge areas necessary of general and global navigation for high performance aircraft as pilot in command. (Offered in Fall)

**Prerequisite(s)**: FSCI 2250 with a grade of C or higher; (MATH 1200 with a grade of C or higher, MATH 1400 with a grade of C or higher, MATH 1320 with a grade of C or higher, or MATH 1510 with a grade of C or higher)

## FSCI 2930 - Special Topics

1-3 Credits (Repeatable for credit)

#### FSCI 2980 - Independent Study

1 or 3 Credits (Repeatable for credit)

## FSCI 3550 - Flight 5

0 or 3 Credits

This course will provide the principles of flight to qualify for the Commercial Certificate with the Single and Multi engine rating. These principles will include airmanship, complex aircraft systems, high altitude operations and weather, and flight planning.

**Prerequisite(s):** FSCI 2550 with a grade of C or higher; Minimum Earned Credits of 30

#### FSCI 3555 - Flight 5 Supplemental

1 or 2 Credits

This course provides the supplemental coursework necessary for the student to provide the principles of flight to qualify for the Commercial Certificate with the Single and Multi-engine rating. These principles will include airmanship, complex aircraft systems, high altitude operations and weather, and flight planning.

Prerequisite(s): FSCI 3550 with a grade of C or higher

## FSCI 3700 - Principles of Flight Instruction

3 Credits

Fundamentals of teaching and learning; teaching methods; aerodynamics; flight training syllabus; maneuvers and procedures. The student is prepared to take the two flight instructor knowledge tests upon successful completion of this course.

**Prerequisite(s):** FSCI 3550 with a grade of C or higher; CORE 1500\*; (CORE 1000 or UUC Ignite Seminar Waiver with a minimum score of S)

#### FSCI 3750 - Flight 6

0 or 3 Credits

This course will provide the appropriate knowledge and skill to expertly control the airplane from the right seat while teaching a student.

Prerequisite(s): FSCI 3550 with a grade of C or higher

#### FSCI 3930 - Special Topics

3 Credits (Repeatable for credit)

#### FSCI 3980 - Independent Study

1-3 Credits (Repeatable for credit)

#### FSCI 4100 - CFI Practicum I

3 Credits

This course will provide a practical experience in flight education. The student will conduct flight training for at least one flight student. The student will also participate in directed group sessions emphasizing the delivery of quality flight instruction through the development of teaching skill, including, demonstration and the analysis of student performed maneuvers.

**Prerequisite(s):** FSCI 3700 with a grade of C or higher; Minimum Earned Credits of 90; FSCI 3750 with a grade of C or higher

## FSCI 4500 - CFI Practicum II

3 Credits

This course will provide advanced practical experience in flight education. The student will conduct flight training for at least one flight student. The student will also participate in directed group sessions emphasizing the delivery of quality flight instruction.

Prerequisite(s): FSCI 4100 with a grade of C or higher

## FSCI 4930 - Special Topics

1-6 Credits (Repeatable for credit)

## FSCI 4950 - Senior Residency

1 Credit

## FSCI 4980 - Advanced Independent Study in Flight Science

1-3 Credits (Repeatable for credit)

## FSCI 5930 - Special Topics

1-3 Credits (Repeatable for credit)

## FSCI 5980 - Graduate Independent Study in Flight Science

1-3 Credits (Repeatable for credit)

## FSCI 5981 - Graduate Independent Study in Flight Science

1-6 Credits (Repeatable for credit)

<sup>\*</sup> Concurrent enrollment allowed.

Attributes: UUC:Reflection-in-Action