

Saint Louis University-Madrid Campus
Division of Sciences, Engineering & Nursing

**Program: Global Aviation Degree with Concentration in Flight Science-
Professional Pilot**

COURSE NAME: Professional Orientation

COURS NUMBER: ASCI-101

CREDIT HOURS: 2

INSTRUCTOR: Stephen Belt

PREREQUISITE: None

COURSE SCHEDULE: Lectures; Tuesday and Thursday, 16:00-16:50.

TEXTBOOK:

1. None required for this course.
2. Handouts/other material as provided.

CATALOG DESCRIPTION:

This course will provide an orientation to the University system, the teaching philosophy of the Department, and opportunities for professional development in specific career tracks such as professional pilot and aviation management. Opportunities such as internships, scholarships, research assistantships, and general networking and social events on campus, etc. will be discussed.

INSTITUTION MISSION STATEMENT

The mission of Saint Louis University is the pursuit of truth for the greater glory of God and for the service of humanity. The University seeks excellence in the fulfillment of its corporate purposes of teaching, research, health care and service to the community. It is dedicated to leadership in the continuing quest for understanding of God's creation and for the discovery, dissemination and integration of the values, knowledge and skills required to transform society in the spirit of the Gospels. As a Catholic, Jesuit university, this pursuit is motivated by the inspiration and values of the Judeo-Christian tradition and is guided by the spiritual and intellectual ideals of the Society of Jesus.

PROGRAM MISSION STATEMENT

The mission of the department of aviation science is to actively engage in the fulfillment of Saint Louis University's mission so that our students are formed as global citizens who are intellectually, technically, and ethically prepared to be responsible leaders in the profession and their community.

FIVE DIMENSIONS OF THE SAINT LOUIS UNIVERSITY EXPERIENCE

Scholarship and Knowledge: By developing a well-rounded educational foundation which incorporates learning through experience, by becoming scholars in their chosen fields, and by dedicating themselves to the advancement of knowledge, students are prepared for advanced study, for their careers, and for lifelong learning.

Intellectual Inquiry and Communication: By developing the abilities of intellectual inquiry and communication, students are able to learn effectively, express ideas and concepts clearly, and apply their knowledge to new situations they encounter.

Community Building: By welcoming and working with others, regardless of race, ethnicity, religion, or gender, students build an inclusive community which leads to respect and compassion for human life and the dignity of each person.

Leadership and Service: By serving others and by promoting social justice, students become men and women for others who lead by their example.

Spirituality and Values: By developing their spirituality, values, and openness to the transcendent, students determine principles to guide their actions and their relationships with others.

PROGRAM OBJECTIVES AND GENERAL OUTCOMES

KNOWLEDGE. Graduates of the Department of Aviation Science's academic programs will **demonstrate** broad knowledge in the following fundamental subject areas:

Mathematics; Physics; Philosophy; Psychology; Theology; Ethics; English Composition & Literature

Graduates of the Department of Aviation Science's academic programs will **demonstrate** their ability to build upon their fundamental knowledge in mathematics, sciences, and liberal arts to **analyze, synthesize, and evaluate** contemporary problems in the Flight Science domain. The overall areas covered in the program include the following:

Professional Orientation; Aircraft Design, Operation, and Maintenance; Aviation Safety and Human Factors; National and International Aviation Law and Regulations; Airports, Airspace, and Air Traffic Control; Meteorology and environmental issues; Aerodynamics; Incident/Accident Investigation; Advanced Aircraft Systems; Air Charter and Air Carrier Operations; Flight Deck Automation; Corporate Aviation Management; Economics of Air Transportation; Culminating Senior Project; and a Cohesive Set of Approved Electives (a minor or a certificate is strongly encouraged).

SKILLS. Graduates of the Department of Aviation Science's academic programs will **demonstrate** proficiency in the following skills:

1. **Aircraft piloting** skills to achieve a Commercial Pilot Certificate with Instrument and Multiengine Ratings (*Flight Science majors only*).
2. Oral, written and team **communication** skills to plan, execute, and present team projects in a peer-review setting.
3. **Research** skills to collect data via appropriate literature searches, apply appropriate analytical techniques, synthesize professional-quality reports, and present the research results.
4. **Critical thinking** and **analytical** skills to solve problems.
5. **Decision-making** skills to evaluate and proactively resolve flight-related challenges.
6. **Team building** skills that apply interpersonal communication skills and decision-making skills to resolve conflicts, manage challenges, and build high-performing teams.

ABILITIES. In general, graduates of the Department of Aviation Science's academic programs will have the ability to succeed in life, regardless of their chosen career field. They will **demonstrate** the following key abilities:

1. They will be able to **learn to learn**; therefore, they will be able to acquire new knowledge, solve new problems, and adapt to new environments.
2. They will maintain their **curiosity** for new knowledge, their **imagination** for innovative solutions, and their **creativity** in applying their knowledge and skills in novel ways.
3. They will develop their ability to **self-motivate** and **dedicate** themselves to every endeavor with **passion**.
4. They will apply **sound ethical judgment** in their personal and professional lives marked by integrity and trust.
5. They will strive to **serve others** in the personal, professional, and communal responsibilities.

ATTITUDE. Ultimately, the graduates of the Department of Aviation Science's academic programs are products of a Jesuit university. As such, they will **demonstrate** the following attitudes:

1. They will **respect the universality**—the inclusiveness—of a variety of intellectual disciplines that synergistically enrich each other as well as the multitude of spiritual paths that open one's mind to the transcendent.
2. They will strive toward service to their fellow human beings as **men or women for others** and in so doing, they will strive to apply prepared to be their technical knowledge and skills for the betterment of humanity.
3. Always give more – **MAGIS**. These graduates will be whole-heartedly charged to make a contribution toward their family, their organization, and their society—they will be inspired to choose to **do what is most needed** among the multitude of things that they are trained, skilled, prepared, or gifted to do.

COURSE GOALS/OBJECTIVES:

1. Expose the student to the teaching philosophy of Saint Louis University, Parks College and the Department of Aviation Science. Discussions will include the use of the Flight Operations Manual and Flight Training Records as required by 14 CFR Part 141.
2. Expose the student to opportunities and careers available within the aviation community. Discussions will include but will not be limited to career opportunities such as professional pilots, flight instructors, aviation managers, and air traffic control operators.
3. Provide the student with knowledge of certain aspects of aviation history, particularly in the United States. Included will be discussions of legislation, regulation and deregulation of the aviation industry.

LEARNING OUTCOMES:

1. The student will possess a level of familiarity with the teaching philosophy used at St. Louis University, Parks College and the Department of Aviation Science.
2. The student will possess a level of familiarity with a variety of career opportunities found in the aviation industry.
3. The student will possess a level of familiarity with the Flight Operations Manual and Flight Training record system used by the aviation unit at Parks College.
4. The student will possess a level of familiarity with the general privileges and responsibilities of being a professional pilot.
5. The student will demonstrate knowledge of contemporary issues affecting the aviation industry.
6. The student will demonstrate knowledge of aviation history, including legislation affecting the aviation industry.

ASSESSMENT METHODS:

1. Student performance in the course will be assessed in part through objective testing. A minimum of three in-term quizzes and one final exam will be given.
2. An additional assessment method will involve each student participating in providing a group presentation to the class.
3. The final assessment method will be turning in on-time and complete assignments as assigned in the course.

COURSE TOPICS: Fall 2012 Tentative Course Calendar Dates to be announced in course syllabus

Course introduction – list of course readings/assignments provided
Accreditation process and portfolio assessment – assign reflection paper
Jesuit Education at Saint Louis University
Career Services – Introduction to Problem Based Learning
INTRODUCTION TO FLIGHT/SAFETY RESOURCES
Program academic policies/instructor and student responsibilities; Set-up group presentation topics and schedules
Academic Planning; Faculty from upper level courses speak with students;
QUIZ #1
Flight Operations Manual and Flight Training Records review
Personal reflection paper due
Student Pilot Code of Conduct review
Flight Operations Manual and Flight Training Records paper due
Group presentation update and discussions
ATC SPEAKER
Student Pilot Code of Conduct Paper due
Group presentation update and discussions
QUIZ #2
AIRLINE PILOT SPEAKER
Final copy of résumé due
PRACTICUUM FLIGHT INSTRUCTOR SPEAKER
AVIATION MANAGER SPEAKER
A&P MECHANIC SPEAKER
(Midterm week)
(Fall break – no class)
History of aviation*
QUIZ #3
History of aviation*
History of aviation*
History of aviation*
Group Presentation
Group Presentation
Group Presentation
Group Presentation
Group Presentation
Overview of the FAA*
(Thanksgiving holiday)
Professionalism and diversity
Review for final exam
(Final exam week) : Final exam is scheduled .TBA

ASSIGNMENTS:

(Requirements for the assignments will be provided in a separate document. No late submissions will be accepted.)

1. Assigned papers – you are to submit a hard copy of this paper no later than the dates listed in the course calendar.
2. Résumé – you are to coordinate with the Career Center to begin and create your professional résumé; a hard copy of the document must be turned in no later than TBA.
3. Assigned papers – you are required to submit a paper on three of the topics discussed in this course: Use of the Flight Operations Manual (due TBA), use of the Flight Training Record (due TBA) and privileges and responsibilities of a pilot (due TBA).
4. Group presentation – each student is required to participate in his/her group presentation. Participation includes both the creation of the presentation and actually presenting part of the group’s material during the group’s presentation. Each student will be asked to comment on the participation efforts of the other members of the group. The comments will be used in determining a grade for each individual.

QUIZZES:

There are three in-term quizzes required in this course. The quizzes will be multiple choice and/or short answer essay questions. The quizzes will cover material obtained from the “NEWS” section of “*Aviation Daily.*” Additional information needed to access the information will be provided separately.

FINAL EXAM:

The final exam will consist of multiple choice and short answer essay questions and will include the course material noted above that is marked with an asterisk (*).

GRADING SYSTEM:

Assigned papers	20%
Group Presentation	25%
Quizzes	25%
Final exam	25%
<u>Attendance</u>	<u>5%</u>
Total Points Possible:	100%

GRADE SCALE

Course Average (%)	Grade
94-100	A
90-93	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
60-69	D
< 60	F

Course Requirements

1. All assignments must be completed on time and as directed.
2. Class attendance is required.
Absences equal to or in excess of three will automatically result in failing the class. For less than three absences, each absence will deduct one fifth of the 5% of the total grade. Three instances of arriving late for class are counted as one absence.
For athletes who travel for the University, you need to turn in official letter verifying your traveling schedule before your expected absence. For students who expect absence due to significant and unavoidable personal reasons (e.g., death in the family), you need to notify the instructors in advance.
3. The aviation industry is a very complex, very dynamic industry that is best learned by continued study and observation. This is accomplished by immersing yourself in the news.
4. Students should write in a clear and professional manner (which includes consideration of spelling and grammar) in submitting materials for this course. All written homework assignments and reports should be completed and delivered to the instructor; no late assignment will be accepted.

Classroom courtesy:

- Please silence all mobile phones and beepers while in class.
- Interactive conversation is very much welcomed during classroom sessions. To stimulate productive interaction, please be courteous when someone has the floor (instructor or student).
- Any student using profanity or otherwise disrupting the learning environment will be asked to leave the classroom.
- Please arrive to class on time. Late arrivals are disruptive. If for some reason you must arrive late, please sit in the first available chair closest to the door to avoid excessive disruption.
- Please ensure you leave your area of the classroom clean after each class session.