

SYLLABUS / OUTLINE
DANVILLE COMMUNITY COLLEGE

DIVISION: Business and Engineering Technology

REVISED: Spring 2014

CURRICULA IN WHICH COURSE IS TAUGHT: Graphic Imaging Technology

COURSE NUMBER AND TITLE: PNT 231 – Lithographic Chemistry

INSTRUCTOR: Sheila Wright

Charles Hawkins E&IT Building, office #10

(434) 797-8433

Email: swright@dcc.vccs.edu

OFFICE HOURS: Posted on my office door and in EIT 26 Mac lab. If these times are not convenient for you, just contact me and I will work with you to fit your schedule.

CREDIT HOURS: 2 **HOURS/WK LEC:** 2 **HOURS/WK LAB:** 0 **LEC/LAB COMB:** 2

I. CATALOG DESCRIPTION: Introduces chemistry and how it involves the printer. Covers the role of water in lithography, pH of solutions, plate coatings and film emulsions. Studies relationship of paper and ink, emulsification, water logging, effect of humidity, and causes and control of static electricity.

II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES:

- Demonstrate an understanding of the fundamentals of reproduction processes.
- Discuss the aspects of lithographic chemistry as it relates to the printing industry.
- Demonstrate an understanding of the economic costs of printing techniques and materials.
- Utilize mathematical skills necessary for effective performance in the printing industry.

III. REQUIRED BACKGROUND/PREREQUISITIES:

- Prerequisite: PNT 132 or department approval.
- Student should have basic computer usage skills to use Email and browse the internet to complete assignments.
- Jump drive: Neither the instructor nor the college is responsible for loss of your computer files. Save them frequently in your folder in Thawspace. If you want to keep them, back them up frequently on your jump drive. No excuses will be accepted for missing or lost work.
- Headphones: This is very important since we will be viewing a lot of Adobe and other tutorials and YouTube presentations. To aid with concentration, it is most important that everyone use headphones.

IV. COURSE CONTENT:

- Paper Manufacturing
- Paper Characteristics
- Ink Manufacturing
- Ink Characteristics
- Ink and Paper Relationships

V. THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE:

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

VI. LEARNER OUTCOMES:

VII. EVALUATION:

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|--|---|
| <p>Paper Manufacturing</p> <ul style="list-style-type: none"> • Discuss the history of paper • Identify the sources of fiber for papermaking • Understand the manufacturing process of papermaking | <p>Evaluation method In-class assignments and exercises Written test</p> |
| <p>Paper Characteristics</p> <ul style="list-style-type: none"> • Discuss coated papers • Discuss recycled papers • Identify physical characteristics of paper • Discuss the classifications of paper | <p>Evaluation method In-class assignments and exercises Written test</p> |
| <p>Ink Manufacturing</p> <ul style="list-style-type: none"> • Identify ink ingredients • Understand the manufacturing process of ink making | <p>Evaluation method In-class assignments and exercises Written test</p> |
| <p>Ink Characteristics</p> <ul style="list-style-type: none"> • Discuss ink properties • Discuss ink testing • Understand the relationship of ink and color | <p>Evaluation method In-class assignments and exercises Written test</p> |
| <p>Paper and Ink Relationships</p> <ul style="list-style-type: none"> • Understand the requirements of using specific inks and papers for various printing processes • Identify the appropriate ink for various papers • Discuss the impact of the manufacture of paper and ink on the environment • Understand responsible handling and disposal of hazardous materials generated from paper and ink waste | <p>Evaluation method In-class assignments and exercises Written test</p> |

VII. GRADING POLICY:

Attendance is required for all lectures and lab sessions. Excessive absences or tardiness will result in poor performance in completing projects and will result in a loss of points toward the student's final grade.

We meet 15 regular class meetings and 1 meeting for the exam. Each class meeting's assignments and/or activities and the exam are worth 6.25 points each for a total of 100 points.

Each class meeting may require open discussion, hands-on projects and/or activities, and/or written assignments which **MUST** be completed in class on the day it is assigned or posted as due. These cannot be made up. If you are absent, you will earn 0 points for that class meeting.

IX. GRADING SCALE: A = 99-90; B = 89-80; C = 79-70; D = 69-60; F = Below 60

X. ACADEMIC HONESTY CLAUSE:

DCC Honor Code: I promise that I have neither given nor received unauthorized help on this work, nor am I aware of any violation of the Honor Code.

Plagiarism and Academic Dishonesty

Students will be expected to maintain complete honesty and integrity in their academic work in this class. Acts of academic dishonesty, such as cheating, plagiarism, or inappropriately using the work of others to satisfy course requirements, will not be tolerated. Students who maintain their enrollment in this class agree that such acts will be managed at the discretion of the instructor according to the severity of the infraction.

Academic dishonesty includes collaborating with other students on take-home examinations or other non-collaborative assignment, presenting the work of others as your own, failing to document adequately on research from printed materials or internet sources, and cheating on tests. Disciplinary action will be pursued for all acts of academic dishonesty and may result in the failure of affected assignments, and or this class, as determined by the instructor.

XI. ADA POLICIES: Danville Community College is committed to meeting the needs of all students and providing access for persons with disabilities. Reasonable accommodations are available to those students with diagnosed disabilities. Students with diagnosed disabilities wishing to receive specific accommodations must be registered with the Disability Services. For more information, please contact Carl Amos, Counselor and ADA Coordinator, at 797-8479 or camos@dcc.vccs.edu.