

ALFRED UNIVERSITY

Alfred, New York

SCHOOL FOR AMERICAN CRAFTSMEN

SPONSORED BY

THE AMERICAN CRAFTSMEN'S EDUCATIONAL COUNCIL, INC.

chartered by the Regents of the State of New York

The position of crafts in our time, or any time, needs no defense, but the survival of fine crafts can only be realized through new concepts and definitions that will establish a permanent place for crafts in an industrial world. The Hand Arts cannot compete with the machine. They must supplement it. The Craftsman of the post-war world will find his occupation and livelihood in serving the special needs of the public. In so doing he will fill a gap which can never be met by industry. He will lead the way in artistic appreciation and creation which industry may then adapt to mass production. In this way the great traditions of American craftsmanship will be revived and perpetuated. The American Craftsmen's Educational Council, through the School for American Craftsmen, is dedicated to establishing the best practical means to assist in attaining these ends. However, this training will give him the necessary skills in Hand Arts to find employment in Industries needing these fine skills.

One of the first questions a prospective craft student asks himself is whether there is a living to be made through the practice of the Hand Arts. The American Craftsmen's Educational Council has no hesitation in saying that a good living is possible. By this is meant that a craftsman who is well trained, is willing to work hard and to follow proper marketing practices, can expect to earn in normal times, from \$1,500 to \$3,000 a year, as an independent craftsman, depending on his skills.

The School for American Craftsmen is equipped to train its students to produce "a good product." To achieve this there will be careful training in design, skills and techniques, disciplined workmanship, establishment of efficient work habits, and practice in cooperative workshop practices. A thorough understanding of the function, cost, and marketing possibility of each product will be taught, as well as the proper use of materials, design, and production methods.

No new or startling approach is attempted in this program. On the contrary, commonsense and a realistic understanding of modern factors are applied to the age old use of the hands of mankind. The desire to use hands creatively is as old as man himself, but now, as always, this desire must be followed by careful training and guidance such as is outlined in these pages. It is hoped that the pattern established by the School for American Craftsmen will appeal to Veterans returning from this war and seeking new opportunities as well as to men and women everywhere who wish to find a way of life which will bring them spiritual and financial independence.

The program offered in this catalog is presented in a full belief in the occupational and cultural opportunities involved. Especially adapted at this time to the needs of the returning veteran, the School is nevertheless planned on a permanent basis which will extend to coming generations the advantages of sound training in craftsmanship. Upon completion of the two year course outlined herein Alfred University will give a certificate.

OUTLINE OF TWO-YEAR COURSE IN THE HAND ARTS

The following five craft courses are offered:

Metal Smithing
Pottery
Textiles
Woodworking
Wrought Iron

The objective of each of the five courses is to train professional, producing craftsmen, capable of adequate self-support through their skills in their chosen craft.

Design, the History of Art*, Mechanical Drawing*, and Production and Marketing, in addition to craft techniques, are required subjects for all courses.

* see Alfred University Catalogue

CALENDAR FOR 1946 - 1947

FIRST SEMESTER

Registration (new students)	Monday	Sept. 30, 1946
Instruction begins	Tuesday 8:30 AM	Oct. 1
Thanksgiving recess begins	Wednesday 12 Noon	Nov. 27
Instruction resumed	Monday 8:30 AM	Dec. 2
Christmas Recess begins	Friday 12 Noon	Dec. 20
Instruction resumed	Thursday 8:30 AM	Jan. 2, 1947
Examinations begin	Monday	Feb. 3
Semester ends	Friday	Feb. 7

SECOND SEMESTER

Registration (new students)	Monday	Feb. 10
Instruction begins	Tuesday. 8:30 AM	Feb. 11
Examinations begin	Monday	June 9
Semester ends	Friday	June 13

THIRD SEMESTER (no new students admitted.)

Instruction begins	Monday 8:30 AM	June 16
Examinations begin	Monday	Aug. 18
Semester ends	Friday	Aug. 22

WEEKLY TIME ALLOTMENT FOR ALL STUDENTS IN ALL DEPARTMENTS

1946-1947

Subject	HOURS		
	Lecture	Shop or Studio	TOTAL
FIRST YEAR			
Design, AC1,AC2,AC3 AC5,AC6,AC7	2	8 4	14
History of Art*	2		2
Mechanical Drawing*		4	4
Shop Training and Production AC1,AC2,AC3	1 (or 2)	18 (or 17)	19
Production & Marketing AC1,AC2,AC3	1		1 40 Hours
SECOND YEAR			
Design, AC11,AC12,AC13		8	8
Shop Training) AC11,AC12) AC13	1	10	11
Production)		20	20
Production & Marketing AC11,AC12,AC13	1		1 40 Hours

* see Alfred University Catalogue

DEPARTMENT OF DESIGN

Edwin Blanchard Brown

It is recognized that the one basic factor interwoven through all crafts is design. Therefore the Designer-Craftsman must have appreciation, understanding of, and experience with creative designing. In addition he must be capable of critical analysis and evaluation of design relative to techniques of execution, shop production, market styling, and contemporary trends. These design courses are planned to integrate the student's individual needs with those he may expect to meet as a practicing craftsman. They are concerned with conception, plan and execution of objects in his chosen field of expression.

DESIGN AC1 - 2 lecture hours, 8 studio hours

Foundation design experience, planned to stimulate and develop the abilities required for original expression. Free experimentation involving the principles of design and allied craftsmanship in surface and color organization. To be taken concurrently with Design AC5

DESIGN AC2 - 2 lecture hours, 8 studio hours

Foundation design experience through continued experimentation, involving ideas and forms conditioned by purpose and function. Simple rendering techniques, rapid sketching and nature research are included. To be taken concurrently with Design AC6.

DESIGN AC3 - 2 lecture hours, 10 studio hours

Transition design experience concerned with methods, processes and techniques for applying knowledge, feeling and skill in dealing with purposeful intention, functional use, and esthetic elevation in the dealing with design problems. To be taken concurrently with Design AC7.

DESIGN AC5 - 4 studio hours followed by related shop training.

Collaborative design, and integration of studio conception with shop execution. Experimental ideas and forms undergo modification by the nature of materials, tools and technical processes. Through collaboration of design and shop instruction the student begins to understand direct and practical relationships between creative design and technical requirements. To be taken concurrently with Design AC1.

DESIGN AC6 - 4 studio hours followed by related shop training

Continued collaborative design experience, determined by the individual needs of the student in relation to his craft. To be taken concurrently with Design AC2.

DEPARTMENT OF DESIGN (2)

Edwin Blanchard Brown

DESIGN AC7 - 4 studio hours with faculty criticism

Project design, providing experience in collaborative problems involving two or more crafts in group solution for specific purpose and function. This course emphasizes design sketching, drafting and the making of working drawings. To be taken concurrently with Design AC3.

DESIGN AC11 - $6\frac{1}{2}$ hours, (including lectures, demonstrations, and faculty conferences.)

Advanced design specialization, consisting of practical and applied two- and three-dimensional experimentation; sketching, rendering, and drafting of working drawings; designing of objects suitable for training problems or for shop production items. Advanced design is more closely correlated with styling, pricing, and marketing.

DESIGN AC12 - $6\frac{1}{2}$ studio hours

Advanced design specialization concentrating on the development of craft-lines. Correlated crafts projects are undertaken. Lectures, discussions, conferences with faculty members are arranged as need for these is noted.

DESIGN AC13 - 8 studio hours

Special design problems of advanced character and original conception, survey of past and present design trends, consideration of possible and probable modes of the future.

DEPARTMENT OF TEXTILES

Ethel Irene Mitchell

TEXTILES AC1 - 1 lecture hour, 16 $\frac{1}{2}$ hours shop training.

Constructive weaving design, study of the loom and accessory tools, Elementary weaving in texture and color effects.

TEXTILES AC2 - 1 lecture hour, 10 hours shop training, 6 $\frac{1}{2}$ hours production.

Textile composition.

Note: Textile analysis and pattern drafting (to be taken by textile students instead of Mechanical Drawing AC2.) 4 hours.

TEXTILES AC3 - 1 lecture hour, 10 hours shop training, 12 hours production.

Textile Art. Tie-dyeing, batik, block printing, stenciling, screen printing, study of vegetable dyes.

TEXTILES AC11 - 1 lecture hour, 10 hours shop training, 20 hours production.

Advanced textile weaves.

TEXTILES AC12 - 1 lecture hour, 10 hours shop training, 20 hours production.

Special textile weaves.

TEXTILES AC13 - 1 lecture hour, 10 hours shop training, 20 hours production.

Special problems in textile composition.

NOTE: The textile department offers these courses to train craftsmen to produce individual textiles of artistic merit. The student will be given opportunity to develop design through working with materials of various kinds, rather than by following in a mechanical way any design-type of a traditional nature. He will be taught the use and care of a loom and yarns, and he will be given a thorough training in all weaving types so that he may choose or invent a form best suited to the article he wishes to produce.

DEPARTMENT OF TEXTILES

FIRST YEAR

1st Semester -(1 lecture hour, 18 hours studio study.)

CONSTRUCTIVE WEAVING DESIGN. Study of the loom and accessory tools, such as warping bar, reel, bobbin winder, and swift. Household art linens will be woven in plain weave.

2nd Semester -(1 lecture hour, 10 hours studio training, 8 hours production.)

TEXTILE COMPOSITION. Study of art elements as they apply to woven textiles. Household art linens and room furnishings will be woven in plain and twill weave combinations. Articles of saleable quality will be woven.

TEXTILE ANALYSIS AND PATTERN DRAFTING. A technical analysis of woven material for making pattern drafts to reproduce them. Training in reading and writing loom threading drafts. (4 hours studio training.)

3rd Semester -(1 lecture hour, 10 hours studio training, 20 hours production.)

TEXTILE ART. Decorative stitchery, stenciling, block printing, native dyes used in batik and warp dyed textiles.

SECOND YEAR

1st Semester -(1 lecture hour, 10 hours studio training, 20 hours production.)

ADVANCED TEXTILE WEAVES. Development of pattern weaves suitable for table linens and draperies. Table linens and draperies short yardage will be woven.

2nd Semester -(1 lecture hour, 10 hours studio training, 20 hours production.)

SPECIAL TEXTILE WEAVES. Study of multiple harness weaves in twills, overshot, double cloth, summer and winter, and damask techniques. Students will develop individual line of handwoven articles.

3rd Semester -(1 lecture hour, 10 hours studio training, 20 hours production.)

SPECIAL PROBLEMS IN TEXTILE COMPOSITION. As arranged.

DEPARTMENT OF METAL SMITHING

Alden H. Wood

METAL SMITHING AC1 Instruction in the basic processes of bumping, planishing, fluting, lead and pewter soldering, silver soldering, use of the jeweler's saw, bronze mold casting, and raising. Training in these skills through the execution of established designs.

1 lecture hour - $16\frac{1}{2}$ hours shop training.

METAL SMITHING AC2 Instruction and training in tool making, chasing, pattern making, mold packing and casting, use of the drawplate, and etching. Additional training projects and production.

1 lecture hour - 10 hours shop training
 $6\frac{1}{2}$ hours production

METAL SMITHING AC3 Advanced training projects, chuck-making, metal spinning, and the design and execution of an approved project by each student.

1 lecture hour - 10 hours shop training
12 hours production

METAL SMITHING AC11 Enameling and basic jewelry techniques. Each student's training during the second year will be largely through the working out of his own designs and through production

1 discussion hour - 10 hours shop training
20 hours production

METAL SMITHING AC12 Training in the layout and management of an individual production shop, job and material estimate, intensive development of techniques and skills, completion of at least two saleable articles of the student's own design.

1 discussion hour - 10 hours shop training
20 hours production

METAL SMITHING AC13 Plan and layout of an individual metal smithing shop to suit the needs of each student, selection of tools and machines, stock estimates, the techniques of small shop production.

1 hour discussion - 10 hours training
20 hours production

DEPARTMENT OF METAL SMITHING

Alden Wood

AC1

October 1 - 4, 7 - 11:

Techniques: bumping, planishing, filing
Problem: (1) 3 circular ash trays, graduated sizes, made in copper
Lecture: Use and care of elementary hand tools, 2 parts
Production: None

October 14 - 18, 21 - 25:

Techniques: bumping, planishing, filing, soft soldering
Problem: (2) 8" shallow bowl in brass, simple form - collar type, circular base
Lecture: Correct methods of soft soldering, 2 parts
Production: None

October 28 - November 1, 4 - 8:

Techniques: bumping, planishing, bottom setting
Problem: (3) 10" diameter copper bowl with a flat base or bottom
Lecture: Pure metals and alloys. Useful data, 2 parts
Production: 4 hours, repeat problem no. 1

November 11 - 15, 18 - 22:

Techniques: raising, fluting, soft soldering
Problem: (4) creamer and sugar in copper, fluted sides, attached spout and handle
Lecture: Demonstration and lecture of raising and fluting, coloring metals with chemicals.
Production: 4 hours, problem no. 1

November 25 - 27, December 2 - 6:

Techniques: raising, annealing, punching, silver soldering, planishing
Problem: (5) Oval bronze bowl, Eichner pattern no. 3
Lecture: The technique of silver soldering, demonstration, 2 parts
Production: 4 hours, repeat problem no. 2

December 9 - 13, 16 - 20:

Techniques: scoring, bending, use of jewelers saw, sweat soldering, silver soldering
Problem: (6) blotter corners, applied design
Lecture: The use of acids in metal smithing, scoring and bending demonstration.
Production: 4 hours, problem no. 2

DEPARTMENT OF METAL SMITHING (2)

AC1 - (continued)

January 2 - 3, 6 - 10

Techniques: shaping on hardwood block, soft soldering
Problem: (7) Pen tray, rectangular shape
Lecture: Wooden forms as an aid in shaping metals, shaping demonstration.
Production: 4 hours, letter opener

January 13 - 17, 20 - 24

Techniques: casting in bronze molds, filing, scraping
Problem: cast: salt spoons, nut spoons, perringer handles, base rings
Lecture: Methods and practices of the old silversmiths, casting demonstration
Production: 4 hours

January 27 - 31, February 3 - 7

Techniques: spoon making, 3 types of construction
Problem: (8) 3 spoons each made by a different method
Lecture: Laws and rules governing the stamping of articles of silver, 2 parts
Production: 4 hours

AC2 - Second term

February 10 - 14, 17 - 21

Techniques: tool and punch making, hardening and tempering
Problem: make a set (30 to 40) of chasing tools and a holder for the set.
Lecture: Demonstration tool forging and forming, demonstration of hardening and tempering
Production: 8 hours per week on orders secured through America House

February 24 - 28

Techniques: chasing
Problem: cylindrical vase, fitted bottom
Lecture: Preparing chasers pitch for use. Use and care.
Production: 8 hours per week on orders

March 3 - 7

Techniques: cramp seaming
Problem: None
Lecture: Demonstration
Production: 8 hours per week

DEPARTMENT OF METAL SMITHING (3)

AC2 - (Continued)

March 10 - 14

Techniques: straight seaming, silver soldering
Problem: Outline chasing of a selected design
Lecture: Demonstration
Production: 8 hours per week

March 17 - 21, 24 - 28

Techniques: sand mold, packing and pewter casting
Problem: cast parts for boxes, candlesticks, Furringers, etc.
Lecture: Demonstration, 2 parts
Production: 8 hours per week

March 31 - April 4, 7 - 11, 14 - 18

Techniques: pattern making, plaster casting
Problem: Make wooden or metal patterns for new projects
Lecture: Demonstration, 3 parts
Production: 8 hours per week

April 21 - 25

Techniques: Use of the draw plate and rolling mill
Problem: wire reduction, oval wire-tube forming, molding, forming
Lecture: Demonstration
Production: 8 hours per week

April 28 - May 2

Techniques: chain making
Problem: key chain, necklace
Lecture: Demonstration
Production: 8 hours per week

May 5 - 9

Techniques: acid etching
Problem: plate decorated with an etched rim
Lecture: Demonstration
Production: 8 hours per week

May 12 - 16

Techniques: hinge making, silver soldered
Problem: stamp or tablet box
Lecture: Demonstration
Production: 8 hours per week

DEPARTMENT OF METAL SMITHING (4)

May 19 - 23

Techniques: hinge making, lead soldered
Problem: cigarette box
Lecture: Demonstration
Production: 8 hours per week

May 26 - 30

Techniques: non-symmetrical forms, shaping and planishing
Problem: oval shaped bowl, Eichner pattern no. 21
Lecture: Demonstration
Production: 8 hours per week

June 2 - 6

Techniques: non-symmetrical forms, shaping and planishing
Problem: cream pitcher with the spout shaped in while forming
Lecture: Demonstration
Production: 8 hours per week

June 9 - 13: Examination week

June 17 - 20 - beginning of AC3

Techniques: wood turning chucks for shallow articles
Problem: ash trays, coasters, dishes, small bowls
Lecture: Demonstration
Production: 8 hours per week

June 23 - 27

Techniques: spinning shallow forms
Problem: ash trays, coasters, dishes, small bowls
Lecture: Demonstration
Production: 8 hours per week

June 30 - July 4, 7 - 11

Techniques: chuck making and spinning deep forms, panelling
Problem: cups, bowls, vases, etc.
Lecture: Demonstration
Production: 8 hours per week

July 14 - 18

Techniques: split-chuck making and turning
Problem: tea pot
Lecture: Demonstration
Production: 8 hours per week

DEPARTMENT OF METAL SMITHING (5)

AC3 - (Continued)

July 21 - August 15

Techniques: None

Problem: Execution of an approved student designed project

Lecture: consultation

Production: 8 hours per week

August 18 - 22: Examination week

AC11, 12, 13, SECOND YEAR

1st semester

Techniques: Enameling, jewelry techniques not previously studied,
stone setting, etc.

Problem: plates, trays, box tops, rings, pins, bracelets, necklaces

Lecture: Demonstration or consultation time, special instruction as
needed

Production: 20 hours per week

2nd Semester and 3rd Semester

Techniques: Reviewing all previously learned techniques

Problem: Fabrication of approved student designs in the shop.

Specializing on types of techniques chosen for life work.

Lecture: Plans for own shop lay-out needed on leaving school.

Production: 20 hours per week.

DEPARTMENT OF POTTERY

Linn L. Phelan
Herbert H. Sanders

- POTTERY AC1 Instruction in general ceramic procedures, terminology, ceramic background, clay properties, wedging and batting, and plaster techniques, with shop practice in all types of hand-building processes to give experience, through free-shape forms, slabs and coils, in the limitations and scope of clay.
- 2 lecture hours - $15\frac{1}{2}$ hours shop training
- POTTERY AC2 Instruction in pyrometric cones and their use, the keeping of kiln records, study of slips (englobes) and color sources. Shop practice in advanced handbuilding techniques, one-piece and two-piece molds, decoration and use of slips, color tests, kiln stacking and firing.
- 1 lecture hour - 10 hours shop training
 $6\frac{1}{2}$ hours production
- POTTERY AC3 Demonstration and practice in throwing on the potter's wheel, shop lay-out, kiln types, simple clay and glaze chemistry, brush techniques of over-and under- glaze, handle study, application of glazes.
- 1 lecture hour - 10 hours shop training
12 hours production
- POTTERY AC11 Continued study and practice in wheel-throwing and glazing, use of the jigger, salt glazes, pricing and cost of materials. The shop work during the second year will emphasize production.
- 1 discussion hour - 10 hours shop training
20 hours production
- POTTERY AC12 Conferences and criticism on throwing and jiggering, advanced glaze study, and the development of individual production items.
- 1 discussion hour - 10 hours shop training
20 hours production
- POTTERY AC13 A general survey of the student's executed designs and their production time and costs to enable him to leave the School as a practicing craftsman.
- 1 discussion hour - 10 hours shop training
20 hours production

Note: All students in the Pottery Department are required to keep note books and daily time records. They are expected to follow the weekly shop schedule for maintenance, preparation of materials and clean-up.

DEPARTMENT OF POTTERY

Linn L. Phelan
Herbert H. Sanders

POTTERY AC1 - 2 lecture hours, 17 hours shop training.

LECTURES*-- or Demonstrations

General Ceramic Procedure, Safety Measures, Ceramic Background, Clay Study, Clay Mixing, Simple Clay Chemistry, Wedging and Batting, How to make a Batting-table, Introduction to plaster of paris with making of Batts Terminology, (Greenware, leather-hard, glaze, slips, grog), Types of Ceramics, (Earthen-ware, stoneware, china, porcelain salt glazing), Kilns - stacking and firing, replacement of coils (electric kiln).

SHOP TRAINING

Coordinated with Design Laboratory in Hand-building to help student master clay control, finger exercise and what the fullest possibilities of clay are for creative expression.

Project No. 1 - Free shape hand-built piece.

- " 2 - Slab method - a. Box with cover
b. 6 inch. tile (Accurate paper planning to allow for both air and firing shrinkage.)
- " 3 - Coil method - a. Cylinder - 4 inches high, 3 inches diameter.
b. Bowl - 2 inches high, 5 to 6 inches diameter
c. Side base 3 inches diameter built to slant in to 1 inch opening at top (finger exercise) 4 inches high.
d. Sugar bowl and creamer - two handles on bowl, also cover. Creamer theory of how to make to pour well.
e. Vase or other form, to be executed with use of template. (learn to control clay to achieve desired form).
- " 4 - Handle study - how to form and fasten on.
- " 5 - Stacking and firing in 1st or biscuit burn kiln.
- " 6 - Glaze application on pieces made.
- " 7 - Stacking and firing in 2nd or glaze kiln.
- " 8 - Plaster batts made.
- " 9 - Mixing of clay and slips.

*

Note - All students required to keep note-books, daily time record. Both are handed in and are used to analyze work performance as well as following shop schedule which is posted weekly for maintenance preparation of materials and clean-up, all this part of their training.

DEPARTMENT OF POTTERY (2)

POTTERY AC2 - 1 lecture hour, 10 hours shop training, 8 hours production.

LECTURES -- or Demonstrations

Pyrometric Cones, their history and their uses; Kilns, recording of the firings, numbers of pieces; Slips (Engobes), mixing and chemistry and formulas, application, methods and uses and techniques, [(a) dip, (b) spray, (c) brush, (d) scrafitto, (e) inlay, (f) pate-sur-pate, (g) trailing.], Making of color tests in conjunction with possible different color changes in various glazes reactions on the slip tests, plus the mineral sources of color; Molds - making one, two or more piece molds, Other types and techniques of decorating, carving and applied designs;

SHOP TRAINING AND PRODUCTION

Continued training and coordination with the Design Laboratory in the Hand-building processes.

Project No. 1 - Plaster Molds

- a - simple one piece mold. This may be a tile or some other simple form which may have production possibilities as well as being used for later glaze experimentation.
- b - 2 piece mold (or more pieces to the mold if necessary) suitable for modelling of one or more of the following items, depending on the students ability and desire for modelling.
 - 1 - book-end
 - 2 - figure or figurines
 - 3 - a pottery bank
 - 4 - decorative vase form
 - 5 - salt and pepper sets
 - 6 - lamp-base form with any of the techniques to be used for its best decorative possibilities.

Project No. 2 - Making color tests - a chart for future reference with formulas of slips and all available colors with reactions of different types of glazes and different firing temperatures.

- " 3 - Producing a number of tiles or pieces made in Project No. 1a or b.
- " 4 - Stacking and firing kilns, record keeping, of all of the satisfactory completion of the above projects.

DEPARTMENT OF POTTERY (3)

POTTERY AC3 - 1 lecture hour, 10 hours shop training, 8 hours production.

LECTURES and Demonstrations

"Throwing" on the Potters Wheel; History and background of the wheel, the evolution of, and various types; making of simple tools for turning and clay work; equipment and pottery shop layout; study of all types of kilns; simple glaze chemistry; types of glazes, effect of temperatures of kiln burns, colors, effect of kiln temperatures, brush techniques with over and under glaze, analysis and study of the time sheets to learn to throw expertly and efficiently with no loss or waste of time, to throw similar pieces by study of amount of, as well as consistency of clay being used, so duplicate forms can be mastered.

SHOP TRAINING

Continued coordination with the Design Laboratory in the training of the Potters wheel work.

Project No. 1 - Many hours will be spent by the student to learn to throw. There are positively no "short-cuts". The length of time to learn to throw well enough for the student to make marketable pottery depends wholly on his own skill to master this technique and hours of practice is the only possible way. Practice in producing follows the forms listed:

- a- cylinders
 - b- bowls
 - c- plates
 - d- cups (handles) and saucers, mugs
 - e- pitchers
 - f- vases
- " 2 - Making glaze types charts for future reference.
- " 3 - " " Color " " " "
- " 4 - 1st and 2nd firing of projects Nos. 2 and 3.
- " 5 - Application techniques of glazes
- a- pour
 - b- spray
 - c- dip
 - d- brush
 - e- over-glaze
 - f- under-glaze

All of the above techniques take time to learn. They are applied on suitable pieces from Projects Nos. 1 and 4, with the form dictating whether one of the above glaze techniques is possible to use as well as which type of glaze is best, (i.e. Project 2 and 3; this brings together all the various skills, knowledge of functional form color and design backgrounds of the student.

DEPARTMENT OF POTTERY (4)

POTTERY AC11 - 1 discussion hour, 10 hours shop training, 20 hours production.

DISCUSSION -- demonstration, conference, criticism, or lecture - depending on the work or project at the time on the following: Throwing on the Potters-wheel (continued); Jiggering on the wheel, including the necessary mold work; glazes continued, including "salt glazes"; packing, shipping and pricing; cost of materials; equipment for shop such as building of students own potters-wheel, or small tests kilns will be undertaken with any student so interested.

SHOP TRAINING AND PRODUCTION

All pottery problems and projects are geared towards production during the last year, with close cooperation between Design Laboratory and Production and Marketing Department. All production will be executed by the following processes:

- 1- throwing (most emphasis on this)
- 2- jiggering
- 3- glazing
- 4- firing and stacking of work produced in the kilns.
- 5- figuring cost of materials and totalling operation of the ware produced.
- 6- pricing and marking, with complete records.
- 7- packing and shipping.

NOTE: All students required to keep note-books, daily time sheets, as well as to continue to follow the shop schedule.

POTTERY AC12 - 1 discussion hour, 10 hours shop training, 20 hours production.

DISCUSSION -- demonstration, conference, criticism or lecture continuous and depends upon work or project the student or students are occupied with. Wheel work continues with the emphasis on "throwing"; advanced glaze study, soluble salts, use of possible "local materials" in glazes; business addresses for equipment and materials; building of equipment for the student's own shop continues; shop lay-out.

SHOP TRAINING AND PRODUCTION

Continued cooperation with Design Laboratory and Production and Marketing Departments for development of individual production and production items by the following processes:

- 1- throwing
- 2- glazing
- 3- firing and stacking of kilns
- 4- operational costs figures
- 5- pricing and marketing
- 6- packing and shipping

DEPARTMENT OF POTTERY (5)

POTTERY AC13 - 1 discussion hour, 10 hours shop training, 20 hours production.

DISCUSSION

Plans for his own shop lay-out, equipment needed, type of kiln best suited for his locality, materials needed.

SHOP TRAINING AND PRODUCTION

The student plans and executes all necessary steps to develop the "Pottery Line" he will produce in his own shop after leaving school.

DEPARTMENT OF WROUGHT IRON

Robert H. Savage

WROUGHT IRON AC1 Instruction in chemical metallurgy and the history of metallurgical processes (ferrous). A study of methods of refining iron, both modern and historical, that have influenced the craftsman. In the shop, emphasis will be on benchwork and basic forging techniques.

1 lecture hour - $16\frac{1}{2}$ hours shop training

WROUGHT IRON AC2 Instruction in physical metallurgy and heat treating, with an investigation of the peculiarities of iron and steel in various states due to changes in micro-structure, methods of controlling this structure. Shop work in forge welding and elementary heat treatment and the making of tools.

1 lecture hour - 10 hours shop training
6 $\frac{1}{2}$ hours production

WROUGHT IRON AC3 Study of tools and equipment and the planning and maintenance of a workshop, practice in modeling, or repoussé, in both hot and cold metal, oxy-acetylene welding.

2 lecture hours - 9 hours shop training
12 hours production

WROUGHT IRON AC11 Study of the decorative use of metals in architecture and the solutions of the technical problems involved, layout and construction of architectural, decorative wrought metalwork.

2 lecture hours - 9 hours shop training
20 hours production

WROUGHT IRON AC12 Review of both chemical and physical metallurgy of non-ferrous metals used by the craftsman. Shopwork will emphasize individual initiative and production.

1 lecture hour - 10 hours shop training
20 hours production

WROUGHT IRON AC13 Each student will be required to prepare a report on his craft and its place in contemporary life. Shopwork will include individual problems and production.

1 discussion hour - 10 hours shop training
20 hours production

DEPARTMENT OF WROUGHT IRON

Robert H. Savage

WROUGHT IRON AC1

Weekly Lectures - Definitions, sorts of iron and steel; Iron ores; Catalan forge, early processes; the Stückerofen; the blast furnace; the foundry; Malleable cast iron; Bessemer process; Puddled iron; Open Hearth process; Electric Furnace Steel; Cemented steels; Early Ironworks; Rolling Mills; Review of Processes (two lectures).

Shop Training Projects - Care of fire and tools, making tongs; Simple Doorknockers; Toasting Forks; Split 3-branch Candlesticks; Simple Andirons;

WROUGHT IRON AC2

Weekly Lectures - Review of Definitions; Iron-carbon diagram (3 lectures); Martensite; Photomicrography; Non-uniform structures; Heat treating methods (two lectures); Alloy Steels; Alloy tool Steels; High-speed and low-iron "steels" (2 lectures). (The last five lecture periods will be devoted to assigned oral reports by students).

Shop Training Projects - Fagot Welds, forks and pokers; Welded candlesticks (bending forms); Welded Hinges; Making tools and punches; Tool making, hammers; Heavy carved Andirons.

WROUGHT IRON AC3

Weekly Lectures - Shop layout (two lectures); Forges and fuels; Gas welding equipment; Hand tools and their maintenance (2 lectures); Power tools; Warehouse practice, estimating on materials.

Shop Training Projects - Repousse in iron; leafwork; Oxyacetylene welding practice.

WROUGHT IRON AC11

Weekly Lectures - Earliest uses of metal in architecture; Chainage and tension members; Early hinges, The Spanish roja; Medieval fixtures and hardware (2 lectures); Italian Renaissance Iron and Bronze; French and German Renaissance Iron and Bronze; French Baroque ironwork (2 lectures); English Georgian iron and leadwork; American ironwork (2 lectures); 19th Century Eclecticism; Art Nouveau and naturalism, Edgar Brandt; Latest trends.

Shop Training Projects - Layout of Railings and Grilles; Construction of Railings and Grilles; Layout and structure of gates; construction of gates; Curved and inclined railings.

DEPARTMENT OF WROUGHT IRON (2)

WROUGHT IRON AC12

Weekly Lectures - Metallurgy of Copper (2 lectures); Copper Alloys (2 lectures); Nickel and its alloys; Aluminum and Magnesium; Light-weight Alloys; Metallurgy of "base metals"; Alloys of "base metals" (2 lectures); Corrosion and its prevention (2 lectures); Precious metals. (The last five weeks will be devoted to assigned oral reports.

Shop Training Projects - Construction of interior lighting fixtures; Exterior lighting fixtures; special orders, plus regular production for balance of course.

WROUGHT IRON AC13

Advanced students will participate in discussions on shop planning based on anticipated problems after leaving the school, and will prepare written reports on some phase of their craft and its place in contemporary life.

Shop work will involve production and construction of special orders for the balance of the course.

DEPARTMENT OF WOODWORKING

Ernest F. Brace

- WOODWORKING AC1 Instruction and practice in the use, care, and sharpening of hand tools, with supplementary comparison and use of basic machine tools. Elementary joinery and wood-turning. Simple finishes, Training, through progressive projects, in production.
- 1 lecture hour - 14 hours shop training
- WOODWORKING AC2 Advanced training in the use, care, and maintenance of machine tools suitable to the small production shop. Construction, both hand and machine, of all common wood joints, and discussion of their uses in furniture and cabinet construction. Faceplate turning. Completion of three additional training projects.
- 1 lecture hour - 10 hours shop training
4 hours production
- WOODWORKING AC3 Advanced wood turning, the use and construction of jigs for production work, finishing methods. The completion of one approved project of the student's own design.
- 1 lecture hour - 10 hours shop training
12 hours production
- WOODWORKING AC11 Training throughout this term and the next in the layout and execution of the student's individual designs to prepare him for the management and efficient running of his own production shop. Special turning projects, special finishes. Development of skills and techniques. Each student will be expected to design and construct at least two original, marketable projects during the term.
- 1 discussion hour - 10 hours shop training
16 hours production
- WOODWORKING AC12 Survey of training and production projects and discussion of alternative methods of layout and construction. Completion of two additional projects of the student's own design.
- 1 discussion hour - 10 hours shop training
16 hours production

DEPARTMENT OF WOODWORKING (2)

Ernest F. Brace

WOODWORKING AC13 Layout of the small woodworking shop, choice of tools and machines, the flexibility of tools to fit special needs. Discussion of individual problems. A plan of his shop and a statement of its scope and limitations will be required of each student.

1 discussion hour - 10 hours shop training
20 hours production

Note: All students in the Woodworking Department are required to keep daily time records and job sheets. They will be expected to follow the shop schedule for maintenance, care of materials, and clean-up.

WOODWORKING AC1 - 1 lecture hour, 14 hours shop work, weekly.

Instruction will be given weekly in the use, care, and sharpening of hand tools. The student will not be confined to the use of hand tools only, but will be given comparisons and supplementary instruction in the elementary uses of such machine tools as the planer, jointer, circular and cutoff saws, bandsaw, drillpress and lathe. Instruction will also include the use and construction of basic wood joints such as butt, dowel, miter and mortise and tenon. Shellac and wax finish, oil.

All instruction will be directed toward the actual construction of wood objects. Beginning with the making of a simple wooden box for some need the student may have and which he will dimension accordingly, and which will be made entirely with hand tools, he will progress to the making of double hinged photograph frame with contrasting wood inlay. Following that he will construct and finish an occasional table with tapered or turned legs. A set of salad knives and forks will complete his first term projects.

The student will also be given problems and instruction in wood turning. Beginning with the turning of two different types of muddlers, he will progress to the turning of a small wooden bowl.

First term work will also include shop collaboration with his design course, the turning of spheres, cylinders, cones, etc., to specification and the cutting out of stock for use in that course.

The woodworking course will involve shop maintenance, such as the care of tools and machines, and daily clean-up. The student will also keep his own material and time records.

Note: The department reserves the right to substitute other projects involving similar problems if questions of design or utility make such substitution advisable.

WOODWORKING AC2 - 1 lecture hour, 14 hours shop work, weekly.

Weekly instruction involving the filing of circular saws and bandsaws, the grinding of jointer and planer knives, detailed instruction in the use and care of small shop machine tools, such as the circular saw, bandsaw, jointer, drill press, planer, cut-off saws, lathe and router. The student will learn the construction and uses of all common wood joints. Lacquer finish, brush and spray.

Instruction in this term, too, will be directed toward the actual use of the knowledge he has gained. The student will complete three projects during this term. (1) a wooden cigarette box with lock-miter joints, a splined top with hinge of his own construction, and made of walnut, mahogany, cherry, maple or some other cabinet wood. (2) A portable bar, containing a dovetailed drawer and shelves for glasses. (3) A round coffee table or a barrel table (his own choice) containing four quadrant drawers.

WOODWORKING AC2 (continued)

Wood turning this term will include the turning of a small covered box and will involve the turning of segmented material, made into either a bowl or a tobacco jar.

The work in shop collaboration with design will continue with carving and toy making.

The student will be expected to do his share of saw-filing and shop maintenance including clean-up. He will continue to keep material and time records.

WOODWORKING AC3 - 1 lecture hour, 10 hours shop training, 12 hours production

Instruction in cabinet construction, the making of doors, paneling, methods of drawer construction, knobs, handles, hinges, shelving, built-in furniture, choices of joints for various jobs, uses of plywood, the making of moldings with shaper and circular saw, built-up moldings. The comparison of various finishes.

Since the summer term has only ten weeks, each student will be required to finish only two projects. (1) A serving, or butler's wagon with removable serving tray. (2) An approved project in cabinet work of the student's own design. This project must be approved by the design instructor and the shop instructor and must be of practical use.

Work in wood turning will continue with the execution of a large bowl, 12 - 14 inches in diameter.

The student will continue to do the necessary work of maintenance and shop clean-up and to keep material and time records.

WOODWORKING Second Year

AC11-AC12

Training throughout the first two terms of this year will be in the layout and execution of the student's individual designs to prepare him for the management and efficient running of his own production shop. He will be expected to design and make pieces which are marketable and to leave the school with plans and cost prices of articles that he can turn out in his own shop. Problems of joinery, finishing, and production will be discussed with special reference to each article he makes or contemplates making. He will be expected to advance his skills and techniques through both training and production. During each of the first two terms of his second year the student will be expected to complete at least two original and marketable projects. He will continue wood turning and may, within certain limits, specialize in the type of work for which he seems best suited, such as carving.

The work in production will be under the supervision of Mrs. Carod and the shop instructor.

WOODWORKING Second Year - (Continued)

The work of maintenance and shop clean-up will be continued, and the advanced student will be expected to accept some supervisory responsibility in the job of keeping the shop running smoothly. Material and time records will be kept throughout the course.

AC13

Discussion of the layout of the small woodworking shop, the choice of tools and machines, and the flexibility of tools to fit special needs. Discussion of individual problems. Each student will be expected to plan his shop, state its scope and limitations, and list the tools necessary to run it, estimating the cost, and listing the jobs he would expect to do in it. He will complete one more project of original design without supervision or help, choosing his own materials and finish and using his own methods. He will price the job and estimate production costs on it.

AC11-AC12-AC13 - 1 discussion hour, 10 hours shop training, 20 hours production.

DEPARTMENT OF PRODUCTION AND MARKETING

Frances Wright Carod

Production and Marketing courses are planned to assist the student, through inculcation of proper work habits and clear understanding of market requirements and limitations, in self organizations so that when he leaves the school his adjustment to working in and running his own shop will be reduced to a minimum. Because the crafts involve not only skillful work but also much creative thinking, the production and marketing of such articles requires special study and understanding. Production and Marketing will be taught, therefore, only in direct relation to the hand arts. The shop production hours in each department are devoted to the filling of actual orders received. Shop production is organized, for the purpose of thorough study, as a group activity. In all cases students are paid for these articles they produce on order.

PRODUCTION & MARKETING AC1 - 1 lecture hour

Objectives of the professional craftsman and what is required to attain these objectives, markets for the hand arts, work habits, production assignments.

PRODUCTION & MARKETING AC2 - 1 lecture hour

Pricing, work habits, production assignments, contemporary market trends.

PRODUCTION & MARKETING AC3 - 1 lecture hour

Production assignments, market judgment, contemporary trends.

PRODUCTION & MARKETING AC11 - 1 lecture hour

Production assignments, market judgment, contemporary trends, marketability of student-designed articles.

PRODUCTION & MARKETING AC12 - 1 lecture hour

Production assignments, development of an individual line of craft products, market judgment, contemporary trends.

PRODUCTION & MARKETING AC13 - 1 lecture hour

Oral and written discussion of the significance of pricing, work habits, markets, and contemporary trends. Discussion of shop location.

FIRST YEAR

1st Semester - 16 weeks, 1 hour lecture per week.

- (1) Objectives of student - to become an independent professional craftsman
- (2) Requirements to attain the objectives
- (3) Markets, gifts, gift shops
- (4) Markets, department stores
- (5) Markets, Decorators and Architects
- (6) Markets, Regional and foreign
- (7) Marketing agent
- (8) Work habits, their significance
- (9) Cost pricing
- (10) Retail pricing
- (11) Review of cost pricing and retail pricing
- (12) Production group (see note no. 1)
- (13) Production assignments (see note no. 2)
- (14) Examination - written
- (15) " "
- (16) " "

2nd Semester - 18 weeks, 1 hour per week.

All students will be on some type of production so each lecture will include discussions and solutions of problems arising in relation to their work. The following subjects will be the most prevalent and important to clarify and constant in each lecture period:

- (1) Pricing
- (2) Work habits
- (3) Production assignments

In addition discussions of Contemporary Market Trends will be included in each lecture hour. (see note no. 3)

3rd Semester - 10 weeks

Each lecture hour will include:

- (1) Production assignments
- (2) Contemporary market trends

In addition, Market Judgment will be included - this entails the planning of saleable articles and will require the semester to complete.

SECOND YEAR - Once a month the full student body will meet together to discuss all of the articles designed and made by them, with the marketability of each article the subject.

1st Semester

Each week and lecture hour during this period will be divided among the following subjects:

- (1) Production assignments
- (2) Contemporary trends

DEPARTMENT OF PRODUCTION & MARKETING (3)

- (3) Market judgment
- (4) Marketability of student designed articles.

2nd Semester

Each lecture hour during this period will be divided among the following subjects:

- (1) Production assignments
- (2) Contemporary trends
- (3) Marketability of student designed articles

3rd Semester

During this period and in conjunction with their shop planning with their instructors, the students will prepare for the continuation of production from their own shops upon leaving school. The following subjects will be covered:

- (1) Location of shop
- (2) Markets for the location
- (3) Articles to be made so income is not interrupted.

NOTE NO. 1 - Production Group

When a student has attained a certain skill he goes on a certain type of production. This production is organized as a group activity. All members of the school belong and elections of officers are held. All articles made on production are sold and paid for through this group organization. It is a non-profit-making group. The books are open for inspection by students or any other interested parties at any time.

NOTE NO. 2 - Production Assignments

The reason for production is to create in the student proper work habits necessary for him to earn a living. Repetition, the need for an article to be finished in a given time and skillful workmanship are the objectives to perfect. The assignments for articles to be made on production are discussed and distributed at the lecture hour. The training instructor follows these assignments through during production hours, allowing the students as much responsibility toward their assignments as possible. When the articles are finished, they are brought to the lecture hour and the time and workmanship discussed. The articles are then accepted or rejected. Students are paid for all articles they make which are sold, on the basis of one dollar an hour. A price is set on the article. A student may better the time set to make a particular article. In that case he earns more than one dollar an hour. Otherwise, he sets his own hourly rate by the degree of his skill. When, through repetition, he reaches or betters the time allotted for a given article, he progresses to a new article to again challenge his skill. These hours given to production are particularly valuable in the program of the school.

NOTE NO. 3 - Contemporary Market Trends

In order that the students have an awareness of a market for their work, the school has subscribed to about twenty-five publications for them to study and read. These publications are in both the trade and consumer fields and are required reading for the students in relation to marketing. Most of them are monthly publications so there is a constantly changing field to cover during the lecture hours. Students are required to report on work being done in their particular field and outside influences as well. This subject is particularly valuable in developing an awareness of a market.