

# NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

## COURSE SYLLABUS

**Course Title:** Blueprint Reading

**Course #:** MFG 124

**Course Description:**

This is the first course in blueprint reading. It starts with the study of orthographic projection. Topics include lines and their uses, auxiliary views, sectional views, basic and special dimensioning, dimensioning practices for holes, chamfers, angle, tapers, keyways diameters and radii. Also, geometric tolerancing and dimensioning is discussed.

Credits; 2.0

**Pre-requisite/Co-requisite:** None

- **Goals:**
- Determine the information conveyed using Title Blocks, Linework & Symbols.
- Determine the information conveyed using Orthographic Projection, One View Drawings, Two View Drawings.
- Determine the information conveyed using Three-Viewed Drawings and Auxiliary Views
- Understand standard practices for Decimal Dimensions, Angle Dimensions, Hole Dimensions and Metric Dimensions.
- Determine the information conveyed using Full Sections and Half Sections.
- Determine the information conveyed using Revisions or Change Notes.
- Understand standard practices for Counterbores, Countersinks, and Spotfaces.
- Understand standard practices for Fillets, Rounds, and Slots.
- Understand standard practices for Machining Symbols, Bosses, and Pads.
- Understand standard practices for Tapers, Chamfers, and Bevels.
- Understand standard practices for Necks and Knurling.
- Understand standard practices for Keyseats and Flats.
- Understand standard practices for Screw Thread Specification and Representation.
- Understand standard practices for Assembly Drawings.

**Outcomes:**

**Upon course completion students shall be able to do the following:**

Describe the purpose of a blueprint.

- Identify the dimensions on the blueprint.
- Describe the appearance and use of notes.
- Explain how to use scale information on a print.
- Explain the tolerance information on a print.

Explain the appearance and use of views.

- Identify the types of section views.
- Define orthographic views.

- Identify the six possible views of a box.
- Identify how section views are displayed.

Understand the importance of linework.

- Describe the appearance and use of center lines.
- Describe the appearance and use for break lines.

Describe the relationship between prints and inspection.

- Describe how surface finish is specified in a common print.
- Describe proper methods for checking surface finish on a part.
- Identify common methods for specifying a thread in a print.
- Describe a thread based on its standard specification.

## **College Policies**

**Plagiarism:** Plagiarism and Academic Dishonesty are not tolerated at Northwestern Connecticut Community College. Violators of this policy will be subject to sanctions ranging from failure of the assignment (receiving a zero), failing the course, being removed/expelled from the program and/or the College. Please refer to your “Student Handbook” under “Policy on Student Rights,” the Section entitled “Student Discipline,” or the College catalog for additional information.

**Americans with Disabilities Act (ADA):** The College will make reasonable accommodations for persons with documented learning, physical, or psychiatric disabilities. Students should notify Dr. Christine Woodcock, the Counselor for Students with Disabilities. She is located at Green Woods Hall, in the Center for Student Development. Her phone number is 860-738-6318 and her email is [cwoodcock@nwcc.edu](mailto:cwoodcock@nwcc.edu).

**School Cancellations:** If snowy or icy driving conditions cause the postponement or cancellation of classes, announcements will be made on local radio and television stations and posted on the College’s website at [www.nwcc.edu](http://www.nwcc.edu). Students may also call the College directly at **(860) 738-6464** to hear a recorded message concerning any inclement weather closings. Students are urged to exercise their own judgment if road conditions in their localities are hazardous.

**Use of Electronic Devices:** Some course content as presented in Blackboard Learn is not fully supported on mobile devices at this time. While mobile devices provide convenient access to check in and read information about your courses, they should not be used to perform work such as taking tests, quizzes, completing assignments, or submitting substantive discussion posts.

**Sexual Assault and Intimate Partner Violence Resource Team:** NCCC is committed to creating a community that is safe and supportive of people of all gender and sexual identities. This pertains to the entire campus community, whether on ground or virtual, students, faculty, or staff.

Sexual assault and intimate partner violence is an affront to our national conscience, and one we cannot ignore. It is our hope that no one within our campus community will become a victim of these crimes. However, if it occurs, NCCC has created the SART Team - Sexual Assault and Intimate Partner Violence Resource Team - to meet the victim’s needs.

SART is a campus and community based team that is fully trained to provide trauma-informed compassionate service and referrals for comprehensive care. The team works in partnership with The Susan B. Anthony Project to extend services 24 hours a day, 7 days a week throughout the year.

The NCCC team members are:

Ruth Gonzalez, Ph.D.	860-738-6315	Green Woods Hall Room 207
Susan Berg	860-738-6342	Green Woods Hall Room 223
Kathleen Chapman	860-738-6344	Green Woods Hall Room 110
Michael Emanuel	860-738-6389	Founders Hall Annex Room 308
Seth Kershner	860-738-6481	Library
Jane O'Grady	860-738-6393	Founders Hall Annex Room 212
Robin Orloski	860-738-6416	Business Office Room 201
Patricia Bouffard, Ex-Officio	860-738-6319	Founders Hall Room 103
Savannah Schmitt		Student Representative

At NCCC we care about our students, staff and faculty and their well-being. It is our intention to facilitate the resources needed to help achieve both physical and emotional health.