The Social and Behavioral Sciences Aviation Major

Proposed Revision

**Name of major:** SBS Aviation Transportation[[1]](#footnote-1)

**Proposed Implementation Date:** Spring 2011

**Degree to be Received:** Bachelor of Arts

**Rationale**:

Over the past three to four years, the Aviation major in the Social and Behavioral Sciences (SBS) has taken on a more vocational practice of focusing on hands-on flight training and flight time than on the mission of the strong liberal arts education that SBS believes is its foundation. This modification has taken place because of changes to the faculty makeup in SBS as well as a shift in Aviation’s philosophy of how to prepare students for careers. Many of the curricular changes over the last few years have taken place without the knowledge of either the College of Engineering, where the Department of Aviation resided, or SBS. The resulting, and current, Aviation major within SBS allows a student to earn the major and the SBS degree without ever taking SBS courses. This proposal to revise the SBS Aviation undergraduate program will reshape the curriculum so that students will have the benefit of SBS disciplinary competence and pedagogy.

It is useful to note that, late last year, the College of Engineering initiated a proposal to dismantle its Department of Aviation and establish a Center for Aviation Studies (CAS) in its place. The CAS will not be a tenure-initiating unit (TIU), and Aviation’s faculty will have new homes in the College of Engineering. The CAS Director will be a faculty member in the College of Engineering reporting directly to the Dean of the College of Engineering. SBS has concurred with the proposal, as has the Fisher College of Business (FCOB).

Equally, if not more important to note, the Dean’s office of the College of Engineering and the Fisher College of Business support a thorough revision of the SBS Aviation major.

Beginning February 2010, representatives from SBS, Engineering, the Department of Aviation, and the Department of Geography have met and exchanged ideas on how to offer current Aviation majors the education required for a degree in the Arts and Sciences while continuing to provide the training necessary for a career in the aviation industry. We feel that this proposal to revise the major meets this challenge.

1. Among the eight departments within SBS plus the Undergraduate International Studies Program (UISP), Geography is the most logical host for the major revision. The department has a strong emphasis on transportation and other ancillary subject areas which directly reflect the needs of students interested in the aviation field (meteorology, mapping, business, and understanding global connections). With these well-suited offerings, Geography courses represent the SBS core of the revised major.
2. Aviation is a diverse field, and the proposal incorporates courses from five other SBS departments (Communication, Economics, International Studies, Political Science, Psychology, and Sociology). Courses from these other departments will satisfy major electives categories, making the revised major an interdisciplinary one which will expose students to the varied areas of interest and research within the field.
3. The goal of the revised major is to provide students a choice of alternative career paths while maintaining the high quality of flight instruction they receive through the CAS. Although a career as a pilot is the most obvious of careers, it is far from the only one. Jobs in airline/airport management, air traffic control, marketing, travel logistics, and public relations are but a few careers students can prepare for via a well-rounded curriculum. The aviation sector is widely interconnected with the economy and so we believe an appropriately broad training and education makes sense as a preparation for students.

**Revised Major**:

After consultation with curricular representatives from Engineering and SBS, and after receiving support from the department chairs (or their designees) whose courses are included in the major, we are proposing the following changes to the Aviation major:

The revised major will be comprised of an SBS Core of six Geography courses (30 quarter hours) and three Elective courses, one to be chosen from each of three categories (15 quarter hours). The three Elective categories are: *Security*; *Individual and Social*; and *Institutions* (Appendix A). This major revision would require students to take 45 SBS hours. The Aviation Core of the major will consist of seven required courses (23 quarter hours) and a minimum of 28 quarter hours chosen from among Aviation Elective courses, a total of 51 Aviation hours.

The SBS Aviation Transportation major will require 96 quarter hours (see Appendix B.)[[2]](#footnote-2).

**SBS Core**

The core courses represent topics directly associated with aviation and provide practical knowledge and transferable skills for students. They include courses in topics such as transportation, transportation security, weather and climate, and cartography. These address issues that are present in many areas of the transportation sector and give students a strong understanding of the principles needed to be successful. These are all courses which are consistently taught by faculty in the department and are fully expected to be consistently offered once the semester system is in place.

**SBS Electives**

**1. Security**

Courses in this category are largely from International Studies, Sociology and Psychology and address trends in terrorism, the security apparatus of governments, and personal security. These are central concerns for both the aviation industry itself and individual travelers. Those working in this sector must be aware of how threats to security can be met and how best to understand and assist those affected, whether directly or indirectly.

**2. Individual & Social**

Courses in this category are potentially drawn from Communication, Psychology, Sociology, and Geography. They cover a broad range of topics that encompass the human interaction components of the field. Considering the transnational nature of transportation in general, and aviation in particular, a solid understanding of geopolitical issues, communication theories and practices, and how individuals interpret situations causing them to act in certain ways alone and in groups is an ongoing and important component to problem solving in the field.

**3. Institutions**

Courses in this category are from Economics, Communication, and International Studies. These courses address issues surrounding international law, governmental oversight, employment legislation, and effective business communication. In essence they are concentrated on the business and trade aspects that are prevalent in aviation corporate dealings.

**Student Enrollment**

Currently, there are 182 Aviation majors[[3]](#footnote-3) in total, and 146 (80%) of those are SBS Aviation majors. The numbers have remained relatively steady over time, and we expect that the program will continue to enroll approximately 150 SBS Aviation majors.

**Relationship to other programs**

We expect little impact on other programs throughout the university. There may be a modicum of change in enrollment numbers in various Aviation courses, depending on the changes to the aviation portion of the program (see Appendix B).

**Administration**

The revised program will be an SBS major. For now, any changes to the structure or content of the program will be vetted through the regular Arts and Sciences (ASC) approval process (including the SBS Curriculum Committee) as well as through the College of Engineering. Once the Center for Aviation Studies (CAS) is established, any changes to the program will be vetted through ASC after seeking concurrence by CAS.

**Proposed revisions as they relate to similar programs at other institutions**

Non-engineering baccalaureate aviation degrees at other universities focus on administration and management. There tend to be 2 sets of core requirements – non-aviation and aviation cores.

Non-aviation core requirements for aviation baccalaureate programs nationally generally include courses from several disciplines of the social sciences: climatology, physical geography, marketing, economics, communication, psychology (individual and social behavior), and domestic and international law. Appendix C provides several examples of the organization and content of other institutions’ aviation management/administration programs.

This proposal to revise SBS’ aviation major is consistent with what appears to be a convention for these programs, and will prepare students for a variety of careers in aviation that require or prefer baccalaureate degrees [[4]](#footnote-4). Moreover, this proposal is forward-thinking in that it will provide students the preparation that will be expected as aviation careers are developed or reshaped to deal with increased interest in the global effects of aviation transportation, especially aviation transportation security.

**Advising and Student Resources**

Students will have access to the Aviation advisor for advice relating to the major, appropriate minors, or coursework that would augment their marketability. The departmental advisor for Geography would also be available for consultation on issues relating to the SBS Core courses of the major.

The advisor is also available to students for assistance with career search help and resume/cv and cover letter reviews. Additionally, students will have access to the Geography’s Undergraduate Resource Room located in Derby Hall. The Resource Room has computers for students to access e-mail and Carmen and is also equipped with course-relevant software programs, such as Arc/Info for GIS and Cartography courses.

**Internships**

Through the Department of Aviation and, later, through the Center for Aviation Studies (CAS), internships with industry are available in aviation management and administration. These internships are often paid and are available for credit in the Aviation Electives portion of the proposed SBS Aviation Major revision. We expect that students also will continue to compete for internship positions at the OSU airport in administration, planning, external relations, marketing, and so forth.

**Assessment**

Our assessment will be multidimensional and ongoing. We expect our assessment strategy to result in SBS Aviation Transportation majors who are better prepared for the job market, graduate studies, and as citizens. Program goals are as follows:

|  |
| --- |
| A. Students acquire fundamental theoretical and practical knowledge of transportation systems |
| B. Students understand the social and behavioral processes shaping transportation and transportation systems |
| C. Students acquire specialized knowledge regarding significant issues in the transportation industry |
| D. Students acquire familiarity with methods in geospatial data analysis |

Our assessment plan will initially consist of:

* Use of focus groups with students in the major. Facilitators will systematize sessions by eliciting responses to a predetermined set of questions regarding goals A and C.
* An exit survey of graduating seniors, which includes questions about the major regarding their overall educational experience, classroom experience, research and internship participation, and placement in jobs and graduate school.
* Use of embedded testing in selected courses which will demonstrate student understanding of essential concepts (Courses used for embedded testing will be identified jointly through SBS, Aviation, and Geography).

The assessment strategy will be refined as we learn the results data collection from focus groups responses and embedded testing. SBS, the Center for Aviation Studies (CAS), and the Department of Geography will consult regarding results. Assessment strategies will be revisited annually by all three participants, and program goals, assessment strategies, and the SBS Aviation Transportation curriculum will be revised as warranted.

**Appendix A**

**SBS Aviation Transportation Major**

**50 SBS Quarter Hours**

6 Core Courses + 3 Courses from 3 Areas

|  | **Course** | **Description** | **Prerequisites** |
| --- | --- | --- | --- |
| ***Required SBS Core***  **30 hours** | Geog 240 - Economic and Social Geography | This course explores relationships between society and economy, focusing on geographic dimensions of such issues as globalization, production and consumption, inequality, and social difference. |  |
| Geog 445 - Transportation Security | Geographic aspects of transportation security. Spatial analysis of transportation linkages. Relationships between transportation and spatial organization; selected analytical models dealing with threats to transportation security. |  |
| Geog 520 - Climatology | The elements and the controls of climate; types of climate and their distribution; climates and their effects on the economic and other activities of humans. |  |
| Geog 580 - Elements of Cartography | A study of the cartographic techniques of map compilation and presentation including generalization, symbolization, reproduction, and simple computer mapping with an emphasis on thematic mapping. |  |
| Geog 607 - Fundamentals of Geographic Information Systems | Basic principles of geographic and land information systems and their use in spatial analysis and information management. | Geog major or permission of instructor. |
| Geog 645 - Geography of Transportation | Relation between transportation and spatial organization; selected analytical models dealing with traffic demand, network configuration, and allocation of transport facilities; application to selected problems. |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **3 Areas: *Security*, *Individual & Social*, and *Institutions***  **Required: 3 courses, 1 from each of 3 Areas** | | | |
| **Area 1: *Security*** | | | |
| ***Security***  **at least 1 course**  **(7 options)** | Comm  531 - Communication and Conflict Management | An overview of the communication and conflict literature with emphasis on effective conflict management. |  |
| Comm  597.01 - Global Issues and Communication: Media and Terrorism | Focuses on the portrayal of terrorism in the media and on how terrorists use the media to influence public opinion. | Rank 3 or higher. |
| IS 300 - Introduction to Homeland Security | Comprehensive overview of U.S. homeland security. Threats from natural disasters, terrorism, etc will be studied. Programs and technologies involved in disaster prevention and response. | Rank 2 or higher or permission of instructor. |
| IS 553 - Terror and Terrorism | Focus on the origins, evolution and place of terrorism in the modern world and the ideology, motivation, and methods of a number of terrorist groups. |  |
| Poli Sci 548 – Politics of Int’l Terrorism | Examines international terrorism's concepts and actors, the motivations and causes of terrorism, the experience of the United States, and tensions between freedoms and security. |  |
| Psych 525 - Psychology of Personal Security: Global and Local Perspectives | Surveys the diverse psychological literature on personal security, a key ingredient in psychological well-being. | Psych 100. |
| Soc 315 - Sociology of Terrorism | Provides a broad review of the definitions, histories, types, and theories of terrorism from a sociological perspective. |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Area 2: *Individual & Social*** | | | |
| ***Individual & Social***  **at least 1 course**  **(11 options)** | Comm 367 - Persuasive Communication | Principles of persuasion as reasoned discourse. | English 110, 110.01, 110.02, 110.03 or equiv, and rank 2 or above. |
| Comm  431 - Strategic Communication Principles | The role of strategic communications in business, including basic principles of integrated marketing, theory, and ethical standards. |  |
| Geog 460 – Space, Power, and Political Geography | Political geographic thought; territory and territoriality; borders and scale; space, power and uneven development; states and statecraft; and the politics of nations, regions and localities |  |
| Geog 642 - Geography of Development | Political economy of development; development theory; the historical geography of capitalist development; and contemporary development practices and strategies. |  |
| IS 501 - Selected Problems in International Studies | Class discussions, with several guest speakers, informal conferences, and a reading and research program arranged to meet the special needs of those enrolled. |  |
| Poli Sci 201 – Intro to Political Behavior | Focus on concepts such as attitude, role, and group and their application in such areas as voting behavior and political participation. |  |
| Psych 309 - Human Motor Control and Learning | Experimental analyses of the processes underlying the performance, learning and adaptation of movement skills. | Psych 300 or 220 or 320, or Stat 145, or permission of instructor. |
| Psych 508 - Psychology of Judgment and Decision-Making | An overview of current models and empirical research on cognitive processes in human decision-making and judgment under risk or uncertainty. | Psych 220 or 320, or Stat 145 or 245; or permission of instructor. |
| Psych 521 - Personnel Psychology | Overview of theory, method, and practices of personnel psychology: job analysis, recruiting, personnel section, performance appraisal, and training. | Psych 100; 220 or 320, or Stat 145 or 245. |
| Soc 302 - Technology and Global Society | Social aspects of technology, social change, and technological development; underdevelopment and the global economy. |  |
| Soc 370 - Social Factors in Personality | Analysis of relationships between social structure and personality; language; its consequences for social behavior; socialization: learning of motives and social roles; personality: development, organization, and disorganization. |  |
| **Area 3: *Institutions*** | | | |
| ***Institutions***  **at least 1 course**  **(16 options)** | Comm  200 - Communication in Society | Role of communication in society; forms, strategies, theories and issues; interpersonal, group, organizations, public and mass communication. |  |
| Comm  240 - Introduction to Communication Technology | Processes of communication technology, critical consumption, ethical issues, current problems of the markets, technologies and policies of online communication, the world wide web, and media. |  |
| Comm  368 - Intercultural Communication in Organizational Contexts | An examination of the role of intercultural communication in organizational contexts and the attendant effects on the creation and transmission of cultural consciousness, knowledge, tradition, and practices. |  |
| Econ 348 - Ethics and Social Responsibility in Economic Life | Examines the role of ethical norms and social constraints in determining economic outcomes. |  |
| Econ 560 - International Economic Relations | Survey of international economic relations; the basis of world trade; commercial and financial policy, particularly of the United States; and recent international economic organization. | Econ 200 and 201 or 400, or equivalents. |
| Econ 570 - Government and Business | Economic and legal aspects of government regulation of business in the United States; philosophies and concepts of public control; contemporary problems. | Econ 200. |
| Econ 580 - Labor Economics and Industrial Relations | Survey of the field of labor economics; trade unionism, collective bargaining; wage determination, employment, unemployment; labor legislation. | Econ 200. |
| IS 356 - Introduction to Globalization | Analysis of globalization in all its aspects, economic, political, cultural, environmental and technological, as well as of its extent and desirability. | Rank 2 or higher. |
| IS 550 -  Cultural Diplomacy | Cultural Diplomacy is the exchange of information, ideas, and values among nations and peoples. Public and private mechanisms for these exchanges are explored. | Rank 2 or higher. |
| Geog 450 - The Making of the Modern World | The geographies of modernity and their formation: the world market, the global polity, diasporas and constructing difference, colonialism, the transformation of nature, Eurocentricity, post-modernity. | Rank 2 or higher. |
| Geog 470 -  Life and Death Geographies: Global Population Dynamics | Theories of population change; global and national contexts of fertility policy and reproductive health, morbidity and mortality trends; migration; environmental effects of population growth; urbanization | Geography 240. |
| Geog 635 - Globalization and Environment | Transnational dimensions of changes to the natural environment; ways that global economic activity, international institutions, and global environmentalism contribute to environmental problems and solutions. |  |
| IS 650 - International Law | Examination of the varied sources, traditions, functions and structures of international law and its significance in maintaining stability, continuity and communication in the international system. | Rank 2 or higher. |
| Poli Sci 305 – Intro to Public Policy | Introduction to the workings of policy-making processes within governments, and the use of social science reasoning to evaluate and improve the content of policies. |  |
| Poli Sci 535 – Govts & Politics of Modern Democracies | A survey of the basic institutions and politics of modern democracies, with emphasis on representativeness and democratic stability. |  |
| SOCIOL  309 - Introduction to Law and Society | Introduction to the law as a social institution, including the origins of law and its relationship to other social institutions, social control, and social change. |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix B** | | | | |
| **The Proposed Quarter-System SBS Aviation Transportation Major: A Revision of the SBS Aviation Major** | | | | |
| **Social & Behavioral Sciences Core**  **(All Required)** | **SBS Electives**  **(Choose 3 courses)** | **Aviation Core**  **(All Required )** | **Aviation Electives**  **(28 Hours Required)** |
| Geog 240 - Economic and Social Geography | **Security (choose 1):** | AV 300 - The National Aviation System(3) | ACCTMIS 211 - Intro to Accounting **-OR-** ACCTMIS 310 – Foundations of Accounting |  |
| Geog 445 - Transportation Security | Comm 531 – Communication & Conflict Mgmt | AV 310 - Private Pilot Fundamentals (5) | AV 294 – Group Stds in Aviation |  |
| Geog 520 - Climatology | Comm 597.01 – Global Issues & Communication: Media & Terrorism | AV 530 - Aviation Regulation (3) | AV 322 – Aviation History |
| Geog 580 - Elements of Cartography | IS 300 - Introduction to Homeland Security | AV 540 - Aviation Human Factors (3) | AV 341 - Private Pilot Flight Lab I |
| Geog 607 - Fundamentals of Geographic Information Systems | IS 553 - Terror and Terrorism | AV 550 - Aviation Management (3) | AV 342 - Private Pilot Flight Lab II |
| Geog 645 - Geography of Transportation | Poli Sci 548 - Politics of Int’l Terrorism | AV 560 - Aviation Safety (3) | AV 410 – Aviation Weather |
|  | PSY 525 - Psychology of Personal Security | AV 650 - Air Transportation Analysis I (capstone) (3) | AV 413 - Commercial Pilot Fundamentals |
|  | SOC 315 - Sociology of Terrorism |  | AV 415 - Instrument Flight Fundamentals |
|  | **Individual & Social**  **(choose 1):** |  | AV 417 - Advanced Multiengine Operations |
|  | Comm 367 – Persuasive Communication |  | AV 421 - Flight Instruction Methodology |
|  | Comm 431 – Strategic Communication Principles |  | AV 422 - Instrument Instruction Methodology |
|  | Geog 460 – Space, Power, & Poli Geography |  | AV 441 - Commercial Flight Lab 1 |
|  | Geog 642 - Geography of Development |  | AV 443 - Commercial Pilot Flight Lab 3 |
|  | IS 501 – Selected Problems in Int’l Studies |  | AV 444 – Commercial Pilot Flight Lab II |  |
|  | Poli Sci 201 – Intro to Political Behavior |  | AV 445 – Commercial Pilot Flight Lab III |  |
|  | Psych 309 - Human Motor Control and Learning |  | AV 446 – Multi-Engine Flight Lab |
|  | Psych 508 - Psychology of Judgment and Decision-Making |  | AV 461 - Flight Instructor ASEL Flight Lab |
|  | Psych 521 - Personnel Psychology |  | AV 462 - Flight Instructor Instrument Airplane Flight Lab |
|  | Soc 302 - Technology and Global Society |  | AV 463 - Flight Instructor AMEL Flight Lab |
|  | Soc 370 - Social Factors in Personality |  | AV 489 - Professional Practices in Industry |
|  | **Institutions (choose 1):** |  | AV 493 – Individual Stds in Aviation |
|  | Comm 200 – Communication in Society |  | AV 552 - Airport Management |  |
|  | Comm 240 – Intro to Communication Technology |  | AV 591 - Flight Network Analysis & Optimization |  |
|  | Comm 325 - Introduction to Organizational Communication (5) |  | AV 593 - Individual Studies in Aviation |
|  | Comm 368 – Intercultural Communication in Organizational Contexts |  | AV 652 - The International Aviation System |
|  | Econ 348 - Ethics and Social Responsibility in Economic Life |  | AV 654 – Airline Marketing |
|  | Econ 560 - International Economic Relations |  | AV 674 - Airport Systems Planning, Design, and Development |
|  | Econ 570 - Government and Business |  | AV 693 - Individual Studies |  |
|  | Econ 580 - Labor Economics and Industrial Relations |  | AV 694 – Group Studies in Aviation |  |
|  | Geog 450 - The Making of the Modern World |  | AV 699 – Undergrad Research in Aviation |  |
|  | Geog 470 – Life & Death Geog: Global Population Dynamics |  | AV 750 – Air Transportation Analysis II |  |
|  | Geog 635 - Globalization and Environment |  | AV H783 – Honors Research |  |
|  | IS 356 – Intro to Globalization |  | Econ 200 – Principles of Microecon |  |
|  | IS 550 – Cultural Diplomacy |  | Econ 201 – Principles of Macroecon |  |
|  | IS 650 - International Law |  |  |  |
|  | Poli Sci 305 – Intro to Public Policy |  |  |  |
|  | Poli Sci 535 – Govts & Politics of Modern Democracies |  |  |  |
|  | Soc 309 – Intro to Law & Society |  |  |  |
|  |  |  |  |  |
| **30 Quarter Hours** | **15 Quarter Hours** | **23 Quarter Hours** | **28 Quarter Hours** |  |
|  |  |  |  |  |
|  |  | **SUMMARY:** |  |  |
|  |  | Social & Behavioral Sciences Core | **30 hours** |  |
|  |  | SBS Electives | **15 hours** |  |
|  |  | Aviation Core | **23 hours** |  |
|  |  | Aviation Electives | **28 hours** |  |
|  |  | **Total Quarter Credit Hours** | **96 hours** |  |

| **Appendix C** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | | | | | |
|  | **REQUIRED CORE** | |  | **QUARTER EQUIVALENTS** | |
| **BACCALAUREATE**  **INSTITUTION** | **NON-AVIATION CORE** | **AVIATION CORE** | **ELECTIVES** | **GE**  **HOURS** | **TOTAL DEGREE HOURS** |
|  |  |  |  |  |  |
| Western Michigan University *Aviation Science & Administration* | Accounting I & II | Intro to Aviation | Professional Flight I Theory & Lab | 70 | 161 |
|  | Transportation Tech: Policy, Perils & Promise | Aerodynamics & Performance | Aviation Mgmt Intern |  |  |
|  | Interpersonal Communication | Aircraft Systems | Organization Behavior |  |  |
|  | Fluency w/Info Tech | Aviation Safety | Multinat'l Mgmt Entrepreneurship |  |  |
|  | Principles of Micro & Macro | Crew Resource Mgmt | Airline Strategy |  |  |
|  | Organization of Industries | Aviation Meteorology |  |  |  |
|  | Business Finance | Advanced Aircraft Systems |  |  |  |
|  | Physical Geography | Aviation Legislation |  |  |  |
|  | Intro to Meteorology & Climatology | Airport Planning, Ops, & Admin |  |  |  |
|  | Tech Communication | Corporate Aviation Mgmt |  |  |  |
|  | Calculus | Airline Administration |  |  |  |
|  | Marketing Principles | Int'l Aviation |  |  |  |
|  | Elementary Physics | Senior Project - Planning |  |  |  |
|  | General Psychology | Senior Project - Analysis |  |  |  |
|  | Business Statistics |  |  |  |  |
|  | Business Enterprise |  |  |  |  |
|  |  |  |  |  |  |
| CUNY -- York College *Aviation Management* | Accounting I & II | Intro to Aviation Safety & Security | **1 Course from Group I** | 55-66 | 156 |
|  | Intro to Aviation Business | Intro to Aviation Business | Intro to Mgmt Info Systems |  |  |
|  | Business Law | Airport Planning & Mgmt | Air Cargo Mgmt |  |  |
|  | Business Finance | Aviation Ops | Intro to Emergency Planning & Mgmt |  |  |
|  | Case Studies in Aviation Financial Mgmt | Aviation Policy Seminar | Aviation Internship in the Private Sector |  |  |
|  | Intro to Microeconomics |  | Weather & Climate |  |  |
|  | Intro to Economic Statistics |  | **1 Course from Group 2** |  |  |
|  | Aviation Mktg & Economics |  | Basic Factors in Int'l Politics |  |  |
|  | Public Administration in the Political Setting |  | Aviation Law |  |  |
|  |  |  | Aviation Internship in the Public Sector |  |  |
|  |  |  | **1 Course from Group 3** |  |  |
|  |  |  | Human Factors Psychology |  |  |
|  |  |  | Psychology of Terrorism |  |  |
|  |  |  | Social Research |  |  |
|  |  |  |  |  |  |
| Purdue University *Airline Management* | Intro to Public Relations | Airline Mgmt |  | 39-52 | ?? |
|  | Principles of Persuasion | Airport Mgmt |  |  |  |
|  | Intro to Advertising | Air Traffic Control |  |  |  |
|  | Problems in Public Relations | Aviation Internship |  |  |  |
|  | Consumer Relations Mgmt | Airport Operations |  |  |  |
|  | Consumer Behavior | Airport Manager Certification |  |  |  |
|  | Industrial Safety |  |  |  |  |
|  | Automatic Identification & Data Capture |  |  |  |  |
|  | Leadership Principles |  |  |  |  |
|  | Occupational Safety & Health |  |  |  |  |
|  | Human Resource Issues |  |  |  |  |
|  | Leadership for Organizational Change |  |  |  |  |
|  | Leadership through Teams |  |  |  |  |
|  | Leadership in a Global Environment |  |  |  |  |
|  |  |  |  |  |  |
| Purdue University *Airport Management* | Intro to Public Relations | Airport Mgmt |  | 39-52 | ?? |
|  | Principles of Persuasion | Airport Manager Certification |  |  |  |
|  | Intro to Advertising | Airline Mgmt |  |  |  |
|  | Problems in Public Relations | Air Traffic Control |  |  |  |
|  | Industrial Safety | Aviation Internship |  |  |  |
|  | Automatic Identification & Data Capture | Airline Operations |  |  |  |
|  | Leadership Principles |  |  |  |  |
|  | Occupational Safety & Health |  |  |  |  |
|  | Human Resource Issues |  |  |  |  |
|  | Leadership for Organizational Change |  |  |  |  |
|  | Leadership through Teams |  |  |  |  |
|  | Leadership in a Global Environment |  |  |  |  |
|  | Intro to Environmental Policy |  |  |  |  |
|  |  |  |  |  |  |
| South Dakota State University *BS in Aviation w/Aviation Mgmt Specialization* | Physical Climatology & Meteorology + Lab Course | Intro to General Aviation |  |  |  |
|  | Thru Calculus 2 | Private Pilot Theory |  |  |  |
|  | Principles of Acctg I & II | Private Pilot Flight I & II |  |  |  |
|  | Principles of Macroecon | Aviation Safety |  |  |  |
|  | Principles of Microecon | Aviation Weather |  |  |  |
|  | Physics + Lab Course | Advanced Flight Principles |  |  |  |
|  | General Psych | Instrument Pilot Theory |  |  |  |
|  | Intro to Soc | Instrument Flight |  |  |  |
|  | Business Finance | Commercial Pilot Theory |  |  |  |
|  | Intro to Computers | Commercial Flight I & II |  |  |  |
|  | Technical Communication | Aviation Law |  |  |  |
|  | Physical Geography + Lab Course | Intro to Aviation Admin |  |  |  |
|  | Fundamentals of Speech | Human Factors in Aviation |  |  |  |
|  | Legal Environment of Business |  |  |  |  |
|  | Organization & Mgmt |  |  |  |  |
|  |  |  |  |  |  |

**Appendix D**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
| ***TWO SAMPLE 4-YEAR SBS AVIATION TRANSPORTATION PLANS*** | | | | | | | |
|  |  |  |  |  |  |  |  |
| **Sample Four-Year Plan - SBS Aviation Transportation B.A.** | | | | | | | |
| **Year 1** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| GE 1st Writing | 5 | Aviation 310 (AVN core) | 5 | Econ 200 or 201 (AVN elective) | 5 |
| Aviation 300 (AVN core) | 3 | GE 1st Foreign Language | 5 | GE 2nd Foreign Language | 5 |
| College Survey Course | 1 | Geography 240 (1st Social Science) | 5 | SBS Security Elective | 5 |
| GE Math | 5 |  |  |  |  |
| Quarter Hours | 14 | Quarter Hours | 15 | Quarter Hours | 15 | **Yearly Hours** | **44** |
|  |  |  |  |  |  |  |  |
| **Year 2** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| GE 3rd Foreign Language | 5 | GE 4th Foreign Language | 5 | Acct 211 (AVN elective) | 5 |
| Geography 607 (SBS core) | 5 | SBS Individ & Soc Elective | 5 | Geography 445 (SBS core) | 5 |
| Geography 520 (SBS core) | 5 | AVN 540 (AVN core) | 3 | Aviation 550 (AVN core) | 3 |
| Aviation 530 (AVN core) | 3 | AVN Elective | 3 | AVN Elective | 3 |
| Quarter Hours | 18 | Quarter Hours | 16 | Quarter Hours | 16 | **Yearly Hours** | **50** |
|  |  |  |  |  |  |  |  |
| **Year 3** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| Geography 645 (SBS core) | 5 | GE Historical Study | 5 | AVN Elective | 3 |
| GE 1st Open Option | 5 | SBS Institutions Elective | 5 | GE Historical Study/Humanities | 5 |
| Aviation 560 (AVN core) | 3 | GE 2nd Science | 5 | GE 2nd Writing | 5 |
| GE 1st Science | 5 | AVN Elective | 3 | Aviation 650 (AVN Core) | 3 |
| Quarter Hours | 18 | Quarter Hours | 18 | Quarter Hours | 16 | **Yearly Hours** | **52** |
|  |  |  |  |  |  |  |  |
| **Year 4** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| Geography 580 (SBS core) | 5 | GE 3rd Science | 5 | AVN Elective | 3 |
| AVN Elective | 3 | GE 2nd Social Science | 5 | GE Data Analysis | 5 |
| GE Literature | 5 | GE Art | 5 | GE 2nd Open Option | 5 |
|  |  |  |  |  |  |
| Quarter Hours | 13 | Quarter Hours | 15 | Quarter Hours | 13 | **Yearly Hours** | **41** |
|  | | | | | |  |  |
| **Total Hours** | **187** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Sample Four-Year Plan - SBS Aviation Transportation B.A.** | | | | | | | |
| **Year 1** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| GE 1st Writing | 5 | Aviation 310 (AVN core) | 5 | SBS Security Elective | 5 |
| Aviation 300 (AVN core) | 3 | GE 1st Foreign Language | 5 | GE 2nd Foreign Language | 5 |
| College Survey Course | 1 | Geography 240 (1st Social Science) | 5 | Aviation 341 (AVN elective) | 2 |
| GE Math | 5 |  |  | GE Data Analysis | 5 |
| Quarter Hours | 14 | Quarter Hours | 15 | Quarter Hours | 17 | **Yearly Hours** | **46** |
|  |  |  |  |  |  |  |  |
| **Year 2** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| GE 3rd Foreign Language | 5 | Aviation 410 (AVN elective) | 3 | Aviation 443 (AVN elective) | 3 |
| Geography 607 (SBS core) | 5 | GE 4th Foreign Language | 5 | Geography 445 (SBS core) | 5 |
| Aviation 342 (AVN elective) | 2 | SBS Indiv & Soc Elective | 5 | Aviation 415 (AVN elective) | 3 |
|  |  | GE 1st Science | 5 | SBS Institutions Elective | 5 |
| Quarter Hours | 12 | Quarter Hours | 18 | Quarter Hours | 16 | **Yearly Hours** | **46** |
|  |  |  |  |  |  |  |  |
| **Year 3** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| Geography 645 (SBS core) | 5 | GE 2nd Writing | 5 | Aviation 444 (AVN elective) | 3 |
| Aviation 441 (AVN elective) | 3 | GE 2nd Science | 5 | Aviation 550 (AVN Core) | 3 |
| Aviation 530 (AVN core) | 3 | Aviation 442 (AVN elective) | 3 | Aviation 413 (AVN elective) | 3 |
| GE Historical Study | 5 | GE Historical Study/Humanities | 5 | Geography 520 (SBS core) | 5 |
|  |  | Aviation 540 (AVN core) | 3 |  |  |
| Quarter Hours | 16 | Quarter Hours | 18 | Quarter Hours | 14 | **Yearly Hours** | **48** |
|  |  |  |  |  |  |  |  |
| **Year 4** | | | | | | | |
| **Autumn** |  | **Winter** |  | **Spring** |  |  | |
| Geography 580 (SBS core) | 5 | GE 3rd Science | 5 | GE Art | 5 |
| GE 1st Open Option | 5 | GE 2nd Social Science | 5 | AVN 650 (AVN core) | 3 |
| Aviation 445 (AVN elective) | 3 | GE Literature | 5 | GE 2nd Open Option | 5 |
| AVN 560 (AVN core) | 3 |  |  | Aviation 446 or 461 (AVN elective) | 3 |
| Quarter Hours | 16 | Quarter Hours | 15 | Quarter Hours | 16 | **Yearly Hours** | **47** |
|  | | | | | |  |  |
| **Total Hours** | **187** |

1. Baccalaureate aviation degrees generally fall under one of two categories: *Aviation Systems* or *Aviation Management* degrees. *Aviation Systems* degrees require students to obtain a minimum of a private pilot’s license as well as Instrument and Commercial ratings, while *Aviation Management* degrees do not prepare students for a pilot’s license. The proposed SBS Aviation Transportation falls within the *Aviation Management* category. [↑](#footnote-ref-1)
2. The 96 SBS and Aviation major hours are reasonable for this type of major. The Fisher College of Business Aviation specialization requires 86-89 quarter hours and the Engineering Aviation major requires 109 quarter hours. It appears that requiring 85 or more major credit hours is the norm for aviation baccalaureate degrees nationally as well (see Appendix C.). [↑](#footnote-ref-2)
3. Aviation degrees are conferred by the Fisher College of Business, the College of Engineering, and the ASC division, Social and Behavioral Sciences. [↑](#footnote-ref-3)
4. See *Careers in Aviation* on the Aircraft Owners and Pilots Association’s website, <http://www.aopa.org>, for the careers as pilots, in airline and airport operations, airline and airport services, scientific services (e.g. cartography), law-related services, and office professionals that require or prefer baccalaureate degrees. [↑](#footnote-ref-4)