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Nashville State Community College
School of STEM
CAD Certificate, & ACT, CIT, EETH A.A.S Programs

2023 Course Syllabus
CADD 2113 – 3D Design and Printing

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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: CADD 2113 – 3D Design and Printing
Location:
Credits: 3
Class Hours: 2 class hours, 2 lab hours

Course Description:

An advanced course using AutoCAD software. This course provides the student with 3-D drafting techniques used in all fields of design. Topics include learning to think in three dimensions, the creation of 3-D objects, and standard drafting versus 3-D techniques. Students will complete this course with the ability to design and create 3-D objects, and present them as picture images and design prints. Prerequisite(s): CADD 1200

Instructor Information:
Name:
Email:
Office Phone:
Office Location:
Office Hours: As posted on the office door and D2L on the news page.
Instructor Zoom link:

Required Textbook(s) & Other Materials:
Textbook(s):   N/A
ISBN:

Reference Materials:
Supplies: USB Removable Storage Device (Flash Drive) 4 Gig Minimum size

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@nscc.edu.

Outline for CADD 2113

NOTE: THIS IS THE SEQUENCE BUT NOT NECESSARILY THE WEEK BY WEEK. TIMING MAY CHANGE OVER THE SEMESTER.

WEEK	TOPIC	Assignment
1	Introduction and Course Requirements	Lecture
	Software Introduction and Interface	Lecture
2	Intro to 3D Modeling	Lab Exercise – 1
3	3D Workspaces & Navigating in 3D	Lab Exercise – 2 & 3
4	Modeling & Editing Tools	Lab Exercise – 4 & 5
5	Design 3D Model	Lab Exercise - 6
6	Export & Prepare CAD Files	Lab Exercise - 7
7	Import to 3D Printer & Post Process	Lab Exercise - 8
8	Intro to 3D Scanning	Lecture
9	Perform Scan & Convert	Lab Exercise - 9
10	Importing 3D Scan to CAD	Lab Exercise - 10
11	Final Project	Lab
12	Final Project	Lab
13	Final Project	Lab
14	Final Project	Lab

Spring 2023 Full 14-Week Term Important Dates

Date(s)	Event/Deadline
Jan-18	Beginning Jan 18, Fees Due Day of Registration or Classes Subject to Being Dropped
Jan-17	Regular Classes Begin
Jan-30	Census Date (Last date to withdraw without "W" appearing on transcript"
Mar 6-12	Spring Break (No classes)
Mar-24	Last Day to Withdraw and Receive "W"
Mar-24	Last Day to Earn "F" for Attendance ("FA")
Mar-24	Fall 2021 "I" Grades (Incompletes) Change to "F"
Mar-24	Deadline for Filing Summer 2022 Graduation Intent
Apr 7-9	Administrative Closing (College closed)
Apr-29	Last Day of Classes
May 1-6	Final Exam Period
May-6	Weekend Class Finals
May 4	ALL ASSIGNMENTS DUE BY MAY 4th
Complete Calendar available at https://www.nscc.edu/academics/academic-calendar	

Course Outcomes:
Upon successful completion of this course, students should be able to:
1. Navigate and understand 3-D Space in Drawings
2. Understand and create 3-D primitives and 3-D Parametric objects
3. Understand 3D Printing concepts and Print designs on a 3D Printer.
4. Print 3D objects in shaded color and as traditional drawings.
5. Create a 3D assembly in parts and as a whole.

Course Competencies:
The following are detailed course competencies intended to support the course outcomes:
1. A basic level of computer literacy of the Windows environment is expected. The student should know how to open files, save files and follow a path to a file either on a hard disk or on a removable storage device.

Topics to Be Covered:
1. Mastery of 3D Design Concepts and command usage
2. Working knowledge of 3D Printer Concepts and Practices
3. Intermediate & Advanced techniques on how to use the commands most effectively to create 3D Designs.

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

1. Students will be assessed on their ability to perform "hands on" creation of design exercises evaluated on accuracy, clarity, and techniques learned in this program.

2. Students will be assessed on their retention of learned materials through written or "hands on" designs for testing.

Grading Scale:

3-4 Tests	20%
Homework	30%
Lab	19%
Final Exam	31%
Total	100%

Grading Policy:

If you cannot take a test when scheduled, you must notify the instructor and make arrangements to take the test prior to the scheduled date. Homework not turned in on time is subject to a 25% grade reduction. Homework will not be accepted if more than one week late or after an assignment has been returned to the class, whichever comes sooner. Homework should reflect your understanding of the subject, not that of your classmates. There will be no makeup on missed labs. Make every effort to attend every lab.

Grading Scale:

Letter Grade	Percentage Range
A	90-100
B	80-89
C	70-79
D	60-69
F	Below 60

FA

If you stop attending class or if you are in an online class and stop submitting assignments, but do not turn in a withdrawal form by the deadline, you are still enrolled in class. You will be given a grade of FA, which means you have failed due to not attending class and not completing your assignments. 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)." If you stop attending your course after this date, you will receive an F.

FN

An FN is awarded if you have never attended your course or done any of the work in an online course.

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

Assignments must be turned in by the last week of classes. If turned in in a timely manner students will be allowed to correct the problems and resubmit for a better grade.

Attendance Policy

The College is not an attendance taking institution as defined by 34 CFR 668.22(b)(1) in the Code of Federal Regulations; however, students are expected to attend all scheduled classes and laboratories.

- Absences in a course may affect a student's final grade.
- Tardiness may also affect a student's final grade.
- Students are responsible for all work/tests that occur during any missed class session(s) regardless of reason(s) for absence.
- Students who are sick or not well enough to attend class must notify the instructor as soon as possible before the scheduled class time, unless incapacitated or unable to do so. In that case, students must contact the instructor as soon as reasonably possible.
- If a student has an unavoidable conflict with a scheduled class session, students must notify the instructor, preferably before the class session, or as soon as possible.

For purposes of financial aid continued attendance is determined via engagement in the course. This can be accomplished in several ways including, but not limited to, continued attendance and/or participation in on-ground class sessions, participating in D2L as prompted (e.g., responding to an instructor's email, posting to a discussion board), and/or completing and submitting assignments.)

To the extent that attendance is kept in this class it is not for the purpose of the College but is instead associated with the instructor's individual grading rubric. The attendance policy for this class is: *(add attendance policy).*

General Policy

If you have been exposed to COVID-19 or have tested positive, you must email virusinfo@nscc.edu.

- *Absences in a course may affect your final grade.*
- *Tardiness may also affect your final grade.*
- *You are responsible for all work/tests that occur during any missed course session(s) regardless of reason(s) for absence.*
- *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, The attendance policy for this course is:

Students are responsible for attending class and or making up all work. The instructor must be sure that work submitted is the work of the student so all work must be submitted as a drawing file AND a paper print or .pdf file if attending online and not able to submit a paper print.

For financial aid purposes, **attendance** is measured by participation in the course. Instructors can determine your level of participation in several ways. Some of those ways are:

- continued attendance
- participation in on-ground or virtual class sessions
- participating in D2L as prompted
- responding to an instructor's email
- posting to a discussion board
- completing and submitting assignments

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.nscc.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 your responsibility to check your email in **both** D2L/NS Online course shells and your @my.nscc.edu (student email) on a regular basis. These are the official communication channels between the college and you. You are responsible for the information communicated through these email channels. D2L/NS

Online emails contain specific course information and @my.nscc.edu emails contain important information from college offices, such as Financial Aid.

ADA Compliance Statement

If you need accommodations due to a disability, please do not hesitate to reach out to our Access Center. Disabilities for which you can receive accommodations include documented physical, emotional, and/or learning conditions. Nashville State is committed to supporting your success, and we encourage you to get assistance if needed. 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@nscc.edu.

Classroom Misconduct

Disruptive conduct is not allowed in the classroom. Disruptive conduct is any behavior that prevents students from learning and interferes with the ability of the instructor to teach. This may change from course to course; therefore, your individual instructors will give you guidance on what qualifies as "disruptive conduct" in their courses. 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

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.nscc.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

You can log in to this free alert system to receive text messages about emergencies related to NSCC campuses: https://www.getrave.com/login/nscc. 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.nscc.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.nscc.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.nscc.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.nscc.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.