# NORTHEASTERN TECHNICAL COLLEGE
## COURSE OUTLINE

<table>
<thead>
<tr>
<th>COURSE:</th>
<th>PREFIX NO.</th>
<th>EFFECTIVE DATE</th>
<th>NEXT REVIEW DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGT</td>
<td>111</td>
<td>September 2015</td>
<td>September 2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TITLE:</th>
<th>CREDITS</th>
<th>CONTACTS</th>
<th>CLASS - LAB - TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Drawing I</td>
<td>2</td>
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<td>1 3 2</td>
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**PREREQUISITES:** EGT 106 with a grade of “C” or better or by permission of instructor

**DESCRIPTION:** This course is an introduction to the principles and practices of mechanical drawing. Not for EGT majors.

Techniques will include instrument drawing, technical construction, and other graphic projection of normal, inclined, oblique and cylindrical surfaces as well as principles for selection and use of size and location dimensions.

**TEXTBOOK(S) OR ALTERNATIVE:** Graphics Technology, by James H. Earle; 2nd edition.

**MATERIALS (specifying those to be purchased by student):**

Drafting Kit required:

- Drafting brush
- Architect scale
- Lead pointer - sandpaper
- Drafting Tape
- Erasing shield
- 30-60-90 triangle
- 45-45-90 triangle
- Lead holder - 2
- Isometric Elliptical Template

Leads, 2H and 5H
6" bow compass
4" bow compass
Dry cleaning pad
Ames lettering guide
Pink eraser
Lead pointer
Protractor

The drafting kit is available through the NETC bookstore, will provide the above as a minimum.

**COLLATERAL READING:** Basic Diemaking - by D. E. Ostergaard

**CLASS MANAGEMENT ACTIVITIES (Attendance, tardies, testing, etc.):**

A. No more than 20% of the scheduled class hours may be missed; attendance will be kept "by the hour", including any tardiness or early leaving.

1) Students are expected to be in class on time and ready to start working.

2) Students are to remain working until the end of the class period. No student should leave class early without the permission of the instructor.

3) There are no excused absences except those verified by other instructors for field trips or school related activities.
4) A student with a doctor’s excuse will be able to make up missed work, but the absence will still count toward the maximum number of absences allowed.

5) A student is tardy if he/she arrives for class after the instructor has checked the class roll. Three tardies will count as one absence for day students. Time missed for night students will be accumulated until an even hour has been missed. Students should strive to get to class on time each day.

B) Disabilities Statement: Students with disabilities are encouraged to contact the Dean for Student Services to discuss needs or concerns as they pursue an academic program and participate in campus life. The Dean for Student Services will provide guidance regarding official documentation of disabilities and/or accommodation of needs. (See College Catalog)

C) Student ID: It is mandatory that every student wear his or her student ID at all times when on the Cheraw campus. During the first week of classes, the instructor will issue a reminder to wear the ID. This reminder is a warning. After the first week of classes, instructors are required to dismiss students without ID from class. The student may get his/her ID (or a new one in Student Services for $3.00) and return to class before the midpoint of the class. If the student cannot get an ID and return to class by the midpoint, the instructor will record the absence.

D) Academic Honesty: During a test, as well as on any written assignment, paper, or project, anyone determined to be exchanging information or copying someone else's work will be given a grade of "F" on that work and face further disciplinary action. Collusion is defined as the unauthorized collaboration with any other person in preparing work offered for credit. This, as well as plagiarism, the appropriation of any other person's work and the unacknowledged incorporation of that work in one's own work offered for credit, will also be subject to a grade of "F" on the work and further disciplinary action. Please refer to the "Student Code Book" on "Academic Dishonesty" section, pp. 9-10.

E) All drawings will be done in class

F) Grading will be based on:
   1. Instructor's evaluation of drawings (accuracy, completeness, neatness)..........................90%
   2. Classwork (diligence, effort, attendance)......10%
   3. All drawings assigned must be completed or will receive a grade of “0” for incomplete drawings.

G) All keys loaned must be returned before a grade is assigned.

H) Minimum of 35 Drawings
RESOURCES (A-V, persons, tools/equipment): Geometric Solids; Prints

COURSE TOPICAL OUTLINE (List topics and sub-topics of course) and CALENDAR of approximate length of time devoted to topic.

<table>
<thead>
<tr>
<th>WEEK</th>
<th>SUBJECT</th>
<th>ASSIGNMENT</th>
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<tbody>
<tr>
<td>1-2</td>
<td>Draw Handouts</td>
<td>Page 38 1-AV and 1-AH</td>
</tr>
<tr>
<td>2-4</td>
<td></td>
<td>Pages 62-64, Sheets 1-6&lt;br&gt;Draw figures 5.45, 5.46, 5.49</td>
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<tr>
<td>4,5,6</td>
<td></td>
<td>Figure 6.41 (2 per sheet grid paper)&lt;br&gt;1-12, 6 total</td>
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<tr>
<td>7-10</td>
<td>Read Chapter 7</td>
<td>Draw figure 7.61, 7.64, 7.65&lt;br&gt;(AV) Add Missing lines and views Dimension</td>
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OBJECTIVES OF COURSE:
1. Demonstrate proper usage of drawing instruments.
2. Demonstrate competence with the basic principles and practices.
3. Demonstrate acceptable lettering.
4. Prepare orthogonal multiview of assigned die.
5. Prepare assembly drawing of assigned die.
6. Use proper dimensioning techniques.

INSTRUCTIONAL METHODS TO COMPLETE OBJECTIVES:
Review of text material<br>Practice in making assigned drawings

EVALUATIVE METHODS TO APPRAISE OBJECTIVES:
Drawing exercise will be graded for accuracy, completeness, and neatness.

GRADING SCALE:
100 - 90 = A<br>89 - 80 = B<br>79 - 70 = C<br>69 - 60 = D<br>BELOW 60 = F