

**Nashville State Community College
Science Technology Engineering Math
Industrial Process Control Technology**

Master Course Syllabus

IPCT 2370 Industrial E/II

Course Information:

Course Title: IPCT 2370 Industrial E/II
Credits: 3 Credits
Class Hours: 2 Class Hours, 2 Lab Hours

Course Description:

This course is designed for students in the maintenance technology program to be exposed to basic industrial electrical concepts. Topics include industrial safety for electrical and instrumentation, introduction to the NEC, electrical theory, alternating current, test equipment, flow, level, pressure and temperature, hand bending, tubing, instrument drawings and conductors and cables terminations and splices. Prerequisite(s): Level 2 placement or higher in Math or concurrent enrollment in MATH 0845

Instructor Information:

Name:
Email:
Office Phone:
Office Location:
Office Hours:

Textbook and Other Materials:

Textbook: *Industrial Maintenance Electrical & Instrumentation, Level 2*
ISBN: 0-13-614390-3
Reference Materials: None
Supplies: None

Course Outcomes:

Upon successful completion of this course, students should be able to:

- Identify and demonstrate safe operations in electrical and instrumentation maintenance
- Demonstrate knowledge of finding information in the NEC
- Demonstrate and identify proper electrical and instrumentation test equipment
- Demonstrate and identify hand bending techniques
- Identify proper procedures for conductor and cable termination and splices

Topics To Be Covered:

- Industrial Safety for E&I
- Introduction to the national electric code
- Electrical Theory
- Alternating Current
- E&I Test Equipment
- Flow Pressure Level Temperature
- Hand Bending
- Tubing
- Clean Purge and Test Tubing and Piping Systems
- Instrument Drawings and Documents Part One
- Conductors and cables
- Conductor Terminations and Splices

Course Assessments:

A student's mastery of the learning outcomes will be assessed through both module exam and performance evaluation as determined by The National Center for Construction Education and Research (NCCER). The student must pass each module assessment with a score of 70% in order to take the performance evaluation and advance to the next module of instruction.

Performance evaluations are graded as Pass/Fail and must be successfully completed in order to advance to the next module of instruction.

Grading Policy

Class notes, handouts, practice exercises and your textbook are excellent resources to prep for quizzes. Written assignments will periodically be assigned for you do outside of class. Along with the required reading, the homework will guide you and require summarizing key points, conducting research or answering questions.

This is an NCCER class. Tests will be graded as follows:

- 1) All module exams must be passed with a 70% or higher to become "knowledge verified" through NCCER
- 2) Any exams not passed at this level must be retaken
- 3) Although the student may make above a 70 on the re-take and become knowledge verified with NCCER, the grade of record for the NSCC grade will be the grade made on the first attempt
- 4) Students with an unexcused absence on the day of a module exam will receive a zero (0) on the module exam for NSCC class scoring; however, the student will be able to retake the exam for NCCER "knowledge verification" purposes.
- 5) Students who know they will be absent in advance will be given opportunity to test early

without penalty.

Excused Absences include:

Sickness with a doctor's note

Death of immediate family member

Example:

John Smith makes a 56 on his first module exam attempt. John re-takes the exam and makes a 72. With the 72, John is now knowledge verified with NCCER; however, his grade for the NSCC class is his original 56.

Grading Scale:

Grades will be determined as follows (Average = Total points earned / Total points):

Grade	Average	Points
A	90.0 - 100.0	>900
B	80 - 89.9	800 to 899
C	70 - 79.9	700 to 799
D	60 - 69.9	600 to 699

- **FA** According to NSCC policy, an FA is awarded to students who do not officially withdraw from a course and do not attend after the cut-off date provided in the academic calendar. Students with an F average **whose last date of attendance** is on or before 11/2/2018 will receive an FA; students with an F average, **whose last day of attendance** is after 11/2/2018 will receive an F.
- **FN** An FN grade is awarded to students who never attended class.
- **W** The last day to withdraw from the course with a W is **Wednesday, October 31st**.

Attendance Policy

A student is expected to attend all scheduled classes and laboratories. Each instructor will formulate an attendance policy and provide it on the course syllabus. Absences are counted from the first scheduled meeting of the class, and it is the responsibility of each student to know the attendance policy of each instructor in whose class he/she is enrolled. If a student is absent from a class, he/she should give an advanced explanation to the instructor. Absences in a course may affect a student's final grade. The student is responsible for all assigned work in the course regardless of excused or unexcused absences. Tardiness may also affect a student's final grade.

Student Communication Channels

It is the student's responsibility to check D2L and MyNSCC email on a regular basis. These are the official communication channels between the college and students. Students are responsible for the information communicated through those channels. D2L contains specific course information and MyNSCC contains information important for other purposes.

Early Warning System

Nashville State Community College has implemented an Early Warning System to notify students via e-mail about academic problems such as poor classroom attendance, poor performance on assignments/tests, poor communication skills, late/missing assignments, and/or

lack of classroom participation. Please note that Early Warning Alerts do not affect a student's academic standing.

ADA Compliance Statement

Nashville State complies with the Americans with Disabilities Act. Please contact the Access Services Coordinators at 615-353-3721 or 615-353-3741 if you would like to arrange ADA accommodations.

Classroom Misconduct

Nashville State Community College has a zero tolerance policy for disruptive conduct in the classroom. Students whose behavior disrupts the classroom will be subject to disciplinary sanctions. Please consult your Student Handbook for more specific details.

The instructor has primary responsibility for control over classroom behavior and maintenance of academic integrity. He/she can order temporary removal or exclusion from the classroom of any student engaged in disruptive conduct or in conduct which violates the general rules and regulations of the College.

Disruptive behavior in the classroom may be defined as, but is not limited to, behavior that obstructs or disrupts the learning environment (e.g., offensive language, harassment of students and professors, repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught, failure to cooperate in maintaining classroom decorum, etc.), the continued use of any electronic or other noise or light emitting device which disturbs others (e.g., disturbing noises from beepers, cell phones, palm pilots, lap-top computers, games, etc.).

Please be aware that children are not allowed in class or unattended on campus.

Academic Dishonesty (Honor Code)

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. "Plagiarism may result from: (1) failing to cite quotations and borrowed ideas, (2) failing to enclose borrowed language in quotation marks, and (3) failing to put summaries and paraphrases in your own words (A Writer's Reference 331). Academic dishonesty may be defined as, but is not limited to, intentionally trying to deceive by claiming credit for the work of another person, using information from a web page or source without citing the reference, fraudulently using someone else's work on an exam, paper, or assignment, recycling your own work from another course, purchasing papers or materials from another source and presenting them as your own, attempting to obtain exams/materials/assignments in advance of the date of administration by the instructor, impersonating someone else in a testing situation, providing confidential test information to someone else, submitting the same assignment in two different classes without requesting both instructor's permission, allowing someone else to copy or use your work, using someone else's work to complete your own, altering documents, transcripts or grades, and forging a faculty/staff member's signature.

In addition to other possible disciplinary sanctions that may be imposed through regular college procedures as a result of academic dishonesty the instructor has the authority to assign an "F" or a "Zero" for the exercise, paper, or examination or to assign an "F" for the course. Students may appeal through the appropriate college grade appeal procedures.

Inclement Weather Policy

In the event of an inclement weather event, check the Nashville State web site home page at www.nsc.edu for announcements on campus closures. Campus closures will also be announced on local television stations (channels 2, 4, 5, and 17).

When classes are cancelled, an online assignment will be posted in NS Online. Check your NS Online email for a message from your instructor regarding your online assignment requirements. Even though classes may be cancelled, some areas, i.e. Testing Center, may be open. However, you should check before commuting to campus.

The Vice President for Academic Affairs and the Director of Security are responsible for cancellation decisions during an inclement weather event for the Nashville State main campus and the Southeast campus. Cookeville, Waverly, and Dickson Campus Directors will make class cancellation decisions based on conditions in their respective areas. Decisions about class cancellations are based on actual conditions, not forecasts. The perspective used for making decisions is that of the college as an employer, not as a K-12 institution. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

NOTE: This syllabus is meant simply as a guide and overview of the course. Some items are subject to change or may be revised at the instructor's discretion. Each instructor will further clarify their criteria for grading, classroom procedures, attendance, exams and dates, etc. on his/her course syllabus.