FLIGHT SCIENCE (FSCI)

FSCI 1150 - Flight 1
Credit(s): 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
Credit(s): 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. Offered in spring. Prerequisite: FSCI 1150.
Prerequisite(s): FSCI 1150

FSCI 1250 - Basic Flight Foundations
Credit(s): 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
Credit(s): 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: FSCI 1150.
Prerequisite(s): FSCI 1150 with a grade of C or higher

FSCI 1555 - Flight 2 Supplemental
Credit(s): 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. Offered in spring. Prerequisite: FSCI 1150.
Prerequisite(s): FSCI 1550

FSCI 1560 - Flight 2 Transition
Credit(s): 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 1565 - Flight 2 Transition Supplemental
Credit(s): 1 or 2 Credits
This course provides the supplemental coursework necessary for the student to perform commercial maneuvers and will include the elements of airmanship, practical weather, and other cross-country skills. Offered in spring. Prerequisite: FSCI 1150.
Prerequisite(s): FSCI 1560

FSCI 2150 - Flight 3
Credit(s): 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: FSCI 1550.
Prerequisite(s): FSCI 1250 with a grade of C or higher

FSCI 2155 - Flight 3 Supplemental
Credit(s): 1 or 2 Credits
Prerequisite(s): FSCI 2150

FSCI 2250 - Instrument Flight Foundations
Credit(s): 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: FSCI 1250.
Prerequisite(s): FSCI 1250

FSCI 2550 - Flight 4
Credit(s): 0 or 3 Credits
This course provides 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: FSCI 2150.
Prerequisite(s): FSCI 2150 with a grade of C or higher
Restrictions: Students with a semester level of Freshman may not enroll.

FSCI 2555 - Flight 4 Supplemental
Credit(s): 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. Offered in spring. Prerequisite: FSCI 2550.
Prerequisite(s): FSCI 2550

FSCI 2650 - Navigation Foundations
Credit(s): 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.
Prerequisite(s): FSCI 2250; MATH 1200
Restrictions: Students with a semester level of Freshman may not enroll.

FSCI 2930 - Special Topics
Credit(s): 1-3 Credits (Repeatable for credit)

FSCI 2980 - Independent Study
Credit(s): 1 or 3 Credits (Repeatable for credit)

FSCI 3550 - Flight 5
Credit(s): 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
Restrictions: Students with a semester level of Freshman may not enroll.
FSCI 3555 - Flight 5 Supplemental  
**Credit(s): 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. Offered in spring. Prerequisite: FSCI 3550.  
**Prerequisite(s):** FSCI 3550

FSCI 3700 - Prin Flight Instruction I  
**Credit(s): 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. Prerequisites: FSCI 3550.  
**Prerequisite(s):** FSCI 3550

FSCI 3750 - Flight Instructor Prep I  
**Credit(s): 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: FSCI 3550 or permission of the Chief Instructor. Co-requisite: FSCI 3700.  
**Prerequisite(s):** FSCI 3550

FSCI 3930 - Special Topics  
**Credit(s): 3 Credits (Repeatable for credit)**

FSCI 3980 - Independent Study  
**Credit(s): 1-3 Credits (Repeatable for credit)**

FSCI 4100 - CFI Practicum I  
**Credit(s): 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. Prerequisites: Senior Standing, FSCI 3100, FSCI 3200 or approval of the Department Chair.  
**Prerequisite(s):** FSCI 3700 with a grade of C or higher; FSCI 3750 with a grade of C or higher  
**Restrictions:**  
Enrollment limited to students with a semester level of Senior.

FSCI 4200 - Prin. of Flight Instruction II  
**Credit(s): 3 Credits**  
This course will provide the appropriate knowledge to understand the elements of teaching instrument and multiengine flight. The student will prepare lesson plans and practice various methodologies appropriate for advanced flight instruction. Prerequisite: FSCI 3700.  
**Prerequisite(s):** FSCI 3700

FSCI 4250 - Flight Instructor Prep. II  
**Credit(s): 3 Credits**  
This course will provide the appropriate knowledge and skill to expertly control the airplane from the right seat while teaching instrument and Multi engine flight. Prerequisite: FSCI 3700 and FSCI 3750. Co-requisite: FSCI 4200.  
**Prerequisite(s):** FSCI 3700 and FSCI 3750

FSCI 4500 - CFI Practicum II  
**Credit(s): 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: FSCI 4100.  
**Prerequisite(s):** FSCI 4100

FSCI 4930 - Special Topics  
**Credit(s): 1-6 Credits (Repeatable for credit)**

FSCI 4950 - Senior Residency  
**Credit(s): 1 Credit**

FSCI 4980 - Independent Study  
**Credit(s): 1-3 Credits (Repeatable for credit)**

FSCI 5930 - Special Topics  
**Credit(s): 1-3 Credits (Repeatable for credit)**

FSCI 5980 - Graduate Reading Course  
**Credit(s): 1-3 Credits (Repeatable for credit)**

FSCI 5981 - Independent Study  
**Credit(s): 1-6 Credits (Repeatable for credit)**