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New York State School of Clay Working and Ceramics

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Calendar

First Semester 1926-1927

Entrance Examinations	Monday	1926 Sept. 20
Registration and " Freshman Week "	Mon., Tues. and Wed.	Sept. 20, 21, 22
Instruction begins	Thursday	Sept. 23
Mid-semester grades	Friday	Nov. 19
Thanksgiving Recess begins	Wednesday evening	Nov. 24
THANKSGIVING RECESS		
Instruction resumed	Monday morning	Nov. 29
Founders' Day	Sunday	Dec. 5
Holiday Recess begins	Thursday evening	Dec. 16
HOLIDAY RECESS		
Instruction resumed	Tuesday morning	1927 Jan. 4
Mid-year Examinations begin	Monday	Jan. 31
Examinations end, semester ends	Friday evening	Feb. 4

Second Semester

Instruction begins	Wednesday	Feb. 9
Mid-semester grades	Thursday	Apr. 7
Easter Recess begins	Tuesday evening	April 12
EASTER RECESS		
Instruction resumed	Wednesday morning	April 20
Memorial Day, half holiday	Monday	May 30
Senior Examinations begin	Monday	June 6
Senior Examinations end	Wednesday	June 8
Final Examinations begin	Thursday	June 9
Final Examinations end	Thursday	June 16
Second Semester ends	Thursday evening	June 16
NINETY-FIRST COMMENCEMENT		
Annual Sermon before Christian Associations	Saturday morning	June 11
Annual Concert	Saturday evening	June 11
Baccalaureate Sermon	Sunday evening	June 12
Alumni Association, Directors' meeting	Monday afternoon	June 13
Commencement Play	Monday evening	June 13
Class breakfasts and reunions	Tuesday morning	June 14
Annual meeting of Trustees	Tuesday morning	June 14
Annual meeting of Corporation	Tuesday afternoon	June 14
Class-day Exercises	Tuesday afternoon	June 14
Alumni Banquet	Tuesday evening	June 14
Commencement Exercises	Wednesday morning	June 15
Alumni Association, Public Session	Wednesday afternoon	June 15
President's Reception	Wednesday evening	June 15
SUMMER VACATION		

Summer Session 1927

Term begins	Tuesday	July 5
Term ends	Tuesday	Aug. 16

First Semester 1927-1928

Entrance Examinations
 " Freshman Week "
 Registration for Seniors, Juniors and Sophomores
 Instruction begins
 Mid-semester grades
 Thanksgiving Recess begins

THANKSGIVING RECESS

Instruction resumed
 Founders' Day
 Holiday Recess begins

HOLIDAY RECESS

Instruction resumed
 Mid-year Examinations begin
 Examinations end, semester ends

Monday Sept. 19
 Tues. and Wed. Sept. 20-21
 Thurs. and Fri. Sept. 22-23
 Monday Sept. 26
 Thursday Nov. 17
 Wednesday evening Nov. 23

Monday morning Nov. 28
 Monday Dec. 5
 Thursday evening Dec. 15

1938
 Tuesday morning Jan. 2
 Monday Jan. 30
 Friday evening Feb. 3

Second Semester

Instruction begins
 Mid-semester grades
 Easter Recess begins

EASTER RECESS

Instruction resumed
 Memorial Day, half holiday
 Senior Examinations begin
 Senior Examinations end
 Final Examinations begin
 Final Examinations end
 Second Semester ends

Wednesday Feb. 8
 Thursday Mar. 20
 Tuesday evening April 8

Wednesday morning April 11
 Wednesday May 30
 Monday June 4
 Wednesday June 6
 Thursday June 7
 Thursday June 14
 Thursday evening June 15

NINETY-SECOND COMMENCEMENT

Annual Sermon before Christian Associations
 Commencement Play
 Baccalaureate Sermon
 Alumni Association, Directors' meeting
 Annual Concert
 Class breakfasts and reunions
 Annual meeting of Trustees
 Annual meeting of Corporation
 Class-day Exercises
 Alumni Banquet
 Commencement Exercises
 Alumni Association, Public Session
 President's Reception

Saturday morning June 9
 Saturday evening June 10
 Sunday evening June 10
 Monday afternoon June 11
 Monday evening June 11
 Tuesday morning June 12
 Tuesday morning June 12
 Tuesday afternoon June 13
 Tuesday afternoon June 13
 Tuesday evening June 14
 Wednesday morning June 15
 Wednesday afternoon June 15
 Wednesday evening June 15

SUMMER VACATION

Summer Session 1928

Term begins
 Term ends

Thursday July
 Thursday Aug. 1

OFFICERS OF INSTRUCTION

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NEW YORK STATE SCHOOL OF CLAY- WORKING AND CERAMICS

This school was founded by the State of New York in 1900.

The building was especially designed for the purpose, and is located on land which was deeded by Alfred University to the people of the State. It is built of red brick and terra cotta with gray trimmings and roofed with brown tile. The main building has a floor space of about thirteen thousand square feet, and a frontage of seventy-five feet.

To this has been added a fireproof wing measuring about 36 by 57 feet and three stories in height.

In the main basement are located the kilns, the heavy machinery for the manufacture of brick, tile, hollow blocks and roofing tile, the slip-making plant, cylinders for glaze preparation, and a workshop fitted with modern appliances for pottery and porcelain manufacture. There are also rooms for mold making and drying.

In the sub-basement are located the heating plant and fuel storage.

On the principal floor are the executive offices, the technical laboratories and a lecture room. On the second floor is the department of Design and Applied Art and on the third floor a lecture room and a studio for advanced work.

The motive power is supplied by several electric motors.

The school maintains a complete technical library for reference and for the encouragement of independent reading and research. It also encourages membership and activity in the New York State Students' Branch of the American Ceramic Society, which was chartered at Alfred in 1915, and in the Ceramic Guild organized by the students in Art.

Courses Offered

The courses of study which lead to a degree extend over a period of four years and embrace the science, technology, and art special to ceramics.

The course in Ceramic Engineering is designed to qualify men to occupy positions as superintendents, scientific experts, and ceramic chemists.

Two courses are given in the Department of Applied Art. The first is for those wishing to major in Ceramic Art. The second is a course in Normal Art for those wishing to do intensive work in Drawing and Design, relative to teaching in the public schools. With the second course the student is required to take all the educational subjects which lead to the procuring of a Teacher's Professional Certificate.

Benefits of the School

The demand for trained clay-workers has grown to considerable proportions, nor is there any likelihood that this demand will decrease.

Hitherto, no student who has passed through the school successfully has remained unemployed, and the director is continually in receipt of applications for persons qualified to fill responsible positions. Every effort is made by the faculty to place the students in communication with manufacturers desiring to offer them employment.

The student successfully pursuing the technical course will be able, presuming that his personal capacity is good, to take up the practical work of manufacturing ceramic wares. He will have had experience with every description of clay, and with the minerals and oxides used in preparing bodies and glazes, glasses and enamels. He will have acquired a knowledge of machinery and practical operations which he will find of the greatest value; in short, he will be a trained man as regards the problems of the ceramic industries.

Physical Training

The aim of the work in physical training is to bring the whole body to its normal condition, to acquire ease and precision in movement, and to develop the health and strength of the student.

GYMNASIUM. A new gymnasium, now under construction, is located on the east side of Kanakadea Creek. The building as planned comprises two sections, one to face the street, and a rear section, now complete, provides the basketball court and an indoor running track, together with bleachers to seat about 1000 people. The plans for the front section call for boys' and girls' locker rooms, a general gymnasium, girls' gymnasium, athletic offices, trophy room, small indoor field, jumping pits, and heating plant.

ATHLETIC FIELD. The Merrill athletic field embraces over four acres of level land. All local intercollegiate contests in football, baseball, and track athletics are held on this field. The field affords a running track (one-fifth of a mile). Appropriate apparatus for field sports is provided.

EXPENSES

Matriculation	\$5 00
Graduation	10 00

COLLEGE FEES *per semester:*

Tuition (10 to 18 hours) <i>per semester*</i>	100 00
Tuition, per hour (under 10 and over 18 hours), <i>per semester</i> ..	10 00
Medical and Infirmary, <i>per semester</i>	3 00
Reading Room	2 00
Athletics	7 50
College Paper (Fiat Lux)	1 25

EXTRA FEES *per semester*, for the use of instruments, apparatus and laboratory materials:

Chemistry 1, 5	8 00
Chemistry, 2, 3	10 00
Drafting	2 00
Gymnasium (Freshmen, Sophomores)	2 00
Machine Shop	5 00
Physics 1b	5 00
Physics 4	5 00
Surveying	5 00
Woodshop	8 00

* Tuition free to residents of New York State.

MISCELLANEOUS FEES AND DEPOSITS:

Chemistry Breakage Deposit, Chemistry 1, 5.....	\$10 00
Chemistry Breakage Deposit, Chemistry 2, 3.....	15 00
Room Deposit (all students in College dormitories).....	10 00
Special Examinations (final and mid-semester), each.....	5 00
Late Registration (all students not registering on Registration days, and all students who are absent from all classes on the first day of a semester).....	5 00

Students who register for more than eighteen hours will be charged seven dollars and fifty cents for each additional hour.

Students taking fewer than ten hours will be charged seven dollars and fifty cents for each hour.

Semester bills for college fees will be issued on or before the fifteenth of October and February, and must be paid at the office of the Treasurer before the first of the following month. Failure to comply with this regulation renders the student liable to suspension.

No tuition is charged to residents of New York State who are prepared to enter the regular courses, but no student is entitled to free tuition in any college class not forming part of a course in the School of Ceramics, nor are students registered in the college entitled to free tuition in the School of Ceramics in respect of any subject for which college credit is given.

Rooms and Board

Rooms and board, including fuel, can be obtained in private families from \$7 to \$8 per week. Board in clubs organized and managed by the students themselves varies from \$4.50 to \$8 per week according to the means and inclinations of the students.

Estimated Annual Expenses

Excluding cost of clothing and travel, one can go through a college year by close economy upon \$450; and by exercising care, upon \$500. An allowance of \$650 is comfortable.

Board, \$4.50 to \$6.00 per week.....	\$160 00 to \$200 00
Rooms	60 00 to 110 00
Laundry	20 00 to 30 00
Books	25 00 to 35 00
Class dues, etc.....	10 00 to 25 00
College tuition, incidentals and extras.....	200 00 to 250 00
(Tuition free to residents of New York State)	225 00 to 275 00
Total for year.....	\$500 00 to \$675 00

Self-Support

Many of the graduates have been persons of very limited means who worked their way through college. While the school cannot guarantee work to all applicants, enterprising students can usually find employment in the town with satisfactory compensation for all the time they can profitably spare from their studies. Some earn enough to meet the greater part of their expenses. Students should distinctly understand that when they attempt entire self-support they should lengthen their term of study.

College Year

The college year consists of two semesters of about eighteen weeks each. There is a vacation at the holidays of about two weeks, a week's recess at Easter, and a summer vacation of about thirteen weeks.

Class Exercises

The class period is one hour in length; in laboratory work, however, the class period is two hours. There are no classes on Saturday or Sunday.

Unit of Credit

One class period per week for one semester is taken as the unit of credit and is called a semester hour.

The work of the students in each subject is graded as A, excellent; B, good; C, fair; D, poor; E, conditioned failure; F, failure; I, incomplete; W, withdrawn.

Scholarship Indices

For determining scholarship and for awarding honors the office uses a system of point values corresponding to the above grades as follows: each hour at A is equivalent to 3 points; at B, to 2; at C, to 1; at D, to 0; at E, to -1; at F, to -2; at I, to -1; at W, to -1. At intervals the Registrar determines a scholarship index for every student and for student groups. These indices are obtained by dividing the total number of points by the total number of hours.

Absences.

The maximum number of absences allowed per hour credit per semester is three (3). That is, in a two-hour course, six (6) absences are allowed; in a three-hour course, nine (9); in a five-hour course, fifteen (15). Overcutting will reduce the student's grade to F.

Examinations

Final examinations are held at the close of each semester in addition to occasional written tests during the semester. Fees will be charged for all examinations taken by those not regular members of classes, or at other times than those appointed for the class examinations.

ADMISSION

Candidates for admission to the freshman class must be at least sixteen years of age and must present certificates of good moral character. The particular requirements for entrance are explained below. Preparatory work is estimated in "units." The "unit" represents a course of five recitations weekly throughout an academic year of the preparatory school. Fifteen "units" or an equivalent must be offered.

Entrance Requirements

ENGLISH. Three units. The candidate must be familiar with elementary rhetoric, both as a science and an art, and must be proficient in spelling, punctuation, idiom, and division into paragraphs. Preparation must include the work in English prescribed by the various college associations.

FOREIGN LANGUAGES. Four units. Latin grammar and composition; Cæsar, four books of the *Gallic War*; Cicero, six orations; Virgil, six books of the *Aeneid*, or equivalents; or four units from not more than three of the following: Latin, Greek, German, French, Spanish.

MATHEMATICS. Two units. Elementary Algebra, including fundamental operations, factoring, fractions, ratio, proportion, radicals, quadratics; Plane Geometry, including the straight line, angle, circle, proportion, similarity, and areas.

SCIENCE. One unit. Biology, Botany, Physiology, Zoology, Physical Geography, Physics, or Chemistry. Any one may be offered.

ELECTIVE. Five units in addition to the above subjects. Candidates may substitute two units of science or one unit of science and one unit of advanced mathematics for two units of foreign language. Candidates for the degree in Ceramic Engineering should offer Solid Geometry and Intermediate Algebra.

Summary

English	3 units
Mathematics	2 units
Foreign Languages	4 units
Science	1 unit
Elective	5 units

Admission is gained either on certificate or on examination, as follows:

Admission on Certificate

REGENTS' CREDENTIALS. The credentials of the University of the State of New York are accepted instead of an examination in the subjects required for admission, so far as they cover these requirements. (For description of subjects, see *Entrance Requirements*.)

PRINCIPAL'S CERTIFICATE. Certificates are also received from principals of preparatory or high schools outside of New York State, provided such schools are known to the faculty for thoroughness of instruction. Such certificate must specify, in connection with each subject, the extent to which it has been pursued, by giving the text-book used, the method of instruction, the amount of time given to it, the date of the final examination, the degree of the applicant's proficiency, and must clearly show that the student has met the requirements in every detail. The school furnishes blank forms for such certificates upon application of principals of approved schools. Principals of preparatory schools who desire to have their students admitted on certificate are invited to correspond with the director.

Admission on Examination

Candidates who fail to present satisfactory certificates must pass a written examination in the required subjects.

For the convenience of students not having such certificates, entrance examinations are held at Alfred on the first day of registration.

Conditioned Students

No student can enter the freshman class conditioned in any subject.

Admission to Advanced Standing

Students from other schools, having a course equivalent to that of the New York State School, may enter at the point from which they take dismissal, upon presentation of satisfactory certificates of standing and character, including an honorable dismissal.

Industrial Experience

Each candidate for a degree in Ceramic Engineering is required to spend two summer periods of ten weeks each, or the equivalent, in an approved industrial plant and to turn in a satisfactory report, together with a certifying letter from the person in charge of the work. For each summer period one hour credit will be given.

With the approval of the director, which should be obtained not later than the close of the Sophomore year, a candidate for a degree may offer a thesis in some branch of ceramic research. The title of the thesis must be chosen before November 1st of the Senior year and a typewritten copy of the completed work must be deposited with the director not later than May 1st next following.

Graduation

Upon students who satisfactorily complete the course in Ceramic Engineering, Alfred University will confer the degree of Bachelor of Science (in Ceramic Engineering), and upon students who satisfactorily complete the course in Applied Art the degree of Bachelor of Science (in Applied Art).

COURSES OF STUDY

Course in Ceramic Engineering

First Year

<i>First Semester</i>		<i>Second Semester</i>	
Mathematics 1.....	5	Mathematics 1	5
Chemistry 1	4	Chemistry 1	4
English 1	3	English 1	3
Ceramics 1	1	Ceramics 1	1
Drafting	3	Drafting	3
Physical Training	1	Physical Training	1
Ethics	1	Ethics	1
18		18	

Second Year

<i>First Semester</i>		<i>Second Semester</i>	
Mathematics 6	3	Mathematics 6	3
Physics 1	5	Physics 1	5
Chemistry 2	4	Chemistry 3	4
Ceramics 2	3	Ceramics 2	3
Economics	2	Economics	2
Physical Training	1	Physical Training	1
18		18	

Third Year

<i>First Semester</i>		<i>Second Semester</i>	
Mechanics	3	Mechanics	3
Chemistry 6	4	Chemistry 6	4
Ceramic Engineering 1.....	3	Ceramic Engineering 1.....	3
Geology	3	Mineralogy	3
Elective	5	Elective	5
18		18	

Fourth Year

<i>First Semester</i>		<i>Second Semester</i>	
Ceramic Engineering 2.....	4	Ceramic Engineering 2.....	4
Physics 2	3	Chemistry 5	3
Power and Machinery	2	Power and Machinery.....	2
Ceramic Calculations	2	Professional English	2
Summer Practice	1	Summer Practice	1
Elective	6	Elective	6
18		18	

The elective is to be chosen, with the consent of the Director, from the following subjects: Assembly, four hours; Chemistry 7, six hours; German or French, twelve hours; Introduction to Economics, six hours; Labor Problems, three hours; Music, six hours; Principles of Public Finance, three hours; Surveying, four hours; Thesis, four hours.

Course in Applied Art

First Year

<i>First Semester</i>		<i>Second Semester</i>	
Drawing 1, Studio Practice....	2	Drawing 1, Studio Practice....	2
Pottery Making 1.....	1	Pottery Making 1.....	1
Design 1, Lecture and Studio...	2	Design 1, Lecture and Studio...	2
Ceramics 1, Lecture.....	1	Ceramics 1, Lecture.....	1
English 1, English Composition and Rhetoric	3	English 1, English Composition and Rhetoric.....	3
Modern Language	3	Modern Language	3
Chemistry 1	3	Chemistry 1	3
Physical Training	1	Physical Training	1
Ethics 1	1	Ethics 1	1
17		17	

Second Year

<i>First Semester</i>		<i>Second Semester</i>	
Drawing 2, Studio Practice....	2	Drawing 2, Studio Practice....	2
Pottery Making 2, Studio Practice	2	Pottery Making 2, Studio Practice	2
Design 2, Lecture and Studio...	2	Design 2, Lecture and Studio...	2
Ceramics 2, Lecture and Labora- tory	3	Ceramics 2, Lecture and Labora- tory	3
English 8	2	English 8	2
Modern Language	3	Modern Language	3
Physical Training	1	Physical Training	1
Elementary Psychology	2	Elementary Psychology	2
17		17	

Third Year

<i>First Semester</i>		<i>Second Semester</i>	
Drawing 3, Studio Practice.....	2	Drawing 3, Studio Practice.....	2
Pottery Making 3, Studio Practice	3	Pottery Making 3, Studio Practice	3
Design 3, Lecture and Studio...	2	Design 3, Lecture and Studio...	2
Ceramic Craft 2, Lecture and Studio	2	Ceramic Craft 2, Lecture and Studio	2
Educational Psychology	3	Principles of Education.....	3
History of Western Europe.....	3	History of Western Europe.....	3
Ceramics 7, Laboratory.....	2	Ceramics 7, Laboratory.....	2
17		17	

Fourth Year

<i>First Semester</i>		<i>Second Semester</i>	
Drawing 4, Studio Practice.....	2	Drawing 4, Studio Practice.....	2
Pottery Making 4, Studio Practice	3	Pottery Making 4, Studio Practice	3
Design 4, Lecture and Studio...	2	Design 4, Lecture and Studio...	2
Methods and Practice Teaching.	6	Ceramic Guild Management, Lec-	
Ceramics 8, Thesis.....	2	tures and Studio.....	2
History of Education.....	2	History of Art.....	4
		History of Education.....	2
	17	Ceramics 8, Thesis.....	2
			17

DEPARTMENTS OF INSTRUCTION

Description of Courses

CERAMIC TECHNOLOGY

Professor Binns

1. Lectures on the origin, properties, and uses of clays and other ceramic materials. Types of ware and methods of manufacture. Elementary glaze and body composition. History of Ceramics.

Laboratory practice in the operations involved in manufacture. The preparation and use of forms, molds, and dies. Making saggers, jiggering, pressing, and casting pottery. Making brick and tile. The general use of the machine equipment.

First year. One hour lecture and two hours laboratory. *One hour.*

2. Lectures on the occurrence, classification, and identification of clays. The manufacture of all classes of ceramic products. The theory and practice of drying and burning. The compounding of clay mixtures, and the production and use of glazes and colors. The glaze formula.

Laboratory practice in clay testing. The measurement of the physical properties of clays and the compounding of bodies and glazes. Kiln firing.

Second year. Two hours lecture and four hours laboratory. *Three hours.*

3. Laboratory practice for art students. The production of form by molding. The preparation of glazes for decorative pottery. Technical problems.

Third year. Four hours laboratory. *Two hours.*

4. Thesis in applied art.

Fourth year. Four hours laboratory. *Two hours.*

PROFESSIONAL ENGLISH

A course in the use of English in the Engineering profession. Technical descriptions and the writing of reports.

Fourth year. Two hours lecture and recitation. *Two hours.* II.

CERAMIC ENGINEERING

Professor Westendick

1. Lectures are given on the chemical, physical, and mineralogical changes which take place in clays, bodies, and glazes during their preparation, drying and burning. Details of different types of plants, such as brick, pottery, refractory, etc., are discussed.

Laboratory practice includes the testing of clays and other ceramic materials and the production of bodies, glazes, and completed wares.

Third year. Two hours lecture and four hours laboratory. *Three hours.*

2. The theory and practice of methods employed in enameling cast iron and steel. Laboratory exercises in production.

The making, calibration and use of various instruments; pyrometers, gauges and testing apparatus.

Fourth year. Two hours lecture and recitation and four hours laboratory. *Four hours.* I.

3. The application of general engineering principles to the ceramic industry. The topics studied include refractories, glass, lime, plasters and cements; drying, heat reactions and kiln construction.

The laboratory work consists of methods of testing and, so far as possible, methods of production.

Fourth year. Two hours lecture and recitation and four hours laboratory. *Four hours.* II.

GEOLOGY. A course in general geology especially arranged for the ceramic engineer. It deals with the development and the

features of the earth's surface, with special reference to the geology of ceramic materials.

Third year. Three hours lecture and recitation. *Three hours.* I.

MINERALOGY. This course includes an introduction to crystallography, microscopic mineralogy and the identification of minerals and rocks by inspection and simple tests.

Third year. Two hours lecture and two hours laboratory. *Three hours.* II.

CERAMIC CALCULATIONS

Professor Westendick

Solution of chemical and physical problems involved in compounding ceramic mixtures including wet blending, and slip corrections. The solving of every day factory problems occurring in the manufacture of clay wares. Lecture and recitations.

Prerequisite, Mathematics 6 or equivalent. Fourth year. *Two hours.* I.

POWER AND MACHINERY

The aim of this course is to familiarize the student with the installation, maintenance and repair of shop power and machinery. With this end in view, a study will be made of internal combustion engines, ceramic machinery and methods of power transmission. Under repair will come bearing removal, shaft straightening, belt lacing, valve grinding and such other operations as are necessary to the proper maintenance of a shop. Laboratory exercises will be carried on in which each student will be required to perform the different operations. During the last half of the second semester a study of the Strength of Materials will be taken up. This will include elastic and ultimate strength, general properties, moments for beams and columns, torsion of shafts, elastic deformities, reinforced concrete, combined stresses, and resilience. *Two hours.*

CHEMISTRY

Professor Rice

1. **INORGANIC CHEMISTRY.** The fundamental principles of chemistry are taught by a systematic study of the non-metallic elements during the first semester, followed by a broadening of the student's knowledge by study of the metallic elements during the second half of the year. The laboratory work, in which the student is expected to demonstrate facts and principles for himself, follows closely upon class room discussion. Lectures and recitations, three periods; laboratory, two periods. Textbook, Deming, *General Chemistry*. Four hours.

2. **QUALITATIVE ANALYSIS.** This course serves to emphasize the principles involved in chemical analysis, to give the student practice in laboratory manipulation, and to serve as a medium for further instruction in inorganic chemistry. Preliminary experiments illustrate principles and give practice in writing chemical equations and are followed by the analysis of simple unknown solutions and salts and finally by the complete analysis of several industrial products, such as alloys, pigments, minerals, ores, glass, enamels, etc. Lectures and recitations, one period; laboratory, two periods. Textbook, Noyes, *Qualitative Chemical Analysis*. Prerequisite, Chemistry 1. Three hours. I.

3. **QUANTITATIVE ANALYSIS.** This course is devoted to volumetric analysis and elementary gravimetric analysis. In the laboratory, accuracy, care, and integrity are emphasized as being necessary for successful analysis. The principles of stoichiometry are also taught. Lectures and recitations, one period; laboratory, two periods. Textbook, G. M. Smith, *Quantitative Chemical Analysis*. Prerequisite, Chemistry 2. Three hours. II.

4. **QUANTITATIVE ANALYSIS.** This is an advanced course, covering the analysis of rocks, clays, cements, etc. Lectures and recitations, one period; laboratory, two periods. Textbook, Wash-

ington, *The Chemical Analysis of Rocks*. Prerequisite, Chemistry 3. Three hours. I.

5. **FUELS AND COMBUSTION.** The analysis of solid, liquid, and gaseous fuels and their products of combustion is discussed in the class-room and carried out in the laboratory. Industrial stoichiometry, covering combustion calculations on furnaces and kilns, heat losses, etc., is included in this course. Prerequisite, Chemistry 3. Three hours. II.

6. **PHYSICAL CHEMISTRY.** The characteristics of chemical substances which determine their properties and reactions, such as the pressure-volume relations of gases, the properties of solutions, the equilibria and rate of chemical changes, heterogeneous equilibrium in terms of the phase rule, thermo-chemistry and colloidal chemistry are considered in this course. The student is required to solve a large number of problems pertaining to the subjects discussed. Lectures and recitations, three periods. Textbook, Getman, *Physical Chemistry*. Prerequisite, Chemistry 2, Mathematics 6, and Physics 1a and 1b. Three hours.

APPLIED ART

Miss Fosdick

Miss Nelson

Public and private schools are requiring well trained teachers of crafts. Although pottery is the craft in which the school offers exceptional facilities for production, a crafts course for the better understanding of color and design in Applied Art has been added in the junior and senior years. This includes block printing and batik.

The electives allowed in the junior and senior years may be utilized in the department of education as required work for the teacher's professional certificate and in further study in college subjects, or they may be used in additional craft work.

Drawing

1. Freehand perspective, value study.
First year. Four hours studio. *Two hours.*
2. Composition, cast drawing, lettering.
Second year. Six hours studio. *Two hours.*
3. Kanakadea drawings, sketch.
Third year. Four hours studio. *Two hours.*
4. Sketch.
Fourth year. Four hours studio. *Two hours.*

Pottery Making

1. The first semester is given over to a course in appreciation leading to discrimination in design for pottery. Building of pottery commences with the second semester, which includes glazing with hand ground glazes.

First year. Three hours studio. *One hour.*

2. Continuation of building of pottery with elementary work on the wheel. Use of varied types of glazes in connection with laboratory work in glaze preparation and mold-making.

Second year. Four hours studio. *Two hours.*

3. Processes of pottery decoration, slip treatment, underglaze and overglaze, modeling and incising. Kiln management and firing.

Third year. Six hours studio. *Three hours.*

4. Advanced work in decorating and glazing. Advanced wheel work.

Fourth year. Six hours studio. *Three hours.*

Design

1. Design theory.
First year. Four hours studio. *Two hours.*
2. Color theory.
Second year. Six hours studio. *Two hours.*
3. Design and color applied to block printing and batik.
Third year. Four hours studio. *Two hours.*
4. Thesis in applied design.
Fourth year. Four hours studio. *Two hours.*

Ceramic Craft

Special decorative processes for pottery, the making and renewal of equipment, and care of machinery.

Third year. Four hours studio. *Two hours.*

Guild Management

Production of pottery with special reference to commercial problems and economy of production. The problem of the sales room and private studio. Kiln management. Ceramic craft a prerequisite.

Fourth year. Four hours studio. *Two hours.*

History of Art

Lectures and recitations illustrated with photographs, slides and casts on the history of Art and the appreciation of beauty. The beginnings of art as seen in the work of primitive peoples and of children. Egyptian architecture and decorative arts. The architecture and sculpture of Greece. Roman achievement in civic art. The great cathedrals and the decorative arts of the Middle Ages. The painting and sculpture of the Renaissance. Modern Art.

The work is done through lectures, supplementary reading and keeping of note books.

Third year. Two hours recitation. *Two hours.*

DEPARTMENT OF INVESTIGATION AND RESEARCH

Clay Testing

Professor Binns

The State School of Ceramics is fitted, and the experts in charge are qualified, for the professional examination and testing of clays for economic purposes. Such clays may be classified under the following heads:

- (a) Kaolin, white burning residual clay.
- (b) Kaolin, white burning, washed for market, used in the manufacture of pottery, porcelain, and paper.
- (c) Ball clay, white or cream burning, sedimentary clay of high plasticity, used in pottery manufacture.
- (d) Stone ware clay, gray or cream burning, more or less sandy in character, used in stoneware manufacture.
- (e) Fire clay, buff or white burning, refractory, used for manufacture of fire brick.
- (f) Brick clay including colored clays and shales, used for the manufacture of brick and tile of various qualities and descriptions.

For each of the above classes special tests are necessary and the charges made are proportionate to the work required.

A report upon each sample will be furnished and must be understood to refer only to the samples submitted unless the experts are instructed to examine the deposit and prepare their own samples, in which case special charges will be made. The report includes physical tests and chemical analysis where necessary.

Advice as to washing or other preparation of the clay is also given, together with an opinion as to the industry to which the material may be applied.

Industrial Problems

Professor Binns

Professor Westendick
Assistant Professor Merritt

The problems incidental to the manufacture of clay wares are regularly investigated at the school. Manufacturers are invited to present questions for study. Persons resident within the State are entitled to reasonable services without charge.

REGISTRATION OF STUDENTS 1926-1927

SENIORS

NAME	RESIDENCE	COURSE
Amberg, Charles Rhodimer.....	Elmira.....	Eng.
Boyce, Robert Esterly.....	Chester, W. Va.....	Sci.
Bristol, Julia Athalene.....	Cuba.....	Art
Buhrmaster, Viola Caroline.....	Scotia.....	Art
Bull, Ruth Dorothy.....	Lake Placid.....	Art
Burdick, Lyle Dixon.....	Little Genesee.....	Eng.
Claire, Altana Mae.....	Alfred.....	Art
Clarke, Jeanne Augusta.....	Yonkers.....	Art
Cottrell, Gertrude Louise.....	Tempe, Arizona.....	Art
Ford, Frank Jedediah.....	New York City.....	Eng.
Fulmer, Raymond Cooper.....	Olean.....	Eng.
Hamilton, Richard.....	North Harpersfield.....	Eng.
Hussain, Tajamul.....	Hyderabad, India.....	Eng.
Hutchinson, Grace Edibell.....	Long Beach, Calif.....	Art
Ingoldsby, Frank Marvin.....	Lakemont.....	Eng.
Jeffrey, Gilbert Hoffman.....	Milton, Wis.....	Eng.
Kelley, Paul Gordon.....	Wellsville.....	Art
Lunn, Arlouine Odessa.....	Wellsville.....	Art
McNerney, Francis De Sales.....	Du Bois, Pa.....	Eng.
Perrone, Patrick Dominick.....	Johnsonburg, Pa.....	Eng.
Saunders, Harriet.....	Alfred.....	Art
Tate, Frank Edward.....	Ridgway, Pa.....	Eng.
Vey, William Giles.....	Morristown, N. J.....	Eng.
Welch, Neal Carney.....	Alfred.....	Eng.
Wilcox, Herman Gerald.....	Falconer.....	Eng.

JUNIORS

Ally, Abde.....	Hyderabad, India.....	Eng.
Bookheim, Arnold.....	Albany.....	Eng.
Brundige, Helen Bernese.....	Scotia.....	Art
Claire, Ruth Evelyn.....	Alfred.....	Art
Coleman, Beatrice Belle.....	Ilion.....	Art.
Collins, William George.....	New York City.....	Eng.
Devitt, Desmond Earl.....	Malta, Ill.....	Eng.
Fulmer, Eugene William.....	Olean.....	Eng.
Gardner, Raymond Edward.....	Wellsville.....	Eng.
Holland, Dorothy Evelyn.....	Hempstead.....	Art
Hyland, David Lee.....	Lima.....	Eng.
Luks, Daniel Wynkoop.....	Towaco, N. J.....	Eng.
Saunders, Revere Hamilton.....	Belmont.....	Eng.
Saunders, Stanley Spring.....	Alfred.....	Eng.
Selkirk, Elizabeth Whiting.....	Albany.....	Art
Stolte, Norman Henry.....	Cleveland, O.....	Eng.
Tucker, Nathan Fred.....	Alfred.....	Eng.
Utrich, Dorothy Elizabeth.....	Albany.....	Art
Williams, Francis Jesse.....	Elmira.....	Eng.
Witter, Raymond Bowler.....	Alfred.....	Eng.

SOPHOMORES

NAME	RESIDENCE	COURSE
Adams, Howard Lewis.....	Ellicottville.....	Eng.
Anderson, Theodore Norman.....	Bellona.....	Eng.
Brown, Robert Ellis.....	Almond.....	Eng.
Burdett, Roy Francis.....	Hornell.....	Eng.
Call, John Lloyd.....	Buffalo.....	Eng.
Carpenter, Harold Frederick.....	Canistota.....	Eng.
Dailey, Wesley Arthur.....	Arcade.....	Eng.
Fenner, Donald Olin.....	Coudersport, Pa.....	Eng.
Fredericks, Dean Hayes.....	Flemington, Pa.....	Eng.
French, Gordon Elmer.....	Rochester.....	Eng.
Gardner, Paul Vickers.....	Canistota.....	Eng.
Gilder, Charles Louis.....	Dansville.....	Eng.
Gridley, Daniel Philo.....	Wellsville.....	Eng.
Hawley, Dorothy Adell.....	Rochester.....	Art
Henry, Eleanor.....	New York City.....	Art
Henshaw, Doris May.....	West Falls.....	Art
Hinton, Robert Hoyle.....	Tabor, N. J.....	Eng.
Holmes, Lillian Ward.....	Alfred.....	Art
Hulse, Walter Thurston.....	Chester.....	Eng.
Humphrey, Ingraham.....	Lima.....	Eng.
Klinger, Daniel George.....	Friendship.....	Eng.
Koch, Evelyn Antoinette.....	Queens Village.....	Art
Lewis, Gordon Evans.....	Wellsville, Pa.....	Eng.
Lewis, William George.....	Watertown.....	Eng.
Love, Marian Winifred.....	Cuba.....	Art
Lyon, Ruth Virginia.....	Bradford, Pa.....	Art
Miller, Kenneth Gordon.....	Ticonderoga.....	Eng.
Mulroy, James Philip.....	Buffalo.....	Eng.
Ostrander, George William.....	Almond.....	Eng.
Post, Helen Margaret.....	Bloomfield, N. J.....	Art
Potter, Florence Sally.....	Friendship.....	Art
Reed, Kenneth Willard.....	Rochester.....	Eng.
Rockefeller, Warren Willis.....	Port Chester.....	Eng.
Saunders, Mildred Lillian.....	Belmont.....	Art
Schwenk, Carl Clarence.....	Shillington, Pa.....	Eng.
Shardlow, Lawrence Russell.....	North Bloomfield.....	Eng.
Sherman, Clark Lester.....	Little Valley.....	Eng.
Sisson, Verne Porter.....	Lima.....	Eng.
Smith, Kenneth Eugene.....	Scio.....	Eng.
Stearns, Rhoda Isabel.....	Warsaw.....	Art
Stillman, Paul Clarke.....	Alfred.....	Eng.
Studwell, Charles Le Roy.....	Port Chester.....	Eng.
Thomas, Clarice Marie.....	New Haven, Conn.....	Art
Tredennick, William Treloar.....	Johnstown, Pa.....	Eng.
Vores, Adelaide Pearce.....	New Haven, Conn.....	Art
Weir, Henry Eldridge.....	Belfast.....	Eng.
Welts, William Ward.....	Salamanca.....	Eng.
Williams, George La Route.....	Cuba.....	Eng.
Williams, John Elton.....	Hornell.....	Eng.
Williams, Leland Ellis.....	Hornell.....	Eng.
Willson, Herbert Smith.....	Addison.....	Eng.
Wilson, Bernard Floyd.....	Canistota.....	Eng.

FRESHMEN

NAME	RESIDENCE	COURSE
Alvord, Kenneth Brainard	Andover	Eng.
Armstrong, Leland Reuben	Alfred	Eng.
Bass, George Quincy	Baltimore, Md.	Eng.
Bassett, Robert Bias	Alfred	Eng.
Bennett, Clarence Tremaine	Rockville Center	Eng.
Bordwell, Mary Eleanor	Warren, Pa.	Art
Burdick, Milton De Witte	Alfred	Eng.
Claire, Walton Irving	Alfred	Eng.
Conderman, Mary Adelaide	Hornell	Art
Curry, William Jack	East Liverpool, Ohio	Eng.
Duggan, John William	Bradford, Pa.	Eng.
Fabianic, William Lewis	Ridgway, Pa.	Eng.
Gent, Henry Edward	Wellsville	Eng.
Gougas, Helen Pauline	Owego	Art
Greene, Ferne Ramona	Alfred	Art
Greene, Frances	Ancon, Canal Zone	Art
Gronquist, Rebecca Margaret	Jamestown	Art
Hallock, Dorothy Emma	Oneida	Art
Herriott, Thomas Grayden	Jersey Shore, Pa.	Eng.
Hill, George Wesley	Pittsford	Eng.
Hillmiller, John Karl	Salamanca	Eng.
Hood, Betty Shipley	Atlanta, Ga.	Art
Hoyt, Charlotte May	Thomaston, Conn.	Art
Jaquiss, Gerard Johnston	Floral Park	Eng.
Karthauser, Harold Edwin	Greenwich, Conn.	Eng.
Kuhl, Waldo Whitney	Lawrenceville, Pa.	Eng.
Langworthy, Jack Rainey	Orchard Park	Eng.
Leach, Mary Constance	Mt. Morris	Art
Lent, Olive Alberta	Canisteo	Art
Leonhard, Floyd Carl	Buffalo	Eng.
Lynn, Don Carlisle	Smithton, Pa.	Eng.
McCormick, Charles Francis	Hornell	Eng.
McGraw, Jack Edgar	Hornell	Eng.
Marley, Ruth Irene	Hornell	Art
Martin, Kenneth Gerome	Ovid	Eng.
Martin, Paulina Mercia	Salamanca	Art
Mills, Harriette Janet	Akron	Art
Nielsen, John	Port Chester	Eng.
Olander, Elmer Eli	Jamestown	Eng.
Petko, Julia Agnes	Warsaw	Art
Pickering, Wilfred Lott	Homer	Eng.
Roberts, Clair Elmer	Scio	Eng.
Rogers, Frances Randolph	Daytona Beach, Fla.	Art
Sheffield, Mary Elsie	Angelica	Art
Sill, Stewart Stillman	Sodus	Eng.
Spencer, Ernest Henry	Friendship	Eng.
Stanton, George Edward	Luzerne	Eng.
Stephens, Donald Baker	Canisteo	Eng.
Thomson, John Wesley	Buffalo	Eng.
Titsworth, Alfred Alberti	Alfred	Art
Tuttle, Harry Lee	Scio	Eng.

NAME	RESIDENCE	COURSE
Van Buren, Wesley Howard	Hempstead	Eng.
Walkley, Daniel Eugene	Bolivar	Eng.
Wamsley, Delos Herschel	Alfred Station	Eng.
Weishan, Theora May	Ellicottville	Art.
Whitford, Harold Carlton	Hornell	Eng.
Whitman, Clark James	Ovid	Eng.
Wilkinson, William Clark	Brooklyn	Eng.
Worden, Dorothy Helen	Brookfield	Art
Wright, Seth Weldon	Warsaw	Art
Wright, Smith Donald	Preble	Eng.
Young, William Hartzell	Hornell	Eng.

SPECIALS

Miller, Andrew William	Galeton, Pa.	Eng.
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SUMMARY

Seniors	25
Juniors	20
Sophomores	52
Freshmen	62
Specials	1
Total	160