

Course Outline

COURSE: AMT 232 **DIVISION:** 50 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2019 **CURRICULUM APPROVAL DATE** 05/14/2019

SHORT TITLE: DRONES BUSINESS/INDUSTRY

LONG TITLE: Drones in Business and Industry

Units	Number of Weeks		Contact Hours/Week		Total Contact Hours
3	18	Lecture:	3	Lecture:	54
		Lab:	0	Lab:	0
		Other:	0	Other:	0
		Total:	3	Total:	54

COURSE DESCRIPTION:

This course will provide individuals with information on how to start a drone business as well as the types of business and industry opportunities that are available with drones. The ethical implications of drone use will also be discussed. This class is designed for those entrepreneurs looking to start their own drone business.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: C - Credit - Degree Non Applicable

GRADING MODES

- L - Standard Letter Grade
- P - Pass/No Pass

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

- 02 - Lecture and/or discussion
- 05 - Hybrid
- 72 - Dist. Ed Internet Delayed

STUDENT LEARNING OUTCOMES:

1. List and describe 5 different types of drone business applications and the setup required to create a successful business

Measure of assessment: homework, exam, discussion

Year assessed, or planned year of assessment: 2019

Semester: Fall

2. Analyze the feasibility of starting a drone business from start to finish.

Measure of assessment: project, exam, homework

Year assessed, or planned year of assessment: 2019

Semester: Fall

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Curriculum Approval Date 05/14/2019

15 Hours

1) Introduction - Rapid Growth in Industrial Drone Applications

2) FAA - Regulations Related to the Operation of Drones, Certification Required

3) Trends - Business Applications

4) Ethics – Privacy Rights

Student Performance Objectives: State the requirements needed to operate a drone. Explain the FAA regulations required to pilot a commercial drone. Discuss the latest research related to gearing up for a drone-powered economy. Identify the ethical implications of drone use.

19 Hours

5) How to Start a Drone Business - Investment, Drone Training, Workflow

6) Data Processing - Sensors, Gathering Data

Student Performance Objectives: Describe the investments required and the training needed to begin a drone business. State the possible obstacles to commercial drone operations. Explain the workflow setup needed to create a successful business. Discuss the type of drone and sensors recommended based on the drone application. Discuss data processing including formatting your data into a report.

18 Hours

7) Types of Businesses - Industrial Uses of Drones, Business Applications

Student Performance Objectives: List and describe 10 business applications using drones. Select 1 or 2 applications and discuss how they might "fit" you.

2 Hours

METHODS OF INSTRUCTION:

lecture, discussion, AV presentation

OUT OF CLASS ASSIGNMENTS:

Required Outside Hours: 21

Assignment Description: Read related chapters in the textbook. Answer study guide questions. Report: Investigate the latest research related to the trends in a drone-powered economy and report back to the class. OR Summarize the FAA changes that have led to the current rapid growth in industrial drone applications and report back to the class. OR Investigate the latest regulations related to the ethical use of drones.

Required Outside Hours: 40

Assignment Description: Study for exam. Read related chapters in the textbook. Answer study guide questions. Homework: Research the type of drone and sensors required for a start-up drone business of your choice and write a 1 - 2 page paper. Come prepared to discuss this information with the class. OR Determine the data processing, including formatting your data into a report, for a start-up drone business of your choice and write a 1 - 2 page paper. Come prepared to discuss this information with the class.

Required Outside Hours: 47

Assignment Description: Study for exam. Read related chapters in the textbook. Answer study guide questions. Report/Presentation: Select a hypothetical drone business application and develop a plan to bring this business to fruition, including recommended drone type and sensors and workflow-setup to create a successful drone business. If time allows, report your findings to the class.

METHODS OF EVALUATION:

Writing assignments

Percent of total grade: 10.00 %

Homework

Problem-solving assignments

Percent of total grade: 40.00 %

Report, Presentation

Objective examinations

Percent of total grade: 30.00 %

Written exam

Other methods of evaluation

Percent of total grade: 20.00 %

REPRESENTATIVE TEXTBOOKS:

Dr. Jerry LeMieux. Drone Entrepreneurship: 30 Businesses You Can Start. Washington, D.C.: Unmanned Vehicle University Press,2018.

ISBN: 10: 0578132036

Reading Level of Text, Grade: 12th Verified by: MS Word

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Not Transferable

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education: N

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department:

CSU Crosswalk Course Number:

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: C

Maximum Hours:

Minimum Hours:

Course Control Number:
Sports/Physical Education Course: N
Taxonomy of Program: 095000