



OWENS
COMMUNITY COLLEGE

Course Syllabus
SEMESTER
School of _____

Course Name:	Electrical Prints
Course & Section Number:	SKT 132-XXX
Meeting Day(s) & Time(s):	
Credits:	3
Contact Hours:	3 (Lecture: 3)
Text:	
Instructor's Name:*	
Office Hours & Location:	
OCC Phone:	
OCC Email:**	
Additional Contact Information:	

*Please call me _____; it is my preferred name.

**Please use only Owens email for course communications.

Catalog description:

A through coverage of control devices, symbols, control diagrams of typical electrical circuits. Manual and automatic control circuits with some exposure to cascading timing circuits, from prints and drawings. Will interpreting, analyzing and troubleshooting prints.

Prerequisite/Corequisites:

SKT-131

Course Materials:

PRINTREADING FOR INSTALLING AND TROUBLESHOOTING ELECTRICAL
SYSTEMS ITEM #2052

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What You Will Learn in the Course

Course Objectives:

- Understand the usage and placement of electrical symbols.
- Understand how to draft a correct electrical diagram.
- Learn pictorial diagrams, wiring, diagrams, and symbols.
- Gain a basic knowledge of electrical building prints and symbols.
- Be prepared for more advanced electrical course on control/analysis.

Student Learning Outcomes:

Student Will:

Outcome	Where Assessed
Demonstrate ability to read and interpret the areas of Printreading Fundamentals, such as: Lines • Abbreviations • Schedules • Print Divisions • Title Blocks • Print Conventions • Print Scales	Chapter 1 Trade Competency Tests, Evaluation 1 and Final Exam
Demonstrate ability to read and interpret the areas Residential and Commercial Electrical Systems, such as: Standards Organizations • Symbols and Components	Chapter 2 Trade Competency Tests, Evaluation 1 and Final Exam
Demonstrate ability to read and interpret Industrial Electrical and Electronic Symbols	Chapter 3 Trade Competency Tests, Evaluation 1 and Final Exam
Demonstrate ability to read and interpret the areas on an Electrical Drawing and Plan on both an industrial and residential print	Chapter 4 Trade Competency Tests, Evaluation 1 and Final Exam
Demonstrate ability to read and interpret the areas on a One-Line Diagram, Ladder (Line) Diagrams, Schematic, and PLC	Chapter 5 Trade Competency Tests, Midterm and Final Exam
Demonstrate the understanding of: Responsibilities of Construction Personnel, Overview of Construction Process, Responsibilities of Maintenance Personnel, Overview of Maintenance Process.	Chapter 6 Trade Competency Tests, Midterm and Final Exam
Demonstrate ability to read and interpret the symbols of an Site Plans, Power Prints.	Chapter 7 Trade Competency Test, Midterm and Final Exam
Demonstrate ability to read and interpret Voice /Data/Video system terminology, and symbology.	Chapter 8 Trade Competency Test, Midterm and Final Exam
Demonstrate ability to identify and interpret fire alarm and security systems prints and symbology	Chapter 9 Trade Competency Test, Evaluation 3 and Final Exam
Demonstrate ability to read and interpret the HVAC Control System Prints	Chapter 10 Trade Competency Test, Evaluation 3 and Final Exam
Demonstrate ability to explain the read Power and Control Circuits, and to be able to identify Control Logic Functions	Chapter 11 Trade Competency Test, Evaluation 3 and Final Exam
Demonstrate ability to read and interpret various power distribution systems and power circuit applications	Chapter 12 Trade Competency Test, and Final Exam

Outcome	Where Assessed
Demonstrate ability to recognize circuit wiring methods such as direct hard wiring, wiring using terminal strips, and PLC wiring	Chapter 13 Trade Competency Test, and Final Exam
Demonstrate ability to recognize hydraulic symbols and follow the function of these symbols	Chapter 14 Trade Competency Tests, and Final Exam
Demonstrate ability to identify the principal parts of a piping and instrumentation diagram.	Chapter 15 Trade Competency Test, and Final Exam

Program Outcomes:

The following program outcomes are assessed in this course

Outcome	Where Assessed
Develops proficiency in sketching/drawing, identifying components and types of diagrams.	Trade Competency Tests, Assessment 1, Assessment 2, Midterm, and Final
Conceptualize, sketch and draw design projects and components.	Constructor Labs (Unless online)
Produce professional documentation	Assessment 1, Assessment 2, Midterm, and Final

Institutional General Education Competencies:

As a student at Owens Community College, you will take General Education courses as part of your degree program. While specific to the General Education courses, will be reinforced in many of your degree program major courses and may be measured in your capstone course(s) and others as identified.

Competency	Where Assessed
Communicate effectively.	All tests and the final
Act with professional responsibility.	Post lab questions, all tests and the final
Demonstrate sensitivity to others' beliefs and values.	Electrical blueprint usage and completed technical drawings
Think analytically, critically, and creatively.	Post lab questions

Technology, Lab, and File Requirements:

Blackboard Platform: This course will use the Owens Blackboard Portal to access course materials. Many, if not all, quizzes and homework will be given electronically. You must be able to log into Blackboard to be successful in this course.

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at <https://www.owens.edu/counseling/>.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 151) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

******Students can find more information on campus resources, student support, student life, and security at this link.******

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's Student Code of Conduct, which includes academic honesty, encompassing plagiarism. See the Board Policy for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's Anti-Discrimination and Harassment Policy and the College's Title IX Policy/Sexual Misconduct Procedures and Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu
The policy may be found on the Owens website: 3358:11-2-63 Accommodation for a Student Absence for the Observance of Religious Beliefs and Practices Policy

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See FERPA regulations for more information.

Student Responsibilities & Instructor Expectations

Instructor Expectations:

Safety is our number one concern in both the lab setting and classroom. Any student that is found to cause a hazardous situation either to themselves or others will be removed from the lab/classroom. All students in the classroom/lab should be able to feel safe and receive a positive learning environment.

Cell phones and devices: Over the past few years cell phones have become a major issue in the classroom and lab. The phones and other devices become a major distraction to the learning environment if not used correctly. Students will have projects to be working on when bookwork is done; there is limited need for them to have their phones or electronics out in class.

"Personal digital devices equipped with picture taking or video capabilities, text messaging, and Internet access can add value to the learning process when used appropriately." Student personal digital devices that are brought to college or enroute to or from college or any college sponsored activity;

- *Remain the sole responsibility of the owner. The college is not liable for damage, loss, or theft.*
- *At the college level may be used responsibly during non-instructional time and/or during instructional time for educational purposes when requested and supervised by a staff member.*
- *With video or picture taking ability may not be used at any time or place where individuals have an expectation of privacy such as restrooms or locker rooms.*
- *Photographs or images of individuals may not be taken or recorded without the person's knowledge and permission.*
- *May not be used to harass, intimidate, or bully anyone, at any time.*
- *May not be used in any way that detracts from the "learning environment of the college."*

Bullying: Bullying is a serious topic in any setting. Bullying will not be tolerated and if a student is found to be unable to conduct themselves properly they will be reported to the office and college policies will be followed. This may include the student being removed from the Program. All students deserve a positive learning environment. Please contact me if there is ever an issue. I cannot help if I don't know there's an issue!

Use of AI Tools: This course requires you to complete various assignments that assess your understanding and application of the course content. You are expected to do your own work and cite any sources you use properly. You are not allowed to use any artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to complete any part of your assignments. Any attempt to use these tools will be considered academic misconduct and will be dealt with according to the Owens Community College academic integrity policy. Students are expected to complete all work independently and without the assistance of AI-generated content. If you have any questions about what constitutes acceptable use of AI tools, please consult with the instructor *before* submitting your work.

How Grades are Determined and Major Assignments

Grading Procedure:

Tests are worth 50% of your grade and Classroom Participation/Homework is worth 50%. If you miss a class, or are tardy/leave early, this may affect your grade.

Being 30-minutes tardy, or Leaving 30-minutes early equals one Absence.

Three Absences will deduct One-Letter Grade from your overall score. There is no make-up for Classroom Participation.

Grading Scale:

90-100% = A 80-89% = B 70-79% = C 60-69% = D 0-59% = F

Late Work Policy:

- Blackboard Exams must be taken during the posted time frame. In class exams must be taken during class. Extenuating circumstances, such as school approved absences will be offered make-up exams. (Bereavement, Hospitalization, etc.)
- Online tests/quizzes/homework will have due-date limits set. You must complete the online work within the specified time frame. After the time limit (due-date) is reached, the form will stop accepting responses.
- Hardcopy work (paperwork assignments) -- 5% of grade will be deducted for each calendar day late.
- Work turned in after 7 calendar days will be evaluated by instructor, but the student will receive no more than 50% for their grade on the assignment. After 10 calendar days the student will receive a zero.

Assignment Calendar

Week	Topic
Week 1	Introduction to class / Electrical safety
Week 2	Electrical Symbols and Diagrams
Week 3	Test over Electrical Symbols and Diagrams
Week 4	Logic Applied to line Diagrams
Week 5	Logic Applied to line Diagrams / Diagrams
Week 6	Solenoids / Interpret Prints given by Instructor
Week 7	Control Devices
Week 8	Prints/ Test
Week 9	Timers and Counters
Week 10	Prints/Test
Week 11	Sensing Devices
Week 12	Test
Week 13	Interpret Prints given by Instructor/Test
Week 14	Interpret Prints given by Instructor
Week 15	Final Test part #1
Week 16	Final Test part #2

Disclaimer:

The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.

I have read this syllabus and agree to its terms and conditions: