

**Nashville State Community College
(STEM)
(Architectural, Civil and Construction Engineering Technology)**

2018 Master Course Syllabus

CIT 2301 – *SITE DESIGN WITH CIVIL 3D*

(This master course syllabus template is a general guide for providing an overview of each course offered at Nashville State. Each instructor will further clarify specific criteria for grading, classroom procedures, attendance, exams and dates, etc. on his/her individual course syllabus. Prompts for individual adaptations are italicized and in parentheses; faculty should remove or replace these prompts when creating master syllabi and their own individual syllabi if they have not been removed previously.)

Course Information:

Course Title: SITE DESIGN WITH CIVIL 3D

Credits: 3 Credits

Class Hours: 3 Class Hours

Course Description:

An advanced level course designed to use students' prior knowledge of drafting, surveying, and hydraulics in the subdivision and development of property. Topics include storm water runoff and storm sewer systems, street pattern variables and intersections, site planning, utilities, and earthwork calculations. Students will be required to present work using CAD.

Instructor Information:

Name:

Email:

Office Phone:

Office Location:

Office Hours:

Required Textbook(s) & Other Materials:

Textbook(s): Civil Drafting & Introduction to GIS

ISBN: 978-0- 558-79674-7

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:

1. Draw Two dimensional elements in Autodesk Civil 3D; lines and curves for Cadastral surveying including dimensions.
2. Draw Three dimensional elements in Civil 3D; slope, topography, horizontal and vertical road alignment, grading, section & profile.
3. Site Grading; Linear elements, pads, contour lines, cut and fill.
4. Understand Water principles including Stormwater (Erosion Prevention and Sediment Control principles), Water, Sewer pipes in Civil 3D.
5. Parking and circulation configurations according to Traffic Institute guidelines,

Topics to Be Covered:

COURSE OUTLINE

Week Topic

1. Part1: Cadastral Elements

Two Dimensional objects - Insert picture, scale & digitize. Use Boundary lines (Bearing over distance), hatch, layers, linetypes, print from paperspace.

2. Two Dimensional objects; Curves

Three Dimensional objects; Points, Surfaces. Draw Tristar & Donegan Property. Use Boundary lines and curves (chord). Create surface with contour lines.

Federal, State (TN) & Local (Metro) Regulations. Zoning and property restrictions (setbacks). Topography, slope.

3. **Project**; Cover Sheet, Existing Surface, Topography with Contours

4. Part 2; Roads

Roads; Horizontal Curves, Alignments and Assemblies.

5. Roads- Plan and Profile Sheets Vertical Curve Alignment Grade (slope) of road.

6. Test #1 Cadastral & Roads

7. **Project**; Road Centerline, Road Plan and Profile Sheet.

8. **Break**

9. **Part 3; Site Grading** - Contour movement (cut and fill). Linear elements. Alignments and Elevation Editor.
10. Site Grading; Pad in cut and fill. Existing and Proposed Site Creation.
11. **Project**; - Proposed Site. Lot Layout with Setbacks, Boundary lines.
12. **Part 4; Water** –Stormwater – Watersheds, Rational Method, Retention / Detention
13. Supply Water – Clean Water Act, Erosion (EPSC)
14. Sewer Water – Civil 3D Pipes
15. **Project**; - Stormwater, Water & Sewer Plan & Profile, EPSC sheets
16. Project Presentations
17. Final Exam (Cadastral, Roads, Grading, Water).

Course Assessments:

The following performance assessments will be used to demonstrate students' understanding, knowledge, and skills: *(include type and point/percentage breakdown here)*

Grading Policy:

Tests 2	20%
Homework	30%
Attendance & Participation	20%
Final Project and presentation	30%
Total	100%

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

(Each instructor will provide policy)

Attendance Policy

Students are expected to attend all scheduled classes and laboratories. 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.

In online courses, attendance is signaled by logging on to the D2L/NS Online shell, participating as prompted (e.g., responding to an instructor's email, posting to a discussion board) and/or completing

and submitting assignments. Campus closures do not affect attendance and assignment completion in online courses.

(Each instructor will provide policy, especially how attendance influences student assessment and grading.)

Grading Scale:

Letter Grade	Percentage Range
A	90-100
B	80-90
C	70-80
D	60-70
F	Below 60

FA

According to NSCC policy, if a student fails a course, but has not officially withdrawn from the course, and her/his last date of attendance is before the last date to withdraw (*use date appropriate to your section*), the student will receive a grade of FA (i.e., “Failure for Attendance Reasons”).

(While the above statement should appear in all syllabi, faculty are encouraged to make additional statements or provide examples that would clarify the policy for students.)

FN

An FN is awarded to students who never attended class.

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.