

**Nashville State Community College
School of STEM
Architectural Design Technology**

**Spring 2023 Syllabus
ARCT 1200 Residential Design and Construction**

Course Information:

Course Title: Residential Design and Construction

Credits: 4

Class Hours: 2 Lab Hours : 4

Course Description: ACT 1161 is an introductory course in the basics of residential design, light construction and construction drawings. Topics include: design concepts & schematic design; application of concepts to a design problem; developing a floor plan; footings and foundations; structural elements; platform framing construction; stairway design; dimensioning; architectural symbols and developing building sections and elevations.

Each student will prepare schematic drawings, construction drawings and a study model.

Prerequisites: CAD 1200 and Co requisite: CAD 1650

Instructor Information:

Name:

Email:

Office Phone:

Office Location:

Office Hours:

Required Textbook(s) & Other Materials:

Textbook(s): *Building Construction Illustrated*; Francis D. K. Ching, (most recent addition)

ISBN:

Once you have registered for your courses, you should make sure you have the correct textbook and materials for each course. Before courses begin, you can do this by looking up your courses on the bookstore's website (<https://www.bkstr.com/nscstore/shop/textbooks-and-course-materials>) using your A# or by entering your course information. If you are registered with the Access Center and need

an alternate format for the textbook and other course materials, please contact the Access Center at 615-353-3721, 615-353-3741, or accesscenter@nscc.edu

Course Outcomes:

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

1. Have a basic knowledge of design concepts and process in residential design.
2. Prepare a schematic design of a small residence by analyzing program data and developing an adjacency matrix, hierarchy chart, served versus service chart and a block diagram.
3. Produce a set of construction drawings that include site plan, floor plans, building section, roof plan and details using REVIT.
4. Determine the structural sizes and placement of the foundation, walls, footings, columns, piers and floors for a small residence.

Course Competencies:

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

- Write clear, well-organized documents.
- Know how to locate, evaluate, and use information sources.
- Prepare and deliver well-organized oral presentations.
- Apply mathematical concepts to problems and situations.

Topics to Be Covered:

- The four ways to place a house on a site
- Schematic Design drawings
- Structural Considerations: footing design, joist and beam selection
- Planning the interior - Room layouts
- Wood framing
- Wall Systems
- Building section and construction Details
- Building Elevations, Doors and Windows and Stair Design
- Construction Documents room schedules door and window schedules
- 3d perspective rendering

Course Assessments:

The Course Outcomes will be measured by demonstrated ability to meet the requirements of each assignment. The standards expected and the level of quality of meeting those standards will be stated with each assignment. .

- *If you are not well enough to attend a course session (class), you must notify the instructor as soon as possible before the scheduled course time.*
 - *If you are unable to notify an instructor before the scheduled course time, you must contact the instructor as soon as reasonably possible.*
- *If you have an unavoidable conflict with a scheduled course session, you must notify the instructor before the course session.*
 - *If you are unable to notify an instructor before the scheduled course time, you must contact the instructor as soon as reasonably possible.*

Instructor's Policy

Students are expected to attend all scheduled classes and laboratories. Every student will be permitted two excused absences for the semester. Unexcused absences beyond that will result in the deduction of two (3) percentage points for each class/lab session absence from the student's final grade. If a student is absent from a class, he/she should give advanced notice via email to the instructor in order to have an excused absence. The student is responsible for all assigned work/tests and/or quizzes in the course for an excused absence. Assigned Work/tests and/or quizzes cannot be made up for an unexcused absence. Tardiness may also affect a student's final grade.

Technology Statement

- All classes at the College are web enhanced. "Web enhanced" means that components of the course, such as assignments and online discussions, may be located online in the class D2L/NS Online course shell and used in the course, even if the course meets in a classroom on ground.
- You must 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.
- You may also be required to use free video conferencing platforms (examples: Zoom, Teams, etc.) for course sessions and meetings.
- You will be responsible for appropriate dress while on video. This means that you are expected to dress as if you were in a classroom.
- You will be responsible for a distraction free environment while on video. This means that the professor and others in the course should not be able to hear noise in your home, such as cell phones, TVs, or barking dogs. The best way to do this is to keep yourself on "mute" until you need to speak.
- You will be responsible for making sure your background is neutral. Keep in mind that students and professors come from all around the world, and you are all a part of our community. Therefore, please avoid having images in your background that may be offensive to your classmates.
- Certain publisher materials, such as textbook figures, may not work on cellphones and may require a laptop or a tablet.
- If you have questions or concerns regarding access to a computer or internet resources, please contact your instructor. Additional information is available on this website: <https://www.nsc.edu/current-students/student-online-resources/access-to-internet-and-technology>.

Computer Labs

Computers are available for all Nashville State students to use at each campus during open hours. Open computer lab availability may vary from campus to campus.

You should check the 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). 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

You have started this academic journey to prepare for a future career. Because of this, it is important that you learn the materials being presented in your courses. For this reason, cheating, in any form, robs you of your opportunity to learn and master the material that will enable you to succeed in that future career. Nashville State has a clear [Academic Misconduct Policy](#) that you are expected to follow. In addition, your instructors will clarify what Academic Misconduct looks like and the consequences for violations in each course that you take. The instructor has the authority to assign an "F" or a "zero" for such violations or for the semester grade.

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 conduct which violates the general rules and regulations of the College.

Disruptive behavior in the classroom that obstructs or disrupts the learning talking. environment is defined as:

- Offensive language;
- Harassment of students or professors;
- Repeated outbursts from a student which disrupt the flow of instruction or prevent concentration on the subject taught; (this includes loud talking)
- Failure to cooperate in maintaining classroom decorum; and
- Continued use of any electronic or other noise or light emitting device which disturbs others: beepers, cell phones, palm pilots, laptop computers, games, etc.

Students who are removed from class for disruptive behavior will not be allowed to return until the issue is resolved with the Dean of Students and may be administratively withdrawn from the course or the college

Academic Misconduct

You have started this academic journey to prepare for a future career. Because of this, it is important that you learn the materials being presented in your courses. For this reason, cheating, in any form, robs you of your opportunity to learn and master the material that will enable you to succeed in that future career. Nashville State has a clear Academic Misconduct Policy that you are expected to follow. In addition, your instructors will clarify what Academic Misconduct looks like and the consequences for violations in each course that you take. The instructor has the authority to assign an “F” or a “zero” for such violations or for the semester grade.

Academic Early Alert System

If you are not doing well in your course, your instructor may send you an Early Alert through your @my.nsc.edu email. This email will go to your academic advisor and Student Success advisor, as well. If you get an Early Alert, contact your instructor immediately. Instructors send these when they want to help you figure out how to get extra support to pass the course. An Early Alert does not mean that you have already failed the course. Rather, it means you are in danger of failing the course if you do not change your learning strategy. Please use an Early Alert to your advantage and as an opportunity to improve your grade.

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/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

You can log in to this free alert system to receive text messages about emergencies related to NSCC campuses: <https://www.getrave.com/login/nsc>. The instructions for this are listed below.

- 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

Your well-being is important to us. With this in mind, the college has several resources available to provide support when needed:

- Free tutoring: <https://www.nsc.edu/current-students/on-campus-resources/learning-center-and-tutoring>
- NSCC email, scheduling, online courses, textbooks, tech check out and support, computer labs on campuses, academic advising, financial advising, COVID-19 information and procedures on campuses: <https://www.nsc.edu/current-students/student-online-resources>
- Services that help with bus passes, food, childcare, textbooks, housing, financial counseling, personal counseling, suicide prevention, health insurance: <https://www.nsc.edu/current-students/on-campus-resources/student-support-services>

Equity Statement

We are taking steps to become more aware of the many different needs of students. Faculty, staff and administrators are committed to helping students find ways to meet their needs so that ALL students can reach their goals. Please ask for things you need.

Inclement Weather & Campus Closings

You get notices about campus closings in these places: text messages from RAVE and www.nsc.edu. Even when campuses are closed, you are still responsible for completing all assigned work. Check D2L/NS Online for a message from your instructor so you do not miss important assignments and due dates, which may change due to the campus closure.

Class Cancellation Policy

Our instructors post messages about cancelling classes in the D2L/NSOnline course shells and/or on the classroom door on campus. These messages can be found in the News and Content section or the Email tab in the online shell. Please check these to be sure that you take advantage of opportunities for learning and points toward your grade.