Higher Learning Commission

Form

New Academic Program
Substantive Change Application

Institution: Wright State University City, State: Dayton, Ohio
Name of person completing this application: Bruce Mackh
Title: Vice Provost Phone: 937-775-2155 Email: bruce.mackh@wright.edu
Date Submitted: 02/29/2024

This completed form will constitute your request for approval of a substantive change. This form will be the basis for review of this application. The questions are designed to elicit brief, succinct, detailed information, rather than a narrative or references to extensive supporting documents. Do not attach other documents unless they are specifically requested in the questions and are germane to the request. Excluding attachments, the completed application form should be no more than **12–15 pages** on a single classification of change. The total submission, including attachments, should not exceed 200 pages.

If the person completing this application is not the CEO, CAO or the Accreditation Liaison Officer of the institution, it is understood that the person completing and submitting this application has consulted with and informed those individuals and has been authorized to submit this form on the institution's behalf.

Please note: HLC plans to update its application forms annually, on or about September 1 of each year. However, if an application form was accessed more than 90 days prior to filing, please visit hlcommission.org/change to ensure that there have been no changes to the form in the intervening time.

Submit the completed application as a single PDF file at hlcommission.org/upload. Select "Change Requests" from the list of submission options to ensure the application is sent to the correct HLC staff member.

Part 1: General Questions

1. **Requested Change(s).** Concisely describe the change for which the institution is seeking approval

   Wright State University is submitting an application for review to offer an Associate of Applied Science in Aviation Science and Technology.

2. **Does another characteristic of the change requested in this application also require prior HLC approval?** (Example: contractual arrangement, new academic program, new additional location, etc.)

   ☒ No
   ☐ Yes

If yes, please briefly explain the second type of substantive change requiring prior HLC approval and submit the relevant application form separately (or indicate the date on which it was submitted):

NO: On 12.11.2023 at 11:54AM, Wright State University submitted information through HLC's Contractual Arrangement Screening Form. We have received confirmation of our submission and that no further review is required. See "EXHIBIT 1 Contractual Arrangement Email" attached or online at: https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials.

3. **Classification of Change Request.**
Note: Not every substantive change requires prior review and approval. Visit hlcommission.org/change to make certain that current HLC policy requires the institution to seek approval.

New academic program(s):

☒ Associate's ☐ Bachelor's ☐ Master's or specialist
☐ Doctorate ☐ Certificate or diploma
☐ *Check if program is at a new degree level*

An institution submitting more than one change request should complete multiple applications, one for each type of change. Change requests may be related to the following topics:

- New academic programs, including degree and certificate programs
- New Pell-eligible prison education programs (also referred to as PEPs)
- Changes to existing academic programs involving credit/clock hours, method of delivery or length of term
- Opening or closing additional locations or branch campuses
- Provisional Plans (with or without Teach-Out Agreements, as applicable)
- Teach-Out Agreement if closing a campus or additional location that provides 100% of at least one program
- Access to HLC's Notification Program for Additional Locations
- Initiating or expanding distance education offerings
- Initiating or expanding correspondence education offerings
- Offering programs through competency-based education (credit-based, direct assessment or hybrid)
- Initiating or modifying contractual arrangements
- Change in mission
- Change in student body

4. **Special conditions.** Indicate whether any of the conditions identified below fit the institution (Yes or No). If Yes, explain the situation in the space provided.

a) Is the institution, in its relations with other institutional or specialized accrediting agencies, currently under or recommended for a negative status or action (e.g., withdrawal, probation, sanction, warning, show-cause, etc.)?

NO

b) Is the institution now undergoing or facing substantial monitoring, special review, or financial restrictions from the U.S. Department of Education or other federal or state government agencies?

NO

c) Has the institution's senior leadership or board membership experienced substantial resignations or removals in the past year?

NO

d) Is the institution experiencing other pressures that might affect its ability to implement the proposal (e.g., a collective bargaining dispute or a significant lawsuit)?

NO

5. **Internal Approvals.** Attach documentation of internal (faculty, board) approvals that the institution has obtained for the proposed change. **All required approvals must be obtained before submitting the application to HLC.** If no approval is required, attach evidence that approval is not needed (e.g., applicable regulation, statute, or correspondence).

Please see the following exhibits, attached:

Exhibit-2: Undergraduate Curriculum Committee approval documentation – yellow highlights, page 2
Exhibit-3: Faculty Senate approval documentation
Senate Minutes April 24th, 2023 – yellow highlights, page-3
Exhibit-4: Wright State University Board of Trustees resolution of approval

Exhibits 2-4 are also available online: https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials

6. **State Approvals.** Attach documentation of state approvals that the institution has obtained for the proposed change. **All required approvals must be obtained before submitting the application to HLC.** If no approval is required, attach evidence that approval is not needed (e.g., applicable regulation, statute or correspondence).

Please see the following exhibit, attached

Exhibit-5: Ohio Department of Higher Education approval documentation or online at: https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials

7. **System Approvals.** If applicable, attach documentation of system approval that the institution has obtained for the proposed change. **All required approvals must be obtained before submitting the application to HLC.** If no approval is required, attach evidence that approval is not needed (e.g., applicable regulation, statute, or correspondence). Check the box below if the institution is not part of a system.

☒ Not Applicable

8. **Foreign Country Approval(s).** If applicable, attach documentation of foreign country approval(s) that the institution has obtained for the proposed change. Documentation must be written in or translated to English. **All required approvals must be obtained before submitting the application to HLC.** If no approval is required, attach evidence that approval is not needed. Check the box below if the proposed change is not related to offerings in a foreign country.

☒ Not Applicable

9. **Specialized Accreditation.** Complete this section only if specialized accreditation is required for licensure or practice in program(s) covered by this change application.

☐ The institution has already obtained the appropriate specialized accreditation. Attach a copy of the letter from the agency granting accreditation.

☐ The institution has begun the process of seeking or plans to seek specialized accreditation. Specify the name of the agency and the timeline for completing the process in the space below. (If approval is a multi-stage process, the institution should contact the HLC staff liaison to discuss the timeline before submitting this change application form.)

☒ The institution does not plan to seek specialized accreditation. Provide a rationale for not seeking this accreditation in the space below.
Please note: Specialized accreditation is not required for licensure or practice in program(s) covered by this New Academic Program application.

10. **Changes Requiring Visits.** This section is not for HLC-mandated visits such as additional location confirmation visits or campus evaluation visits.

Complete this section only if the institution is already aware that the proposed change will need to be reviewed through a visit. The institution may submit Part 1 of the change request application to begin the process of scheduling a Change Visit or adding the proposed change to an already scheduled visit. The full application must be submitted at a later date. (If the institution is unsure whether a visit is required, leave this section blank and submit the full change application. HLC will advise the institution based on the information provided.)

a) Select the type of visit the institution is requesting:

☐ Request to schedule a Change Visit.
Change Visits typically are scheduled approximately four months from the date an institution submits its change request. The full change application and other required materials will be due to HLC and the peer review team eight weeks before the visit date. See Change Visit: Required Materials and Submission Procedures for more information.

☐ Request to embed a Change Visit into an already scheduled visit.
Note: Such requests must be submitted at least six months before the visit date. HLC staff will determine whether to embed a Change Visit based on peer reviewer availability and the complexity of the scheduled visit, among other factors. HLC may not be able to accommodate all requests.
Specify type of visit and date scheduled:
The institution's full change application should be submitted along with other materials required for the already scheduled visit.

b) Provide URLs to the institution's faculty/staff handbook and catalog below. If the URLs are not available, please provide PDF versions of these documents when submitting other required materials prior to the visit.

Faculty/Staff **Handbook URL**: https://www.wright.edu/faculty-senate/about/faculty-handbook-constitution
Catalog URL: https://catalog.wright.edu/

Staff Handbook URL:
https://www.wright.edu/sites/www.wright.edu/files/page/attachments/Staff%20Handbook_Final.pdf

Part 2: Topic-Specific Questions

If the institution is unsure whether prior HLC approval for the proposed program is required, complete the New Degree Program Screening Form.

An institution should submit a separate application for each requested program (unless the programs represent closely related disciplines). If more than one program is being requested in this application, please be sure to sufficiently address each program when answering the following questions, particularly in Sections A, D, E and F. Each proposed new program should be identified by using the *Classification of Instructional Programs* terminology (CIP codes). CIP codes are established by the U.S. Department of Education's National Center for Education Statistics as a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity.

Section A. Characteristics of the Change Requested

1. Identify the basic characteristics of the proposed educational program as indicated below:

   a) The full official name of the proposed program, the specific degree (if applicable) or the instructional level (if not a degree program), and the six-digit 2020 CIP code (XX.XXXX) of the program (CIP codes, program name, and additional description [optional])

   Aviation Science and Technology / Associate of Applied Science; CIP 49.0102

   b) Total credit hours (indicate whether semester or quarter) for completion of the program. (If your institution uses clock hours please respond to questions accordingly.)

   60

   c) Normal or typical length of time for students to complete the program.

   Two (2) years

   d) Proposed initial date for implementation of the program

   Providing Wright State University receives approval, the initial date of program implementation will be Monday, June 17th, 2024. Should Wright State University receive approval after June17th, 2024, implementation will begin immediately upon approval.

   e) Primary target audience for the program (e.g., full-time, part-time, traditional college age, working adults, transfer students, military personnel, or particular ethnic group):

   1. Citizens of the United States due to FAA Regulations
   2. Full-time students
   3. Part-time students
   4. Traditional college-age students
   5. Working adults
   6. Transfer students
   7. Military personnel

f) Whether the program will be part of contractual arrangement (see HLC's website for a definition of contractual arrangements)

☒ No
☐ Yes

Important: If yes, complete the Contractual Arrangement Screening Form for each planned involvement to determine whether additional HLC approval is required.

- **If contractual approval is required:** Complete the full contractual application and submit it in conjunction with this application.
- **If approval is not required:** Attach the confirmation email from HLC to this application.

g) Whether the program will be offered as distance education or correspondence education (see HLC's website for definitions of distance and correspondence education)

☒ No
☐ Yes

Important: If yes, check the institution's distance delivery stipulation in its Institutional Status and Requirements Report in Canopy. If this program does not fit within the institution's current stipulation, submit a distance education or correspondence education application in conjunction with this application.

2. Is the institution requesting a change to its General stipulation for the proposed program? If yes, provide a rationale for this request. The institution's Accreditation Liaison Officer or chief executive officer can view the institution's stipulations in Canopy, under the Institutional Profile or Institutional Status and Requirements Report.

   Note: A change in stipulation might require an on-site visit by HLC peer reviewers. If the institution is requesting a new stipulation, please complete Section 1, Question 7.

   NO

Section B. Institution's History With Programs

3. Does the institution currently offer a program at the same instructional level and with the same 4-digit 2020 CIP code (XX.XX) as the proposed program? If so, identify the program currently offered and whether it is a degree program. Will the proposed program replace the program currently offered?

   NO

4. Does the institution currently offer two or more programs at the same instructional level with the same 2-digit 2020 CIP code (XX.) as the proposed program? If so, identify the two such programs with the highest numbers of graduates during the past year, along with their numbers of graduates.

   NO

Section C. Institutional Planning for Program Change

5. Describe the planning process for determining the need for this new program, including the role of faculty in the planning and approval processes.

   Wright State University faculty, driven by research and market analysis, identified a long-term pilot shortage. In response, Dean Denniston and Associate Dean Sexton led the College of Health, Education, and Human Sciences (CHEH) in proposing a new associate degree in aviation. Wright State partnered with First Flight Aviation for resources (aircraft, equipment, and facilities), while retaining exclusive control over curriculum development, program development, teaching, and proprietary ownership of all educational and intellectual property.

6. What is the evidence that a market for the new program(s) exists? How has estimated program demand been factored into realistic enrollment projections? How has this evidence been used in planning and budgeting processes to develop a quality program that can be sustained as intended by the institution?

Wright State University has researched the career areas of aviation and aerospace utilizing the "encoura" enrollment predictor platform and that systems population analysis tool for the graduation years of 2023, 2024, 2025, 2026, 2027, and 2028 for the state of Ohio. Without other filters applied, encoura predicts there are 9,478 prospects (students) to potentially recruit.

Global Pilot Shortage Looms: The skies may soon face a major navigation issue: a pilot shortage. Studies predict a global gap of 34,000 pilots by 2025, potentially reaching 50,000 in extreme scenarios.

North America Takes Off: This shortage hits North America particularly hard, with an aging pilot population and higher-than-average retirement rates. As of 2023, the region is experiencing a deficit of over 12,000 pilots, representing 13% of total demand.

Asia Pacific Soars Ahead: However, Asia Pacific will see the most dramatic impact by the end of the decade. With its exponential air travel growth, the region could face a staggering shortage of 23,000 pilots by 2029.

Airline Pilot: A Lucrative Skyward Path: For those considering the skies, an Airline Pilot career offers much more than just exciting scenery. It is one of the most lucrative professions, with an average first-year income (including signing bonuses) reaching $74,926. Beyond the substantial paycheck, pilots enjoy exceptional perks like free airline travel, comprehensive retirement benefits, ample time off, and much more. Most experienced pilots easily break into six-figure salaries while working an average of only 17 days per month.

Beyond Airlines: A Diversified Horizon: For students dreaming of aviation, becoming an Airline Pilot is often the first image that comes to mind. However, the aviation industry offers a vast ocean of career opportunities beyond commercial passenger flights. Graduates can pursue exciting careers flying single-engine planes for law enforcement, corporate or charter operations, cargo and passenger airlines, government contractors, survey missions, and even search and rescue operations.

Source: https://www.oliverwyman.com/our-expertise/insights/2021/mar/after-covid-19-aviation-faces-a-pilot-shortage.html

Faster Entry to the Skies: Currently, Ohio universities accept only 120-160 new students into their Aviation programs annually. Many face lengthy waitlists and delays in starting flight training, often waiting 1-2 years into their program. To avoid this bottleneck, our associate degree program will accept a smaller cohort of no more than 50 students, guaranteeing they can begin their flight hours right in the first semester of the program.

7. If the program request is approved, what future growth do you anticipate (e.g., in the next six months, three years) and how do you plan to manage this growth?

Please see "Exhibit 6- Financial Impact," which is our program's Financial Impact Statement—a four-year budget projection. Wright State University employs this instrument to calculate and predict fiscal efficiency—a requirement for every new university program. It is calculated, expected, and required that all programs become self-sustaining. The Aviation Science and Technology AAS program is expected to be self-sufficient in 2 to 3 years.

To ensure optimal student support and flight training accessibility, Wright State University's Aviation Science and Technology AAS program will initially maintain a controlled cohort size of no more than 50 students annually. This will foster a total program enrollment of approximately 100 students at any given time. As the program experiences anticipated growth, we will strategically adapt by:

- Hiring additional Certified Flight Instructor faculty, directly employed by Wright State University, to expand flight lab sections and meet the increasing demand for flight hours.

- Adjusting the number of program sections as needed to accommodate both AAS students and students enrolled in the Aviation Studies minor.

Financial projections for the initial student cohort admitted into the AAS program are outlined in the attached "Exhibit-6" or online at: https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials. Upon graduation, graduates will have the opportunity to seamlessly transition to the BS program and earn their bachelor's degree.

Exploring further recruitment, admissions, and growth strategies, we're also considering introducing an alternative admissions pathway directly into the four-year degree program. This option would maintain the integrity of our proprietary curriculum as students seamlessly progress through the entire aviation program.

Clarification: With specific regard to the questions posed in question seven (7), *"what future growth do you anticipate (e.g., in the next six months, three years) and how do you plan to manage this growth (?),"* We again ask you to look at our financial impact statement, attached, marked "Exhibit-6." Our projected growth is planned, reasonable, yet carefully and thoughtfully designed for stability and sustainability, rather than runaway-explosive-growth or over projection. By carefully following our projection goals as a planned, Wright State University seeks reasonable growth, while also remaining small, successfully.

8. How does this program fit into the current and expected financial picture of the institution? In particular, does the institution intend for the program to be financially self-sustaining? If not, please explain. Submit a three-year budget projection for the proposed program with the application.

Please see "Exhibit 6-Financial Impact," which is our program's Financial Impact statement—a four-year budget projection, including goals and plans for program sustainability. Wright State University employs this instrument to calculate and predict fiscal efficiency and solvency—a requirement for every new university program. It is expected and required that all programs become self-sustaining and not just achieve solvency, but contribute to the margins required in support of overhead not directly supported by tuition. If a program's projection does not meet this requirement, Wright State University will not approve the program. The Aviation Science and Technology AAS program is expected to be self-sufficient in 2 to 3 years. The aviation program(s) are a perfect fit for our communicated mission and vision—education and degree programs dedicated to workforce development for in-demand careers and professions. Finally, because there is a pilot shortage, and our programs are strategically focused on supplying qualified graduates able to satisfy job market and workforce needs, we confidently predict our proposed programs fit our financial mission.

9. What are the physical facilities, technology and equipment needed to support the program? Are these facilities, technology and equipment currently available or will they need to be obtained? Indicate the impact that the proposed change will have on the physical resources and laboratories that currently accommodate existing programs and services, or identify new laboratory and preceptor needs.

1. Classrooms (Exist Onsite at Dayton Campus – Currently Available)
2. Classrooms (Exist Offsite at First Flight Airport Facilities – Currently Available)
3. Computer Labs (Exist Onsite at Dayton Campus – Currently Available)
4. Computer Labs (Exist Offsite at First Flight Airport Facilities – Currently Available)
5. Library (Exist Onsite at Dayton Campus – Currently Available)
6. Aircraft (Exist Offsite at First Flight Airport Facilities – Currently Available)
7. Aircraft Hanger (Exist Offsite at First Flight Airport Facilities – Currently Available)
8. Flight Simulator (Exist Offsite at First Flight Airport Facilities – Currently Available)
9. Takeoff and Landing Strip (Exist Offsite at First Flight Airport Facilities – Currently Available)
10. Bathrooms (Exist Onsite at Dayton Campus – Currently Available)
11. Bathrooms (Exist Offsite at First Flight Airport Facilities – Currently Available)
12. Parking (Exist Onsite at Dayton Campus – Currently Available)
13. Parking (Exist Offsite at First Flight Airport Facilities – Currently Available)

Our classrooms, facilities, and master planning practices are carefully designed to optimize space and support learning. We use a variety of seat managements systems, practices, and other technologies to create a flexible and engaging learning environment. Our facilities and equipment are also well-maintained to ensure that students have everything they need to succeed.

Offsite, our partner, First Flight, also employs classroom, facilities, and planning practices which are carefully designed to optimize and maintain space and equipment to support learning.

The percentage of classes/courses offered on the Dayton Campus equals 58.4%

The percentage of courses offered off campus equals 41.6% and includes the following courses, only:
AVI 2000 (3 Credits), AVI 2001 (3 Credits), AVI 2002 (1 Credit), AVI 2004 (1 Credit), AVI 2010 (3 Credits), AVI 2101 (3 Credits), AVI 2102 (1 Credit), AVI 2250 (3 Credits), AVI 2201 (2 Credits), AVI 2202 (1 Credit), AVI 2301 (3 Credits), AVI 2302 (1 Credit). See list of courses for specific course descriptions, Exhibit-7.

10. How does the institution plan to manage communications to prospective and enrolled students related to this program? Outline the types of communication that will be used to advertise for the program.

Prospective Students:

1. Direct Mail
2. Email
3. Phone
4. Social Media
5. Live Chat
6. Virtual Events
7. Podcasts and Blogs
8. Interactive Platforms
9. Print Materials
10. College Fairs
11. Campus Visits
12. Alumni Engagement

Enrolled Students:

1. Email
2. Learning Management System
3. University Website & Portal
4. University's Mobile App
5. Professor Email
6. Office Hours
7. Course Discussion Forums
8. Student Organizations
9. Student Government
10. University Committees

Forms/Kinds/Types of Communication Used to Advertise this (these) new degree program(s):

1. Website
2. Email Marketing
3. Live Chat
4. Print Materials
5. School Visits
6. Social Media
7. Webinars
8. Podcasts & Blogs
9. College Fairs
10. Radio & Television

Section D. Curriculum and Instructional Design

11. What informed the development of the curriculum for the program?

1. **Discipline Requirements and Standards:** Every field has its own body of knowledge, core concepts, and methodologies. Curriculum development at Wright State University starts with identifying the essential learning outcomes expected of graduates in the discipline. These laws, policies, procedures, rules, and regulations are often outlined by professional licensing agencies, federal and state governments, or other national frameworks.

2. **Student Learning Needs and Goals:** The curriculum should provide for the diverse needs and goals of its students. This includes considering their prior knowledge, learning styles, career aspirations, and the overall development required for their future success.

3. **Faculty Expertise and Interests:** The faculty's expertise in the field significantly shapes the curriculum, content, and delivery methods. Faculty disciplinary and research interests, teaching philosophies, and pedagogical approaches enrich the program by offering diverse perspectives and cutting-edge knowledge.

4. **Current Trends and Industry Demands:** The curriculum should continuously remain relevant to the ever-evolving demands of the job market and professional landscape. Universities need to consider emerging technologies, market trends for in-demand careers and professions, new fields of study, and changing skills required by employers in field.

5. **Social and Global Context:** Higher education increasingly acknowledges the broader social and global context within which the program operates. This might involve incorporating diverse perspectives, lived experiences, addressing sustainability concerns, and preparing students to be responsible citizens in a connected world.

6. **Learning Resources and Infrastructure:** The availability of resources like classrooms, computer labs, technology, libraries, and other facilities influences the types of courses and learning activities that can be offered. Effective curriculum development considers existing resources and plans for potential acquisition or upgrades.

7. **Assessment and Evaluation Methods:** Continuous assessment helps gauge the effectiveness of the curriculum in achieving its learning objectives and outcomes. Depending upon the discipline, various assessment methods like exams, projects, portfolios, quizzes, applied – engaged – and guided learning, demonstration – observation – evaluation, and peer feedback can inform decisions about curriculum revision and improvement.

8. **Accreditation, Licensing, and Regulatory Requirements:** Universities must comply with regulations and accreditation standards set by governing, licensing, and regulatory agencies. These often specify minimum requirements for course content, faculty qualifications, and learning outcomes, influencing the structure and content of the curriculum.

12. Please list all intended program learning outcomes

Program Learning Objectives (which are included here as objectives lead instruction towards outcomes):
Students enrolled in the Aviation Science and Technology Associate of Applied Science program will learn to:

1. Develop the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in-flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

Program learning outcomes:
As a result of their learning experience, graduates of the Aviation Science and Technology Associate of Applied Science program can:

1. Demonstrate the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic, fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in-flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

13. Please list all the courses that comprise the program and identify if the program will include any new courses. Include course descriptions and number of credit hours for each and how each link to program learning outcomes.

Please see Exhibit-7 Program of Study and Selected Syllabi attached, and "Catalog with Syllabi" for all program information online at: https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials

14. How will the institution ensure instructional design principles are utilized to develop the courses? What modalities will be used to deliver the program?

Wright State University utilizes the following instructional design principles to develop curriculum, pedagogy, and instructional materials:

1. Backwards (a.k.a. Reverse Design)
2. Course Assessment of Objectives and Outcomes
3. Program Assessment of Objectives and Outcomes
4. The following types of learning and teaching strategies:

a. Active Learning
b. Applied Learning
c. Engaged Learning
d. Experiential Learning
e. Guided Learning
f. Linked Learning (Career Connected Curriculum)
g. High Impact Practices
h. Universal Design for Learning, including:

- Multiple means of engagement
- Multiple means of representation
- Multiple means of action and expression

5. With specific regard to modality of instruction, all instruction is 100% face-to-face—not online.

Finally, the program's designers, faculty, and staff have and will continue to collaborate with Wright State University instructional design staff to ensure all courses in the program follow these principles to deliver an optimized learning experience to every student through student focused curricula and pedagogies.

Section E. Institutional Faculty, Staffing and Student Support

15. What are the institution's policies and procedures to ensure qualified faculty for this program? Does the institution possess qualified faculty for the program? If not, what are the institution's plans and budget to ensure qualified faculty?

- All faculty who deliver and teach flight instruction and operations (including ground school and in-flight instruction) are FAA Certified and Licensed Flight Instructors. The FAA requires this by law.
- All faculty who deliver and teach flight instruction and operations (including ground school and in-flight instruction), who are FAA Certified and Licensed Flight Instructors (required by the FAA and federal law) are hired directly and employed by Wright State University.
- All other university instruction outside of flight instruction and operations (including ground school and in-flight instruction) required for completion of our degree program are delivered and taught by faculty who are credentialed, current, competent, and who are subject matter experts in their respective fields.
- Therefore, the institution does possess qualified faculty for the program.

16. What are the institution's policies and procedures to ensure sufficient faculty for this program? Does the institution possess sufficient faculty for the program? If not, what are the institution's plans and budget to ensure sufficient faculty?

Yes, the institution has policies and procedures to ensure sufficient and qualified faculty for this or any program. Please see:

Exhibit-8 "Faculty Hiring and Credentialing," Exhibit-9 "List of Non-Terminal Ph.D. Degrees," Exhibit-10 "Verification of Transcript Template," Exhibit-11 "Faculty Credentialing Exceptions," Exhibit-12 "Exception Request Cover Sheet," Exhibit-13 "Adjunct Offer Letter," and Exhibit-14 "Exception Request Renewal," attached or online at: https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials.

17. For graduate programs, please describe the scholarship and research capability of the faculty. For doctoral programs, please describe faculty experience in directing student research.

There is no graduate degree component planned or offered.

18. What is the primary target audience for the program (e.g., full-time, part-time, traditional college age, working adults, transfer students, military personnel, etc.)?

1. Citizens of the United States due to FAA Regulations
2. Full-time students
3. Part-time students
4. Traditional college-age students
5. Working adults
6. Transfer students
7. Military personnel

19. How will the institution ensure that there are sufficient student support services available for students in this program?

Our current enrollment of 11,036 students demonstrates a 43% decrease from 19,277 students enrolled in 2016. Although this change in enrollment resulted in some reductions in faculty over the intervening years, student support services and staffing have remained consistent. Therefore, the university maintains adequate capacity to provide for the limited number of students projected for the new aviation programs. We have hired and will continue to hire qualified faculty, and we have capacity in our advising unit, career services, financial aid unit, registrar's office, enrollment management division and administration at every level from Department Chair's through the President's office, ensuring that students in this program will receive support services throughout their educational experience at Wright State University.

Section F. Assessment of Student Learning and Evaluation

20. Describe the institution's process for assessing student learning at the course and program levels.

Course Level Assessment:

1. Wright State University aligns assessment with clear and specific learning objectives and outcomes:
    - We start with well-defined learning outcomes: Articulate and signal what a student will learn in a class or course—why and how what they will learn is important (TILT).
    - Then, communicate well-defined learning outcomes: Articulate what students should know, understand, or be able to do by the end of the course.
    - Next, we align assessments to outcomes: We choose assessment methods that directly measure achievement of each learning outcome. This could involve exams, essays, projects, presentations, or other activities.
    - We use rubrics for scoring: We develop and communicate clear and specific rubrics that outline different levels of performance for each assessment tool. Our assignment rubrics ensure consistent and transparent evaluation across students.
2. Utilize a variety of assessment methods:
    - Beyond traditional exams: While exams have their place at Wright State University, we diversify our assessment toolkit with methods like case studies, simulations, portfolios, peer assessment, or self-reflection activities.
    - We consider direct and indirect measures: We include direct measures like assignments and exams that directly assess learning outcomes, and indirect measures like surveys or exit interviews to gain insights into student perceptions and experiences.
    - We embrace authentic assessment: Because this program is specifically designed to prepare graduates for in-demand careers and professions, this includes implications for instructional design, curriculum, and pedagogy. As such, we employ assessment methods that mirror real-world situations and require students to apply their knowledge and skills in meaningful contexts.
3. Focus on assessment for learning, not just of learning:
    - In all our courses across the university, we strive to provide timely and constructive feedback: All feedback should be specific, actionable, and focused on helping students improve their learning.
    - In many of our classes we incorporate self-assessment and peer assessment: We encourage students to reflect on their own learning and provide feedback to their peers. This promotes metacognitive skills and active engagement.

- Finally, we use assessment data to inform instruction through our newly purchased Watermark platform: We input and then analyze assessment data to identify areas where students struggle and adjust our curricular and pedagogical approach accordingly.
- All these methods, methodologies, and practices are best practices already in place across our curriculum and programs at Wright State University.

Program Level Assessment:

1. Wright State University focuses on meaningful program objectives and measurable program outcomes:
    - We clearly articulate program-level objectives: We signal to students what they will learn across a body of knowledge.
    - We clearly define program-level learning outcomes: These should be broader than course-level outcomes and represent the cumulative knowledge, skills, and dispositions students should acquire by program completion. Align them with institutional and disciplinary standards.
    - We ensure outcomes are measurable: We develop performance indicators for each outcome that specify observable evidence of achievement. This may involve specific skills demonstrated, problem-solving approaches, or critical thinking applied in various contexts.
2. We utilize a diverse and aligned assessment strategy:
    - We combine direct and indirect assessments: Direct assessments program-related technical skills, communication or collaboration fluencies, research and information literacy, portfolios, or standardized tests directly measure student achievement of outcomes. Indirect measures like exit surveys, alumni outcomes (or interviews), or employer feedback offer broader insights into program effectiveness and graduate preparedness.
    - We align assessments across courses and semesters: We ensure various courses within the program contribute to developing and assessing defined outcomes. We employ curriculum mapping to identify where and how each outcome is addressed cyclically over time.
    - We use multiple data sources: We synthesize data from different assessments (course assessment, annual assessment, academic program review, and future program prioritization) to gain a richer and more nuanced understanding of student learning, program performance, and success.
3. We promote continuous improvement and action:
    - We analyze data collaboratively and collectively: The Assurance of Learning Committee, the Vice Provost for Assessment and Chief Accreditation Office, the Director of Assessment and Accreditation, Faculty, Staff, and other stakeholders are all involved in interpreting and discussing assessment results. Thereafter we identify areas of strength and areas for improvement, which are communicated to programs.
    - We develop action plans: Based on data analysis, we create concrete plans to address identified changes, [continuous] improvements, and needs. This could involve revising curriculum, enhancing teaching methods, or providing additional support services.
    - We close the loop: We track the implementation of action plans and assess their impact on student learning through subsequent assessments. We regularly review and update program outcomes and assessment practices to ensure ongoing program effectiveness.

Other Assessment and Evaluation

1. Other Assessments and Evaluations / FAA Instrument Certification:
    a. Each student must demonstrate through written, oral, and flight tests, and show through appropriate records, that the student meets the knowledge, skill, and experience requirements necessary to obtain an *Instrument – Airplane Rating.* Each student must successfully complete both ground and flight training to complete earn this certification. As demonstrated by our syllabi (evidence), ground school will include formal lectures, discussion, and individual study accomplished under the supervision of a qualified instructor who is hired by and works directly for Wright State University. Flight training within each stage may be completed out of sequence with prior permission. According to the FAA, students can only earn this certification when they comply with and pass examinations associated with Instrument Rating Courses contained in Appendix C of Part 141 of the Federal Aviation Regulations (FAR's). This is a federal examination.
2. Other Assessment and Evaluations / FAA Ground Rating Certification
    a. Here, also, Each student must demonstrate through written, oral, and flight tests, and show through appropriate records, that the student meets the knowledge, skill, and experience requirements necessary to obtain an *Instrument – Airplane Rating.* Each student must successfully complete both ground and flight training to complete earn this certification. As demonstrated by our syllabi (evidence), ground school will

include formal lectures, discussion, and individual study accomplished under the supervision of a qualified instructor who is hired by and works directly for Wright State University. Flight training within each stage may be completed out of sequence with prior permission. According to the FAA, students can only earn this certification when they comply with and pass examinations associated with Instrument Rating Courses contained in Appendix D of Part 141 of the Federal Aviation Regulations (FAR's). This is a federal examination.

We wish to make clear that all flight related instruction is delivered by FAA certified and licensed flight instructors as required by federal law. All students will be assessed and evaluated against course-level learning outcomes with continuous improvement of instruction and examinations considered. Course-level assessment and evaluation are the building blocks of annual program assessment in which the program and student success are assessed against program-level learning outcomes. Programs and annual program-level assessment is also undertaken with the intention of engaging in continuous improvement. Academic Program Review considers course-learning assessment and program-learning assessment and will take place on a 4-year cycle. Recently, Wright State University has established a 3-year cycle of program prioritization, with the next cycle beginning in the fall of 2027. Apart from program deactivation, which we do not anticipate, we also assess programs for "improvement," "maintenance," and "enhancement."

By following our institutionally-designed best practices, we ensure that our assessments are meaningful, informative, and contribute to effective student learning. At Wright State University, our philosophy is that the most effective assessments are not simply about assigning grades, but about providing valuable feedback and supporting students in achieving their full potential.

21. Describe the process and timeline for reviewing this program on a regular basis.

1. All Wright State University programs are required to undergo annual program assessment.
    a. All annual assessment for the previous academic year is due no later than February 15th, of the succeeding year (Example: 2022-2023 AY assessment due February 2024)
2. Wright State University utilizes Watermark, which provides Wright State University with the following data collection and assessment systems:
    a. Faculty Success (A faculty accomplishment tracking system)
    b. Outcome and Assessment Project (a tool used by faculty and administrators for juried assessment projects and standards reporting on capstone assignments)
    c. Planning and Self-Study (a streamlined system for gathering, understanding, reflecting on, and acting on assessment and other programmatic data)
    d. Student Learning and Licensure (track students' progress toward mastery in specified areas of professional knowledge and standards)
        i. All of which will be utilized in the Aviation program(s) where applicable and appropriate.
3. In the fall of 2024, all Wright State University faculty are required to submit course-level assessment evidence (direct and indirect measures) in support of course-level learning outcomes via the Watermark Planning and Self-Study system and platform.
4. Beginning in the fall of 2024, annual program review (APR) will begin. Annual program review will take place yearly and programs will be assigned a 4-year cyclical rotation for participation. Please see our draft guide located at: **https://www.wright.edu/sites/www.wright.edu/files/page/attachments/Academic-Program-Review-Draft-Proposal.pdf**
    a. Wright State University anticipates the draft guide will be finalized by the end of the spring semester, 2024
5. Wright State University has published and issued the "Wright State University Guide to Accreditation and Assessment," which instructs faculty on how to design course-level learning objectives, course-level learning outcomes, program-level learning objectives, program-level learning outcomes, creating and designing course-level assessments, creating and designing program-level assessments, along with a sample course assessment checklist, a program assessment checklist, and instruction on how to create a program map.
    a. Please see our guide at: **https://www.wright.edu/sites/www.wright.edu/files/page/attachments/accreditation-and-assessment-guide.pdf**
    b. Please see a short one-page guide for Objectives and outcomes at: **https://www.wright.edu/sites/www.wright.edu/files/page/attachments/objectives-and-outcomes-guide.pdf**

6. All syllabi communicate course-level learning objectives and outcomes.
    a. Please see all aviation program course syllabi – Exhibit – 7.
7. All syllabi include communications regarding course assessments.
8. We are providing HLC with:
    a. Sample performance rubrics – See Exhibit 15 attached
    b. Sample grading schema – See Exhibit 7 – Sample Syllabi – Grading Scale attached
    c. Sample quizzes – See Exhibit 16 attached
    d. Sample exams – See Exhibit 17 attached

Exhibits 15, 7, 16, and 17 can also be found online at: https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials.

22. Describe the process for monitoring and improving student persistence and completion for the program. What additional measures of success may be used for this program (continuation into graduate or professional schools, rates of grants and fellowship, rates of post-college entry into the Peace Corps or other service settings, etc.)?

Matriculation - Persistence – Retention – and completion (graduation):

1. Wright State University utilizes Data-Informed, Multi-Faceted Monitoring:
    - We track key metrics: We regularly monitor data on matriculation, persistence, retention, and completion rates at crucial points (e.g., first year, transfer).
    - We attempt going beyond numbers: We supplement quantitative data with qualitative surveys to understand student experiences and challenges.
    - We regularly and opportunistically dig deeper: Using the PowerBI platform, we segment data by demographics, academic performance, and program specifics to identify at-risk groups and specific areas for improvement.
    - External evaluation: We invite external review of our program's performance to assess effectiveness and set realistic goals.
2. Holistic, Proactive Interventions:
    - We employ early intervention: We are presently piloting first-year programs, we have plans to expand orientation, and mentoring initiatives. We also employ multi-term registration.
    - Academic support: We offer tutoring and other resources to address academic hurdles early on.
    - Financial aid guidance: We ensure students understand and access financial aid options effectively.
    - Social and emotional support: We have just reorganized and repurposed our counseling services, peer support groups, and activities to promote a sense of belonging and well-being.
    - Career advising: We integrate career exploration and planning to connect academic coursework to future aspirations.
3. Collaborative, Continuous Improvement:
    - On a broader front we encourage cross-college collaboration: We foster communication and collaboration between academic departments, student support services, and administrative units.
    - Faculty engagement: We provide professional development and train faculty to recognize early signs of student struggle and offer support or referrals.
    - Technology integration: We utilize technology platforms to provide personalized resources, track student progress, and facilitate communication.
    - Regularly evaluate and adapt: We continuously assess the effectiveness of interventions, gather feedback from students and staff, and iterate based on evidence-based practices.

Exhibit 1: Contractual Arrangement Email

Fw: Contractual Arrangement Conveyed

Mackh, Bruce Martin <bruce.mackh@wright.edu>
Mon 12/11/2023 11:59 AM

To:Linnea Stenson <lstenson@hlcommission.org>
Cc:Mackh, Bruce Martin <bruce.mackh@wright.edu>

Submitted as per our email earlier today.

-- -- --

"And if you need a friend, I'm sailing right behind ..."

Bruce M. Mackh, PhD
Vice Provost for Assessment and Chief Accreditation Officer
Wright State University
3640 Colonel Glenn Hwy.
University Hall #292
Dayton, OH 45435 USA
Email: bruce.mackh@wright.edu
Ofc: 937-775-2155
Cell: 312-907-6566

From: Higher Learning Commission <changerequest@hlcommission.org>
Sent: Monday, December 11, 2023 11:57 AM
To: Mackh, Bruce Martin <bruce.mackh@wright.edu>
Subject: Contractual Arrangement Conveyed

Thank you for your submission. Based on the information detailed below, HLC has determined that this does not meet the definition of a contractual arrangement that HLC needs to track, and it will not be entered into the institution's record. If you have any further questions, please send an email to changerequest@hlcommission.org.

Name: Bruce M Mackh
Institution: 1611 - Wright State University - OH
City: Dayton
State: Ohio
Email address: bruce.mackh@wright.edu
Phone number: 937-775-2155

You confirm you are authorized to provide HLC with information regarding your institution's contractual arrangements.

CIP code and program name: 49.0101 - Aeronautics/Aviation/Aerospace Science and Technology, General.
Course catalog name: Aviation Science and Technology Associate's of Applied Science
Program or credential level: 1550 - Associate

Expected start date: 07/22/2024
Contractual partner: FIRST FLIGHT AVIATION

Total program credit hours: 60
Credit hours taught by contractual partner: 0
Calculated percentage: 0.00

The percentage taught by the contractual partner is less than 25%.
Does the contractual partner provide oversight of the curriculum? No
Does the contractual partner provide assurance of the consistency? No
Does the contractual partner establish academic qualifications for instructional personnel? No

Exhibit 2: University Curriculum Committee Approval

UCC 2023-4-5. Programs Agenda:635

Committee University Undergraduate Curriculum Committee

Notes

Meeting date - April 5, 2023, 2:30 - 4:30 pm, 259 Allyn Hall

Due to the number of persons attending the meeting it was moved to 240 Allyn. The committee continued to meet until 5:30 pm.

Attendance: BSOM rep - Sheri Gladish (remote), CECS rep - Michelle Cheatham, CHEH rep - Barb Dunaway - Chair, COLA rep - Sarah McGinley, COSM rep - Patrick Sonner, LAKE rep - Diane Huelskamp (remote), RSCOB rep- Mike Bernstein, Provost Reps - Wafa Hozien (Remote), Carol Loranger, & Bruce Mackh, Registrar - Lisa Runyan (Remote), Assistant Registrar - Laura Siegmann, Guests: Kim Everhart - Office of Financial Aid, Jim Denniston - Dean of CHEH, Marty Sexton - Associate Dean of CHEH, Mick Phillips, Chief Flight Instructor of First Flight, Craig Castle, Flight Instructor First Flight & Adjunct Faculty WSU, Glenn Crawford, Owner of First Flight, Noeleen McIlvenna - WSU Union Representative, Beth Hersman - Chair of KNH in CHEH (Remote)

I. Approval of Activity Report/ Minutes - Past agenda and notes approved. Any corrections to the agenda or notes from the month's meeting should be brought to the attention of the committee chair.

II. Review of proposals - 2 agendas for the month.

All proposals listed below were reviewed and discussed by the committee faculty members and other participants at the meeting. All were approved and will be moved forward.

The UCC faculty members want to send comments to the Faculty Senate regarding the Aviation Degrees.

* The UCC has felt pressured to hurry the review and approval of all these proposals. These will be approved and moved forward outside of the times lines for curricular actions that were established at the beginning of the academic year and publicized. It is felt that other programs have adhered to these timelines and not been extended the consideration of submitting proposals late.

* If this "fast track" approach to curricular approvals is to be undertaken in the future there should be some notation on the process of beginning that procedure, completing the approvals that will follow, and any limitations should be noted as well.

* The Aviation program should have a full-time faculty member with a degree in the field of aviation that is current in the field and research.

*** Continued on agenda UCC 2023-4-5 Courses Agenda:636

III. Other business - We will consider the need for the final April meeting at the next meeting. Items will not be purged, from the system, but it would be nice to move them along before summer.

IV. Next meeting - scheduled for April 26, 2023, from 2:30 - 4:30 in room 259 Allyn Hall. Agendas will be distributed one week prior. It will be determined later if this meeting will be necessary depending on the number of proposals in the work queue.

Total Proposals 7

Aviation Science/Tech, AAS

y 2023-2024 New Undergraduate Program (degree, major, minor, licensure, or endorsement) v2

GENERAL INFORMATION

Registrar Approval New Program Deadlines	Fall 2023	Spring 2024
Offered in Fall 2023 & in the 2023-2024 catalog	4/1/2023	4/1/2023

Please complete a separate form for each request. **Note that new degree and major programs require approval by the Ohio Department of Higher Education (ODHE).** See the ODHE website for more information. There is an additional section below for new degrees or majors. Although supporting documents and additional information must be attached, it will not replace the required fields on this proposal.

The following required forms must be attached (Click the paperclip tab from the Proposal Toolbox on the right side) **and sent to the Provost:**

1) **Initial Inquiry** (submit after college curriculum committee approval);

2) **ODHE Full Proposal** (submit prior to University Undergraduate Curriculum Committee approval);

3) **Financial Impact New Enrollment** (submit after Department Curriculum Committee approval); and

4) **Market Analysis** or alternate source (submit prior to department curriculum committee)

ALL USERS: Please expand "Proposal Help" (under proposal title) for "What can I do next?" details. To edit a field, click **once** in the desired field and **save** after each change.

Curriculog Type* ◉ Program ○ Shared Core

ORIGINATORS: To use a blank or existing program as a template, click the **import button** above and select the DRAFT Academic Catalog. Add "Name" filter and type in the program name or "Undergraduate Degree Program" (blank template) and search. Save.

Name: Major, Degree *or* Credential

Examples: English, B.A. *or* Reading License

Name* Aviation Science/Tech, AAS

Type of Request*
- ○ New degree designation (A.S., B.A., B.F.A., etc.) and major
- ◉ New major within an existing degree
- ○ New minor
- ○ New licensure program or endorsement

If an endorsement, list related degree

Department or Program for approval process* Kinesiology and Health

College* Health, Education, and Human Services, College of

Catalog Display* College of Health, Education, and Human Services

Collaboration with another department, college, program, or institution?* ◉ Yes ○ No

If yes, please list First Flight Aviation, 10600 N. Springboro Pike Miamisburg, OH 45342

Published Program Length (in Years)* 2

Requested Effective Term*
- ○ Fall
- ◉ Spring

Year* 2024

Mode of Delivery*
- ☑ Face-to-face (<50% Online)
- ☑ 50%-79% Online
- ☐ 80%-99% Online
- ☐ 100% Online

Location Offered*
- ☑ Dayton Campus
- ☐ Lake Campus
- ☑ Off-Campus in Ohio
- ☐ Off-Campus outside Ohio
- ☐ Off-Campus outside U.S.

Please list each off-campus location where courses in this program may be offered (or N/A)* First Flight Aviation, 10600 N. Springboro Pike Miamisburg, OH 45342

Is 50% or more of the program offered off-campus?* ○ Yes ◉ No

If this program will be offered off-campus, how will services be available to students (e.g., advising, tutoring, counseling, and financial aid)?	Students will still be required to complete Wright State Core classes on campus and will have full access to all student support services.
Is this program accredited? If so, by whom?*	no

ANALYSIS OF MARKET DEMAND

Explain and quantify the needs addressed by this program, and present evidence that the program fulfills these needs

1) answer questions below with evidence, or

2) upload answers in separate attachment

Please provide a rationale regarding how student enrollment projections were calculated.*	The predicted U.S. Pilot Shortage per year for the next 20 Years is 130,000. To meet growing demand, we'd need to train a staggering 87 new airline pilots every day for the next 20 years. In addition, the overall employment of airline and commercial pilots is projected to grow 13 percent from 2020 to 2030, faster than the average for all occupations. Based on the market demand we expect to have a competitive admission of 25-30 students in the first cohort. It is predicated this cohort will grow to 30-50 students per year as resources allow. Source: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Airline and Commercial Pilots, at https://www.bls.gov/ooh/transportation-and-material-moving/airline-and-commercial-pilots.htm This program will provide more opportunity to increase enrollment across multiple programs. By opening up flight training as electives within other degree programs, graduates will be more marketable by having flight ratings. This is especially true with some of the engineering degrees. For these reasons and many more, we believe a university level flight training program, in the birthplace of aviation, will be very successful and increase enrollment.
What is the economic need and workforce data related to the program?*	It has been estimated that roughly 27,000 pilots are due to retire over the next decade at American Airlines, Delta Air Lines and United Airlines. Pilot Shortage magnitude, in the most likely scenarios, there is a global gap of 34,000 pilots by 2025. This could be as high as 50,000 in the most extreme scenarios. In North America, with an aging pilot population and heavy use of early retirements, the shortage reemerges quickly and is projected to reach over 12,000 pilots by 2023 — 13 percent of total demand. However, Asia Pacific, with a faster growth trajectory will surpass this by the end of the decade with a projected shortage of 23,000 pilots by 2029. Source: https://www.oliverwyman.com/our-expertise/insights/2021/mar/after-covid-19-aviation-faces-a-pilot-shortage.html

Provide information on jobs available as a result of successfully completing the certificate or degree: job titles, job outlook/growth, and salaries.*	An Airline Pilot career is one of the most lucrative professions, and it also includes many perks. Average pilot income first year including signing bonuses is $74,926. Some of the perks include free airline travel, great retirement benefits, medical and loss of license insurance, significant time off and much more. Most pilots make well over 6 figure income working approximately 17 days per month. Free travel benefits as well as amazing retirement. When someone is considering becoming a pilot, they usually envision being either an Airline or Military Pilot. In reality, there are numerous pilot careers graduates can pursue after graduation. These careers include flying single engined planes for: Law Enforcement, Corporate or Charter operations, Cargo and Passenger Airlines, Government Contractors, Survey Pilots, Search and Rescue Operations.

Program Description (REQUIRED)

Please include information using the following four required headings ("Heading 2") in the order presented below for consistency in the catalog. Select the "normal" format for the body of text under each heading. The information entered below will appear in the catalog as submitted, but may be edited for style guide consistency.

Program Description

Admission Requirements

Program Learning Objectives (see below)

Program Learning Outcomes (see below)

For More Information

Program Title with hyperlink
Department/School Title with hyperlink
College Title with hyperlink

For licensures, a statement needs to be made, such as 'This program meets partial fulfillment for ___ licensure in Ohio. To learn more about whether the program leads to licensure in other states, go to [Text with hyperlink].'

PROGRAM LEARNING OBJECTIVES

Program learning objectives communicate and signal what a student will learn as the result of the instruction they undertake across all courses in a program comprising a body of knowledge.
Normally, program learning objectives are written as, "students enrolled in the _____ program will learn to:"

PROGRAM LEARNING OUTCOMES

Program Learning Outcomes are statements that communicate and signal what students have learned as the result of the instruction they received across all the courses in a program, which comprise a body of knowledge.
Normally, program learning outcomes are written, "as a result of their learning experience, graduates of the _____ program can:"
Program learning outcomes are the basis for the assessment of the program's success. Also, program learning outcomes map onto and support institutional learning outcomes, which are also directly linked to the institution's mission, vision, and values.
A program should have between three and five program learning outcomes. Finally, program learning outcomes describe the students' achievements or accomplishments at the completion of the program.

*Please refer to the Accreditation & Assessment guide as well.

Prog Description, Admission Requirements, Prog Learning Objectives & Outcomes, and Prog/Dept/College Links*

Program description:

The Aviation Science and Technology Associates of Applied Science program provides students with an education in aviation that prepares professional pilots who will be able to operate effectively within National and International Airspace Systems in the 21st century. This program prepares students for entry-level technical positions in the aviation industry. Students entering this program should have a strong desire to excel in aviation and acquire the skill sets of a professional pilot. This program is designed to accommodate students entering the program with or without previous flight experience and those students transferring from other universities. Graduates will be able to pursue entry-level careers that require an aviation-related degree flying single engine planes in areas such as: law enforcement, corporate or charter operations, cargo and passenger airlines, government contractors, survey pilots, and search and rescue operations.

Admission Requirements:

Successful completion of first semester courses (AVI2000, AVI2001, AVI2002, AVI2004, and AVI2010), GPA of 2.5 or better, obtain class 1 medical certificate, interview with First Flight check instructors and administration. Must be a United States citizen.

Program Learning Objectives:

Students enrolled in the Aviation Science and Technology Associate of Applied Science program will learn to:

1. Develop the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

Program learning outcomes:

As a result of their learning experience, graduates of the Aviation Science and Technology Associate of Applied Science program can:

1. Demonstrate the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

For more information:

- Kinesiology and Health Sciences
- College of Health, Education, and Human Services

Program Requirements (REQUIRED)

Use the following template when creating program requirements. Each of the following required headings is called a "core" in the template. The information entered below will appear in the catalog as submitted, but may be edited for style guide consistency.

Wright State Core Requirements
Required courses
Elective courses
Other requirements (if applicable)
Total: # Hours

Undergraduate programs must be 120 credit hours. A minor is made up of at least 12 credit hours. For additional information, please refer to the policies for Academic Standards and Curriculum.

Program Requirements*

Wright State Core

16 hours

Element I: Communications

ENG 1100 Academic Writing and Reading	3
ENG 2100 Research Writing and Argumentation	3

Element II: Mathematics

3 credits

Element V: Social Science

PSY 1010 Introduction to Psychology	4
PSY 1010L Introduction to Psychology Laboratory	0

Element VI: Natural Science

PHY 1903 Physics of Flight [Right]	3

Required Courses

37 hours

AVI 2000 Introduction to Aviation and Aviation Systems	3
AVI 2001 Private Pilot Ground School	3
AVI 2002 Private Pilot Flight Lab 1 [Right]	1
AVI 2004 Private Pilot Flight Lab 2 [Right]	1
AVI 2010 Air Traffic Control Basics [Right]	3

AVI 2101 Instrument Rating Ground School [Right]	**3**
AVI 2102 Instrument Rating Flight Lab [Right]	**1**
AVI 2201 Commercial Pilot Ground School 1 [Right]	**2**
AVI 2202 Commercial Pilot Flight Lab 1 [Right]	**1**
AVI 2250 Aircraft Systems and Powerplants [Right]	**3**
AVI 2301 Commercial Pilot Ground School 2 [Right]	**3**
AVI 2302 Commercial Pilot Flight Lab 2 [Right]	**1**
AVI 2350 Aviation Safety and Accident Investigation [Right]	**3**
AVI 2375 Aviation Law and Regulations [Right]	**3**
PSY 3680 Aviation Human Factors [Right]	**3**
GEO 4000 Climate Meteorology	**3**

Electives

7 hours

[Before]Suggested

ASM 1717 Humans and Machines at Extremes	**4**
KNH 2600 First Aid and CPR	**2**

Total

60 credit hours

Total # of Credit Hours* 60

List all Integrated Writing courses in the major (minimum of 2)* AVI 2350, AVI 2375

Do you want students to be able to select this major or minor in WINGS Express?* • Yes ○ No

FACULTY/PROGRAM STAFFING

Name* Craig Castle, Mick Phillips, James Ferrari, Josh Warren, Curtis Liska, Derek LaBraie

Discipline* Aviation **Title*** Adjunct

Discipline Aviation Title Adjunct

Describe the credentialing requirements for faculty teaching in the program (e.g., degree requirements, special certifications or licenses, and experience).*

There is no degree specific to being able to teach aviation courses, instead, instructors have to have certifications/experience appropriate to what they will be teaching. This pertains to AVI 2010, AVI 2020, AVI 2250, AVI 2350, and AVI 2375.

For those who teach AVI 2001, 2002, and 2004 (Private Pilot), or AVI 2201/2202, AVI 2301/2302, the certification levels needed are Certified Flight Instructor and Advanced Ground Instructor.

Certified Flight Instructor - 18 years of age or older, English proficient, Commercial Pilot certificate. Has passed 2 FAA written exams (Fundamentals of Instruction and Flight Instructor Airplane) and accomplished the aeronautical experience required by FAR 61.183, after which they successfully completed a Practical Exam on both teaching methods as well as flight training maneuvers from the instructor's position of the airplane. A CFI then has to continue ongoing training every 2 years to remain legal and viable as a competent instructor.

Advanced Ground Instructor - This is similar to CFI, subtracting the flight training and adding a tiny bit of instrument and helicopter knowledge. 18 years old, English proficient, Commercial Pilot certificate. Has passed the Advanced Ground Instructor knowledge exam.

For those who teach ground school and flight lab classes for AVI 2101/2102, they would need the Certified Flight Instructor- Instrument and Instrument Ground Instructor certifications.

Certified Flight Instructor - Instrument - 18 years of age, English proficient, Instrument and Commercial Pilot. Has passed the FII written exam as well as met the aeronautical experience requirements and taken the Practical Exam.

Instrument Ground Instructor - Very similar to the AGI, but with a lot more focus on the Instrument side of instruction.

RESOURCES & FACILITIES

Describe additional resources that will be needed to support the proposed program and provide a timeline for acquiring/implementing such resources.

Adjunct Faculty and CHEH Academic Advising.

Additional information if needed

We would like to call this program Aviation Science and Technology, AAS but the line at the top did not allow me to write out the full name.

New - Minors, Licensures, or Endorsements

Skip to the "Acknowledgement of Completion" below.

FOR NEW DEGREES OR MAJORS ONLY:

Note that new degree or major programs require approval by the Ohio Department of Higher Education (ODHE).

Program Assessment

Describe (below) the policies and procedures in place to assess and evaluate the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform students as they progress through the program, and initiatives used to track student success after program completion.

Program Assessment

Description of measurements used: Students must fulfill all FAA requirements in each ground school and flight lab. The number of students attempting and passing the FAA written and practical (check ride) exams for each certification with comparison to the annual published pass rates.

Responsible person/group: The AVI flight assessments will be conducted by all check instructors at First Flight Aviation.

Frequency of data collection: program assessment will be completed annually. AVI check instructors will meet to share data and discuss student success and any changes that need to be made.

How results will be used to inform students: students will recieve a license, certification, or rating every term based on completing and passing the ground school and flight lab they are taking.

Tracking student success after program completion: Following program completion, completer surveys will be given to all students.

Measuring Student Success

Describe (below) the policies and procedures in place to measure individual student success in the proposed program. Please include: responsible position/unit/group, description of measurements used, frequency of data collection and sharing, how the results are used to inform the students as they progress through the program, and initiatives used to track student success after program completion.

Student Success

Description of measurements used and policies in place: Students must fulfill all FAA requirements in each ground school and flight lab with an 80% or better. In addition, students must receive passing scores in all other coursework, maintain a 2.5 GPA, and must pass all AVI courses with a C or better. The number of students attempting and passing the FAA written and practical (check ride) exams for each certification with comparison to the annual published pass rates.

Responsible person/group: The AVI flight assessments will be conducted by all check instructors at First Flight Aviation. The program data will be collected and stored by the Program Director for program assessment.

Frequency of data collection: Data will be collected on each student once they complete the ground school and flight labs each semester.

How results are used to inform students as they progress: Within each ground school course are required stage checks that meet the requirements of the training course outlines. Students who are successful will pass all stage checks and end of course exams.

Initiatives to track student success after program completion: completer surveys will be given to all students who complete the program.

Are additional faculty needed to support this program? (•) Yes ( ) No

If yes, provide a timeline for hiring. Adjuncts will be hired as needed for specific course offerings

Provide the number of existing faculty members available to teach in the proposed degree/major below.

Full-time 0 **Less than Full-time** 2

Provide an estimate of the number of faculty members to be added during the first two years of program operation below.

Full-time 0 **Less than Full-time** 8

Acknowledgment of Completion ✓ I have reviewed this for publication in the catalog. The required forms are attached. If applicable, GPS changes will be addressed.

1. Validate and Launch
2. Save
3. **To approve**, select the Decisions tab ✓ from the Proposal Toolbox (right side). Do not complete the section below.

ADMINISTRATIVE USE ONLY - DO NOT COMPLETE

To be completed after Board of Trustees approval

Attach signed Board of Trustees resolution.

Resolution # **Date of Approval**

To be completed by the Provost

Attach Directive signed by Chancellor.

ODHE Directive # **Date of Approval**

To be completed by Financial Aid

Eligible for Title IV funding: (•) Yes ( ) No

To be completed on the CIP step

CIP 490102 **CIPC Description** Airline/Commercial/Professional

CIP 490102

CIPC Description Airline/Commercial/Professional Pilot and Flight Crew

To be completed by Registrar

Approved Effective Term

- ○ Fall
- ○ Spring
- ○ Summer

Year

Banner Program Name

Banner Program Code

Banner Major Name

Banner Major Code

Concentration Name(s) and Code(s) if applicable

Degree Type

Program Type

Special Program Indicator

- ○ Special Admission Associate Degree Program (A)
- ○ Bachelor's Degree Completion Program (B)
- ○ Preparatory Coursework Undergraduate (U)

Status

Exhibit 3: Faculty Senate Approval

Faculty Senate

2:30pm, Monday, April 24, 2023
Student Union Endeavor Room

I. Call to Order

Faculty President Brian Boyd called the meeting to order and welcomed those in attendance.

Faculty Senators
- ✓ Akhbari, Marlena (EC)
- ✓ Clayton, Angie (virtual)
- ✓ Duby, John
- ✓ Evans, Vicki
- ✓ Froehle, Andrew
- ✓ Hall, David
- ✓ Halling, Kirsten
- ✓ Huang, Hong
- ✓ Jaqueth, Aubrey (EC)
- ✓ Jones, Lynette
- ✓ Matott, Michael
- ✓ McGinley, Sarah
- ✓ McNutt, Mindy (EC)
- ✓ Oroszi, Terry (EC)
- ✓ Raslich, Marc

Faculty Senators
- ✓ Steele-Johnson, Debra (EC)
- ✓ Stoker, Valerie (EC)
- ✓ Stover, Sheri
- ✓ Strombeck, Andrew (EC)
- ✓ Wischgoll, Thomas
- ✓ Wooley, Dawn
- ✓ Zhong, Quan

Faculty President
- ✓ Brian Boyd (EC)

Faculty Vice President
- ✓ Megan Faragher (EC)

Faculty Senate Parliamentarian
- ✓ Melissa Spirek

University President
- ✓ Susan Edwards

University Provost
- ✓ Amy Thompson

II. Approval of Minutes
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Apr/meeting/Senate_Minutes_2023-03-4.pdf

Dr. Boyd asked for any corrections to the minutes before calling for a vote to approve. The minutes were approved as written.

III. Report of the University President or Provost

IV. Report of the Senate Executive Committee

A. AY2023-24 Roster
https://www.wright.edu/faculty-senate/about/2023-24-officers-and-members

B. AY2023-24 Faculty Senate Meeting Schedule
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Mar/meeting/FacultySenateScheduleAY23-24.pdf

C. AY2023-24 Faculty Senate Committee Rosters
https://raidermailwright.sharepoint.com/:x:/s/SenateExecutiveCommittee/ERRZRia70-RAhEmUuAtAvJ8BoVmjLUM8OGOoebZIkZc83w?e=CYIkH7

AY2023-24 Executive Committee members are working to populate the committees for next year. This document will continue to be updated as EC members confirm committee representatives.

D. Faculty Constitution voting (May 1 – May 3)
https://www.wright.edu/faculty-senate/about/senate-meeting-agendas-and-minutes/meeting/483136

E. WSU CORE Course Removals
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Apr/meeting/2023-04-CoreCourseRemoval.pdf

F. CORE Review and Alignment Committee

G. Ohio Senate Bill 83 / Ohio House Bill 151
https://www.legislature.ohio.gov/legislation/135/sb83
https://www.legislature.ohio.gov/legislation/135/hb151

AAUP Summary of SB 83:
https://www.ohiostateaaup.org/uploads/1/3/3/2/133252195/sb_83_-_cirino_bill_summary.pdf

Faculty Congress of Ohio Opponent Testimony SB 83
https://raidermailwright.sharepoint.com/:b:/s/SenateExecutiveCommittee/EQrm733BxidOiwFlowM0b-oBCbaNf5MWlnUB-LX3H1WLfg?e=ww5DNE

H. HLC Visit - April 24 & 25

V. Required Business per Faculty Constitution

A. Approval of the list of graduating students as prepared by the Office of the Registrar for the Board of Trustees

1. Registrar's Summary
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Apr/meeting/APRIL_2023_GRADUATING_STUDENTS_BRD_OF_TRUSTEES.pdf

2. Additional pivot table summary
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Apr/meeting/Spring2023GraduationSummary.pdf

Senators who want to view the list should contact facultyoffice@wright.edu to schedule a time to view.

Dr. Boyd called the question. The list of graduating students was approved.

VI. Curricular Items for Final Approval
https://wright.curriculog.com/agenda:640/form

For each item (VI.A – E), Dr. Boyd asked for discussion followed by motion and second from the floor for approval. Each item was approved by majority voice vote.

A. Aviation Studies Minor (New minor)
B. Aviation Science/Tech, AAS (New major)
C. Aviation Science/Technology BS (New major)
D. Computer/Technology Endorsement - The endorsement is added to an active teaching license. Related undergraduate degrees at WSU include: Bachelor of Science in Education: Elementary Education P-5;Bachelor of Science in Education in Middle Childhood Education; Bachelor of Science in Education in Middle Childhood Education; Bachelor of Science in Education and Licensure: Intervention Specialist - Mild/Moderate; Adolescence to Young Adult Education (Licensure Program); Multi-Age Education (Licensure Program).
E. Instructional Design and Learning Technologies, MEd, Concentration in Gifted Intervention Specialist - New concentration. This concentration will leverage existing courses out of two different programs to a) provide a pathway for those pursuing the gifted intervention specialist endorsement to complete a relevant masters degree focused on the effective use of technology in the classroom, and b) provide a pathway for K-12 teachers interested in the use of technology to pursue the gifted intervention specialist endorsement. No new classes would be required to offer this concentration, this program fully leverages existing courses.

VII. Old Business

A. Policy 2330 – Excused Absence Guidelines
https://raidermailwright.sharepoint.com/:w:/s/FacultySenateUndergraduateAcademicPoliciesCommittee-UAPC-1/ET518riMh-9KvSdvl6MyX5wBsIiRHlqUoDq12hQ_aPi4gw?e=RhYWIa

Background: The Testing Your Faith Act

Dr. Boyd asked for questions and discussion. A motion was made and seconded to approve the item. The item was approved by majority voice vote.

B. Policy 4225 - Dual-Listed, Cross-Listed, and Meet-With Course Policy
https://raidermailwright.sharepoint.com/:w:/s/FacultySenateUndergraduateAcademicPoliciesCommittee-UAPC-1/ESq_G5qEWlFCpHPR01i007EB04YewGNbamf0ZOhpRntdLg?e=oDaNyR

Dr. Boyd asked for questions and discussion. A motion was made and seconded to approve the item. The item was approved by majority voice vote.

VIII. New Business

A. Policy 4275 - Deactivation, Reactivation, and Termination of Programs (GAPC)
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Apr/meeting/4275_%28GAPC_2023_04%29.pdf

Dr. Boyd asked for discussion followed by a motion and second to move the item to Old Business for the September 2023 meeting. The motion was approved.

B. Policy 5070.3 – English Proficiency (GAPC)
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Apr/meeting/Policy_5070_%28proposed_revisions_2023_04_11%29.pdf

Dr. Boyd asked for discussion followed by a motion and second to move the item to Old Business for the September 2023 meeting. The motion was approved.

IX. Written Committee Reports and Minutes

A. Guest Speaker:

University Retention Coordinating Committee Co-chairs:
Laura Luehrmann, Chair, School of Social Sciences and International Studies
Tim Littell, Associate Vice Provost, Student Success
https://www.wright.edu/sites/www.wright.edu/files/uploads/2023/Apr/meeting/FACULTY%20PRESENTATION%20Retention%20Cmte%20APR%2023%20FINAL.pptx

B. Committee Minutes
https://raidermailwright.sharepoint.com/:f:/s/SenateExecutiveCommittee/Ej_NhXeTp9NOl6X_HK5gM3UBeUNyfEQpbuNKPY-iThGjzw?e=hyTgjg
Additional minutes and reports will continue to be added as they are submitted to the Faculty Office.

X. Announcements

A. Commencement
https://www.wright.edu/event/graduation-and-commencement-ceremony

XI. Adjournment

The next meeting is scheduled for 2:30pm, Monday, September 25, 2023.

Exhibit 4: Board of Trustees Approval

WRIGHT STATE UNIVERSITY

Board of Trustees
Wright State University
3640 Colonel Glenn Hwy.
Dayton, OH 45435-0001

250 University Hall
Phone: (937) 775-2199
Fax: (937) 775-2421

CERTIFICATION OF BOARD ACTION

RESOLUTION 23-37

I, Daniel Palmer, the duly appointed Secretary to the Board of Trustees of Wright State University, a public institution of higher learning created by and validly existing under the laws of the State of Ohio, hereby certify that the following is the true, accurate, and correct copy of Resolution 23-37, duly adopted by the requisite number of Wright State University Trustees, acting at a meeting lawfully convened at Dayton, Ohio on Friday, April 28, 2023.

I further attest that the resolution has not been modified, rescinded, or revoked.

In witness whereof, I have executed this instrument and affixed thereto the seal of the Wright State University Board of Trustees on this 28th day of April, 2023.

Attest:

Daniel Palmer
Secretary to the Board of Trustees
Wright State University

WRIGHT STATE UNIVERSITY

BOARD OF TRUSTEES

APPROVAL OF
ASSOCIATE OF APPLIED SCIENCE IN AVIATION SCIENCE AND TECHNOLOGY

RESOLUTION 23-37

WHEREAS, the Wright Brothers, namesakes of Wright State University, were the pioneers of aviation; and

WHEREAS, Wright State University is a regional workforce development hub, tasked with educating the needed workforce for the Dayton region and beyond; and

WHEREAS, there exists a significant need of pilots nationwide with estimates indicating a need of 60,000 additional pilots by the end of the decade; and

WHEREAS, Wright State University is proposing a new Associate of Applied Science in Aviation Science and Technology within the College of Health Education and Human Services to help meet the significant workforce needs; and

WHEREAS, the program of study associated with this degree will provide practical training in Aviation Technology that airline employers in Ohio and the United States desire; and

WHEREAS, the program has been approved by the Faculty Senate and the Provost; therefore, be it

RESOLVED that the Associate of Applied Science in Aviation Science and Technology as submitted to the meeting be, and the same hereby is endorsed.

Exhibit 5: Ohio Department of Higher Education (ODHE) Approval

Ohio | Department of Higher Education

Mike DeWine, Governor
Randy Gardner, Chancellor

REQUEST AND RECOMMENDATION

WRIGHT STATE UNIVERSITY
Associate of Applied Science in Aviation Science and Technology

Request:
Wright State University requests approval to offer the Associate of Applied Science in Aviation Science and Technology.

Background:
Wright State University is a public institution located in Dayton, Ohio with a regional campus serving Lake County in Celina, Ohio. The university enrolls 16,000 students in programs at the associate, bachelor's, master's, and doctorate levels. Wright State University is accredited by the Higher Learning Commission until its next scheduled review in 2025-26.

Curriculum and Enrollment:
The Associate of Applied Science in Aviation Science and Technology is a 60-semester hour program designed to address the current and anticipated shortage in airline pilots. The program, located within the College of Education, Health, and Human Services, is a collaboration between Wright State University and First Flight Aviation in Miamisburg, Ohio. First Flight Aviation is an FAA certified repair station and Part-141 FAA Approved Flight School. First Flight Aviation instructors will provide the relevant aviation courses. Graduates can pursue employment in entry level positions in aviation, including airline pilots in various settings. The program prepares students in single and multi-engine operations, aviation instruction, and aviation management. Students may enter the program with or without previous flight experience and, upon completion, can articulate into the Bachelor of Science in Aviation Science and Technology.

An initial program enrollment of 20 full-time equivalent (FTE) students is anticipated for the degree program, with growth to 40 FTE students after four years.

Faculty and Resources:
Wright State University adequately planned for the delivery of this program. The program budget also represents student fees paid to First Flight Aviation.

Recommendation:
The Associate of Applied Science in Aviation Science and Technology meets the Chancellor's standards for associate degrees and approval is recommended. Approval may be withdrawn if, in the Chancellor's judgment, Wright State University fails to continue to meet the Chancellor's standards for undergraduate degree programs or receives a sanction from the Higher Learning Commission.

25 South Front Street
Columbus, Ohio 43215

phone 614.466.6000
fax 614.466.5866
web www.OhioHigherEd.org

End of Comment Period: 6/23/2023 at 12:30pm
No comments received, recommend approval.

RECOMMENDATION	
The Associate Vice Chancellor has verified that this institution has met the standards and requirements of the Ohio Department of Higher Education.	
/s/ Stephanie McCann	6/26/2023
Stephanie McCann, Associate Vice Chancellor of Program Development & Approval	**Date**

APPROVAL	
	6/29/2023
Randy Gardner, Chancellor	**Date**

Exhibit 6: Financial Impact Document

Financial Impact - New Enrollment Program					
Aviation Science and Technology- AAS Degree program					
First Fall Semester:	2024				
New Program Projected Enrollment	**New Program Projected Fall Headcount**				
	2024	**2025**	**2026**	**2027**	**2028**
Full Time: Enrolled in 11 or more credit hours per term (UG and Grad)	5	10	20	30	40
Part Time: Enrolled in less than 11 credit hours per term (UG and Grad)	0				
Note: what do you anticipate the stable enrollment headcount to be and when will that be achieved?	**Projected enrollment stability and anticipated date**				
	admit 40 students per year by 2028				
Impact on Headcount of other programs (list program & college)					
	Academic/Fiscal Year - Headcount Change +/-				
	2024	**2025**	**2026**	**2027**	**2028**
none					
	Number of New Courses / Sections to support Program				
	2024	**2025**	**2026**	**2027**	**2028**
Number of New Courses	0	5	3	0	0
Number of Sections	0	1	1	0	0
Credit Hours per Section	0	10 total CH	7 total CH	0	0
Enrollment per Section	NA	5	5		
Projected Program Expenditures	**Academic/Fiscal Year**				
Direct Expenses - Personnel	**2024**	**2025**	**2026**	**2027**	**2028**
• **Faculty**					
Full Time Faculty Headcount ____	*1*	*2*	*2*	*2*	*2*
Full Time Faculty Salary	*$45,070*	*$90,140*	*$90,140*	*$90,140*	*$90,140*
Full Time Faculty Benefits	*$13,050*	*$26,100*	*$26,100*	*$26,100*	*$26,100*
Part Time Faculty Headcount ____	*1*	*3*	*4*	*4*	*4*
Part Time Faculty Salary	*$3,000*	*$9,000*	*$12,000*	*$12,000*	*$12,000*
Part Time Faculty Benefits	*NA*	*NA*	*NA*	*NA*	*NA*
• **Non-instruction (indicate role(s) in narrative section below)**					

Full Time Non-Instruction Headcount ____					
Full Time Non-Instruction Salary					
Full Time Non-Instruction Benefits					
Part Time Non-Instruction Headcount ____					
Part Time Non-Instruction Salary					
Part Time Non-Instruction Benefits					
DIRECT EXPENSE SUBTOTAL					
Other Expenses (if applicable, describe in narrative section below)					
Professional Services					
Supplies					
Travel					
Information & Communication					
Maintenance & Repairs & Utilies					
Scholarships					
OTHER EXPENSE SUBTOTAL	$ -	$ -	$ -	$ -	$ -
TOTAL PROJECTED EXPENSE:	$ 61,120	$ 125,240	$128,240	$128,240	$128,240

Narrative: *(Use narrative to provide additional information as needed based on responses above.)*

*Subject to revision and additional information may be requested

Exhibit 7: Program of Study and Selected Syllabi

Program description: The Aviation Science and Technology Associates of Applied Science program provides students with an education in aviation that prepares professional pilots who will be able to operate effectively within National and International Airspace Systems in the 21st century. This program prepares students for entry-level technical positions in the aviation industry. Students entering this program should have a strong desire to excel in aviation and acquire the skill sets of a professional pilot. This program is designed to accommodate students entering the program with or without previous flight experience and those students transferring from other universities. Graduates will be able to pursue entry-level careers that require an aviation-related degree flying single engine planes in areas such as: law enforcement, corporate or charter operations, cargo and passenger airlines, government contractors, survey pilots, and search and rescue operations.

Admission Requirements: Successful completion of first semester courses (AVI2000, AVI2001, AVI2002, AVI2004, and AVI2010), GPA of 2.5 or better, obtain class 1 medical certificate, interview with First Flight check instructors and administration. Must be a United States citizen.

Program Learning Objectives: Students enrolled in the Aviation Science and Technology Associate of Applied Science program will learn to:

1. Develop the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

Program learning outcomes: As a result of their learning experience, graduates of the Aviation Science and Technology Associate of Applied Science program can:

1. Demonstrate the skills to successfully adapt to regulatory policies, procedures, and evolving technologies in a dynamic fast paced operational environment.
2. Analyze and interpret data for problem-solving in ground and flight operations.
3. Identify modern-day challenges that affect the aviation industry.
4. Become proficient in flight navigation through dead reckoning, pilotage, and aircraft instrumentation.
5. Utilize modern technology to effectively manage professional flight operations.

WRIGHT STATE UNIVERSITY

Academic Program of Study

College:	**Health, Education, and Human Services**
Department:	**Kinesiology and Health**
Degree (A.A. B.S., B.F.A., etc.) & Title:	**Aviation Science and Technology AAS**
Concentration, Track, Option, Specialization:	
Minor Program Title:	
Certificate Program Title:	

Program	Hours
I. Wright State Core	
Element 1: Communication	
ENG 1100 Academic Reading and Writing	3
ENG 2100 Research, Writing, and Argumentation	3
Element 2: Mathematics	3
Element 5: Social Sciences	
PSY 1010 Introduction to Psychology (IW, MC)	4
Element 6: Natural Sciences	
PHY 1903 Physics of Flight	3
Additional Core	
	16
II. Required Courses	
AVI 2000 Introduction to Aviation and Aviation Systems	3
AVI 2001 Private Pilot Ground School	3
AVI 2002 Private Pilot Flight Lab 1	1
AVI 2004 Private Pilot Flight Lab 2	1
AVI 2010 Air Traffic Control Basics	3
AVI 2101 Instrument Rating Ground School	3
AVI 2102 Instrument Rating Flight Lab	1
AVI 2201 Commercial Pilot Ground School 1	2
AVI 2202 Commercial Pilot Flight Lab 1	1
AVI 2250 Aircraft Systems and Powerplants	3
AVI 2301 Commercial Pilot Ground School 2	3
AVI 2302 Commercial Pilot Flight Lab 2	1
AVI 2350 Aviation Safety and Accident Investigation (IW)	3
AVI 2375 Aviation Law and Regulations (IW)	3
GEO 4000 Climate Meteorology	3
PSY 3680 Aviation Human Factors	3
	37
III. Elective Courses	
	7
Total:	60

Introduction to Aviation
Wright State University
Department of Kinesiology and Health
AVI 2000

Instructor Information

Name - Click or tap here to enter text.

Contact Information – Please text or e-mail questions first if possible
EMAIL: Click or tap here to enter text.
PHONE:
OFFICE HOURS: Click or tap here to enter text.

Course Information

Course Meeting Details - First Flight Aviation Classroom, Dayton-Wright Brothers airport, Tuesday / Thursday 12:40 – 14:00

Schedule Type Face to Face (F2F), Lecture, Field Experience, Discussion

Course Catalog Description - Introduction to aviation systems and careers: airlines, business, freight, flight test, and military flight operations. Introduces aviation systems including aircraft, airports, airspace, and regulatory environment for the broad range of aviation activities.

Course Description
Stage I - Basic History of aviation/aerospace: Overview of aviation history, general aviation, military aviation, and commercial aviation, Students will learn how different types of air aircraft were developed, and the importance of the air transportation industry as well as the importance of military air dominance in both peace time as well as the theater of war. (3 weeks)

Stage II - Basic Flight Mechanics: Students will study the basic physical principles of airplane aerodynamics, aircraft performance, stability, and controlled flight, of fixed-wing aircraft.

Stage III - This course will introduce the student to operations and quality of life issues related to working in the aviation environment. The material is not limited to one specific area of professional pilot's career but will seek to cover far reaching issues and provide the student with a wide perspective of what to expect as a professional pilot.

Credit Hours – 3 Hours

Repeatable for Credit? No

Prerequisite Course(s) - None

Corequisite Course(s) - None

Enrollment Restriction(s) - None

Course Attributes – This course is a competency based educational program

Course Learning Objectives – Students enrolled in this course will learn to:

- Demonstrate knowledge of Aviation history.
- Identify basic aerodynamics and flight mechanics.
- Identify opportunities and responsibilities of multiple careers in the aviation/aerospace fields.

Course Learning Outcomes – Students successfully completing this course can:

- Demonstrate knowledge of Aviation history.
- Identify basic aerodynamics and flight mechanics.
- Identify opportunities and responsibilities of multiple careers in the aviation/aerospace fields.

Course Materials

Required Textbooks

Title: **Everything Explained for the Professional Pilot** ISBN: 978-0974261300 Author: Richie Lengel Publisher: Everything Edition: 13	
Title: **Stick and Rudder: An Explanation of the Art of Flying** ISBN: 978-0070362406 Author: Wolfgang Langewiesche Publisher: McGraw Hill Edition: 1	

Evaluation of Students

Course Assignments –

Date	Subject	Percentage
Week 4	Stage 1 Exam	20%
Week 10	Stage 2 Exam	20%
Week 15	Stage 3 Final Exam	20%
Weeks 4, 10, 15	Stage Projects	20%
Ongoing	Participation and Group Assignments	20%

Grading System - Standard traditional letter grades (A, B, C, D, F)

Grading Scale

A = 90% - 100% B = 80% - 89% C = 70% - 79% D = 60% - 69% F ≤ 59%

Course Content, Weekly Course Outline and Activities

Week	Topic	Reading and Assignments
Week 1 **Stage 1**	DAY 1 Course Briefing and Aviation History (Pre- 1300s) DAY 2 Aviation History (1300 to 1700)	Jepp Chapter 2A, 3
Week 2	DAY 1 Aviation History (1700 to 1900) DAY 2 Aviation History (1900s) *Wright Brothers Museum	Stage 1 Project Assignment
Week 3	DAY 1 Aviation History (Post 1900 to Present day) DAY 2 Aviation History (Future of aviation/aerospace)	Stage 1 Project Assignment
Week 4	DAY 1 * Stage 1 Project Evaluation DAY 2 Stage 1 EXAM	
Week 5 **Stage 2**	DAY 1 Flight Mechanics (Forces of Flight) DAY 2 Flight Mechanics (Basic Fluid Dynamics and Newtonian Physics)	
Week 6	DAY 1 Flight Mechanics (Atmospheric properties) DAY 2 Flight Mechanics (Atmospheric effects)	
Week 7	DAY 1 Flight Mechanics (Stability) * US Air Force Museum Trip	

Week	Topic	Reading and Assignments
	DAY 2 Flight Mechanics (Weight Shift Effects)	
Week 8	DAY 1 Flight Mechanics (Primary flight controls) DAY 2 Flight Mechanics	Stage 2 Project Assignment
Week 9	DAY 1 Flight Mechanics (Trim and Flaps) DAY 2 Flight Mechanics (Stalls and Emergencies)	
Week 10	DAY 1 * Stage 2 Project Evaluation DAY 2 Stage 2 EXAM	
Week 11 **Stage 3**	DAY 1 Guest Speaker Prep and Discussion DAY 2 Guest Speaker	
Week 12	DAY 1 Guest Speaker Prep and Discussion DAY 2 Guest Speaker	Stage 3 Project Assignment
Week 13	DAY 1 Guest Speaker Prep and Discussion DAY 2 Guest Speaker	
Week 14	DAY 1 * Stage 3 Project Evaluation DAY 2 Guest Speaker	
Week 15	Course FINAL Exam	

Disclaimer: "Course schedule, topics, evaluation and assignments may be changed at the instructor's discretion."

"*" denotes classes that may meet outside of prescribed location and/or times

Course Policies and Resources

Attendance is mandatory per the Federal Aviation Administration and Training Course Outline. If the student cannot attend class (excused or unexcused), it is the student's responsibility to meet with the primary instructor to make up the lesson. If students cannot meet with the primary instructor during office hours or by appointment, an additional flight instructor from First Flight Aviation can be used to cover the missed lesson(s) for a fee of $45/hr. In the event lessons cannot be completed before the beginning of the next stage, the student will be unable to continue ground and/or flight training until the requirements of the previous stage are met. Failure to complete missed lessons within 1 week after the end of stage will result in a meeting with either the Primary Instructor, Chief Flight Instructor, or Program Director to discuss continuation or the possible removal from the flight program.

In order to complete various stages of flight and ground training, a written endorsement must be provided by a Certified Flight Instructor. The nature of that endorsement requires that the instructor is

confident the student can pass that stage of training (FAA Written, Solo Flight, Check Ride, etc). **The Flight Instructor reserves the right to withhold their endorsement for any reason**.

Program or College Policies and Resources

Students are expected to comply with the ethical standards of both Wright State University and First Flight Aviation. Improper language and behavior in class or at the airport can be grounds for separation from the program. As pilots, we are expected to maintain a level of decorum appropriate to our positions and responsibilities.

Students are required to complete this course with a grade of C or better in order to enroll in the Instrument Ground and Flight Program.

University Policies and Resources

Disability Services http://www.wright.edu/disability-services.
Students registered with the Office of Disability Services who require special accommodations for lecture, lab, testing, or to complete the requirements of this class, should contact the instructor as soon as possible so arrangements can be made. Additional help and information is available at Office of Disabilities Services (Dayton Campus) or Academic Instructional Services (Lake Campus)

Academic Integrity http://www.wright.edu/students/judicial/academic-integrity-student-guide.pdf
It is the policy of Wright State University to uphold and support standards of personal honesty and integrity for all students consistent with the goals of a community of scholars and students seeking knowledge and truth. Furthermore, it is the policy of the university to enforce these standards through fair and objective procedures governing instances of alleged dishonesty, cheating, and other academic misconduct.

Diversity Statement
Wright State University promotes the acceptance and appreciation of every individual regardless of race, gender, age, ethnicity, ability or disability, sexual orientation, socio-economic status, religious affiliation, or national origin. We encourage appropriate activities and events which foster learning about the diversity of our world.

Non-Discrimination
Wright State University does not discriminate on the basis of race, color, religion, age, national origin, national ancestry, sex, pregnancy, gender, gender identity or expression, sexual orientation, military service or veteran status, mental or physical disability, or genetic information in employment, admission, treatment, or access to its programs or activities.

Wright State University adheres to all applicable state and federal equal opportunity /affirmative action statutes and regulations.

The Office of Equity and Inclusion (OEI)
The OEI exists to provide an inclusive, equitable, working, living, and learning environment for members of the Wright State University community. OEI is responsible for compliance with federal and state law as well as University policy regarding equity and equal employment opportunity in personnel matters and

university issues of harassment and discrimination, including relationship violence and sexual misconduct. Specifically, OEI is tasked with investigating and resolving complaints related to violations of the University Non-Discrimination Statement as well as the Gender Based Harassment and Violence Policy. All members of the WSU community, guests, and visitors are protected by these policies regardless of their sexual orientation, gender identity, or gender expression. For more information, please visit www.wright.edu/oei.

Sex/Gender-Based Harassment

Wright State University is committed to maintaining a safe and healthy educational and work environment in which no member of the university community is, on the basis of actual or perceived sex, gender, gender identity, gender expression and or sexual orientation, excluded from participation in, denied the benefits of, or subjected to discrimination in any university program or activity. Wright State University does not discriminate on the basis of sex or gender in its education programs and activities. Sex/Gender-based harassment and violence, including sexual violence, are forms of sex discrimination in that they deny or limit an individual's ability to participate in or benefit from university programs or activities.

Private Pilot Ground School
Wright State University
Department of Kinesiology and Health
AVI 2001

Instructor Information

Name - Click or tap here to enter text.

Contact Information

EMAIL: Click or tap here to enter text.
OFFICE: Click or tap here to enter text.
OFFICE HOURS: Click or tap here to enter text.

Course Information

Course Meeting Details – First Flight Aviation Classroom, Dayton-Wright Brothers airport, Tuesday / Thursday 10:00 – 11:20

Schedule Type – Face to Face (F2F), Lecture, Discussion

Additional Course Requirements

- Minimum age 17 years old
- English proficient
- Minimum FAA 3rd Class Medical Certificate
- Corequisite course with AVI 2002A Private Pilot Flight Lab 1

Course Catalogue Description – The study of flight fundamentals, systems, weather, human factors, and regulations required for a Private Pilot Certificate. Must be a United States citizen. Minimum age of 17 years old.

Course Description – AVI 2001 Private Pilot Ground will introduce the student to flight training in a single engine aircraft and prepare them for their FAA Private Pilot Written Exam. Lectures will cover the knowledge portion of flight training, including regulations, human factors, aerodynamics, flight controls, cross country flight planning and aircraft systems. The course is designed to encourage discussion and interaction as well as prepare the student for a seamless transition into the cockpit.

Credit Hours – 3 Credit Hours

Repeatable for Credit? No

Prerequisite Course(s) – None

Corequisite Course(s) – AVI 2002A Private Pilot Flight Lab 1

Enrollment Restriction(s) – International students prohibited at this time, Department Approval Required

Course Learning Objectives – Students enrolled in this course will learn to:

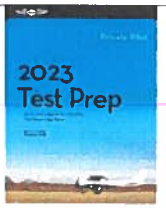
- Explain the aerodynamics, legal regulations, weather forecasting, airport environment, and the biological and psychological hazards of human factors as they relate to a Private Pilot according to the Airman Certification Standards created by the Federal Aviation Administration (FAA).
- Create accurate, usable cross-country flight plans using knowledge of airspace, regulations, pilotage, dead reckoning and electronic navigation.
- Identify the equipment, inspections and airworthiness requirements of an aircraft as mandated by Federal Aviation Regulations.

Course Learning Outcomes – As a result of their learning experience, students successfully completing this course can:

- Explain the aerodynamics, legal regulations, weather forecasting, airport environment, and the biological and psychological hazards of human factors as they relate to a Private Pilot according to the Airman Certification Standards created by the Federal Aviation Administration (FAA).
- Create accurate, usable cross-country flight plans using knowledge of airspace, regulations, pilotage, dead reckoning and electronic navigation.
- Identify the equipment, inspections and airworthiness requirements of an aircraft as mandated by Federal Aviation Regulations.

Course Materials

- **Required Materials**

Title: **Guided Flight Discovery: Private Pilot** ISBN: 978-0-88487-660-1 Paperback Author: Jeppesen Publisher: Jeppesen Edition: 2018	
Title: **FAR/AIM 2023 *** ISBN: 978-1-64425-212-3 Author: Federal Aviation Administration / Aviation Supplies and Academics Publisher: Aviation Supplies and Academics Edition: 2023	
Title: **Pilot Handbook of Aeronautical Knowledge *** **ISBN: 978-1619544734** Author: Federal Aviation Administration / Aviation Supplies and Academics Publisher: Aviation Supplies and Academics Edition 2016	
Title: **Airplane Flying Handbook *** ISBN: 978-1644250686 Author: Federal Aviation Administration / Aviation Supplies and Academics Publisher: Aviation Supplies and Academics Edition: 2021	
Title: **Private Pilot 2022 Test Prep** ISBN: 978-1644252475 Author: Federal Aviation Administration / Aviation Supplies and Academics Publisher: Aviation Supplies and Academics Edition: 2023	
Title: **Airman Certification Standards: Private Pilot Airplane *** ISBN: 978-1619549036 Author: Federal Aviation Administration / Aviation Supplies and Academics Publisher: Aviation Supplies and Academics Edition: 2019	
Title: **Chart Supplement: East Central U.S.** ISBN: 979-8430888312 Author: Federal Aviation Administration / Department of Transportation Publisher: Independently Published Edition: VALID 29 DEC 2022 to 23 FEB 2023	

Title: **Private Pilot Oral Exam Guide** ISBN: 978-1644250150 Author: Michael Hayes Publisher: Aviation Supplies and Academics Edition: 2020	
Title: **Guided Flight Discovery: Private Pilot Syllabus** ISBN: 978-0-88487-654-0 Author: Jeppesen Publisher: Jeppesen Edition: 2016	

*Marked books are available FREE via faa.gov website.

- **Required Materials**

VFR Sectional Chart: Cincinnati Valid 12/29/2022 to 02/23/2023	
Forever Sectional Plotter by Sporty's	
ASA Composite E6B Computer Electronic E6Bs will not be used in class, but are permitted through flight training	
Aviation Headset – Airplane Obtained from https://www.sportys.com/aviation-headsets.html or other online sources. Must have dual plug cord. Prices vary based on brand and model.	
Logbook – Pilot's Flight Log and Record Alternate versions can be obtained online.	

Evaluation of Students

Course Assignments

Date	Subject	Percentage
Week 4	Stage 1 Exam	25%
Week 7	Stage 2 Exam	25%
Week 11	Stage 3 Exam	25%
Ongoing	Homework and Quizzes	25%

Grading System – A grade of C or higher is required for this course to count as a prerequisite for corresponding AVI courses.

Grading Scale

A = 90% - 100% B = 80% - 89% C = 70% - 79% D = 60% - 69% F ≤ 59%

Course Content, Weekly Course Outline and Activities

Week	Topic	Reading and Assignments
Week 1	Aerodynamics and Flight Controls	Jepp Chapter 2A, 3
Week 2	Systems, Certificates and Documentation	Jepp Chapter 2B, 2C FAR/AIM 61.3, 91.205
Week 3	Flight Environment and Airport Operations	Jepp Chapter 4 FAR Part 71, 73 AIM Chapter 2-3, Chapter 3
Week 4	Communications and Exam Review Exam	Jepp Chapter 5 FAR 91.113, 91.123, 91.125 AIM Chapter 4-2
Week 5	Weather and Weather Reporting	Jepp Chapter 6, 7 FAR 91.155 AIM Table 3-1-1
Week 6	Regulations, Privileges and Limitations	Jepp Chapter 1A, 1B FAR 61.113, 61.117
Week 7	Emergency Procedures and Exam Review Exam	FAR 91.13, 91.119 AIM Chapter 6, 7 49 CFR Part 830

Week	Topic	Reading and Assignments
Week 8	Human Factors and Airplane Performance	Jepp Chapter 1C, 8, 10 FAR 91.17, 91.211 AIM Chapter 8
Week 9	Navigation	Jepp Chapter 9
Week 10	Cross Country Flight Planning	Jepp Chapter 11
Week 11	Exam Review Exam	
Week 12 - 15	FAA Written Exams Check Ride Prep	Assigned Cross Country Plans Oral Exam Guide Review Chapters

Disclaimer: Course schedule, topics, evaluation and assignments may be changed at the instructor's discretion.

Course Policies and Resources

Attendance is mandatory per the Federal Aviation Administration and Training Course Outline. If the student cannot attend class (excused or unexcused), it is the student's responsibility to meet with the primary instructor to make up the lesson. If students cannot meet with the primary instructor during office hours or by appointment, an additional flight instructor from First Flight Aviation can be used to cover the missed lesson(s) for a fee of $45/hr. In the event lessons cannot be completed before the beginning of the next stage, the student will be unable to continue ground and/or flight training until the requirements of the previous stage are met. Failure to complete missed lessons within 1 week after the end of stage will result in a meeting with either the Primary Instructor, Chief Flight Instructor, or Program Director to discuss continuation or the possible removal from the flight program.

In order to complete various stages of flight and ground training, a written endorsement must be provided by a Certified Flight Instructor. The nature of that endorsement requires that the instructor is confident the student can pass that stage of training (FAA Written, Solo Flight, Check Ride, etc). **The Flight Instructor reserves the right to withhold their endorsement for any reason**.

Program or College Policies and Resources

Students are expected to comply with the ethical standards of both Wright State University and First Flight Aviation. Improper language and behavior in class or at the airport can be grounds for separation from the program. As pilots, we are expected to maintain a level of decorum appropriate to our positions and responsibilities.

Students are required to complete this course with a grade of C or better in order to enroll in the Instrument Ground and Flight Program.

University Policies and Resources

Disability Services http://www.wright.edu/disability-services.

Students registered with the Office of Disability Services who require special accommodations for lecture, lab, testing, or to complete the requirements of this class, should contact the instructor as soon as possible so arrangements can be made. Additional help and information is available at Office of Disabilities Services (Dayton Campus) or Academic Instructional Services (Lake Campus)

Academic Integrity

http://www.wright.edu/students/judicial/academic-integrity-student-guide.pdf

It is the policy of Wright State University to uphold and support standards of personal honesty and integrity for all students consistent with the goals of a community of scholars and students seeking knowledge and truth. Furthermore, it is the policy of the university to enforce these standards through fair and objective procedures governing instances of alleged dishonesty, cheating, and other academic misconduct.

Diversity Statement

Wright State University promotes the acceptance and appreciation of every individual regardless of race, gender, age, ethnicity, ability or disability, sexual orientation, socio-economic status, religious affiliation, or national origin. We encourage appropriate activities and events which foster learning about the diversity of our world.

Non-Discrimination

Wright State University does not discriminate on the basis of race, color, religion, age, national origin, national ancestry, sex, pregnancy, gender, gender identity or expression, sexual orientation, military service or veteran status, mental or physical disability, or genetic information in employment, admission, treatment, or access to its programs or activities.

Wright State University adheres to all applicable state and federal equal opportunity /affirmative action statutes and regulations.

The Office of Equity and Inclusion (OEI)

The OEI exists to provide an inclusive, equitable, working, living, and learning environment for members of the Wright State University community. OEI is responsible for compliance with federal and state law as well as University policy regarding equity and equal employment opportunity in personnel matters and university issues of harassment and discrimination, including relationship violence and sexual misconduct. Specifically, OEI is tasked with investigating and resolving complaints related to violations of the University Non-Discrimination Statement as well as the Gender Based Harassment and Violence Policy. All members

of the WSU community, guests, and visitors are protected by these policies regardless of their sexual orientation, gender identity, or gender expression. For more information, please visit www.wright.edu/oei.

Sex/Gender-Based Harassment

Wright State University is committed to maintaining a safe and healthy educational and work environment in which no member of the university community is, on the basis of actual or perceived sex, gender, gender identity, gender expression and or sexual orientation, excluded from participation in, denied the benefits of, or subjected to discrimination in any university program or activity. Wright State University does not discriminate on the basis of sex or gender in its education programs and activities. Sex/Gender-based harassment and violence, including sexual violence, are forms of sex discrimination in that they deny or limit an individual's ability to participate in or benefit from university programs or activities.

Exhibit 8: Faculty Hiring and Credentialing

Faculty Hiring Process and Credentialing Verification (8/12/2018)

Full Time Faculty

1. Posted job description must include minimum requirements for the position.
    a. Departments are strongly encouraged to place the minimum requirements within People Admin's disqualifying questions section as an applicant pre-screen.
    b. If minimums are below university approved minimums (See list of terminal degrees) the position job description will be reviewed by the Assistant Vice President for Education Effectiveness and Institutional Accreditation to assess minimum requirements before the position is posted.

2. Applicants submit unofficial transcripts as part of application process. [recommended but optional]

3. Search Committee reviews qualified applicants and selects candidates for interview.
    a. Those candidates are forwarded to OEI for approval before they are scheduled for an interview.

4. After the selection process is complete the final applicant will provide official transcript to the department/college for review (see 5b for ABD).
    a. Transcripts should be reviewed per the credentialing policy.
        i. https://policy.wright.edu/policy/2035-faculty-credentials
        ii. Dean or chair is responsible for confirming that credentials are relevant and appropriate to the programs in which they will teach.
        iii. Exceptions can be requested as outlined in the exception process.
        iv. Transcripts not in English must be translated into English by a verified documented source (UCIE recommended translator, faculty in specified language discipline, etc).

5. The department/college sends the official transcript, verification document, and any other required documentation to Human Resources.
    a. Chairs/Deans must attach a verification letter.
        i. Template attached or available from Associate Provost.
    b. Faculty candidates who are ABD (All But Dissertation) must submit their most current official transcript. Upon receiving their terminal degree, they must submit their final transcript within the timeline specified by the CBA.
    c. Retain a copy of information sent to HR in the candidate's personnel file.

6. Human Resources is responsible for collecting and storing original transcripts and performing background check, visual compliance and education verification.
    a. The HR education verification only ensures the transcript(s) match the institution(s) listed on the education report.
    b. The original transcripts will be filed in the faculty member's confidential personnel file.

7. Offer Letter Template is obtained from the Associate Provost's Office.
    a. Request the current template with each new hire.

8. The following must be submitted to the Provost's Office for signature:

    a. Two copies of offer letter signed by Dean
    b. Candidate's CV
    c. Copy of posting in people admin.

9. **Offer letters WILL NOT be signed by the Provost until required transcripts are received and reviewed, degree verification confirmed, and background check completed.**

Adjunct Faculty

1. Each academic year colleges who intend to hire adjuncts during that academic year must create an adjunct posting in PeopleAdmin
    a. The posting should include minimum position requirements in line with the credentialing policy.

2. To be an adjunct, you must be teaching a course for credit at the University.

3. Adjuncts must apply via PeopleAdmin
    a. Reapplication is necessary if they have not taught in 18 months.
        i. After 18 months, they become inactive in HR.
    b. If teaching in two different colleges, the individual will need to apply to each college's PeopleAdmin posting.
    c. Staff who are teaching a course must apply through the PeopleAdmin system as an adjunct.
        i. Hourly employees cannot be adjuncts, unless part of their regular job duties.
        ii. Salaried staff may not be compensated for adjunct duties using overloads.

4. A hiring proposal is created for each "new" adjunct.
    a. The semester, college, and department will need to be listed.
    b. The chairs will be required to approve the proposal.
        i. Deans will be in the approval que but can be bypassed at their request.
    c. The Associate Provost Office and HR will track all adjuncts.

5. When completing the hiring proposal the following must be done:
    a. One of two boxes will need to be checked with regards to credentialing.
        i. Hire- Credentials have been reviewed by the hiring department/college, meet the policy and all documents have been sent to HR.
        ii. Provisional hire- Credentials have been reviewed by the department/college but the documents needs to be sent to HR.

6. First time adjuncts will provide official transcript to the department/college for review. Transcripts should be reviewed per the credentialing policy.
        i. https://policy.wright.edu/policy/2035-faculty-credentials
        ii. Dean or chair is responsible for confirming that credentials are relevant and appropriate to the programs in which they will teach.
        iii. Exceptions can be requested as outlined in the exception process.
        iv. Transcripts not in English must be translated into English by a verified documented source (UCIE recommended translator, faculty in specified language discipline, etc).

7. The department/college sends the official transcript, verification document, and any other required documentation to Human Resources.
    a. Chairs/Deans must attach a verification letter.
        i. Template attached or available from Associate Provost.
    b. Retain a copy of information sent to HR in the candidate's personnel file.
    c. The original transcripts will be filed in the faculty member's confidential personnel file.

8. An offer letter **must** be completed every semester.
    a. The signed letter must be received by the department **BEFORE the first class period they teach**.
    b. An offer letter template can be obtained from HR or Associate Provost's Office.
        i. Departments/colleges can add language specific for their college.
        ii. No language should be removed from the template.
        iii. Highlighted sections of the template can be modified.
            1. Number of pays can be modified to match EPAF each semester.
    c. Send a signed copy of the offer letter to your HR analyst.
    d. The offer letter must contain language that the position is contingent upon an official credentialing documentation by HR and enrollment numbers.

9. The department should create an EPAF.
    a. Please include all required information to justify pay and salary on EPAF.
        i. Semester
        ii. Course(s) teaching
        iii. Credit hours
        iv. Total pay
        v. Any additional required info

10. Adjunct Transcripts
    a. Official transcripts and chair verification must be on file in HR for every adjunct.
    b. The first time an adjunct teaches at WSU, they can teach one semester without official transcripts on file.
    c. If the official transcripts and chair verification are not on file in HR by the end of their first semester teaching at WSU, the adjunct will **be ineligible** to teach at WSU until official transcript(s) and chair verification are received.
        i. Even if 18 months has passed.
    d. EPAFs for adjuncts who have received the one semester exemption but do not have official transcripts on file **will not** be approved until transcripts are received.

        [**IMPORTANT**: There will be no exceptions to this rule. An adjunct teaching in a subsequent semester without official transcripts on file will **NOT** be paid for services rendered during the period of time the university is out of compliance with HLC.]

11. HR will process the adjunct for payment when they have:
    a. Signed offer letter
    b. Verified transcripts on file
        i. First time ever adjuncts will have one semester to provide.
    c. Complete EPAF sent

Exhibit 9: List of Non-Terminal Ph.D. Degrees

List of Non- PhD Terminal Degrees (8/12/2018)

1. Doctor of Education (EdD)
2. Educational Specialist (EdS)

Arts:

3. Doctor of Arts (DA)
4. Doctor of Modern Languages (DML)
5. Doctor of Music (DM or DMus)
6. Doctor of Musical Arts (DMA) (Usually awarded to performance majors in the musical arts)
7. Doctor of Philosophy (DPhil)
8. Doctor of Professional Studies (DPS)

Design:

9. Doctor of Architecture (D.Arch)
10. Master of Architecture (M.Arch)
11. Master of Art and Design (MAD) [2]
12. Master of City Planning (MPLAN, MCRP, MUP, MCP, MCD or MURP)
13. Doctor of Design (DDes)
14. Master of Design (MDes) [3]
15. Master of Fine Arts (MFA)
16. Master of Graphic Design (MGraph) [4]
17. Master of Landscape Architecture (MLArch and/or MLA)

Healthcare:

18. Doctor of Behavioral Health (DBH)
19. Doctor of Healthcare Administration (DHA)
20. Doctor of Health Science (DHSc)
21. Doctor of Medical Physics (DMP)
22. Doctor of Nursing Practice (DNP, DNS, DNSc, DNAP)
23. Doctor of Occupational Therapy (DOT or OTD)
24. Doctor of Physical Therapy (DPT)
25. Doctor of Podiatric Medicine (DPM)
26. Doctor of Psychology (PsyD)
27. Doctor of Public Health (DrPH, DPH)
28. Doctor of Rehabilitation (Rh.D.)
29. Doctor of Science (DSc)
30. Doctor of Social Science (DSocSci)
31. Doctor of Social Work (DSW)

Law:

32. Doctor of Canon Law (JCD)
33. Doctor of Juridical Science (JSD/SJD) (in the U.S.)

Management:

34. Doctor of Business Administration (DBA)
35. Doctor of Economic Development(DED)
36. Doctor of Management (DMgt or DM)
37. Master of Project Management (MPM)
38. Doctor of Public Administration (DPA)

Religion:

39. Doctor of Ministry (DMin)
40. Doctor of Theology (ThD or DTh)

Technology:

41. Doctor of Computer Science (DSc.Comp, DCS, D.C.Sc.), D.C.Sc.)
42. Doctor of Engineering (Dr.-Ing./DEng/Dr. Eng./EngD)
43. Doctor of Information Technology (DIT)
44. Master of Library and Information Science (MLIS, MLS, MSLS) (Given in the US, by an ALA accredited school or program.)

List of Professional Degrees

45. Advanced Practice Registered Nurse (APRN, CRNA, NP, CNS)
46. Biotechnology (ALM)
47. Dental Science (DDSc, Dr.Odont)
48. Dentistry (MDS, MSD, MDSc, or DClinDent)
49. Education (MEd, MAT, MT, EdS)
50. Engineering (MEng, MASc, MMSc, PD)
51. Lawyer (LLM, LLD, JSD, JD, DJur)
52. Medicine (MD, DO, MBBS)
53. Midwifery (MMid, MScMid, CNM)
54. Ministry (DMin)
55. Psychology (PsyD)
56. Public Policy (MPP)
57. Social Science (DPhil)
58. Social Work (MSW, DSW, ProfD)

List of Certifications (Assumes a bachelor's degree in field)

CPA must have: Successful completion of the Uniform Certified Public Accountant Examination, 150 semester units of college education, and one year of accounting related experience

Exhibit 10: Verification of Transcript Template

Verification of Transcript Template (9/13/2018)

Date:_____

To: Human Resources (exceptions need to go through the exception process)

Re: Transcript Verification for (faculty member)

I, (Chair/Dean Name), Chair or Dean of _____, verify that I have reviewed the attached original transcript for, (faculty name).

HLC and University policy requires:

- To teach undergraduates, faculty must have a Masters degree (or higher) and (or including) at least 18 credit hours of graduate study relevant to the field in which they are teaching.
- To teach graduate students, faculty must be a member of the Graduate Faculty, have a terminal degree, and at least 18 credit hours of graduate study relevant to the field in which they are teaching.
- If the above conditions do not apply, the faculty must have an exception.

I attest that (faculty member),

Check one of the following:

_____ has a Masters degree (or higher) and (or including) at least 18 credit hours of graduate study relevant to the field in which they are teaching and is eligible to teach undergraduate courses for the Department of _____.

_____has a Terminal degree and at least 18 credit hours of graduate study relevant to the field in which they are teaching and is eligible to teach undergraduate and graduate courses for Department of _____. The faculty member appears to be qualified and will complete the process to become a member of the Graduate Faculty.

_____should be granted an exception and attached is the necessary form and all required documentation to begin the approval process.

Sincerely,

Name, Title and Signature

Exhibit 11: Faculty Credentialing Exceptions

Faculty Credentialing Exceptions (updated 8/12/2018)

1. All continuing and newly appointed faculty must meet credentialing guidelines as stated in the Faculty Credentialing Policy (#2035). This policy allows for exceptions under limited circumstances. Exceptions should be extremely rare in most departments.

2. To request an exception, an exception packet must be completed by the Chair/Dean and forwarded to the Office of the Provost.

   The exception packet must include ALL of the following:

   a. Exception Request Form Cover Sheet
      i. If appropriate, syllabi for specific course(s) to be taught at WSU for which the exception applies.
   b. Transcript verification form
   c. Letter from Program Head communicating why the exception is requested and appropriate.
   d. Copy of the candidate's academic transcript
   e. Copy of the candidate's CV
   f. **Verifiable documentation that supports each credential or experience worthy to be considered cause for the exception.** This may require multiple documents. Verifiable expertise is typically not based exclusively on years of teaching experience.
      i. Examples of **verifiable** documents for faculty exceptions:
         - A letter from a source external to the program that verifies a minimum of three years in the field and outlines why and in what field the candidate is an expert.
         - Evidence of verifiable scholarly works in the field in which the exception is requested.
         - Copies of credentials relevant to the exception including expiration dates if appropriate.

The Approval Process

1. Send the complete exception packet to the Office of the Provost. (250 University Hall)
   a. The packet will be logged and reviewed to ensure all necessary materials are present.
   b. Original transcript will be taken to HR. A copy will be put with the packet.

2. The packet will be given to the appropriate program Curriculum Committee for faculty review.
   a. The committee should direct any credentialing questions to the Associate Provost Office.
   b. The committee will review to make sure the exception meets HLC criteria and University policy.
      i. Additional accreditation criteria should be considered as required on a per program basis.
3. The faculty committee will submit the packet back to the Associate Provost Office with one of the following decisions:
      i. Exception accepted and for what length of time

ii. More information needed (specify what is needed)
iii. Exception denied

4. The Associate Provost Office in conjunction with the Provost will review the faculty committee's decision and take one of the following actions.
    i. Accept the faculty committee's recommendation, or
    ii. Return to the appropriate program Curriculum Committee with the additional requested information.
    iii. Request a second opinion from a Faculty body constituted by the Faculty Senate Executive Committee. The decision of this body is the final recommendation to the Provost.

5. If approved, the exception letter and supporting documentation will sent to HR and placed in the faculty members confidential personnel file.
    a. An approved copy will be sent back to the originating department/college.
    b. The HR transcript sheet will reflect the approved exception.

6. In situations where a continuing faculty member's credentials no longer qualify them, the Provost Office will contact the Chair/Dean to discuss next steps.

NOTE: Exceptions may be done for a limited time and are subject to future reviews. Any exception approved prior to 8/1/2018 must reapply to comply with the most recent University policy.

Exhibit 12: Exception Request Cover Sheet

4/27/2021

Exception Request (Alternative Criteria) Form Cover Sheet

Date:_____

Department/College Requesting Exception:_____

Contact person for Exception: _____

Exception for (name of candidate):_____

Specific Field or Course(s) for which the exception applies: _____

_____

Attached to this form:

____ Course(s) Syllabi (if applies)
____ Transcript verification form
____ Program Head letter of support
____ Copy of the candidate's transcript **(Please send the original/official transcript to HR)**
____ Copy of the candidate's CV
____ Verifiable documentation that supports each credential or experience worthy to be considered cause for the exception.
____ For graduate teaching only: Graduate Faculty Nomination process has been initiated.
Please attach copy of the submission email.

_____

Program Curriculum Committee

____ Exception accepted on _____ (date) for _____length of time
Needs to be reviewed again before _____ Semester
(grad school requires within first 7 years)

_____ More information needed (specify what is needed):

_____ Exception denied

_____

Provost Office

____ Accept the program curriculum committee decision
____ Return to program curriculum committee (additional information attached)
____ Request a second opinion from Faculty Senate

_____

Faculty Senate (if requested)

____ Exception accepted on _____ (date) for _____length of time
Needs to be reviewed again before _____ Semester
_____ Exception denied

_____

Provost Office

____ Approved to teach undergraduate courses until _____ ____ Denied

Exhibit 13: Adjunct Offer Letter

ADJUNCT Offer Letter (8/12/2018) One Semester
Date

Name
Address
City, State Zip

Dear Dr./Mr./Ms. _____

We are pleased to offer you an adjunct faculty position in the Department of _____ at Wright State University, for _____ Semester 20____. You will be teaching _____. (list all courses and credit hours) Your pay for the semester will be _____ which will be paid in ____ installments over the semester.

This is a one-semester appointment. This offer is contingent upon Human Resources having on file original copies of your official transcripts and any other required documentation. (list documents)

This offer is contingent upon enrollment and can be terminated if sufficient enrollment numbers are not achieved.

As an adjunct faculty member, you will participate in the State Teachers Retirement System of Ohio (STRS). STRS offers three retirement plans: Defined Benefit, Defined Contribution and Combined. You have 180 days from your hire date to notify STRS of your plan selection. Both you and the university will contribute to your retirement account. Your contribution of 14% will be deducted on a pre-tax basis (federal and state) from your pay. The university will contribute 14% of your pay. The percentage of the university's contribution to be deposited into your STRS account will depend on your plan selection.

All WSU employees are exempt from Social Security contributions on earnings from the university. WSU employees hired on or after March 31, 1986 are required to pay a Medicare contribution of 1.45% of their earnings.

Department/College can add any additional language

Sincerely,

TITLE
College of _____

I accept the offer contained herein as indicated by my signature below.

_____ _____
Signature Date

Cc: Chair
Dean
Human Resources

Exhibit 14: Exception Request Renewal

4/20/2023

Exception Request (Alternative Criteria) Renewal Cover Sheet

Date:_____

Department/College Requesting Exception:_____

Contact person for Exception: _____

Exception for (name of candidate):_____

Specific Field or Course(s) for which the exception applies: _____

_____

Attached to this form:

____ Prior approved exception cover sheet

____ Verifiable documentation that supports valid reason for continued exception.

____ For graduate teaching only: Graduate Faculty Nomination process has been initiated.

Please attach copy of the submission email.

_____

Provost Office

____ Prior exception approval on file

____ Accept the program request for renewal

____ Return to program curriculum committee (additional information attached)

____ Request a second opinion from Faculty Senate

_____

Faculty Senate (if requested)

____ Exception accepted on _____ (date) for _____length of time

Needs to be reviewed again before _____ Semester

_____ Exception denied

_____

Provost Office

____ Approved to teach undergraduate courses until _____

(Initial)

____ Denied

Exhibit 15: INST 141 Flight Lesson Standards and MYFBO Grading Examples

Sample Performance Rubrics

View All Lesson Objectives – Instrument Rating Part 141

Stage	Lesson	Lesson Name	Lesson Completion Standards
			NOTES:

All required tasks will be graded using the 1 to 5 scale, with all grades recorded in the corresponding Flight lesson box.

Grading Scale: 1) well below standard 2) Unsatisfactory 3) Meets Lesson Standards 4) Meets ACS standards 5) Well above Standards

All lessons must be completed and the student must receive a grade of 3 or better in each required task as well as in the overall lesson in order to be eligible to move on to the next lesson.

Stage	Lesson	Lesson Name	Lesson Objectives
1	1	Ground Lesson 1	
1	2	Ground Lesson 2	
1	3	Ground Lesson 3	
			Become familiar with the instrument training airplane.
			Briefly review normal preflight, takeoff, and landing procedures.
1	4	Flight Lesson 1	Practice attitude instrument flight with emphasis on precise aircraft control solely by instrument reference including basic instrument flight maneuvers.
			Review full panel instrument flying in preparation for partial panel flight.
1	5	Flight Lesson 2	Introduce the student to aircraft instrument systems, equipment, and preflight checks necessary for IFR flight.
1	6	Ground Lesson 4	
			Review systems and equipment checks.
1	7	Flight Lesson 3	Increase proficiency in full panel instrument flying.
			Review full panel instrument flight.
1	8	Flight Lesson 4	Introduce partial panel attitude instrument flying including related systems and equipment malfunctions.
1	9	Ground Lesson 5	
1	10	Ground Lesson 6	
			Continue to review full and partial panel instrument flight.
			Become more familiar with related systems and equipment malfunctions.
1	11	Flight Lesson 5	Introduce additional full/partial panel instrument maneuvers and procedures.
			Further develop full and partial panel instrument attitude flying skills.
1	12	Flight Lesson 6	Introduce partial panel stalls and maneuvering during slow flight.
1	13	Ground Lesson 7	
			Enhance proficiency in the listed full panel attitude instrument maneuvers.
1	14	Flight Lesson 7	Improve partial panel skills in stall recoveries, slow flight, and unusual attitude recoveries.
1	15	Ground Lesson 8	
			Continue to develop proficiency in the basic listed attitude instrument maneuvers.
1	16	Flight Lesson 8	Gain an understanding of VOR orientation as well as VOR radial interception and tracking.
1	17	Ground Lesson 9	
			The student will gain additional experience and knowledge understanding of VOR orientation, radial interception and tracking.
1	18	Flight Lesson 9	Introduce VOR time and distance calculations, intercepting and tracking DME arcs (if the airplane is so equipped), and the use of ADF equipment and NDB procedures.
			Practice and gain proficiency in VOR orientation, tracking, and time, speed, and distance calculations.
			Become familiar with basic ADF equipment and NDB procedures.
1	19	Flight Lesson 10	Introduce NDB time, speed, and distance calculations.
			Introduce front and back course localizer tracking.
			Continue to gain proficiency with full and partial panel procedures.
1	20	Flight Lesson 11	Learn to interpret the CDI indications associated with the increased sensitivity of the localizer while tracking inbound on the front or back course.
			Increase proficiency in basic attitude instrument flight procedures.
1	21	Flight Lesson 12	Introduce VOR and NDB orientation/tracking procedures using partial panel.
1	22	Flight Lesson 13 --	The Chief Instructor, Assistant Chief, or a designated Check Instructor will evaluate the student's proficiency in attitude instrument flight and navigation to ensure the student is prepared for more complex instrument flying procedures.
2	1	Ground Lesson 10	
2	2	Ground Lesson 11	
2	3	Ground Lesson 12	
			Review instrument systems and equipment malfunctions.
2	4	Flight Lesson 14	The student should become familiar with VOR standard and nonstandard holding patterns, as well as standard NDB holding patterns.
			The student should demonstrate increased proficiency in performing standard VOR and NDB holding patterns.
2	5	Flight Lesson 15	Introduce nonstandard NDB and standard localizer holding procedures.
			The student will review the holding procedures introduced in previous lessons.
2	6	Flight Lesson 16	The student will also be introduced to other types of holding patterns.
2	7	Ground Lesson 13	
2	8	Ground Lesson 14	
2	9	Ground Lesson 15	
2	10	Ground Lesson 16	
			Review previously learned holding pattern procedures and systems/equipment malfunctions.
			Familiarize the student with nonprecision instrument approach procedures (IAPs) and missed approach planning.
			NOTE: The instructor and student must keep in mind FAR 61.1(b)(9) which states an instrument approach means an approach procedure defined in Part 97 of the Federal Aviation Regulations.
2	11	Flight Lesson 17	If the training airplane is DME-equipped, the syllabus listings for VOR approaches may include VORTAC approaches or VOR-DME approaches.
			Begin to develop proficiency in nonprecision instrument approach procedures and missed approach planning.
2	12	Flight Lesson 18	Introduce procedures for completing a circling approach and landing from a straight-in or circling approach.
			Begin to develop proficiency in nonprecision instrument approach procedures and missed approach planning.
2	13	Flight Lesson 19	Introduce procedures for completing a circling approach and landing from a straight-in or circling approach.
2	14	Ground Lesson 17	
			Improve proficiency in localizer and VOR approaches.
2	15	Flight Lesson 20	Become familiar with ILS approach procedures.
			Review full panel instrument approach procedures for precision and nonprecision approaches.
			Introduce the student to the procedure for an approach with a loss of the primary flight instrument indicators.
2	16	Flight Lesson 21	Introduce the student to no-gyro radar vectoring and approach procedures.
2	17	Ground Lesson 18	
			The student should review instrument approach procedures as well as holding pattern entries and procedures in preparation for the stage exam.
2	18	Flight Lesson 22	Introduce VOR/DME RNAV, GPS, and Approach with Vertical Guidance (APV) approach procedures (if airplane is so equipped).
2	19	Ground Lesson 19	
2	20	Flight Lesson 23 --	The Chief Instructor, Assistant Chief Instructor, or a Designated Check Instructor will evaluate the student's proficiency in the proper execution of holding patterns and instrument approach procedures.
3	1	Ground Lesson 20	
3	2	Ground Lesson 21	
			The student should be introduced to IFR cross-country procedures by conducting an IFR cross-country over 50 nautical miles from the original point of departure with an emphasis on planning and departing.
3	3	Flight Lesson 24	The student should develop an understanding of the appropriate emergency procedures for enroute IFR operations.
3	4	Ground Lesson 22	
			Introduce the student to IFR flight planning applications by conducting an IFR cross-country over 50 nautical miles from the original point of departure, becoming familiar with IFR departure, enroute, and arrival procedures.
3	5	Flight Lesson 25	Review the appropriate emergency procedures for enroute IFR operations.
3	6	Ground Lesson 23	
3	7	Ground Lesson 24	
3	8	Ground Lesson 25	
			The student will continue to learn how to accurately plan and conduct an IFR cross-country flight and become more familiar with IFR departure, enroute, and arrival procedures.
			Introduce the student to aeronautical decision making and cockpit management concepts in the IFR environment.
			NOTE: The flight is designed to meet the cross-country requirements stated in FAR Part 141, Appendix C. It includes at least three different types of approaches using navigation systems, each approach executed at a different airport.
			The flight must be at least 250 nautical miles in length on federal airways or as routed by ATC. One leg of the flight must be at least 100 nautical miles in a straight line distance.
3	9	Flight Lesson 26	The flight must also be conducted under IFR in the category and class of airplane for which the course is approved.
			Increase the students proficiency in planning and conducting all phases of the IFR cross-country flight in preparation for the Stage III Exam.
			The student should understand the appropriate emergency procedures as well as resource management and decision making practices for enroute IFR operations.
3	10	Flight Lesson 27	Develop student competency in utilizing resource management and decision making skills.
3	11	Ground Lesson 26	
3	12	Flight Lesson 28 --	The Chief Instructor, Assistant Chief, or a Designated Check Instructor will evaluate the student's IFR cross-country skills. This is the final Stage Check in preparation for the instrument rating practical test.
3	13	Ground Lesson 27	
			The Chief Instructor, Assistant Chief, or a Designated Check Instructor will evaluate the student's IFR skills.
3	14	Flight Lesson 29 --	This is the END-OF-COURSE CHECK in preparation for the Instrument Rating Practical Test.

Create Training Record for: EXAMPLE STUDENT

Curriculum: **Instrument Rating Part 141**
Stage: 2 - **Flight Stage 2** Scoring: 1 thru 5
Lesson: 4 - **Flight Lesson 14**

Instructor: Lucas
Date / Time: 02/28/24 16:40

Sub-Activity	Status	Score
Flight by Reference to Instruments (FULL PANEL)		
Climbs/Descents		
Constant Airspeed Climb	Review	3
Constant Airspeed Descent	Review	4
Constant Rate Climb	Review	3
Constant Rate Descent	Review	3
Maneuvers		
Power Off Stalls	Review	4
Power On Stalls	Review	4
Recovery From Unusual Attitudes	Review	3
Straight and Level Flight	Review	4
Turns		
Steep Turns	Review	4
Standard Rate Turns	Review	4
Navigation Aids (FULL PANEL)		
Holding		
VOR Holding (STANDARD)	Introduce	3
VOR Holding (NON-STANDARD)	Introduce	3
NDB Holding (STANDARD)	Introduce	3
Emergency Operations		
Simulated Systems and Equipment Malfunctions		
Lost Communications	Review	4
Electrical System Failure	Review	4
Vacuum Pump Failure	Review	3
Overall Score		4

EXAMPLE ONLY
LESSON PASSED/COMPLETED

Training Remarks: (required)
EXAMPLE ONLY (PASSED)

Create Training Record for: EXAMPLE STUDENT

Curriculum: **Instrument Rating Part 141**
Stage: 2 - **Flight Stage 2** Scoring: 1 thru 5
Lesson: 4 - **Flight Lesson 14**

Instructor: Lucas
Date / Time: 02/28/24 16:40

Sub-Activity	Status	Score
Flight by Reference to Instruments (FULL PANEL)		
Climbs/Descents		
Constant Airspeed Climb	Review	3
Constant Airspeed Descent	Review	4
Constant Rate Climb	Review	2
Constant Rate Descent	Review	3
Maneuvers		
Power Off Stalls	Review	4
Power On Stalls	Review	4
Recovery From Unusual Attitudes	Review	3
Straight And Level Flight	Review	4
Turns		
Steep Turns	Review	4
Standard Rate Turns	Review	4
Navigation Aids (FULL PANEL)		
Holding		
VOR Holding (STANDARD)	Introduce	3
VOR Holding (NON-STANDARD)	Introduce	3
NDB Holding (STANDARD)	Introduce	3
Emergency Operations		
Simulated Systems and Equipment Malfunctions		
Lost Communications	Review	4
Electrical System Failure	Review	4
Vacuum Pump Failure	Review	3
Overall Score		2

Training Remarks: (required) EXAMPLE ONLY (FAILED/NOT COMPLETE)

Exhibit 16: AVI 2010 Sample Quizzes

AVI 2010
Air Traffic Control

Sample Quiz 1 Questions

1. Who is the largest employer of air traffic controllers in the United States?
   A. Department of Defense
   B. Federal Aviation Administration
   C. Contractor Operator
   D. Midwest ATC Services

2. Control tower controllers manage traffic in what area?
   A. Airport-controlled surfaces and within a few miles of the airport.
   B. Within a 40-mile radius of the primary airport using radar.
   C. Within a 20-mile radius of an aircraft carrier.
   D. None of the above.

3. Where do air traffic controllers working in a Terminal Radar Approach Control (TRACON) manage traffic?
   A. Airport-controlled surfaces and within a few miles of the airport.
   B, Within a 40-mile radius of the primary airport using radar.
   C, Within a 20-mile radius of an aircraft carrier.
   D, None of the above.

4. Air traffic controllers that guide airplanes flying outside of or above a TRACON airspace are_____controllers?
   A. Carrier Air Traffic Control Center
   B. Control Tower
   C. Range Control
   D. Enroute Center

5. True or False? You need to be a United States Citizen or naturalized to be employed as an air traffic controller with the FAA.
   True
   False

AVI 2010
Air Traffic Control

Sample Quiz 2 Questions

1. True or False? All Air Traffic Control Towers have radar.
   A. True
   B. False

2. Who was the first air traffic controller?
   A. Neil Armstrong
   B. Harry Truman
   C. Bill Darby
   D. Archie League

3. What facility provides pre-flight, in-flight, and en route communications and weather services to private and corporate aircraft?
   A. Flight Service Stations
   B. Control Towers
   C. Terminal Radar Approach Controls
   D. Air Route Traffic Control Centers

4. What year did the PATCO controller strike happen?
   A. 1969
   B. 1981
   C. 1986
   D. 1991

5. The first three airway stations are Chicago, Cleveland, and_____.
   A. Newark
   B. St Louis
   C. Los Angeles
   D. Miami

Exhibit 17: Stage 1 Exam AVI 2000, Stage 2 Exam AVI 2000, Student Pilot Pre-Solo Knowledge Exam Open Book

Sample Exams

Intro to Aviation (AVI 2000) **Stage I Exam FA/23**

NAME: **DATE:**

1) **What year was the first untethered balloon flight?**

A) 1331
B) 1617
C) 1783
D) 1903

2) **In 1981 NASA developed a new vehicle for space/ air travel, what was it?**

A) Atlas Rocket
B) Bell X-15
C) Mercury Capsule
D) Space shuttle

3) **When was the first twin engine introduced?**

A) 1903
B) 1941
C) 1634
D) 1855

4) **The first powered flight of an aircraft occurred in 1903.**

True or False.

5) **Who made the first prototype of what look like a helicopter?**

A) Da Vinci
B) Sikorsky
C) Bell
D) Galileo

6) **First bomber was introduced during WWII.**

True or False

7) **Who became the first person to walk on the Moon during NASA's Apollo 11 mission in 1969?**

A) Buzz Aldrin
B) Neil Armstrong
C) Buck Rodgers
D) Chuck Yeager

8) Who was the first female to fly across the Atlantic?

A) Patty Wagstaff
B) Amelia Earhart
C) Beth Hersman
D) Bessie Coleman

9) The Wright brothers made their historic first powered flight in Kitty Hawk, Nort Carolina on what date?

A) December 17, 1903
B) October 22, 1809
C) June 5, 1309
D) January 2, 1942

10) During World War I, what type of aircraft became famous for their dogfighting capabilities and were used by famous pilots like the Red Baron?

A) P-51 Mustang
B) Fokker D. VII
C) Spitfire
D) Sopwith Camel

11) Which aircraft was used for the first solo crossing the Atlantic nonstop?

A) Spirit of Louis
B) Skyhawk
C) Concord
D) Hindenburg

12) Which country developed the monoplane?

A) Germany
B) America
C) France
D) Brazil

13) During WWII Germans developed a new engine for aircraft which is still used today. what engine is it?

A) Radial
B) Diesel
C) Jet Engine
D) Scram Jet

14) Canada was the first to develop a fly by wire aircraft known as the CF-105 Arrow.

True or False

15) What year did the first jet airliner fly?

A) 1935
B) 1903
C) 1977
D) 1951

16) What is the name of the first human-made satellite, launched by the Soviet Union in 1957, which marked the beginning of the space age?

A) Sputnik 1
B) Ranger 1
C) Vostok 1
D) Mercury 7

17) 1935 a new development of tracking aircraft was created, what was that technology?

A) GPS
B) Radar
C) ADSB
D) VOR

18) Who was the first African American aviator known for breaking the color barrier in commercial aviation as the first African American to hold an international pilot license?

A) Bessie Coleman
B) Patty Wagstaff
C) Amelia Earhart
D) Beth Hersman

19) Which 2 individuals are credited with designing and building the first successful powered, controlled, and sustained flight in a heavier-than-air aircraft?

A) Aldrin and Armstrong
B) Earhart and Noonan
C) Orville and Wilbur Wright
D) Montgolfier Brothers

20) What event marked the beginning of the jet age in aviation?

A) The Boing 747
B) The supersonic flight by Chuck Yeager in Bell X-1
C) Transatlantic supersonic flight of the Concord
D) First passenger flight of the Haviland Comet

21) In World War 1, what type of aircraft was famously flown by fighter aces like Manfred von Richton (THE RED BARON) and Eddie Rickenbacker?

A) Triplane
B) Biplane
C) Jet fighter
D) Monoplane

22) What airline manufacture grew to challenge the Boeing company through its technical innovations and fleet of diverse aircraft?

A) Lockheed Martin
B) Airbus Industry
C) McDonnell Douglas
D) Embraer

23) What is the name of the first airplane to fly faster than the speed of sound with a pilot on board?

A) X-15
B) SR-71 Blackbird
C) P-51 Mustang
D) Bell X-1

24) What year was Ohio officially declared the birthplace of aviation?

A) 1903
B) 2003
C) 1987
D) 1944

25) Who was the first person to fly solo around the world?

A) Wiley Post
B) Amelia Earhart
C) Chuck Yeager
D) Wolfgang Langewiesche

26) What was the name of the first commercial airline?

A) American Airlines
B) United
C) Spirt
D) Delta

27) Who developed the first successful air balloon?

A) Ludwig Hindenburg
B) Montgolfier Brothers
C) Sun Tzu
D) Leonardo Da Vinci

28) How long did the wright glider experiment fly?

A) 2 Minutes
B) 47 Seconds
C) 26 Seconds
D) 3 Seconds

29) Whose ideas that pushed flying helicopter?

A) Alexander Gram Bell
B) Otto Lilienthals
C) Igor Sikorsky
D) Leonardo da Vinci

30) What early failed porotype showed a possibility of powered flight?

A) Hot Air Balloons
B) Sam Langlet aerodrome
C) Monoplane
D) Wright flier

31) Who built the first glider concept?

A) Leonardo da Vinci
B) George Cayley
C) Wright Brothers
D) Montgolfier Brothers

32) Name of first person to solo across the Atlantic ocean.

A) Sallie Wright
B) Charles Lindbergh
C) Ludwig Hindenburg
D) Amelia Earhart

33) The FAA meaning of CFI?

A) Chief Flight Instructor
B) Commercial Flight Instructor
C) Certified Flight Instructor
D) Corporate Flight Instructor

34) Who were the first African American military fighter pilots?

A) 56th Fighter group "Zemkes Wolfpack"
B) 332nd Fighter Group "Tuskegee Airmen"
C) Tainan Air Group
D) First American Volunteer Group "Flying Tigers"

35) Who was the first person to have a successful maned glider flight?

A. Orville Wright
B. George Cayley
C. Otto Lilienthal
D. Victor Tarim

36) How many B-10 Martins were made during its production years?

A. 348
B. 1534
C. 791
D. 138

37) What was the first flying man-made object?

A. Chinese lanterns
B. Rotor wing toys
C. Kites
D. None of the above

38) When was the first know commercial airline crash?

A.1953
B.1908
C.1966
D.1920

39) Which aircraft is often referred to as the "Queen of the skies" and has been a pop choice for the long-haul commercial flight since its introduction in 1969?

A) F-15 Eagle
B) Boeing 747
C) Airbus A-320
D) Haviland Comet

40) Explorer 1 was the first U.S space shuttle to be successfully launched into space.

True or False

NAME: _____ **DATE:** _____

AVI 2000 Exam II:
Fundamentals of Lift, Types of Airplane Stability, and Airplane Control Surfaces

1. What is the scientific principle that explains how an airplane generates lift?
    a) First Law of Thermodynamics
    b) Bernoulli's Principle
    c) Boyle's Law
    d) Pascal's Law

2. Draw and label the THREE axes of rotation on an aircraft.

3. How does the use of flaps affect an aircraft's stall speed?

4. The angle between the wing and the oncoming air is known as:
    a) Aileron
    b) Flap
    c) Angle of Attack
    d) Rudder

5. Explain/Describe the FOUR forces acting on an airplane in flight.

6. Explain/Describe what happens (and why) to lift when the angle of attack of a wing increase (AoA is **NOT** beyond the critical angle of attack).

7. Explain/Describe longitudinal stability in an airplane.

8. Explain/Describe the effect/s of adding thrust to a stable airplane trimmed to maintain level and flight.

    BOTH:

    Short term:

    Long term:

9. When in a fully developed stall, which control surface is **NOT** used to correct for roll?
    a) Ailerons
    b) Elevators
    c) Rudder
    d) Flaps

10. The force that opposes the motion of an airplane through the air is called:
    a) Thrust
    b) Lift
    c) Weight
    d) Drag

11. _____ is the force that acts opposite to drag during flight.

12. _____ is the only force acting vertically on an airplane during flight.

13. In an **unstable** aircraft, what happens when a disturbance causes it to roll?

14. Which part of an airplane's control system is most responsible for controlling the aircraft's pitch?
    a) Elevator
    b) Aileron
    c) Rudder
    d) Flaps

15. Explain/Describe Density Altitude (must include temperature and humidity)

16. What is the critical angle of attack?
    a) The maximum angle of attack before the aircraft stalls
    b) The angle of attack at which the aircraft achieves its maximum speed
    c) The angle of attack at which the aircraft generates the least lift
    d) The angle of attack that is irrelevant to lift generation

17. Explain/Describe lateral stability in an airplane.

18. Explain/Describe the effects on **stability and performance** of an airplane with an AFT center of gravity.

19. Which of the following axes of an aircraft is associated with pitch?

20. Which of the following statements is true about lift?
    a) Lift is a rearward force.
    b) Lift is not affected by airspeed.
    c) Lift is not proportional to the angle of attack.
    d) Differences in air pressure create lift.

21. In a **stable** aircraft, what happens when a disturbance causes it to pitch up?

22. What is the purpose of wing flaps on an aircraft?
    a) To increase lift and reduce drag
    b) To decrease lift and increase drag
    c) To provide stability during turns
    d) To control yaw

23. Explain/Describe the difference between the TWO types of stability (Static, Dynamic).

24. The axis of an aircraft associated with roll?

25. _____ is the term for the resulting condition in which an aircraft wing exceeds the critical angle of attack.

26. Explain/Describe the primary flight control surfaces on an airplane.

27. Which control surface is used to control the roll of the aircraft?

28. What is the term for the control surfaces that are located on the trailing edge of the wings and can be extended to increase lift and drag?

29. What is the **primary** factor affecting the lift generated by an airplane wing?
    a) Wing shape
    b) Air temperature
    c) Aircraft weight
    d) Engine power

30. Which control surface is used to control the yaw of the aircraft?

31. What is the function of the trim tabs on control surfaces?

32. Explain/Describe how ailerons work to control roll.

33. What control surface is commonly used to slow an aircraft during landing?

34. Describe how rudders work to control yaw.

35. What is elevator trim maintaining in straight and level flight?
    a. Altitude
    b. airspeed
    c. Heading
    d. Pitch

36. What are the THREE typical control inputs (changes from straight and level cruise flight) for an aircraft to perform a climb?

37. What are the THREE typical control inputs (changes from straight and level cruise flight) for an aircraft to perform a descent?

38. What is the purpose of a flaps system on an aircraft?

39. Which control surface is used to control the pitch of the aircraft?

40. Explain/Describe how elevators work to control pitch.

41. **WORTH 20 POINTS:**

    Explain/Describe each type of:

    Static Stability (10 Points)
        Positive
        Neutral
        Negative

    Dynamic Stability (10 Points)
        Positive
        Neutral
        Negative

Name: Date:

Student Pilot Pre-solo Knowledge Exam – OPEN BOOK

Answer each question in the space provided, using the FARs, AIM, Pilot's Operating Handbook and the ASI Operations Manual. Use the space to the left of the question number to list the reference for each question.

1) What preflight action is required of a pilot prior to flight?

2) List the definition of careless and reckless operation.

3) What is the minimum amount of time after the consumption of alcohol is a pilot required to wait?

4) Will the aircraft still run if the master switch is turned off? Why?

5) Draw an airport traffic pattern, labeling each leg and the proper entry and departure points and the traffic pattern altitude and CTAF.

6) What is the authority and responsibility of the Pilot-In-Command?

7) When are you permitted to deviate from an ATC instruction?

8) When an aircraft is approaching another head-on, each pilot should alter their courses to the _____.

9) What must a pilot do before entering Class D airspace?

10) What is the minimum safe altitude anywhere? Over congested areas? Over non-congested areas?

11) List the documents that must be on board the aircraft.

12) What is the minimum reserve fuel required for day VFR operations?

13) List the day VFR weather minimums in Class G, E and D airspace.

14) What are you, as a student pilot, required to have before operating in Class B airspace?

15) Why is it necessary to drain fuel out of the sumps after refueling and before the first flight of the day?

16) List and describe each of the light gun signals available from air traffic control

17) Describe the proper avoidance for wake turbulence

18) When are you required to wear a safety belt?

19) During run-up, what is the maximum allowable RPM drop for each magneto? Between both?

20) As per the Operations Manual, what are the weather minimums for Dual Day VFR local flights?
Solo local VFR flights?

21) Each cross-country flight will be planned so as to land at your destination with a minimum of _____ hour(s) fuel reserve based upon _____ % power setting for engine performance.

22) Describe Practice the EASE areas and WEST Practice areas. Which is the primary practice area for VFR Students?

23) Are passengers ever authorized on training flights?

24) Are SOLO operations permitted on grass runways?

25) Landings are permitted only at public use airports with hard surface runways of at least _____ feet in length.

Corrected to 100% by _____

CFI / AGI #: _____ Expires: _____

RE: Aviation Program Proposals Update

Smccann@highered.ohio.gov <Smccann@highered.ohio.gov>
Wed 3/20/2024 1:04 PM
To:Mackh, Bruce Martin <bruce.mackh@wright.edu>;Palmer, Daniel <daniel.palmer@wright.edu>

Bruce,

Both the AAS and BS Aviation programs look great. Please feel free to submit to HLC today!

Stephanie
Stephanie McCann, Ph.D.
Associate Vice Chancellor
Program Development and Approval
Ohio Department of Higher Education

Ohio Department of Higher Education

GO TO THIS WEBSITE FOR ADDITIONAL DOCUMENTATION

HLC Aviation Associate of Applied Science Application and Materials

https://health-education-human-services.wright.edu/about/hlc-aviation-associate-of-applied-science-application-and-materials