

East Penn School District
Secondary Curriculum

A Planned Course Statement
for

Advanced Graphic Arts

Course # 922

Grade(s) 11-12

Department: Technology Education

Length of Period (mins.) 40

Total Clock Hours: 60

Periods per Cycle: 6

Length of Course (yrs.) 1

Type of Offering: required elective

Credit: 1

Adopted: 4/23/07

Developed by:

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Description of Course #922

Course Title: **Advanced Graphic Arts**

Description: Advanced Graphic Arts is designed to give the experienced student the opportunity to specialize in offset lithography or screen-printing. Students will also use various desktop publishing programs in their area of specialization.

Students will be responsible for printing projects for the school as well as personal projects.

Job planning, production and cost estimate will be an integral part of this course.

Goals:

- To teach the students a simulated approach to printing production in the areas of offset lithography and screen-printing.

Requirements:

- Graphic Arts 912

Text:

- Teacher produced procedure sheets

Key to Levels of Achievement (Listed with each learning objective)

Awareness (A):	Students are introduced to concepts, forms, and patterns.
Learning (L):	Students are involved in a sequence of steps and practice activities which involved further development and allow evaluation of process.
Understanding (U):	Students demonstrate ability to apply acquired concepts and skills to individual assignments and projects on an independent level.
Reinforcement (R):	Students maintain and broaden understanding of concepts and skills to accomplish tasks at a greater level of sophistication.

Unit	Num	Objective	Level	Content	Evaluation	Standard
I. Safety	1	Students will be instructed in the safe handling of materials/chemicals and machine operations	R	<ul style="list-style-type: none"> Lecture Demonstration MSDS Regulations 	<ul style="list-style-type: none"> Peer observation 	3.7A
II. Printing Processes	2	Students will understand the various printing processes and their applications.	R	<ul style="list-style-type: none"> Letterpress Offset Screen Gravure Electronic Pad 	<ul style="list-style-type: none"> Class discussion Interaction with teacher 	3.6A
III. The Graphic Arts Industry	3	Students will understand the graphic arts industry and the occupations within the various processes.	R	<ul style="list-style-type: none"> Lecture Field trip Demonstration 	<ul style="list-style-type: none"> Discussion with industry personnel 	3.6A
IV. Offset Lithography	4	Students will understand the lithographic printing process.	R	<ul style="list-style-type: none"> History of Lithography Line photography Parts of an offset press Masking/computer to plate Plate making 	<ul style="list-style-type: none"> Interaction with teacher 	3.6A
V. Offset Presswork	5	Students will learn the basics for operating an offset press.	R	<ul style="list-style-type: none"> Plate/Blanket/impressions cylinders Ink systems Dampening systems Paper system Press controls Press operation * 1250 Multi-Lith. * 4750 Toko 	<ul style="list-style-type: none"> Teacher observation Printed product critique 	3.6A
VI. Screen Printing	6	Students will learn the principles of screen-printing.	R	<ul style="list-style-type: none"> Lecture Demonstration Screen Printing Making a film positive Applications Stencil material Screen fabric Screen frames Squeegees T-shirt printing Printing procedure 	<ul style="list-style-type: none"> Teacher observation 	3.6A
VII. Screen Printing Stencils and Materials	7	Students will learn the correct stencil for various printing	R	<ul style="list-style-type: none"> Demonstration Paper stencils 	<ul style="list-style-type: none"> Teacher observation 	3.6A

Unit	Num	Objective	Level	Content	Evaluation	Standard
		applications.		<ul style="list-style-type: none"> • Lacquer: Amba stencils • Photo direct stencils • Emulsion 		
VIII. Screen Printing Procedure	8	Students will learn the printing procedure for textiles and other substrates.	R	<ul style="list-style-type: none"> • Demonstration • T-shirt printer set-up • Registration of images • Print drying • Multi-color registration • Squeegee selection 	<ul style="list-style-type: none"> • Printed product critique 	3.6B,C
IX. Desktop and Electronic Publishing	9	Students will understand the Adobe Suite software programs and Xante Platemaking system.	R	<ul style="list-style-type: none"> • Demonstration • Photoshop • Indesign • Illustrator • Xante Platemaker 	<ul style="list-style-type: none"> • Teacher developed projects 	3.6B,C
X. Orthochromatic Photography	10	Students will understand the process camera and orthographic film.	R	<ul style="list-style-type: none"> • Lecture • Demonstration • Camera • Negatives • Positives • Processing 	<ul style="list-style-type: none"> • Analysis of negatives & positives 	3.6B
XI. Cost Estimating	11	Students will learn the principles of labor and materials estimating.	L	<ul style="list-style-type: none"> • Lecture • Paper types • Maintenance cost • Materials cost 	<ul style="list-style-type: none"> • Correct billing of district job 	3.6B