

SYLLABUS

DIVISION: Business and Engineering Technology

REVISED: Fall 2014

CURRICULA IN WHICH COURSE IS TAUGHT: Graphic Imaging Technology

COURSE NUMBER AND TITLE: PNT 131, Principles of Lithography I

CREDIT HOURS: 4 HOURS/WK LEC: 3 HOURS/WK LAB: 3 LEC/LAB COMB: 6

I. CATALOG DESCRIPTION:

PNT 131 - Principles of Lithography I (4 cr.)—Presents principles of lithography printing, its safety practices and equipment operation. Covers job planning, copy preparation, stripping, presensitized plates, small press operation, ink, paper handling, finishing operations.

II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES:

- Demonstrate technical and skill competencies in the area of lithography to complete laboratory projects.
- Demonstrate technical and skill competencies in the finishing and bindery operations of printed pieces.

III. REQUIRED BACKGROUND/PREREQUISITIES:

- *Co-requisite:* PNT 135 or department approval.
- Internet access (If you do not have a computer at home, you can go to the computer labs on the main campus or local library.)
- Ability to access Blackboard through DCC homepage at www.dcc.vccs.edu and then click on the MY DCC tab.
- No special computer knowledge required. (The first day of class will be dedicated to instruction in this area)
- Knowledge in the use of Blackboard a plus, but, not required. (The first day of class will be dedicated to instruction in this area)

IV. COURSE CONTENT:

- Overview of graphic communications
- Measuring as it relates to the printing industry
- Image Assembly
- Lithographic Platemaking
- Lithographic Press systems
- Finishing and Binding
- Safety

V. THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE (Place X by all that apply)

<input checked="" type="checkbox"/>	Communications	<input checked="" type="checkbox"/>	Personal Development
<input checked="" type="checkbox"/>	Critical Thinking	<input type="checkbox"/>	Quantitative Reasoning
<input type="checkbox"/>	Cultural & Social Understanding	<input type="checkbox"/>	Scientific Reasoning
<input checked="" type="checkbox"/>	Information Literacy		

VI. LEARNER OUTCOMES**VII. EVALUATION**

<p>1. Receive an overview of graphic communications. Understand:</p> <ul style="list-style-type: none">Why importantVisual ImagesPrinting Process (Relief, Flexography, Gravure, Screen, Offset)	<p>Lab exercises Written test</p>
<p>2. Learn measuring as it relates to the printing industry.</p> <ul style="list-style-type: none">Differentiate between the US conventional and SI Metric systemDescribe the point and pica systemUse a line gaugeUnderstand the use of proportional scales, screens, screen angles	<p>Lab exercises Written test</p>
<p>3. Perform image assembly procedures using both conventional and digital methods</p> <ul style="list-style-type: none">Mechanics of LayoutStripping equipment and toolsStripping proceduresPlan and layout simple 1/color, 1 up work	<p>Lab exercises Written test</p>
<p>4. Distinguish different types of plates used in the printing industry. Have an understanding of:</p> <ul style="list-style-type: none">Plate classificationsHandling and safetyPlatemaking equipmentPlatemaking variables	<p>Lab exercises Written test</p>
<p>5. Identify and perform finishing and Binding operations.</p> <ul style="list-style-type: none">Outline bindery and finishing operations as to their functionsPerform cutting, folding and other finishing operations	<p>Lab exercises Written test</p>
<p>6. Learn to operate a lithographic printing press. Perform the set-up and operation procedures on an offset printing press.</p>	<p>Lab exercises</p>