**Course Prefix/Number/Title:** UAS 107 – Commercial UAS Operations – Online/Summer

**Number of Credits:** 2

**Course Description:** This course gives students the knowledge needed to earn a Commercial sUAS Certificate as outlined in Chapter 14 CFR Part 107 of the Federal Aviation Administration regulations. Topics such as weather, airspace, on and off airport operations, emergency procedures and human factors will be explored in detail.

**Pre-/Co-requisites:** None

**Course Objectives:** Upon successful completion of this course students will be able to:

- Understand the current FAA regulations under 14 CFR Part 107.
- Identify appropriate airspace using sectional charts.
- Assess risks from various sources, such as weather, airspace, equipment, and surrounding areas.
- Be prepared to take the FAA's aeronautical knowledge examination.

**Instructor:** Michelle Cauley

**Office:** Molberg 22          **Office Hours:** Summer Hours by Appointment

**Phone:** 701-228-5498          **Email:** michelle.cauley@dakotacollege.edu

**Lecture/Lab Schedule:** Online

**Textbook(s):** All materials will be provided throughout the semester

**Course Requirements:** This is an introductory course. Students are expected to listen to recorded lectures and assigned homework and quizzes in a timely manner. Points will come from homework, quizzes, professionalism, and exams. The breakdown will be as follows:

| Requirement | Final Grade Percentage |
|---|---|
| Weekly Quizzes | 25% |
| Assignments / Homework Tasks | 25% |
| Professionalism | 20% |
| Final Exam | 30% |
| Total | **100%** |

**Homework:** There will be a combination of assigned readings and traditional assignments. Late homework will be accepted with a deduction of 10% per week it is turned in late. All homework will be due on Monday mornings of the next week.

**Professionalism:** In preparation for the real world, your class grade will be dependent upon professionalism. This means you will be graded on a combination of engagement in learning, weekly check-ins, online discussion work, and meeting deadlines. Weekly check-ins with your instructor are also part of this grade.

**Quizzes:** There will be a weekly quiz over each of the topic sections. Each quiz will have 10 questions worth 2 points each for a total of 20 points. Quizzes are due on the Monday at the start of the next week's class. The quizzes are designed to model what you would actually see on the FAA

Aeronautical Knowledge Exam. The quizzes are timed (60 minutes) and three attempts are allowed. The highest attempt will be graded if completed by the date assigned.

**Exams:** Exams in the course are meant to simulate the actual FAA Aeronautical Knowledge Examination. You will be able to take this exam as many times as you want in preparation for the exam. I will take your highest score as your course exam grade. However, in real life, you will only get one shot at the exam every 2 weeks and each attempt costs you $160.

**Grading Percentages:**

| Total Point Percentage | Letter Grade |
|---|---|
| 90% and up | A |
| 80% - 89.99% | B |
| 70% - 79.99% | C |
| 60% - 69.99% | D |
| 59.99% and below | F |

**Tentative Course Outline:**

| Week of: | Topic | Tasks Due | Due Dates |
|---|---|---|---|
| June 2-6 | Welcome FAA Drone Regulations | • Syllabus Quiz<br>• Download Test Book<br>• Welcome Post | June 9 |
| June 9 – 13 | FAA Regulations | • FAA Homework<br>• Quiz #1<br>• Discussion Post | June 16 |
| June 16 – 20 | National Airspace | • NAS Homework<br>• Quiz #2<br>• Discussion Post | June 23 |
| June 23 – 27 | Reading Sectional Charts | • Lat & Long Homework<br>• Quiz #3<br>• Discussion Post | June 30 |
| June 30 – July 4 | Airport Operations | • Airport Ops Homework<br>• Quiz #4<br>• Discussion Post | July 7 |
| July 7 – 11 | Weather | • Weather Forecast HW<br>• Quiz #5<br>• Discussion Post | July 14 |
| July 14 – 18 | Best Practices and Flight Operations | • Flight Scenario HW<br>• Quiz #6<br>• Discussion Post | July 21 |
| July 21 – 25 | 107 Exam Prep Steps to Licensure | • Final Exam | July 27 at 11:59 p.m. |

**General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):** This course meets the CTE department learning outcome of employing industry-specific skills in preparation for workplace readiness by:

1. Demonstrate problem-solving aptitude.
   a. Be aware of the regulations for safe flight.
   b. Understand what airspace is safe for flying.
2. Expand critical thinking competence.
   a. Assess risks associated with flying.
   b. Intrepret sectional maps, TFRs, METAR reports.
   c. Understand your responsibilities as a certified commercial drone pilot.

**Relationship to Campus Focus:** This course addresses the campus theme of Nature, Tehnology, and Beyond by incorporating the latest procedures, technologies and innovative designs of unmanned aircraft systems and their operations.

**Classroom Policies:** Be polite and respectful of the instructor, other students, and any guests in our class.

**Student Email Policy:**
Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

**Academic Integrity:**
According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

**Disabilities or Special Needs:**
Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

**Title IX:**
Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

**AI Student Policy:**
Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.

RESPONSIBILITIES

| Students | • Responsible to follow the syllabus and assignment instructions regarding use of generative AI for all academic work. |
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|---|---|
| | • Obtain permission of the instructor prior to the use of generative AI that is outside of the syllabus or assignment instructions. Provide appropriate rationale for how the use of generative AI will enhance the learning experience for the assignment.<br>• In instances where generative AI is permissible, appropriately cite the generative AI program used and indicate where in the assignment it was used, in a brief submission statement. |
| Faculty | • Determine if the use of generative AI could enhance student learning in any assignment of project.<br>• Clearly indicate in all course syllabi if generative AI is allowable for any academic work.<br>• If allowable, give specific parameters for how and when generative AI may be used.<br>• If a violation of generative AI for the individual course/syllabus is suspected, discuss the concern with the student. If violation is still suspected, inform the appropriate semester coordinator/program director. |