### ATR 112 Introduction to Automation (2-3-3) all sections Fall 2017

Instructor: Email: Class Time: Online Office Location: Office Hours:

## **COURSE DESCRIPTION**

This course introduces the basic principles of automated manufacturing and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems.

## **REQUIRED COURSE MATERIALS**

#### Textbook -

Industrial Robotics Fundamentals: Theory and Industrial Applications 3rd Edition byRoss, Fardo, Masterson, and Towers 2018, Goodheart-Willcox, ISBN: 9781631269417

Supplies – USB drive for saving work

Technology – Computer to access online work

# STUDENT LEARNING OUTCOMES

- A. Recall key milestones in the progression of automation and robotics
- B. Explain the importance of systems integration
- C. Define various types system components
- D. Demonstrate knowledge of robotic components and program types

## **EVALUATION / GRADING**

Work turned in 1 week after the due date will result in a 20% reduction in grade. Work will not be accepted more than 1 week after the due date unless prior approval is given by the instructor.

Your final grade will be determined as follows:

Tests	30	
Assignments	25	
Final Exam	20	Click here to enter text.
Lab Assignments	25	

### **GRADING SCALE**

This course uses the following grading scale:

- **A** = 90-100
- **B** = 80-90
- **C** = 70-80
- **D** = 60-70
- **F** = Below 60
- I = Incomplete

#### ATTENDANCE POLICY

The Cleveland Community College Attendance Policy

# CODE OF CONDUCT POLICY

Student Responsibilities (Student Code of Conduct)

## ACADEMIC AND PHYSICAL ACCOMMODATIONS

Access and Accommodations: Your experience in this class is important to your instructor, and it is the policy and practice of Cleveland Community College to create inclusive and accessible learning environments consistent with federal and state law. If you experience barriers based on a temporary health condition or disability (which could include but is not limited to mental health, attention-related, learning, vision, hearing, physical or health impacts) and as a result cannot participate fully in this class, complete course requirements, or benefit from the College's programs or services, contact Disability Services as soon as possible.

To receive any academic accommodation, you must be appropriately registered with Disability Services at CCC. This office works with students confidentially and does not

disclose any disability-related information without the student's permission. You are welcome to contact them at 704-669-4096 or disabilityservices@clevelandcc.edu. If you have already established accommodations with Disability Services for this semester your instructor has been notified. You will want to discuss your approved accommodations with your instructor at your earliest convenience to make sure your needs in this course are met.

If you have a condition which may affect your ability to exit the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss this in confidence with the instructor and/or Disability Services.

ACADEMIC INTEGRITY POLICY <u>CCC Academic Integrity Policy</u>

#### CALENDAR / IMPORTANT DATES Calendar and Important Dates for this term.

## COURSE SCHEDULE

Add any important dates for this class. For hybrid courses, the days the class meets on campus must be listed. All field trip dates must be listed. Include other dates as you see fit. If pasting text, right-click and choose "Keep text only".

## ADDENDUM

Any information the individual faculty member deems appropriate for the course. If pasting text, right-click and choose "Keep text only".