

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

Spring 2023 Master Course Syllabus

IPCT 1315 – Process I

This syllabus sets forth the expectations for course content, work, and grading as well as expectations for student performance and conduct. The syllabus does not constitute a contract between the student and the instructor or the College. The information contained here is subject to change at any time. Students will be notified if any changes are made. Though changes are possible, it is expected that the course will be conducted as described in this syllabus.

Course Information:

Course Title: IPCT 1315 – Process I
Credits: 3 Credits
Class Hours: 2 Class Hours, 2 Lab Hours

Course Description:

Study of basic chemistry concepts and equipment to instruct prospective process control technicians and chemical operators in proper sampling methods, laboratory techniques, and process monitoring. This applications-based course emphasizes hands-on, practical exercises and experiences both in the laboratory and in an industrial environment.

Instructor Information:

Name:
Email:
Office Phone:
Office Location:
Office Hours:
Instructor Zoom Room link:

Class Session Zoom Link Information:

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

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 homework and exams to demonstrate their individual competency in the application of concepts used in the assigned exercises.
- Students will perform start up, shut down, and basic troubleshooting procedures on simulated

equipment.

- Specific criteria for evaluation of these performance results are included in the grading policy shown below.

Grading Policy:

Assignments will be assessed as follows:

Assignment	Scoring	Count	Tot. Pts.	
Tests	100	10	1000	
Reviews	20	10	200	
Simulations	30	5	150	
Attendance	10%	1	150	
Total			1500	

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

Missed assignments will be assigned a grade of 0%.

Attendance Policy

Students who have been exposed to COVID-19 or who have tested positive must email virusinfo@nsc.edu.

The student is expected to attend all scheduled classes, laboratories and virtual meetings. Attendance will be 10% of the student's overall grade. Any unexcused absence, will result in an overall grade reduction of 5% of the attendance grade for up to 5 absences. Six or more absences will result in a grade of 0 for attendance. Absences are counted from the first scheduled meeting of the class. If a student is absent from a class (virtual or on-campus), he/she should give an advanced explanation to the instructor. 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 any missed assignment. 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 assignment. Unexcused Absences include all absences not approved by the instructor. If the student is late for class by more than 30 minutes or leaves more than 30 minutes before being released by the instructor, the student will be counted as absent for the class.

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

Letter Grade	Percentage Range
F	Below 60

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. Please refer to the current academic calendar available on the Nashville State web site, looking for the date that indicates it is the “Last Day to Earn F for Attendance (FA).” Students who stop attending on or before this date March 24, 2022 receive an FA; students who stop attending after this date receive an F.

For online courses, attendance is defined by submission of assignments. Students who fail a course and whose last assignment is submitted on or before the FA date will earn an FA for the course. Students who fail a course and whose last assignment is submitted after the FA date will earn an F for the course. An FN is assigned to students who do not submit any assignments.

FN

An FN is awarded to students who never attended class.

Technology Statement

- All classes at the College are web enhanced.
- It will be essential for students to have access to a computer and an internet connection to complete assignments, engage in online discussions, and access various course materials through D2L/NS Online course shells.
- Students may also be required to use free video conferencing platforms (ex: Zoom, Teams) for classes and meetings.
- Students will be responsible for appropriate dress while on video, to ensure a distraction free environment (mute sound as needed) and to ensure their background is neutral for others to view.
- If you have questions or concerns regarding access to a computer or internet resources, please contact your instructor. Additional information available: <https://www.nsc.edu/current-students/student-online-resources/access-to-internet-and-technology>.
- Certain publisher materials may not work on cellphones.

Computer Labs

Computers are available for student use at each campus during campus open hours. Open computer lab availability for Spring 2023 may vary from campus to campus.

Students should check NSCC website for current hours of operation.

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). Nashville State complies with the Americans with Disabilities Act (ADA) and so provides accommodations for students with a documented physical, emotional, and/or learning condition. 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.

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 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/nsc> 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.

Student Wellness

- The general well-being of students is an important component of their academic success. With this in mind, Nashville State Community College has several resources available to provide support when needed:
 - Tutoring options and appointments: <https://www.nsc.edu/current-students/on-campus-resources/learning-center-and-tutoring>
 - Academic and student resources for school: <https://www.nsc.edu/current-students/student-online-resources>
 - Support services: <https://www.nsc.edu/current-students/on-campus-resources/student-support-services>

Equity Statement

Nashville State Community College has a relentless commitment to the transformation of our institution through the intentional design of college experiences that expect and promote excellence from students, faculty, staff and administration. We consider equity to be an obligation of higher education. We strive to ensure that each student receives what that student needs to be successful, with goals of success beyond the classroom. We do this through an evidence-based and collaborative effort, understanding that our student population has diverse needs that must be addressed. We recognize that this effort may not always be comfortable and that partnering with students is the driving force to overcome barriers to success.

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.