

AVT-2151: UAS Operations I

Credit Type – Proficiency



MIAMI VALLEY
TECHPREP
CONSORTIUM

Course Description and Learning Outcomes:
https://www.sinclair.edu/course/params/subject/AVT/courseNo/2151/
Faculty Pathway Specialist(s) (Please include name, email and office hours):
Tommy Sunderhaus, tommy.sunderhaus@sinclair.edu
Resources Needed to Offer Course (software, equipment, books [include ISBN and edition], etc. – please include any associated costs):
Real Flight Software version 7 or greater, Merlin Aerospace TNK aircraft (on loan from Sinclair), Unmanned Aerial Systems: The Definitive Guide by Leasure, Michael; Edition: 1 st , ISBN: 9781941144435 Format: Paperback; Publisher: Aircraft Technical Book Company, Date: 1/1/2017
How is the final grade for the course determined? (Please list all required assignments, assessments, etc.)
The Final Grade is comprised of: attendance/participation 10%, homework 20%, flight labs and proficiency checks 20%, mission planning and flight packets 20%, mid-term exam 10%, final exam 20%
Who is responsible for grading the required assignments and/or assessments? (faculty or instructor?)
The high school instructor is responsible for scoring/grading assessments and putting grades in the eLearn gradebook.
What is the grading scale for the course?
The standard Grading Scale is used (A: 90-100, B 80-89, C: 70-79, etc.).
Must students access the eLearn shell regularly to complete requirements?
Course requires that students complete work in eLearn, including homework, a midterm test and a final test. Students will post in discussion forums as needed/instructed, use a thumb drive (or other means) to save files.
Does the course require access to YouTube, GoogleDrive, etc.?
High Speed Internet access required
Additional course details or requirements important for instructors not covered above:
This course consists of lecture, simulator instruction and flight operation demonstration specific to an unmanned aerial system (UAS). Lecture will cover topics in UAS: aerodynamic theory, operations theories and techniques, platform categories, sensors and payloads, technical documents and processes of automation. Students will observe and participate in flight operations on various UAS platforms.
Most common (or popular) degrees this course is in?
Aviation Technology (AVIAT.S.AAS) Unmanned Aerial Systems (UAS.S.AAS) Unmanned Aerial Systems (UAS.S.BAS)