

**STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK**



MASTER SYLLABUS

**COURSE NUMBER – COURSE NAME
FLHT 101– Introduction to Drones: Regulations and Use**

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Updated by:**

**Canino School of Engineering Technology
DEPARTMENT:
SEMESTER YEAR: December 2019**

- A. **TITLE:** Introduction to Drones: Regulations and Use
- B. **COURSE NUMBER:** FLHT 101
- C. **CREDIT HOURS:** 2 credit hours for 2 hours per lecture a week for 15 weeks.
- D. **WRITING INTENSIVE COURSE:** No
- E. **GER CATEGORY:**
- F. **SEMESTER(S) OFFERED:** Summer, Fall, and Spring
- G. **COURSE DESCRIPTION:** This course is designed to give students an introduction to drones and to prepare them for the remote drone pilot exam. The course covers the five knowledge areas on the exam, which are regulations, the national airspace system, weather, loading and performance, and operations.
- H. **PRE-REQUISITES/CO-REQUISITES:**
- a. Pre-requisite(s): none
 - b. Co-requisite(s): none
 - c. Pre- or co-requisite(s): none

I. **STUDENT LEARNING OUTCOMES:**

<u>Course Student Learning Outcome /SLO/</u>	<u>PSLO</u>	<u>GER</u>	<u>ISLO</u>
a. Understand the rights and responsibilities of a Remote Drone Pilot	N/A		5.Industry knowledge
b. Interpret Notices to Airmen (NOTAM)	N/A		1.Communication
c. Ability to read a sectional chart to create pre-flight plan	N/A		2.Critical Thinking
d. Understand how weather impacts drone operations	N/A		5.Industry Knowledge
e. Interpret Aviation Routine Weather Report (METAR)	N/A		1.Communication
f. Create a pre-flight procedure	N/A		2. Critical Thinking 3. Foundational
g. Understand loading and performance	N/A		5.Industry knowledge

- J. **APPLIED LEARNING COMPONENT:** Yes

- **Classroom/lab**

- K. TEXTS:** Required: Test Prep 2020 Remote Pilot (2019). ISBN: 978-1-61954-797-1
- L. REFERENCES:** Remote Pilot—small Unmanned Aircraft Systems (sUAS) Airman Certification Standard (2018). ISBN: 978-1-61954-750-6
- M. EQUIPMENT:** N/A
- N. GRADING METHOD:** A – F
- O. SUGGESTED MEASUREMENT CRITERIA/METHODS:** Homework, Quizzes, and Exams.
- P. DETAILED COURSE OUTLINE:**
- I. Regulations**
 - A. Remote Pilot Certification requirements
 - B. Remote Pilot privileges and responsibilities
 - C. Accident Reporting
 - D. FAA Inspections
 - E. Pre-flight Rules and Inspection
 - F. Drone (sUAS) Registration
 - G. Daytime Operations and Line of Sight
 - H. Operation Limitations
 - I. Right of way Rules
 - J. Operation from a moving vehicle
 - K. Privacy
 - L. Drugs and Alcohol
 - M. Waivers
 - II. National Airspace System**
 - A. Notices to Airmen (NOTAM)
 - B. Airspace Classification
 - C. Airport Operations
 - D. Airport Markings and Signs
 - E. Collision Avoidance
 - III. Weather**
 - A. Wind
 - B. Air Masses and Fronts
 - C. Atmospheric Stability
 - D. Visibility and Clouds
 - E. Inclement Weather (thunderstorms, ice, fog)
 - F. Weather Briefing and Reports
 - G. Aviation Routine Weather Report (METAR)
 - H. Terminal Aerodrome Forecasts (TAF)

IV. Loading and Performance

- A. Speed and Altitude
- B. Loading
- C. Load Factor
- D. Stalls
- E. Performance

V. Operations

- A. Communication Procedures
- B. Emergency Procedures
- C. Aeronautical Decision Making
- D. Physiology
- E. Maintenance and Inspection Procedures

Q. LABORATORY OUTLINE: N/A