

Bergen Community College
Division of Math, Science and Technology
Department of Industrial & Design Technology

Course Syllabus
DFT 282 Technical Illustration

Semester and year:

Course Number:

Meeting Times and Locations: Tuesdays 6:15pm -10:30pm

Instructor: Jesus Marmol

Office Location:

Phone:

Office Hours:

Email Address:

COURSE DESCRIPTION:

DFT 282 Technical Illustration details the techniques used in the preparation of pictorial technical material for illustration and publication. Advanced drawing techniques in axonometric, oblique, and perspectives are covered as well as basic shading methods used in illustration. Illustration techniques on CAD are also explored.

2 lecture, 2 labs, 3 credits

Prerequisites: DFT 107 and DFT 207

Co-requisites: None

STUDENT LEARNING OBJECTIVES:

As a result of meeting the requirements in this course, students will be able to:

Student performance on these objectives will be measured by:

1. Demonstrate techniques used in advanced pictorial drawing.	Drawing exercises.
2. Demonstrate techniques used in surface treatment and shading of pictorial drawings.	Drawing exercises.
3. Identify the need for and appreciation of good illustrative drawing in the advancement of products in the wholesale and retail markets.	CAD drawing assignments and independent project illustrations.
4. Evaluate different software programs used for design illustration.	CAD drawing assignments and independent project illustrations.

COURSE CONTENT:

Chapter

Topic

5	Isometric Drawing
5	Dimetric and Trimetric Drawing
6	Oblique Drawing
7	Perspective Drawing
8	3D Modeling
9	Shading Techniques
12	Airbrush Techniques

TEXTBOOK:

Technical Illustration, Techniques and Applications, Dennison, John A., Johson, Charles D. , Goodheart Willcox Publishers, 2003

Architectural Graphics 4th Edition, Francis D.K. Ching. Wiley, John & Sons, 2002

ILLUSTRATION REQUIREMENTS:

Five illustrations will be required using various shading techniques and drawing areas to include the following:

Shading Techniques

1. Object line shading
2. Open and solid line shading
3. Stiple/Smudge shading
4. Pressure sensitive shading
5. Cast shadows

Drawing Areas

1. Isometric
2. Oblique
3. Diametric – Trimetric

Three major illustrations will be required to include:

1. An Architectural Rendering
2. A CAD Render Illustration
3. A Product Illustration

All illustrations will be completed in ink on illustration paper except the CAD renderings, Google SketchUp renderings and PhotoShop renderings.

Drawing Instruments Required:

1. All instruments that would be required in a drafting class.
2. A minimum four pen technical pen set.
3. Any templates for drawing aids a student feels necessary to complete the above illustrations.

EVALUATION:

Five Shading Illustrations40%
Three Major Illustrations	<u>.60%</u>
	100%

ATTENDANCE POLICY:

Attendance will be taken twice during each class period. The first attendance for the lecture portion of the class will be at the beginning of each class. The second attendance, for the laboratory portion of the class will be taken ½ hour before the end of class.

If a student is absent from the lecture portion of the class, it will be recorded as an absence for the entire class period. If a student is absent from the laboratory portion of the class, it will be recorded as an absence from that portion of the class only.

A letter grade will be deducted from the class participation portion of your final grade for each absence beyond three absences from either portion of a class period.

SPECIAL NOTES:

A final grade cannot be assigned for the course until all drawings, projects and examinations for the course have been completed.

Make-up examinations will be administered in accordance with the instructor’s and division’s policy.

FACULTY ABSENCE PROCEDURE: Please note well.

A daily listing will appear in the glass case located in the main hall A bldg. which will indicate all classes which are cancelled. Students can consult this case before going to class. If students find a class cancelled which has not been listed, they should report this to the divisional dean's office (A325) or to the evening/Saturday office (L113).

TECHNICAL ILLUSTRATION – CALENDAR

Class Meeting	Date	Topic	Assign due
1.	_____	Review Isometric and Oblique, Object Line Shading	
2.	_____	Diametric, Trimetric, Open and Solid Line Shade, Stipple Shade	Object Line Shade in Isometric
3.	_____	Intro To CAD Solids, intro to CAD components	Initial Architectural Illustration Plan
4.	_____	Intro to AutoCAD Architecture	Open, Solid Line, Shade in Dimetric
5.	_____	Rendering with AutoCAD	
6.	_____	AutoDesk Impression	AutoCAD Architecture Workup
7.	_____	Intro to Google SketchUp	Initial CAD Render Plan
8.	_____	Google SketchUp style rendering	Shading in 3 Pt. Perspective
9.	_____	Google SketchUp animation	Final AutoCAD Architecture Illustration, Initial Product Plan
10.	_____	Intro PhotoShop	Google SketchUp Renderings presentation
11.	_____	PhotoShop Rendering	
12.	_____	Open Lab	PhotoShop Rendering
13.	_____	Open Lab	Final CAD Render
14.	_____	Open Lab	Google Sketch up Rendering
15.	_____	Open Lab	Final Product Illustration presentation

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