

Term Information

Effective Term Autumn 2026
Previous Value *Spring 2026*

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

add AVAITN 2400 as GE theme course in Traditions, Cultures and Transformations

What is the rationale for the proposed change(s)?

to expose wider range of students to UAS concepts that will enhance career opportunities and build understanding of disruptive technologies

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

none

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area	Aviation
Fiscal Unit/Academic Org	Aviation - D1415
College/Academic Group	Engineering
Level/Career	Undergraduate
Course Number/Catalog	2400
Course Title	Fundamentals in Unmanned Aircraft Systems
Transcript Abbreviation	AVN: Fundamtls UAS
Course Description	This course introduces the student to Unmanned Aircraft Systems. aircraft aerodynamics and aircraft performance, meteorology, operating within the National Airspace System, regulations, and use-cases of UAS (unmanned aerial systems). This course also provides exposure on UAS career paths, an overview of the various hardware and software that are important to the UAS landscape, and human factors.
Semester Credit Hours/Units	Fixed: 3

Offering Information

Length Of Course	14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	Yes
Is any section of the course offered	100% at a distance Greater or equal to 50% at a distance
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus, Lima, Mansfield, Marion, Newark, Wooster

Previous Value

Columbus, Lima, Wooster

Prerequisites and Exclusions

Prerequisites/Corequisites

Exclusions

Electronically Enforced

Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code

49.0101

Subsidy Level

Baccalaureate Course

Intended Rank

Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Traditions, Cultures, and Transformations

The course is an elective (for this or other units) or is a service course for other units

Previous Value

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- Students analyze FAA regulations to determine legal and safe drone operations.
- Airspace classification, weather interpretation, and mission planning require structured decision-making.
- Weekly journal prompts encourage self-assessment of risk-based choices and operational logic.
- *Explain the principles of aerodynamics of an aircraft*

Previous Value

Define crewed and uncrewed aircraft and their physical components and roles in the operation

Calculate the performance of a given aircraft

- *Define and describe the National Airspace System (NAS) as it relates to crewed and uncrewed aircraft*
- Describe how meteorological conditions affect flight dynamics and operations within the NAS*
- *Demonstrate knowledge of the Aeronautical Decision-Making Model*
- Explain how hazardous attitudes affect flight*
- Interpret a VFR sectional chart*
- *Assess and demonstrate knowledge of professionalism within aviation*
- Locate and explain relevant and appropriate regulations in 14 CFR Parts 61, 91, 107 and beyond*
- Identify runway signs and markings and indicate their meaning to the pilot*
- *Locate and interpret both NOTAMS and aviation weather products in both written and graphic format*
- Evaluate conditions for safe operation of flight*

Content Topic List

- Course Intro
 - Ethics of UAS
- History of UAS
 - Military to Civilian UAS
- Part 107
 - Airspace
- Drone Hardware
 - Sensor Systems
- Weather
 - Charts
 - Performance
- Risk Management
 - Crew Resource Management
- Global Regulations
 - Cultural Perspectives
- Drone Industry
 - Mission Design
- Access, Equity, Representation
 - In UAS
- Autonomy
 - Drone Subcultures

Previous Value

- *Introduction to UAS, Unmanned aircraft*
- *Aviation Weather*
- *FAA resources, ratings, Airworthiness, airspace classification, part 91 & 107*
- *Flight Rules, airspace, IFR, airports, LAANC*
- *Human factors, Crew resource management*
- *Aeronautical Decision-Making*
- *Professionalism in Aviation*

Sought Concurrence

No

Attachments

- 2400 updated syllabus clean.docx: Updated AVIATN 2400 Syllabus
(*Syllabus. Owner: Wade,Christopher Andrew*)
- Updated submission form.pdf: GE Themes Submission Form
(*Other Supporting Documentation. Owner: Wade,Christopher Andrew*)

Comments

- Please upload all required components of GE Theme proposal per the email I sent. (by Matyas,Corinne on 01/13/2026 11:11 AM)
- no DL questionnaire is needed because it is already an approved DL course (by Wade,Christopher Andrew on 01/13/2026 10:52 AM)
- Have the instructor complete the DL questionnaire. Also refer instructor the GE checklist (by Quinzon-Bonello,Rosario on 09/11/2025 09:36 AM)

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Wade,Christopher Andrew	07/22/2025 10:33 AM	Submitted for Approval
Revision Requested	Quinzon-Bonello,Rosario	09/11/2025 09:21 AM	Unit Approval
Submitted	Wade,Christopher Andrew	01/13/2026 10:53 AM	Submitted for Approval
Revision Requested	Matyas,Corinne	01/13/2026 11:11 AM	Unit Approval
Submitted	Wade,Christopher Andrew	01/13/2026 11:23 AM	Submitted for Approval
Approved	Matyas,Corinne	01/28/2026 11:17 AM	Unit Approval
Approved	Matyas,Corinne	01/28/2026 11:18 AM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Neff,Jennifer Vankieerbergen,Bernadette Chantal Wade,Macy Joy Steele,Rachel Lea	01/28/2026 11:18 AM	ASCCAO Approval

AVN 2400
Fundamentals of UAS in Aviation
Fall 2026

Instructor: Mark Bolin
Office: Bolz Hall
E-mail: bolin.98@osu.edu
Course Location: Online
Class time: Asynchronous online
Office Hours: By appointment
Credit Hours: 3
Communication: Via email or the Carmen drop box (for assignments). Please allow 24 hours for a response.

Course Description:

This course explores how drone technology is transforming traditional practices across diverse cultures, from agriculture and film making to disaster response and environmental monitoring. By examining global case studies, students will understand how societies adapt to and integrate emerging technologies, reshaping cultural norms and economic systems. Through hands-on learning and critical reflection, students will engage with the ethical, social, and cultural implications of technological transformation in a global context.

Goals & Learning Outcomes:

This course fulfills the GE requirements for: New GE: Theme Traditions, Cultures, and Transformations.

Traditions, Cultures, and Transformations GE Goals:

1. Successful students will analyze an important topic or idea at a more advanced and in-depth level than in the Foundations component.
2. Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.
3. Successful students will engage in a systematic assessment of how cultures and sub-cultures develop and interact, historically or in contemporary society.
4. Successful students will engage in a systematic assessment of differences among societies, institutions, and individuals' experience within traditions and cultures.

Traditions, Cultures, and Transformations GE Expected Learning Outcomes:

Successful students are able to:

- 1.1. Engage in critical and logical thinking about the topic or idea of the theme.
- 1.2. Engage in an advance, in-depth, scholarly exploration of the topic or idea of the theme.
- 2.1. Identify, describe, and synthesize approaches or experiences as they apply to the theme.
- 2.2. Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.
- 3.1. Describe the influence of an aspect of culture (e.g., religious belief, gender roles, institutional organization, technology, epistemology, philosophy, scientific discovery, etc.) on at least one historical or contemporary issue.
- 3.2. Analyze the impact of a "big" idea or technological advancement in creating a major and long-lasting change in a specific culture.
- 3.3. Examine the interactions among dominant and sub-cultures.
- 3.4. Explore changes and continuities over time within a culture or society.
- 4.1. Recognize and explain differences, similarities, and disparities among institutions, organizations, cultures, societies, and/or individuals.
- 4.2. Explain ways in which categories such as race, ethnicity, and gender and perceptions of difference impact individual outcomes and broader societal issues.

Prerequisites

None

Course Goals and Learning Outcomes

ELO 1.1 – Engage in critical and logical thinking

- Students analyze FAA regulations to determine legal and safe drone operations.
- Airspace classification, weather interpretation, and mission planning require structured decision-making.
- Weekly journal prompts encourage self-assessment of risk-based choices and operational logic.

ELO 1.2 – Engage in advanced, in-depth, scholarly exploration of the topic or ideas within this theme

- Capstone mission project incorporates research on drone applications and societal impact.
- Students engage with FAA documentation and industry literature to support project proposals.
- Written assignments require synthesis of regulatory, ethical, and technical sources.
- Lectures incorporate scholarly analysis of UAS in diverse sectors.

ELO 2.1 – Identify, describe, and synthesize approaches or experiences

- Students complete digital drone anatomy diagrams and compare platform capabilities.
- Post-mission reflections and peer feedback develop synthesis and self-correction skills.

ELO 2.2 – Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work

- Weekly journal entries track progress in understanding UAS operations and broader impacts.
- Students creatively design drone missions aligned with personal interests or community needs.
- Peer review encourages growth mindset and reflection on collaboration and communication.
- Final journal reflection summarizes learner growth, skill acquisition, and applied knowledge.

ELO 3.1 – Describe the influence of an aspect of culture on a historical or contemporary issue

- Students explore how cultural attitudes toward surveillance, privacy, and innovation influence drone legislation.
- Comparative essay analyzes international regulatory differences rooted in cultural values.
- Lectures highlight institutional trust, public safety priorities, and evolving perceptions.

ELO 3.2 – Analyze the impact of a “big” idea or technological advancement in creating lasting cultural change

- Case studies examine drone technology's disruption of sectors like logistics and agriculture.

- Capstone mission proposals require an explanation of long-term impact on industries or communities.

ELO 3.3 – Examine the interactions among dominant and sub-cultures

- Students investigate subcultural drone groups—e.g. drone racers, citizen journalists, indigenous conservation teams.
- Assignments and journal prompts analyze how alternative drone communities challenge or adapt to mainstream norms.

ELO 3.4 – Explore changes and continuities over time within a culture or society

- Students build a drone history timeline spanning military origins to widespread civilian use.
- Lectures examine cultural milestones, policy shifts, and ethical turning points.
- Journals encourage comparison of early drone perceptions vs. current applications and debates.

ELO 4.1 – Recognize and explain differences among institutions, organizations, cultures, and societies

- Students map UAS regulations across countries and agencies (e.g. FAA, EASA, ICAO).
- Assignments promote understanding of how cultural and organizational structures shape technology.

ELO 4.2 – Explain how identity and perceptions of difference impact outcomes

- Written reflections and optional interviews explore how race, gender, and geography affect UAS access.
- Capstone missions may incorporate outreach strategies or tools designed for equity and inclusion.

Feedback and Response Time: For tests, please expect 10-14 business days. For assignments, please expect up to 7 days.

For email and Carmen response, please expect 24 hours when classes are in session.

How this online course works

Mode of delivery

This course is 100% online. There are no required sessions when you must be logged in to Carmen at a scheduled time beyond optional office hours. The course is paced, however, and participation is required weekly.

Pace of online activities

This course is designed to replicate the two meeting days per week model of in-person coursework. Each week will have content subdivided for two days, with assignments due weekly at 11:59 PM on Sundays. It is the student's responsibility to review all materials before submitting assignments. This course is **not designed** to be completed in a single day per week, and students should schedule their time accordingly.

Credit hours and work expectations

This is a **3-credit-hour Session 2 course**. According to Ohio State policy (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average. We will be covering the same basic themes that a full-semester course would in half the time, so please apportion your time accordingly.

Participation requirements

Because this is an online course, your attendance is based on your online activity and participation. The following is a summary of students' expected participation:

Participating in Online Activities

You will be expected to turn in weekly assignments in this course, including discussion boards, quizzes, and primary source reflections. Quizzes will be how I monitor your weekly attendance and participation for the purposes of attendance for the university registrar.

Office hours and live sessions (optional)

All live, scheduled events for the course, including my office hours, are optional.

Course communication guidelines

Writing Style

Assignments in this class are formal writing assignments, and should adhere to standard English grammar, spelling, and writing conventions. As these things impact the comprehensibility of your writing, they will be a factor in all formal writing grades.

Tone and Civility

In this course we will be tackling difficult and sensitive topics. I expect all students to communicate with each other and the instructor with kindness, respect, and basic civility.

Discriminatory statements, hateful comments, or incivility of any kind will not be tolerated in this course.

Citing Your Sources

In this course you are expected to cite your sources for any quotations, paraphrases, or summaries in formal writing assignments. Specific assignment expectations are outlined below. Unless otherwise instructed, you will use either MLA or Chicago style citations.

Citation is an important part of academic work, and failure to cite your sources properly, even in summary, constitute plagiarism and academic misconduct.

Protecting and Saving Your Work

In this course you will be expected to turn in edited PDFs and Word Documents. I would highly encourage you to work on these using programs on your computer which auto-save and do not require internet connectivity, like Adobe and Microsoft Office. This way if you encounter issues with internet connection or a failed submission upload you do not lose your work and have time-stamp evidence to demonstrate that you completed the assignment ahead of the deadline. **Ultimately it is your responsibility to turn in all assignments on time regardless of technological issues.**

Course materials and technology

Course technology

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743
- Baseline technical skills for online courses
- Basic computer and web-browsing skills
- Navigating Carmen: for questions about specific functionality, see the [Canvas Student Guide](#)

Required technology skills specific to this course.

- Basic computer and web-browsing skills
- Navigating Carmen (go.osu.edu/canvasstudent)
- CarmenZoom virtual meetings (go.osu.edu/zoom-meetings)

Required equipment

- Computer: current Mac (OS X) or PC (Windows 7+) with high-speed internet connection

- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in laptop or tablet mic or external microphone
- Other: a mobile device (smartphone or tablet) or landline to use for BuckeyePass authentication

Required software

- [Microsoft Office 365](#): All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found [at go.osu.edu/office365help](https://go.osu.edu/office365help).

Carmen access

You will need to use [BuckeyePass](#) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](#) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the [Duo Mobile application](#) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

Course Materials

FAA Remote Pilot – Small Unmanned Aircraft Systems Study Guide FAA-G-8082-22 - Free

https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/media/remote_pilot_study_guide.pdf

ASA Airman Knowledge Testing Supplement - Sport, Recreational, Remote and Private Pilot - Free

Print copy or Apple iPad with digital

copy https://www.faa.gov/training_testing/testing/supplements/media/sport_rec_private_akt.pdf

FAA Pilot's Handbook of Aeronautical Knowledge (2023) – Free

https://www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak

Certifications and Industry Exams

This course is aimed at preparing you for the FAA Part 107 Remote Pilot exam. The cost of the Part 107 exam is NOT covered by course fees. While not required to pass this class, this will be a prerequisite for the next sUAS (Aviation 2401) course which will be focused on hands-on flight, mission planning, and flight safety.

Code of Conduct

ACADEMIC HONESTY

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee ([Faculty Rule 3335-5-48.7](#)). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

QUIZZES AND EXAMS

You must complete the course quiz by yourself, without any external help or communication.

WRITTEN ASSIGNMENTS

Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should follow APA style to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.

REUSING PAST WORK

In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with me.

COLLABORATION AND INFORMAL PEER-REVIEW

The course includes many opportunities for formal collaboration with your classmates. While study groups and peer-review of major written projects is encouraged, remember that comparing answers on a quiz or assignment is not permitted. If you're unsure about a particular situation, please feel free just to ask ahead of time.

Assignments

Assignments: (Assignment Details Can Be Found on Carmen)

- 7 Discussions – 10 points each
- 15 Journal Reflections – 5 points each
- 9 activities – 10 points each
- 1 Quiz – 20 points
- 1 Exam – 50 points
- 5 Final Project Deliverables – 10 points each

Total Points: 355 points

Weekly “Low Stakes” Assignments: (Assignment Details Can Be Found on Carmen)

These are a combination of things like discussion board posts, videos, responses to readings, among other things. These are smaller, shorter assignments designed to help you build the skills you will need to be successful on the larger assignments. The points will usually range between 2 and 5.

Late Assignment Policy: Unless there is an extenuating circumstance (military leave, bereavement leave, illness, etc.) that we ***have discussed before the assignment is due***, no late assignments will be accepted. Period. Late assignments will receive a '0' grade.

Course Grading Policy

Grading Scale:

93 - 100 (A)	77-79.9 (C+)	Below 60 (E)
90 – 92.9 (A-)	73-76.9 (C)	
87 – 89.9 (B+)	70-72.9 (C-)	
83 – 86.9 (B)	67-69.9 (D+)	
80 – 82.9 (B-)	60-66.9 (D)	

Copyright Disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on Diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Statement on Title IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

Your mental health

A source available at OSU as a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty

concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you find yourself feeling isolated, anxious or overwhelmed, please know that there are resources to help: ccs.osu.edu. You can reach an on-call counselor when CCS is closed at (614) 292-5766 and 24 hour emergency help is also available through the 24/7 National Prevention Hotline at 1-(800)-273-TALK or at suicidepreventionlifeline.org. The Ohio State Wellness app is also a great resgo.osu.edu/wellnessapp.

Requesting accommodations

Disability Services:

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are ill and need to miss class, including if you are staying home and away from others while experiencing symptoms of a viral infection or fever, please let me know immediately. In cases where illness interacts with an underlying medical condition, please consult with Student Life Disability Services to request reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu.

Religious Accommodations:

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic

requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Office of Institutional Equity](#). (Policy: [Religious Holidays, Holy Days and Observances](#))

Reserve Clause:

The professor reserves the right to make changes to the syllabus as necessary to meet the objectives of the course, to compensate for missed classes or schedule changes, or for similar legitimate reasons. Students will be notified of any such changes to the syllabus in adequate time to adjust to those changes.

Course Schedule

***Subject to change as needed. Updates will be posted to Carmen**

Date/week	Material	Assignment	Due date
Week 0	TRUST Test		
Week 1	Course Intro Ethics of UAS	Discussion – Introduce yourself Journal - Reflection	Aug 26
Week 2	History of UAS Military to Civilian UAS	Activity - Timeline of UAS Journal - Reflection	Sep 3
Week 3	Part 107 Airspace	Quiz - TRUST Test Activity - Airspace Journal - Reflection	Sep 9
Week 4	Drone Hardware Sensor Systems	Activity - Drone Diagram Journal - Reflection	Sep 16
Week 5	Weather Charts Performance	Discussion –Weather Activity - Flight Planning Journal - Reflection	Sep 23
Week 6	Risk Management Crew Resource Management	Activity – Emergency Checklist Discussion – Importance of CRM in UAS operations Journal - Reflection	Sep 30
Week 7	Exam - Midterm	Exam - Midterm	Oct 7
Autumn Break	No class	No class	No class
Week 8	Global Regulations Cultural Perspectives	Activity – Global regulations Discussion – Global regulations Journal - Reflection	Oct 15

Week 9	Drone Industry Mission Design	Project Deliverable – Submit mission proposal draft Journal - Reflection	Oct 21 Oct 21
Week 10	Access, Equity, Representation In UAS	Discussion - Barriers to entry Journal - Reflection	Oct 28 Oct 28
Week 11	Autonomy Drone Subcultures	Activity – Flight Plan Journal - Reflection	Nov 4 Nov 11
Week 12	Capstone Proposal Draft	Assignment – Submit Proposal Draft flight plan Discussion – Final Project Journal - Reflection	Nov 18 Nov 18
Week 13	Mission Brief	Assignment – Present mission Journal – Reflection	Nov 25 Nov 25
Week 14	Mission Brief	Discussion – Mission Brief feedback Journal - Reflection	
Week 15 and Finals	Final Project Submission	Assignment – Presentation of Project Journal – Final Reflection	Dec 2

GE Theme course submission worksheet: Traditions, Cultures, & Transformations

Overview

Courses in the GE Themes aim to provide students with opportunities to explore big picture ideas and problems within the specific practice and expertise of a discipline or department. Although many Theme courses serve within disciplinary majors or minors, by requesting inclusion in the General Education, programs are committing to the incorporation of the goals of the focal theme and the success and participation of students from outside of their program.

Each category of the GE has specific learning goals and Expected Learning Outcomes (ELOs) that connect to the big picture goals of the program. ELOs describe the knowledge or skills students should have by the end of the course. Courses in the GE Themes must meet the ELOs common for all GE Themes and those specific to the Theme, in addition to any ELOs the instructor has developed specific to that course. All courses in the GE must indicate that they are part of the GE and include the Goals and ELOs of their GE category on their syllabus.

The prompts in this form elicit information about how this course meets the expectations of the GE Themes. The form will be reviewed by a group of content experts (the Theme Advisory) and by a group of curriculum experts (the Theme Panel), with the latter having responsibility for the ELOs and Goals common to all themes (those things that make a course appropriate for the GE Themes) and the former having responsibility for the ELOs and Goals specific to the topic of **this** Theme.

Briefly describe how this course connects to or exemplifies the concept of this Theme (Traditions, Cultures, & Transformations)

In a sentence or two, explain how this class “fits” within the focal Theme. This will help reviewers understand the intended frame of reference for the course-specific activities described below.

(enter text here)

Connect this course to the Goals and ELOs shared by *all* Themes

Below are the Goals and ELOs common to all Themes. In the accompanying table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The specifics of the activities matter—listing “readings” without a reference to the topic of those readings will not allow the reviewers to understand how the ELO will be met. However, the panel evaluating the fit of the course to the Theme will review this form in conjunction with the syllabus, so if readings, lecture/discussion topics, or other specifics are provided on the syllabus, it is not necessary to reiterate them within this form. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

Goal 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities.

Goal 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

	Course activities and assignments to meet these ELOs
ELO 1.1 Engage in critical and logical thinking.	
ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or ideas within this theme.	
ELO 2.1 Identify, describe, and synthesize approaches or experiences.	
ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.	

Goals and ELOs unique to Traditions, Cultures, & Transformations

Below are the Goals and ELOs specific to this Theme. As above, in the accompanying Table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

GOAL 3: Successful students will engage in a systematic assessment of how cultures and sub-cultures develop and interact, historically or in contemporary society.

GOAL 4: Successful students will engage in a systematic assessment of differences among societies, institutions, and individuals' experience within traditions and cultures.

	Course activities and assignments to meet these ELOs
ELO 3.1 Describe the influence of an aspect of culture (religious belief, gender roles, institutional organization, technology, epistemology, philosophy, scientific discovery, etc.) on at least one historical or contemporary issue.	
ELO 3.2 Analyze the impact of a “big” idea or technological advancement in creating a major and long-lasting change in a specific culture.	
ELO 3.3 Examine the interactions among dominant and sub-cultures.	
ELO 3.4 Explore changes and continuities over time within a culture or society.	
ELO 4.1 Recognize and explain differences, similarities, and disparities among institutions, organizations, cultures, societies, and/or individuals.	
ELO 4.2 Explain ways in which categories such as race, ethnicity, and gender and perceptions of difference, impact individual outcomes and broader societal issues	