

# School of Engineering and Physical Sciences Department of Architecture

| Course Name                  | Engineering Drawing |  |  |
|------------------------------|---------------------|--|--|
| Course Code<br>& Section No. | EEE 154, Section 9  |  |  |
| Semester                     | Fall 2020           |  |  |

| Instructor Name | Amity Kundu   |  |  |
|-----------------|---|--|--|
| Office          | SAC 908   |  |  |
| Office Hours    | Sun 1:00 – 2:30, Tue 1:00 – 2:30  |  |  |
| Office Phone    | +880-2-55668200 Ext:1857  |  |  |
| Email Address   | amity.kundu@northsouth.edu  |  |  |
| Department      | Architecture  |  |  |
| Links           | North South University Website: <a href="http://www.northsouth.edu">http://www.northsouth.edu</a> |  |  |
|                 | School Webpage: http://www.northsouth.edu/academic/seps/  |  |  |
|                 | Department Webpage: http://www.northsouth.edu/academic/seps/architecture.html                     |  |  |
|                 | Google Classroom Access Code: e3ighwk   |  |  |

# COURSE AND SECTION INFORMATION

| Class Time &<br>Location     | Thursday 4:20 – 5:50 pm; LIB 608   |
|------------------------------|--|
| Course<br>Prerequisite(s)    | None   |
| Course Credit Hours          | 1.0 credits  |
| Course Description           | Introduction: lettering, numbering and heading; plain geometry. Projection (Solid Geometry). Development and true shape: cube, pyramid, cone, prism, section and true shape. Isometric drawing, oblique drawing. Plan, elevation and section of engineering structures. Introduction to Computer Aided Design (CAD). |
| Course Objectives            | Introduce the students to the basics of engineering drawing and communication using freehand sketches and computer – aided drawing.  |
| Student Learning<br>Outcomes | On successfully completing this course, students will be able to:  CO 1. Demonstrate effective nonverbal communication skills using 2d technical drawings.  CO 2. Draw 3D projection from 2D sketches.  CO 3. Draw Plan or elevations from 3D projections.   |

# Mapping of Course Outcomes with Program Outcomes, Delivery Methods and Assessment Strategies

|      | Course Outcomes (CO)  | Bloom's<br>taxonomy<br>domain/level<br>(C: Cognitive<br>P: Psychomotor<br>A: Affective) | Delivery<br>methods<br>and activities       | Assessment tools                                  |
|------|---|---|---|---|
| CO-1 | Demonstrate effective nonverbal communication skills using 2D technical drawings. | P4  | Lecture,<br>Handout,<br>AutoCAD<br>drawing  | Homework,<br>Midterm,<br>Classwork,<br>Final Exam |
| CO-2 | Draw 3D projection from 2D sketches.  | P4  | Lecture,<br>Handout,<br>SketchUp<br>drawing | Classwork,<br>Final Exam                          |
| CO-3 | Draw Plan or elevations from 3D projections                                       | P4  | Lecture,<br>Handout,<br>Layout<br>drawing   | Classwork,<br>Final Exam                          |

Cognitive domain (knowledge-based): C

1: Knowledge, 2: Comprehension, 3 Application, 4 Analysis, 5: Synthesis, 6: Evaluation

The affective domain (emotion-based): A

1: Receiving, .2: Responding, 3: Valuing, 4: Organizing, 5: Characterizing

The psychomotor domain (action-based): P

- 1: Perception, 2: Set, 3: Guided response, 4: Mechanism, 5: Complex overt response, 6: Adaptation,
- 7: Origination

# RECOMMENDED TEXT (s) – Primary and Supplementary

| Author  | Title                                     | Edition & Year                     | Publisher     |
|---|---|------------------------------------|---------------|
| Steven B. Combs &<br>Jay H. Zirbel                      | Fundamentals of AutoCAD                   | First Published September 10, 1997 | Prentice Hall |
| Gary R. Bertoline, Eric<br>N. Wiebe, Craig L.<br>Miller | Fundamentals of Graphics<br>Communication | 3 <sup>rd</sup> Edition,<br>2002   | McGraw Hill   |
|   | Handouts, Lecture notes and exercises     |                                    |               |
|   | AutoDesk online help community            |                                    |               |
|   | Youtube videos and online tutorials       |                                    |               |

#### ASSESSMENT STRATEGY AND GRADING SCHEME

Your performance in ALL the exams and attendance determine your grade. The points are distributed in the following manner:

|                        | Points     |
|------------------------|------------|
| Class Work / Home Work | 45         |
| Midterm Exam           | 25         |
| Final Exam             | 30         |
| Attendance             | 5          |
| Total                  | 100 (100%) |

NSU's grading and performance evaluation policies will be followed in assigning your grade. Please note that all final grades are subject to departmental review and approval.

#### CLASSROOM RULES OF CONDUCT

- 1. The ground rule for our class is respectful, open communication. We have many things to learn from one another. Every single question is appreciated!
- 2. Please join the classroom on time (4:20 PM Sharp). Tardiness is not appreciated and it disrupts the class. Attendance will be taken at the beginning of the class and lecture will start right after attendance. It will be the student's responsibility to catch up if he / she misses attendance or any part of the lecture due to tardiness or absences.
- 3. When you come to the class, you become part of a learning community. Please be conscious of your community role, and work toward creating a healthy learning atmosphere in the class.
- 4. Don't chat during the class. If you have to, then feel free not to attend the class at the expense of your attendance for the day. <u>Inability to refrain from unnecessary, disruptive chatting may result in a request to leave the classroom.</u>
- 5. If you have to leave the class when it is in progress, seek permission respectfully without disrupting the class lecture and leave when permission is given by the class teacher.
- 6. You must seek permission before using, sharing or reproducing any class recording, study material, handouts, videos etc provided in class. Use of such material for academic purposes other than for this class only is strictly prohibited and will result in penalty.
- 7. While in class, please switch off or put your cell phone on silent mode to avoid any distraction.
- 8. Limit your eating, chatting on FB, surfing on Insta, going through emails or SMS while the class is in progress. Except the software / programs related to class, all other apps, programs, software <u>must be turned off</u> in order to avoid any distraction created in class.
- 9. Academic Integrity Policy: The School of Electrical and Physical Sciences does not tolerate academic dishonesty by its students. At a minimum, you must not be involved in cheating, copyright infringement, submitting the same work in multiple courses, significant collaboration with other individuals outside of sanctioned group activities, and fabrications. You are advised that violations of the Student Integrity Code will be treated seriously, with special attention given to repeated offences. Please refer to NSU Code of Conduct at <a href="http://www.northsouth.edu/student-code-of-conduct.html">http://www.northsouth.edu/student-code-of-conduct.html</a>

# EXAMS AND MAKE UP EXAMS POLICY

#### Please note:

- You must come prepared for all your exams.
- You must come on time.
- Being late does not necessarily guarantee that you are going to get extra time for writing your tests and exam.
- You must bring your own pencil, pen, eraser, calculator and any other permitted items that you may need and you are allowed during the tests and exam.
- All cell phones must be switched off.
- Any deviation from the standard procedures will not be taken lightly.

- Any unfair means adopted in the tests and exam will be seriously dealt with.
- Plagiarism or cheating in classwork, homework or exams will be seriously dealt with and will result in F grade for ALL the students involved.
- Academic misconduct or failure to comply with NSU Examination Code of Conduct may result in F.

#### ATTENDANCE POLICY

All students must attend all lectures and exams. No make-up exam will be held for this class. All absences must be accompanied by a doctor's note. More than three absences will result in a one point deduction in a letter grade. More than five absences will result in dismissal from the class.

- 1. Students attending less than 50% of the class will obtain 0 points
- 2. Student's attending 50-60% classes = 6 points
- 3. Student's attending 60-70% classes = 7 points
- 4. Student's attending 70-80% classes = 8 points
- 5. Student's attending 80-90% classes = 9 points
- 6. Student's attending 90-100% classes = 10 points

### TENTATIVE COURSE CONTENTS AND SCHEDULE

| Week# | Class# | Day      | Date         | Торіс                                      | Chapter                             |
|-------|--------|----------|--------------|--|-------------------------------------|
| 1     | 1      | Thursday | 29 Oct,2020  | Introduction to Computer Aided<br>Drafting | Basic Shapes                        |
| 2     | 2      | Thursday | 5 Nov,2020   | Introduction to Computer Aided<br>Drafting | Basic Modifications                 |
| 3     | 3      | Thursday | 12 Nov,2020  | Introduction to Computer Aided<br>Drafting | Basic Modifications (Home Work Due) |
| 4     | 4      | Thursday | 19 Nov,2020  | Introduction to Computer Aided<br>Drafting | Layer, Dimension,<br>Print          |
| 5     | 5      | Thursday | 26 Nov,2020  | Practice Session                           | AutoCAD 2D drawing (Home Work Due)  |
| 6     | 6      | Thursday | 3 Dec,2020   | MIDTERM                                    | AutoCAD 2D drawing                  |
| 7     | 7      | Thursday | 10 Dec,2020  | Introduction to SketchUp<br>3D drawing     | Perception, Projection, Perspective |
| 8     | 8      | Thursday | 17 Dec,2020  | Practice Session SketchUp                  | (Class Exercise Due)                |
| 9     | 9      | Thursday | 24 Dec,2020  | Class cancelled                            | Class cancelled                     |
| 10    | 10     | Thursday | 31 Dec,2020  | Introduction to Layout 3D drawing          | Layout, Dimension,<br>Print         |
| 11    | 11     | Thursday | 7 Jan,2020   | Practice Session Layout                    | (Class Exercise Due)                |
| 12    | 12     | Thursday | 12 Jan, 2020 | Review                                     | AutoCAD, SketchUp,<br>Layout        |

<sup>\*\*\*</sup> The faculty reserves the right to make changes to the course outline.