

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

2018 Master Course Syllabus

IPCT 1315 – Process Technology I

Course Information:

Course Title: IPCT 1315 – Process Technology I

Credits: 3 Credits

Class Hours: 2 Class Hours, 2 Lab Hours

Course Description:

An introduction to equipment and systems within the PTEC industry. Topics include PTEC industry-related equipment concepts including purpose, components, operation, and the Process Technician's role for operating and troubleshooting both equipment and systems.

Instructor Information:

Name:

Email:

Office Phone:

Office Location:

Office Hours:

Required Textbook(s) & Other Materials:

Textbook(s): Process Technology Equipment and Systems, 4th ed.

ISBN: 978-1-285-44458-1

Reference Materials: Will be provided

Supplies: TI-84 or later calculator

Once enrolled, all students should verify that they have the correct textbook and materials information by consulting the D2L/NS Online shell for the course. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center at 615-353-3721, 615-353-3741, or accesscenter@nsc.edu.

Course Outcomes:

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

- Analyze and identify the operating principles of basic processing equipment such as pumps, valves, piping, heat exchangers, boilers, cooling towers, heaters and instrumentation
- Identify and analyze process control diagrams including symbology, block flow diagrams, process flow diagrams, and process and instrumentation diagrams
- Perform start up, shut down, and basic troubleshooting procedures on simulated equipment
- Communicate professionally and effectively from DCS control rooms to field technicians

Course Competencies:

The following are detailed course competencies intended to support the course outcomes:

Demonstrated competencies in Math (MATH-1630 or higher) and English (English Comp 1 or higher).

The following are general education competencies intended to support the course outcomes:

Completion of IPCT 1310 - Intro to Process Technology.

Topics to Be Covered:

- Introduction to Process Equipment
- Valves
- Tanks, Piping, and Vessels
- Pumps
- Compressors
- Turbines and Motors
- Heat Exchangers
- Cooling Towers
- Boilers
- Furnaces
- Simtronics Simulation Labs

Course Assessments:

The following performance assessments will be used to demonstrate students' understanding, knowledge, and skills:

- Students will complete exams and performance verifications to demonstrate their individual competency in the application of concepts used in the assigned exercises. Specific criteria for evaluation of these tests are included in the grading policy shown below.

- Students' ability to ask and respond to questions will be measured through a series of module exams. Criteria for evaluation of performance will include accurate and efficient application of technical skills and knowledge as well as appropriate behaviors and attitudes towards safety and basic core skills.

Late Work Policy & Make-up Procedures for Missed Assignments and Work:

Late work and ability to re-test is covered in the Attendance Policy section. Missed Assignments are covered in Course Assessments section.

Attendance Policy

A student is expected to attend all scheduled classes and laboratories. Absences are counted from the first scheduled meeting of the class. 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.

Excused Absence: The student will be given the opportunity to make-up the missed Test, Lab. Excused absences include sickness with a doctor's note, a death in the immediate family or as approved by the instructor.

Unexcused Absence: The student will be given a grade of "0" for any missed Test, Lab or Performance evaluation. Unexcused Absences include all absences not approved by the instructor.

Any student arriving to class more than 10 minutes late or leaving more than 10 minutes before released by the instructor will be counted as tardy. Three instances of being tardy will be counted as an absence. If the student is tardy by more than 30 minutes or leaves more than 30 minutes before released by the instructor, the student will be counted as absent for the class. Attendance will be included as part of the student's grade. The student will be awarded an attendance grade of 100 for perfect attendance. Each absence, both excused and unexcused, will result in an attendance grade reduction of 4 points for a maximum of 8 absences. A student with 9 or more absences will be awarded an attendance grade of 0.

Grading Policy:

Web 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.

Grading Scale:

Letter Grade	Percentage Range
A	90.0 – 100.0
B	80.0 – 89.9
C	70.0 – 79.9
D	60.0 - 69.9
F	Below 59.9

- **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**.

Technology Statement

Nashville State's classes are considered to be web-enhanced. Faculty have an expectation that students will use a computer and the Internet to complete assignments, engage in online discussions, and access various course materials through D2L/NS Online course shells. Computers are available for student use at each campus during campus open hours.

D2L/NS Online and myNSCC

It is students' responsibility to check D2L/NS Online course shells for all enrolled courses and myNSCC, including student email, on a regular basis. These are the official communication channels between the college and students, who are responsible for the information communicated through those channels. D2L/NS Online contains specific course information and myNSCC contains information important for other purposes.

ADA Compliance Statement

Nashville State complies with the Americans with Disabilities Act (ADA). If you require accommodations for any courses in which you are enrolled, contact the Access Center at 615.353.3741 or 615.353.3721, or e-mail accesscenter@nsc.edu. If you are registered with the Access Center and require an alternate format for the textbook and other course materials, please contact the Access Center.

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 measures. Please review the [Nashville State Student Code of Conduct policy](#). Please be aware that children are not allowed in class or to be left unattended on campus.

Academic Misconduct

Any form of academic dishonesty, cheating, plagiarizing, or other academic misconduct is prohibited. Students are responsible for understanding and abiding by the [Academic Misconduct Policy](#) in the Nashville State Student Code of Conduct. In addition to other possible disciplinary measures that may be applied 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.

(Each instructor will outline his/her expectations for academic integrity and provide individualized information about consequences for academic misconduct.)

Academic Early Alert System

Nashville State Community College uses an Early Alert System to let students know of a faculty member’s concern in one or more of these academic areas: lack of attendance, lack of classroom participation, late or missing assignments, and/or poor performance on assignments/tests. *Please note that Early Alerts do not affect a student’s academic standing. If you receive an Early Alert email, please see your instructor and your academic advisor as soon as possible.

RAVE Emergency Alert System

Emergency events can happen at any time and Nashville State Community College wants to be able to notify students if and when they occur. For this reason, all students have been enrolled in the free RAVE alert system. If you have not already done so, please log in at <https://www.getrave.com/login/nscc> to confirm and update your contact information and notification preferences. It is critical that your information be correct so that you will receive any emergency notifications. Your RAVE Username is your NSCC email address. If you've never received an email from RAVE with your password, or if you need to reset your password, select “Forgot your password?” and a new password will be emailed to you. Should the RAVE system indicate “user not found”, select Register and create your own RAVE account.

Inclement Weather & Campus Closings

Nashville State will use the RAVE alert system to send a text message to students, staff, and faculty about adjusted hours of operation and/or closings at individual campuses. All students should check the Nashville State web site home page at www.nsc.edu for announcements on campus closures, which may vary from campus to campus. Campus closures will also be announced on local television stations. Students should use their own best judgment in determining whether to report to campus during inclement weather when classes are not cancelled.

Even when campuses are closed, students are still responsible for completing all assigned work. When classes are cancelled, faculty will post online assignments and any additional instructions in the D2L/NS Online course shell. Check D2L/NS Online for a message from your instructor regarding your online assignment requirements. Faculty have discretion over adjusting deadlines or due date for assignments, but students are responsible for completing all assigned work by the due date established by the instructor.

Class Cancellation Policy

If the class is cancelled, the instructor will notify all students by posting in the D2L/NS Online course, e-mailing through D2L/NS Online, and/or by posting a sign on the classroom door. In the event of class cancellation, students must access D2L/NS Online to complete classwork and the assignment that will be posted in the course D2L site.