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### College Catalog, 1922-1923

Buffalo State College

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# STATE NORMAL AND TRAINING SCHOOL

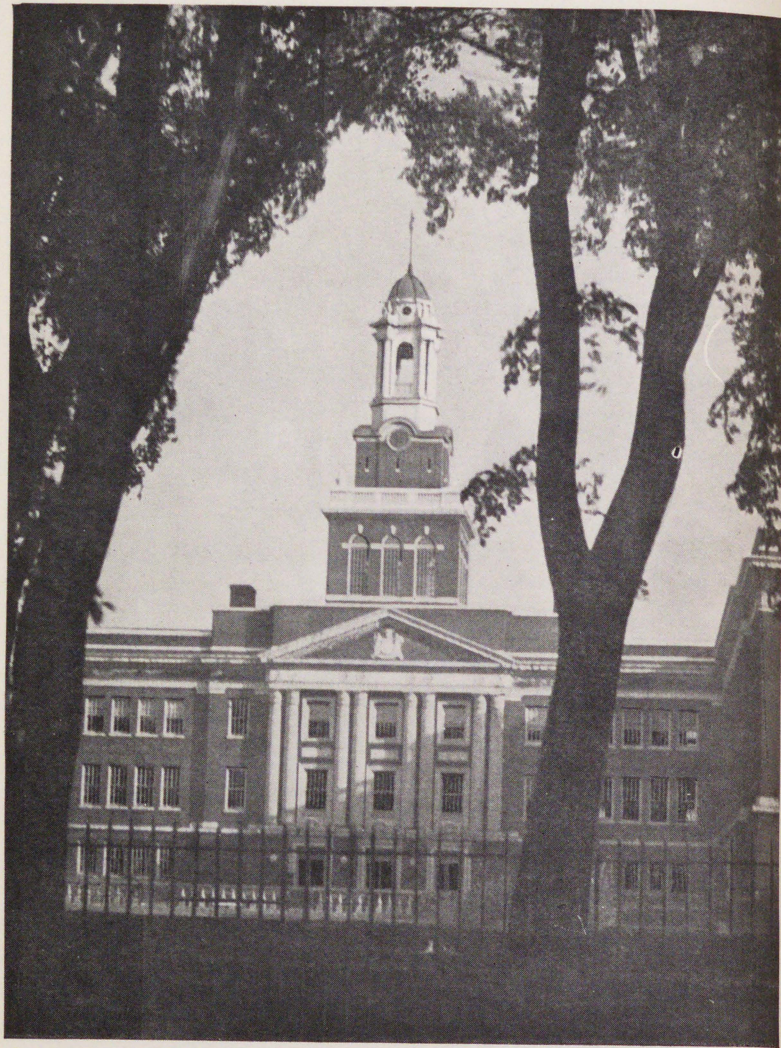
OFFICE OF THE REGISTRAR  
STATE TEACHERS COLLEGE  
DEPARTMENT OF  
INDUSTRIAL TEACHER AT  
TRAINING BUFFALO,  
BUFFALO 9, NEW YORK



BUFFALO, NEW YORK  
1922-1923



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CENTRAL TOWER OF THE NORMAL SCHOOL

# State Normal and Training School

Department of  
Industrial Teacher Training



Buffalo, New York  
1922-1923



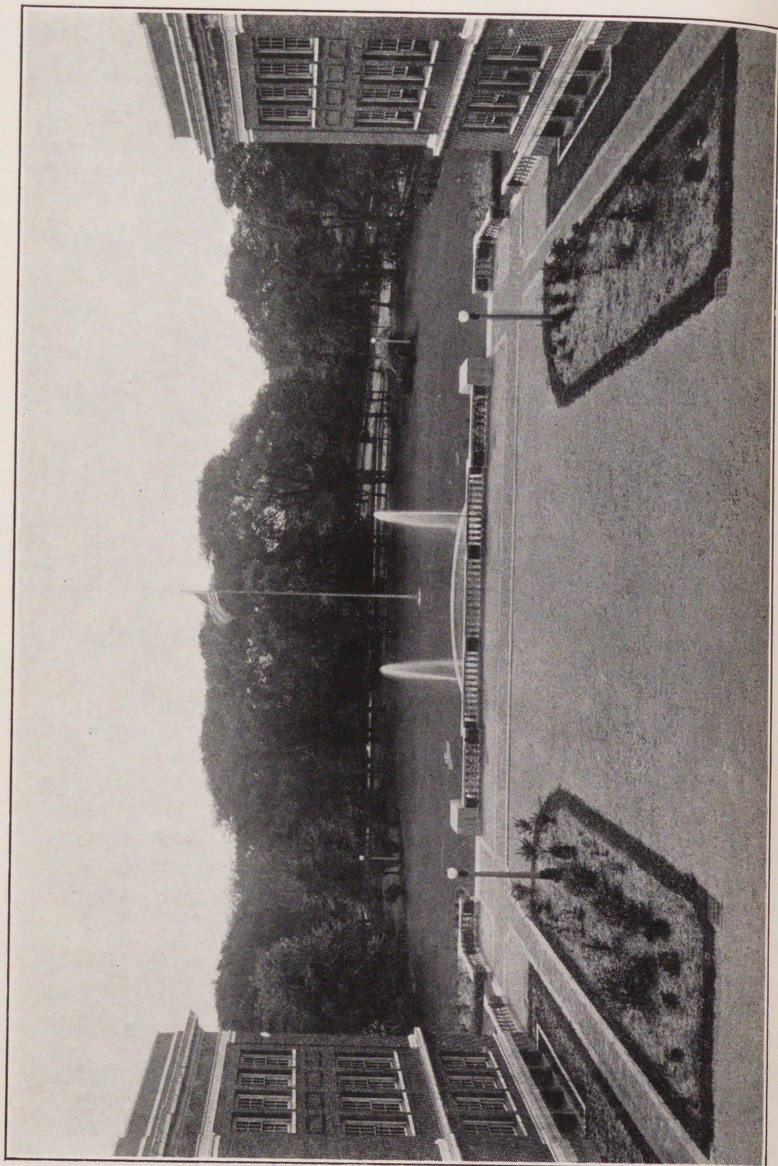
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STATE NORMAL SCHOOL  
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VIEW OF CAMPUS FROM THE TOWER

## CALENDAR OF DAY SCHOOL

1922

Wednesday, July 5th, Summer Session opens.  
Friday, August 11th, Summer Session closes.  
Wednesday, September 6th, School of Practice (not Normal Department) opens.  
Wednesday, September 13th, Normal Department opens.  
Thursday, October 12th, Columbus Day.  
Wednesday, November 22nd, at close of school session Thanksgiving recess begins.  
Monday, November 27th, work resumed.  
Thursday, December 21st, at close of school session Christmas recess begins.

1923

Tuesday, January 2nd, work resumed.  
Wednesday, January 24th, Term examinations begin.  
Monday, January 29th, second semester begins.  
Monday, February 12th, Lincoln's Birthday.  
Thursday, February 22nd, Washington's Birthday.  
Thursday, March 29th, at close of school, Easter recess begins.  
Monday, April 9th, work resumed.  
Monday, April 17th, fourth quarter begins.  
Wednesday, May 30th, Memorial Day.  
Wednesday, June 20th, term examinations begin.  
Sunday, June 24th, Baccalaureate Sunday.  
Monday, June 25th, Class Day.  
Tuesday, June 26th, Commencement.

## CALENDAR OF EVENING INDUSTRIAL TEACHER TRAINING CLASSES

1922

Tuesday, September 12th, 4:30 p.m., final date of acceptance of applications.  
Monday, September 18th, Registration Night.  
Wednesday, September 20th, 7:30 p.m., class work begins.  
Wednesday, December 20th, at close of evening session, Christmas recess begins.

1923

Wednesday, January 3rd, 7:30 p.m., work resumed.  
Monday, January 8th, term examinations.  
Monday, January 15th, second semester begins.  
Monday, February 12th, Lincoln's Birthday.  
Wednesday, March 28th, at close of session, Easter recess begins.  
Monday, April 9th, 7:30 p.m., work resumed.  
Wednesday, May 2nd, final examinations and close of second semester.  
Sunday, June 24th, Baccalaureate Sunday.  
Monday, June 25th, Class Day.  
Tuesday, June 26th, Commencement.

[7]



### THE FACULTY

- Harry W. Rockwell, M.A.....Principal  
Irving C. Perkins.....Director of the Department  
of Industrial Teacher Training; Methods of Teaching  
Shop and Related Subjects.  
George M. Quackenbush.....Study and Analysis of Trades  
and Organization of Courses of Study; Materials, Equip-  
ment and Records; Hygiene and Accident Prevention;  
Mechanical Drawing; Industrial Science.  
Joseph Phillippi.....Shop Mathematics  
Walter B. Weber.....Electrical Work  
Clinton W. Burke.....Woodworking  
Wendell T. Applebee.....Machine Shop; Industrial History  
and Civics.  
George E. Huckins.....Printing  
S. C. Clement.....Applied Psychology; Theory,  
Principles and Problems of Vocational Education.  
Miss Kempke }  
Miss Keeler } .....English and Public Speaking

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### GENERAL INFORMATION

The State Normal and Training School at Buffalo is an institution of Junior college grade under the control of the University of the State of New York and the State Department of Education. It offers a number of courses varying in length for the preparation of trade and industrial teachers for State and Federally aided vocational schools.

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### LOCATION OF SCHOOL

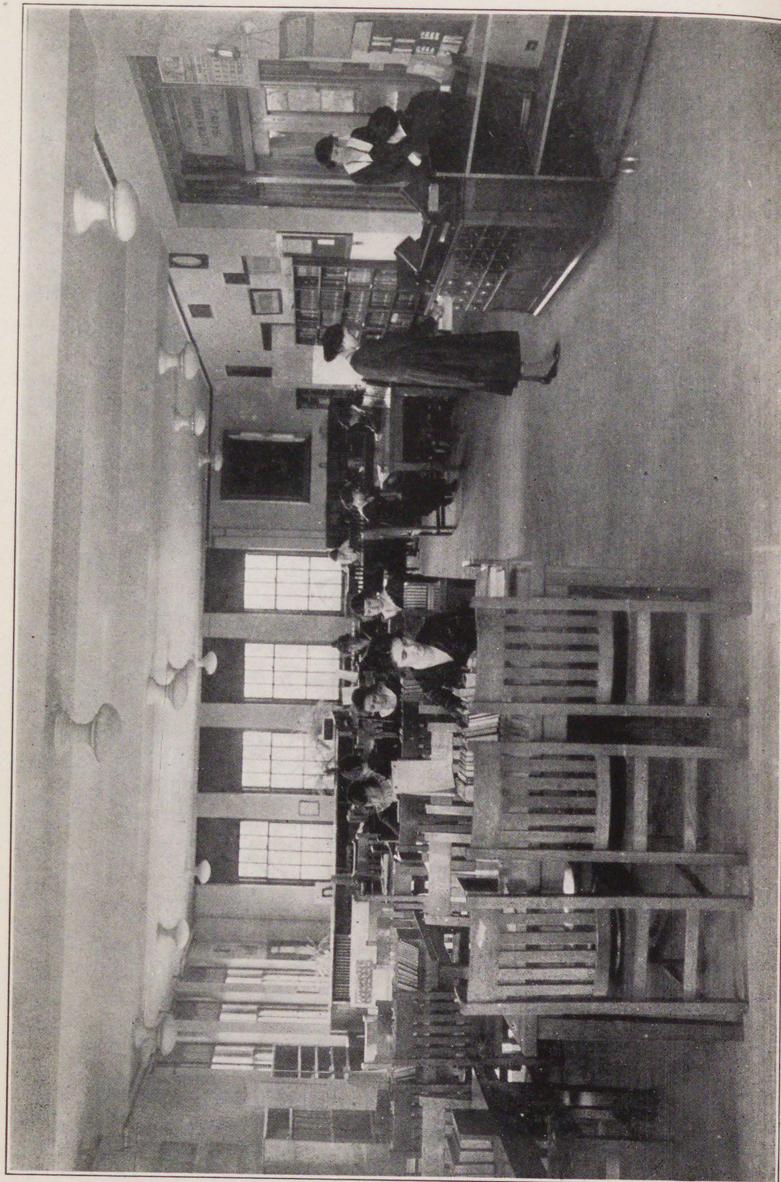
The City of Buffalo is rapidly becoming one of the leading manufacturing cities of the country. A city of this type offers many advantages in connection with industrial teacher training work and it is extremely fortunate that the training department is so favorably located.

The school is situated in the city on the block bounded by Jersey, Fourteenth and York Streets and Normal Avenue and is reached by Hoyt, Grant and Connecticut Street car lines. The numerous suburban electric and steam car lines which connect Buffalo with the surrounding country make it possible for many students who live at a considerable distance from Buffalo to attend the school and reside at home.

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## THE BUILDING AND GROUNDS

The building has just recently been completed and is thoroughly modern in every respect. It houses in addition to the Industrial Teacher Training work, department of Household Arts, Drawing, Music, Elocution, numerous laboratories and class rooms, a grammar school, a large, well-equipped gymnasium and auditorium seating a thousand people.

The grounds are large and well kept and afford a splendid setting for the main building.

## STUDENT ACTIVITIES

The City of Buffalo offers many advantages for self-improvement. Many educational lectures are offered by the various institutions during the year as well as the advantages of libraries containing thousands of volumes, the Albright Art Gallery and the opportunity to hear many of the leading artists of the country on the concert platform.

The School has many live student organizations that promote the various interests. The Faculty is keenly interested in all forms of desirable activities, and will do everything possible, consistent with the purpose of the institution, in co-operating and encouraging a many-sided student life.

## Department of Industrial Teacher Training

### PURPOSE OF DEPARTMENT

The purpose of the department is to prepare qualified men for:

- First, Shop teachers in unit trade schools.
- Second, Technical teachers in unit technical schools.
- Third, Related subjects teachers in unit trade schools.
- Fourth, Teachers in part-time schools.
- Fifth, Teachers in general industrial schools.
- Sixth, Teachers in evening vocational schools.

These teachers are being prepared to teach in State or Federally aided vocational schools in the State of New York.

### DEMAND FOR VOCATIONAL TEACHERS

The vocational work in Public Schools is rapidly developing in every part of the State. All cities are beginning to recognize and to give place to vocational work in their educational programs. This development means a greater demand for trade, industrial and related subjects teachers.



Part-time education is being conducted in over one hundred cities of the State and is requiring large numbers of teachers. The part-time educational program when fully operative in 1925 will afford a large number of splendid opportunities.

Cities of less than 25,000 inhabitants are establishing departments of industrial work that will require specially trained people in large numbers. Evening vocational schools are being organized in the majority of cities and towns and these will also require many teachers with definite training.

The demand for trained vocational teachers has greatly exceeded the supply during the current year. There is no question but that trained people will always be in demand for some one of the many fields of vocational education.

Salaries for vocational teachers have been advanced very materially during the past few years. Indications are that further increases will be such that people will enter this field as a permanent life work and receive a good income.

#### SHOPS, LABORATORIES AND EQUIPMENT

The Department has one of the very best equipped school machine shops in the country. All types of thoroughly modern production machine tools, comprising various types of lathes, shapers, drills, milling machines and grinders are on the floor and are available for the training of teachers.

The woodworking department is very well equipped with machine tools, and includes bandsaw, universal saw, jointers, surfacer, hollow chisel and chain saw mortisers, lathes, boring machine, trimmer, benches and small tools. All machine tools are individual motor driven and represent the best types of equipment.

The printing department is equipped with platen presses, paper cutter, proof presses, stitcher, cases, stands, cabinets, type and the miscellaneous equipment that will permit of good commercial practice and experience.

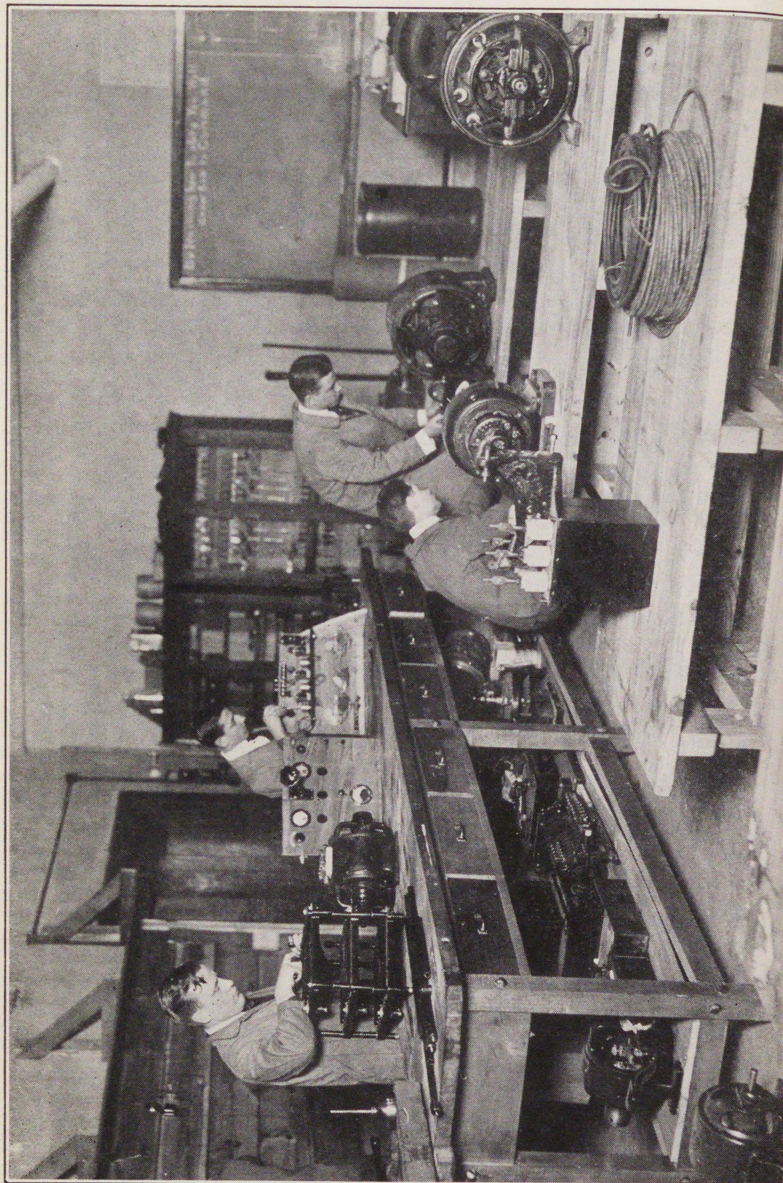
The electrical department is equipped with generators, motors, transformers, panels, switchboards, batteries, meters, a wide range of testing instruments and all necessary small tools and equipment. The facilities will be complete in every respect for handling work in light, power and signal wiring; wireless key and telephone operation; repair work on standard electrical equipment and the running of all standard tests.

The sheet metal shop will be supplied with forming, folding, grooving, beading, turning and burring machines and all the small tools and equipment necessary for teaching all forms of practical work.

The drafting room is completely equipped for classes in mechanical and architectural drafting and includes modern blue-printing equipment.



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CONSTRUCTING WIRELESS SET AND TESTING MOTORS

## APPLICATION FOR ENTRANCE

Candidates for admission to the Industrial Teacher Training Department should apply in person or by letter to the Principal of the School or the Director of the Department. At that time credentials should be submitted showing amount of school work completed, trade work engaged in, a physician's certificate of good health and the names of two persons who can testify as to the character of the applicant.

Formal application blanks will be filled out at the time of interview or will be mailed to applicant upon the receipt of credentials.

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## EXPENSES

Tuition and use of text-books in all courses are free to residents of the State of New York. Non-residents of the State are required to pay in advance a tuition fee of \$20 a term for nineteen weeks.

A deposit of \$10 a term is charged all students, resident or non-resident, in the Department, who are registered for shop courses. This is to cover the loss or breakage of equipment, any excess being returned to students.

The school is located in the midst of comfortable homes, many of which offer rooms to students from outside the city. Board and room (two occupying a room), including heat and light, may ordinarily be had at from \$6 and upward per week.

There are also many opportunities for students to reduce their expenses by outside work. Applicants who wish to take advantage of such opportunities for self-help would do well to write to the Student Committee a full statement as to the line of outside work they feel qualified to undertake.

A student loan fund is available for aiding worthy students who find it impossible without assistance to continue their work and graduate.

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## PLACEMENT OF GRADUATES

The officers of the school are glad to recommend teachers to school officials who are seeking competent people in the field of vocational education. No recommendations are made unless it is felt that the candidate will succeed.

The school will do everything in its power to place graduates in positions they are qualified to fill, although in no instance is it possible to absolutely guarantee positions.

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## THE SCHOOL YEAR

The school year is 38 weeks in length, divided into two terms of 19 weeks each. The regular work begins September 13, 1922,



and closes June 20, 1923. Students should arrange to enter at the beginning of the school year if possible. If this is not possible, students may enter at the beginning of the second term, January 29, 1923.

### INQUIRIES

Address all inquiries concerning enrollment, courses of study, entrance requirements and expenses to:

The Principal, or the Director of Industrial Teacher Training Department, State Normal School, Buffalo, N. Y.

## Industrial, Trade, Technical and Part-time Teacher Training Courses

### TWO-YEAR DAY COURSE AT STATE NORMAL SCHOOLS

**Age.** Candidates must be at least 18 years of age.

**Admission.** Candidates for admission to the two-year industrial teacher training course shall present evidence meeting the approval of the Commissioner of Education of (1) completion of an approved four-year high school course, or an equivalent secondary education and satisfactory industrial, trade or technical experience; (2) good morals, health and personal qualifications necessary to success in teaching.

**Course of Study.** The course of study to be pursued in the two-year day course is as follows:

#### TWO-YEAR DAY COURSE

FIRST YEAR			
First Term	Credit Hours	Second Term	Credit Hours
Applied Psychology .....	5	English .....	5
Mechanical Drawing.....	2	Theory, Principles and Problems .....	3
Trade Mathematics.....	3	Mechanical Drawing.....	3
Woodworking .....	5	Machine Shop .....	5
Printing .....	5	Electrical Work.....	5
	20		21

Ten weeks of approved trade work during the summer.

#### SECOND YEAR

First Term	Credit Hours	Second Term	Credit Hours
Study of Trades and Organization of Courses of Study .....	5	Study of Trades and Organization of Courses of study .....	5
Teaching Industrial Work .....	5	Shopwork (elective).....	10
Trade Science .....	2	Practice Teaching or Mechanical Drawing..	5
Industrial History and Economics .....	3		20
Mechanical Drawing or Practice Teaching.....	5		
	20		

Ten weeks of approved trade work during the summer.

**Requirements for Graduation.** All students in the two-year day course shall complete the following requirements, or their equivalents, pertaining to, (1) subjects and credit hours; (2) summer trade work; (3) resident attendance.

1. Subjects	Credit Hours	Actual Hours
Education .....	28	627
Technical .....	15	475
Shopwork .....	30	1140
General .....	10	190
	83	2432

- Twenty weeks of approved trade, industrial or technical work during the summer months or its equivalent shall be required of all students. Students must submit a detailed report of such work.
- Students must spend two full years in residence attendance (or four summer sessions) to be eligible for the diploma.

**Defining the Hours and the Credit Hour.** The hour is 60 minutes in length. The credit hour is one hour of recitation or two hours of shop, laboratory or practice teaching with such outside preparation as may be necessary, once a week for one term.

**Diploma and License.** A graduate of this course will receive a diploma and a license to teach:

- Shop work, mechanical drawing and shop mathematics in a general industrial school.
- Trade drawing, trade science and trade mathematics in a unit trade school.
- Shopwork and mechanical drawing (manual training, practical arts or industrial arts) in the grades or high school.
- Industrial, technical and the required subjects in a part-time or continuation school or class.



## ONE-YEAR DAY COURSE

**Age.** Candidates should preferably be not less than 23 or more than 38 years of age.

**Admission.** Candidates for admission to the one-year industrial training course shall present evidence meeting the approval of the Commissioner of Education of, (1) five years of trade, industrial or technical training of not less than journeyman grade, (2) a good general education, (3) good morals, health and personal qualifications necessary to success in teaching.

**Course of Study.** The course of study to be pursued in the one-year day course is as follows:

First Term	Credit Hours	Second Term	Credit Hours
Trade Analysis and Organization of Courses of Study .....	5	Trade Analysis and Organization of Courses of Study .....	5
Mechanical Drawing or Shop Work .....	5	Public Speaking .....	3
English .....	3	Theory and Principles of Vocational Education .....	3
Trade Mathematics.....	5	Methods for Vocational Teachers .....	3
Educational Psychology	2	Industrial History and Civics .....	3
Trade Science .....	2	Practice Teaching .....	5
	22		22

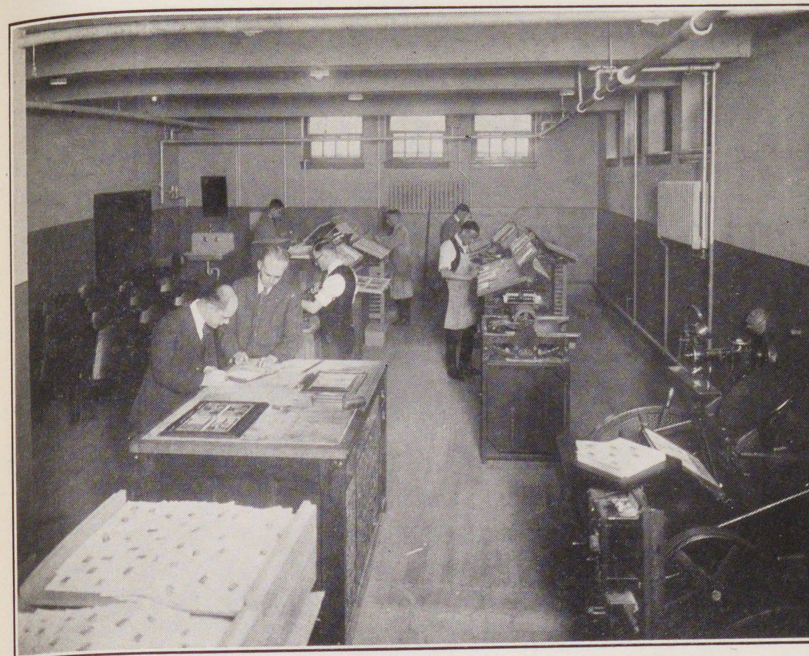
**Requirements for Graduation.** All students in the one-year day course shall complete the following requirements or their equivalents pertaining to, (1) subjects and credit hours; (2) resident attendance.

1. Subjects	Credit Hours	Actual Hours
Education .....	23	532
Technical or Shop .....	12	323
General .....	9	171
	44	1026

2. Students must spend one full year in resident attendance to be eligible for the diploma.

**Defining the Hours and Credit Hours.** The hour and credit hour are on the same basis as for the two-year course.

**Diploma and License.** A graduate of the one-year day course at State Normal Schools will receive a diploma and a license to teach: A specific trade or technical subject in a State-aided day, part-time, or evening vocational school or class.



THE COMPOSING ROOM



THE PRESS ROOM



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### EVENING INDUSTRIAL TEACHER TRAINING COURSE

**Length of Course.** This course is two years in length (240 clock hours), 60 nights of two clock hours for each year.

**Age.** Men should preferably be not less than 23 or more than 38 years of age. Women should preferably be not less than 21 or more than 35 years of age.

**Admission.** Candidates for admission to the two-year industrial evening teacher training course shall present evidence meeting the approval of the Commissioner of Education of, (1) six years or more practical contact with an industry, a trade or technical occupation of which not more than three years shall have been as an apprentice or in work of less than journeyman's grade; (2) graduation from the grammar school or its equivalent; (3) good morals, health, and personal qualifications necessary to success in teaching.

**Course of Study.** The course of study to be pursued in the two-year evening industrial teacher training course is as follows:

#### FIRST YEAR

1. History, theory, principles and problems of vocational education.....30 hours
2. Applied psychology and education.....30 hours
3. Study and analysis of trades, organization of courses of study, problems of materials, equipment and shop records.....60 hours

#### SECOND YEAR

1. Types of vocational education in New York.....30 hours
2. Methods and mechanics of teaching industrial subjects .....30 hours
3. Practice teaching.....60 hours

**Requirements for Securing Certificate.** All students must comply with the following requirements in order to secure the certificate of the course; (1) complete the required subjects in the evening industrial teacher training centers established by the State Department of Education or in the established departments of the State Normal Schools. (2) Attend class instruction not less than 90 per cent of the total number of required hours.

**Evaluation of Credits and Teaching Experience.** The evaluation of subjects taken at the established evening centers and the State Normal Schools shall be on the credit hour basis.

Successful teaching experience may be accepted by the Commissioner of Education in lieu of the practice teaching requirement of this course.

**Certificate and License.** A graduate of this course will receive a State certificate and a license to teach:

1. A specific trade or technical subject in a State-aided day, part-time or evening vocational school or class.



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## EVENING COMMERCIAL TEACHER TRAINING COURSE

The length of the course and the age limitations for the commercial classes will be the same as for men and women in the industrial teacher training courses.

Candidates for admission to the two-year Commercial Evening Teacher Training Course shall present evidence meeting the approval of the Commissioner of Education and of, first, three years experience in commercial work; second, graduation from an approved high school; third, good morals, health and personal qualifications necessary to success in teaching.

Courses of study are as follows:

### FIRST YEAR

1. History, theory, principles and problems of Vocational Education .....30 hours
2. Applied Psychology and Education .....30 hours
3. Study and analysis of junior commercial occupations; Organizations of courses of study and problems of materials, equipment and class records.....60 hours

### SECOND YEAR

1. Types of Commercial Education in New York.....30 hours
2. Methods and mechanics of teaching commercial subjects .....30 hours
3. Practice teaching .....60 hours

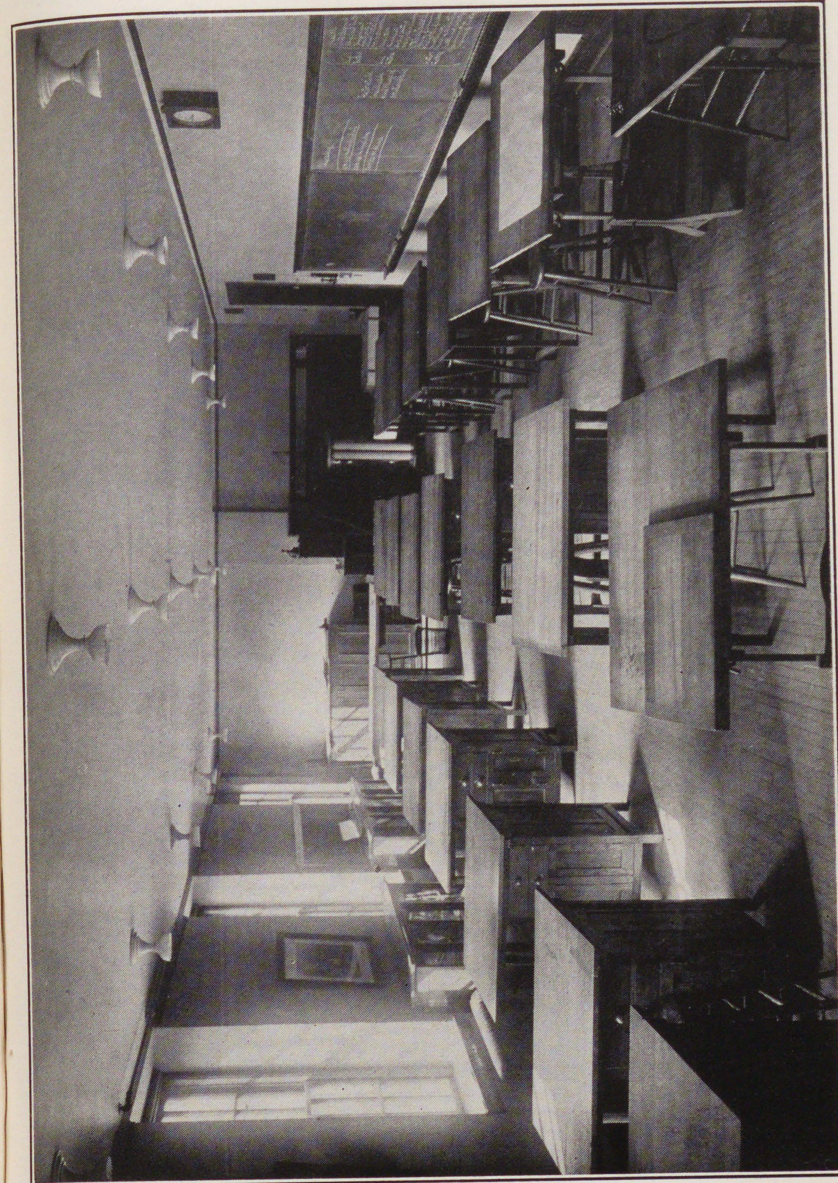
**Requirements for Securing Certificate.** The conditions governing the issuing of certificates to members of the Commercial Teacher Training Classes will be the same as those for the Industrial Teacher Training Course.

## Description of Courses

**Applied Psychology.** Fundamental principles of psychology and their application to the problems of the shop and class room constitute the major work of the course. Special attention is placed upon interest, attention, habit formation and will in their relation to the learning-teaching process.

**Psychology and Education.** The meaning and value of education, aims of education, general facts and laws relating to the individual, methods and results of education, physical and mental characteristics of importance in trade education are the principal topics of the course.

**Methods of Teaching Industrial Subjects.** The work of the course will concentrate upon practical problems of instruction during the preparatory period, and the responsibility of the teacher in having materials, equipment and subject matter ready for the class. The presentation period involves a close study and discussion of effective methods of presenting material and



THE DRAFTING ROOM



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checking results. The class room period includes the assigning of pupils to work and the responsibility of the instructor in following up assignments and individual progress. Consideration will be given to dismissal period and the duties of Vocational teachers and Supervisors. Special attention will be given throughout the course to problems of teaching in the unit trade schools, evening vocational schools, part-time schools and general industrial schools.

**Study and Analysis of Trades and Organization of Courses of Study.** The students of the class are divided according to trades and a study made of the fundamental processes involved in the occupation, including hand and machine operations, classification of operations in relation to each other, special knowledge and its relation to the work of a skilled mechanic, organization of classified processes according to instructional difficulties into courses of study, selection of type projects or jobs, working drawings of selected projects and student record systems. The needs of unit trade and technical classes, evening vocational classes and general industrial classes determine the class work.

**Study and Analysis of Junior Commercial Occupations and Organization of Courses of Study.** Study and analysis of duties, requirements and promotional outlets of specific business occupations in which boys and girls of ages 14-18 are found employed. Upon the basis of this information courses of study are worked out for the training of these boys and girls. Necessary classroom equipment in the teaching of the various commercial subjects discussed. A careful study made of business organization and administration.

**Theory, Principles and Problems of Vocational Education.** An intensive course will cover in part, social reasons for vocational education, relations to various agencies, types of schools and their purposes and organization, State and Federal legislation and vocational education surveys, for the purpose of giving prospective vocational teachers a background covering their field of work.

**Practice Teaching.** Every student before graduation must do a definite amount of practice teaching in a day or evening vocational school. Lesson plans for each lesson taught must be prepared in advance and submitted to the supervisor or critic for criticism and suggestion. Special conferences and round table discussions will be held at regular intervals. No license to teach can be granted to any student who fails to attain the high standard of proficiency in this work which is demanded by the State Department of Education.

**History of Industrial Education.** Class work will stress the development of industrial education in the United States, including evening schools, technical schools, manual training, trade and trade preparatory schools, part-time continuation work, co-operative schools, apprentice and corporation schools, junior high schools and technical high schools.



**Materials, Equipment and Shop Records.** A practical study is made of types of standard equipment, shop layouts, good shop organization, tool rooms and racks, supply and storage rooms, equipment inventories, care of equipment, safety devices, methods of purchasing supplies and equipment, checking and taking inventory of supplies, student records, time and job cards, and follow-up records applicable to the various types of vocational schools.

### COURSES IN RELATED TECHNICAL SUBJECTS

**Mechanical Drawing.** The scope of the course covers a study of drafting conventions, methods employed in drafting room practice and a first hand acquaintance with the principles of projection as applies to the making of working drawings. Applications are made to a very wide range of problems in the field of shop work.

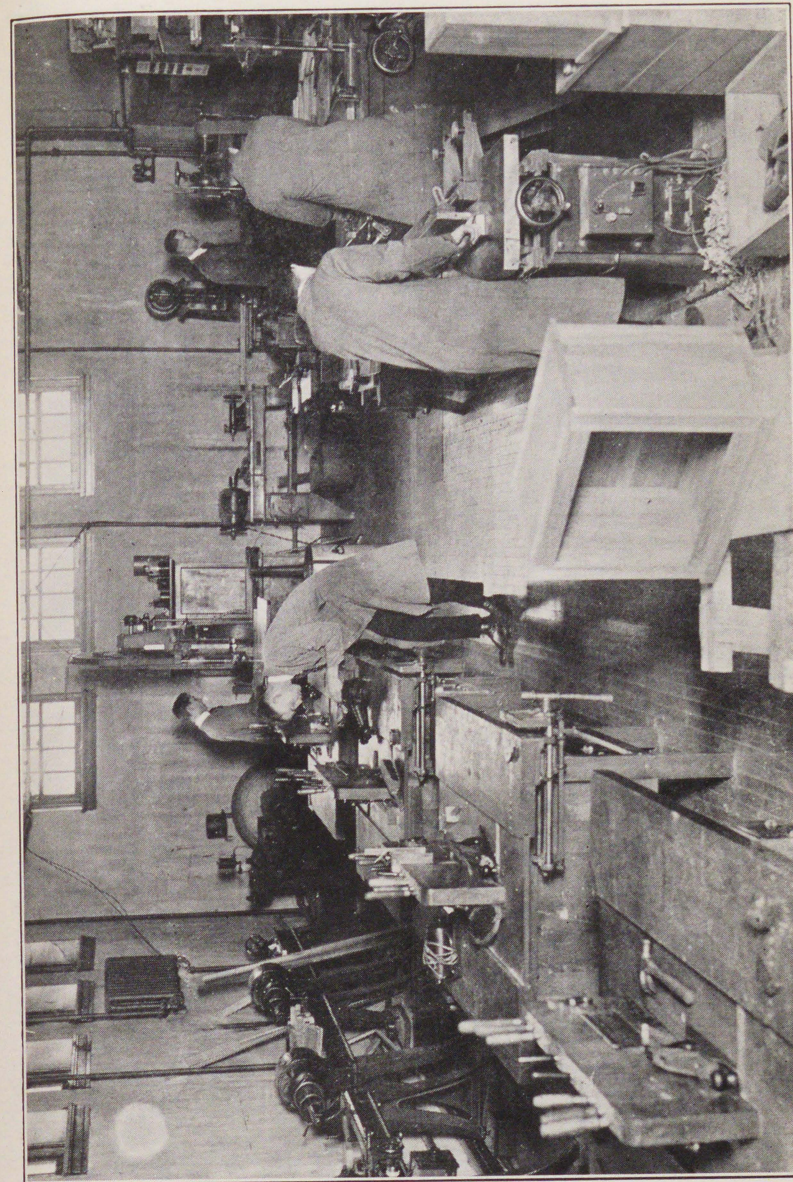
Advanced work includes simple and complex machine drawings, elements of machine design, elements of cabinet and architectural construction and other special work that will develop a draftsman's knowledge and technique.

The professional aspect of the course includes organization of drawing instruction, teaching specific problems in drawing and problems of correlation.

**Related Science.** This work is based upon the fundamental principles of physics and chemistry worked out with practical applications in the laboratory and shops. A wide range of problems and subject matter including the principles of machines, elementary mechanics, composition, characteristics, and tests of various commercial materials, chemistry of paints, oils, stains, treatment and preservation of materials, elements of electricity, chemistry of storage batteries and action of gases, are developed.

The professional work includes the organization of material into courses and units of work for the various types of schools, methods of presenting problems, devising illustrative and demonstration material, and study of laboratory equipment.

**Related Mathematics.** In this course a review is made of those operations in arithmetic, algebra, geometry and trigonometry that have a direct bearing on the various shop courses. In this study the problems are of a practical nature and in presenting them much valuable and accurate information is considered. Problems are given involving woodworking, electricity, concrete, plumbing, sheet metal, foundry and machine shop. Problems are given involving such subjects as concrete mixtures, strength of materials, shafts and bearings, pulleys and gears, lumber measurements and other important topics closely related to the various shop courses.



THE PATTERN MAKING AND CABINET SHOP



The professional work includes the organization of the material into courses and units of instruction for the different types of schools. Problems of correlation and special problems of teaching are thoroughly discussed.

### COURSES IN SHOPWORK

**Woodwork.** The foundation work is for the distinct purpose of acquainting the students with the correct use and care of the fundamental bench and machine woodworking tools. A carefully chosen group of practical problems is selected to accomplish this purpose.

Advanced work is organized around units of millwork, cabinet-making, patternmaking and carpentry. Students may elect within a certain range from this field and pursue intensively the selected branches. Every phase of the work is from a practical standpoint and includes machining, assembling, erecting and finishing, care and upkeep of machines and tools, elements of construction, selection and treatment of materials, safety first precautions and other topics of a similar nature.

The professional work will include the organization of courses and units of instruction, special problems of teaching, and a study of equipment and materials.

**Machine Shop.** The elementary work is so organized that each man progresses from one machine to another and will have done enough work on each to have an acquaintance with the scope and typical processes of each. All the elementary problems are practical and are selected to embody the fundamental processes incident to the machine.

The advanced work involves a more extended use of all the machine tools and should develop considerable skill on the part of the student. Small tools and machines and equipment of all kinds are utilized for this purpose.

Special attention is given to the related knowledge developing from the work of the shop so that the student will be thoroughly intelligent on the common problems of the trade.

Time will be devoted to the organization of courses, units of instruction, special teaching problems, shop routine, and tool equipment and supplies.

**Printing.** The work of this course consists of practice, study and observation in the field of printing with a view of forming the proper habits of work, securing an appreciation of standards of printed product, and developing a reasonable degree of skill.

The course includes work at the case, use of composing stick, taking proofs, correcting type matter, locking in chase, make-ready on press and feeding stock. The binding processes include folding, gathering, stapling, gluing, pasting, tableting, punching and perforating as may be required.



Attention is given to a study of materials, mathematical problems typical of the trade and the related graphic arts.

The professional work includes a study of courses, school equipment and problems of teaching the subject.

**Electrical Work.** The course will cover the commercial methods used in light, power and signal wiring. Practical work will be undertaken to accomplish this end. Experience on selected work will also include installation of fixtures and equipment, fitting up switch boards, care and repair of direct and alternating current machines, study and tests of batteries, transformers and other electrical equipment, and the running of standard tests.

Time will be given to the fundamentals of the science, mathematics involved, construction of machines, code rules and ordinances and other topics of a similar nature.

The professional work will include courses of study, methods of teaching, and all types and kinds of equipment.

#### GENERAL SUBJECTS

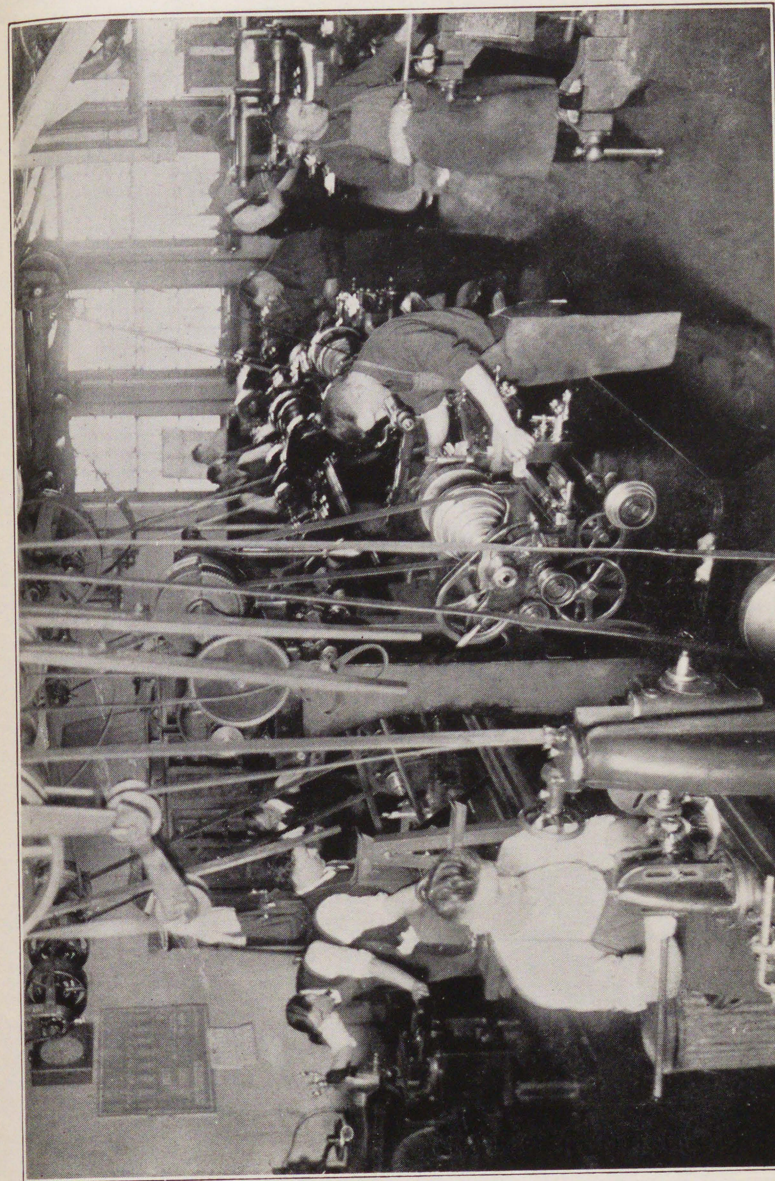
**English and Public Speaking.** The aim of this course is to give the student a command both in speaking and writing of simple, correct and clear-cut expressions. Attention will be given to grammatical forms, sentence structure, choice of words, social and business correspondence and the preparation and organization of literary or professional material.

**Industrial History and Civics.** This is primarily a study of the development of American industry with only enough emphasis placed upon the earlier European periods to establish a background. Colonial industry, industrial aspects of the Revolution, national beginnings of industry, the epoch of expansion, economic causes and results of the Civil War, expansion of commerce, organization of labor, and the relation of the Government to industry, are the major topics.

A part of the course will be devoted to developing what is essential for high quality American citizenship. It will include not only the privileges and opportunities but also the corresponding duties and obligations.

Attention will be given also to the organization of courses for different types of schools and discussions of practical methods of teaching.

**Hygiene and Accident Prevention.** This course treats the subject from the standpoints of personal hygiene and the prevention of accidents in the shop and the ordinary walks of life. The topics developed include nervous disorders and their prevention, diet, narcotics, fatigue, posture, care of eyes, personal hygiene, proper care and ventilation of rooms, infectious diseases, and their symptoms, disinfectants, first aid treatment, industrial hygiene and methods of safeguarding machines.



VIEW OF THE MACHINE SCHOOL