1951-52 Evening School Catalog

Madison Vocational and Adult School
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Evening School Catalog 1951-52

Board of Vocational and Adult Education

E. J. Frautschi, President
F. M. Mason, Vice President
P. H. Falk, Secretary
F. G. Collester
R. E. Dresser

R. W. Bardwell, Director
211 North Carroll Street
Madison, Wisconsin
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GENERAL INFORMATION

The Madison Vocational and Adult School is a public school and is open to all residents of the city of Madison.

There is no tuition charge for Madison residents, but there is a general registration fee of $1 a term, and in some classes fees will be charged to cover the cost of laboratory expense, incidental breakage, texts and supplies. Students registered in the first term, who continue in the second term, are not required to pay the second fee.

Should an insufficient number of registrations be received for any course listed in the Evening School Catalog, the school administration reserves the right to withdraw the offering.

A class may be discontinued or combined with another if the enrollment becomes low.

Courses not listed may be organized if a sufficient number of persons register for such classes.

For many of the courses persons may enroll at any time and receive individualized instruction. Some of the courses are purposely short where the instructional objectives can be achieved within a few weeks.

TWO TERMS OF EVENING SCHOOL

The evening school year is composed of two terms of ten weeks each, the first term coming before the Christmas holidays and the second term in the New Year. If interest of students and value of the class instruction warrants it, the Director may authorize the continuation of a class for a maximum of five weeks after the close of the second term.

RECORDS

Permanent records of students' attendance and achievement are kept in the Registration Office and may be obtained for reference or school admission purposes by the student at any time.

ATTENDANCE

A record is kept on attendance of all students. This is necessary because of the great demand for the use of the school's equipment and the need to eliminate any who are not serious about their work. Those who must be absent are requested to call 54541 so that they will not be withdrawn from class.

GUIDANCE AND PLACEMENT

The Guidance Office is located in Room 135. This department is at the service of all students who have health, welfare, placement and guidance
General Education

Academic
Art
Music
ACADEMIC

ALGEBRA I
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
This course covers beginning algebra for which high school credit is given. It consists of nine assignment sheets. Unit tests are given when each assignment sheet is completed. A final test is given.

ALGEBRA II
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Prerequisite: Algebra I
Reviews the principles learned in Algebra I. Advanced topics in factoring and quadratics are included. Progressions and the binomial theorem are introduced at the end of the course. There are twenty short assignments. A final test is given and upon completion one-half high school credit is given.

GEOMETRY
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Prerequisite: Algebra I
Emphasis is to develop in the individual the ability to form a logical geometric proof. There are six assignment sheets covering the course. Tests are given when a unit is completed as well as a final test. One high school credit is given for successful completion of this course.

APPLIED MATHEMATICS
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Arithmetic fundamentals are studied and applied to practical shop problems. One high school credit is given. This course can only be used as an elective. There are seventeen assignment sheets and a final test is given when the course is completed.

TRIGONOMETRY
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Prerequisite: Algebra, Geometry
This is a high school course in trigonometry. Emphasis is placed on problem solving after the trigonometric relations are mastered. Twenty assignment sheets with a final examination after satisfactory completion of the assignment sheets constitute the course. One-half high school credit is given.
and the building of good sentences. The language difficulties of each member of the class are dealt with according to individual need.

ENGLISH IV

Mon. and Wed., 7:00 p.m. to 9:00 p.m.

An advanced course in English grammar, giving the student a thorough review of the principles of sentence construction, punctuation, capitalization, paragraphing, spelling, and vocabulary building.

ENGLISH V

(Creative Writing)

Mon., 7:00 p.m. to 9:00 p.m.

For writers who will produce copy and give and take criticism. They choose the literary form: short-story, essay, verse, etc. They select the level: juvenile or adult. They pick the subject-matter: religious or secular, serious or non-serious. One hour is used for ms. reading, criticism, literary mechanics, etc. Marketing problems get some consideration. One hour is used for writing in class, but material may be written outside of class also.

GREAT BOOKS

Alternate Thursdays, 7:00 p.m. to 9:00 p.m.

The best thinking that men have done has found its way into the Great Books which compel those who read to think hard and straight. Authors of Great Books to be read and discussed are Montaigne, Shakespeare, Locke, Rousseau, Smith, Marx, Homer, Herodotus and Aeschylus.

SHAKESPEARE FOR YOU AND ME

Wednesday 7:00 p.m. to 9:00 p.m.

A course of study of the great Poet-Dramatist: his life, times, plays. Lectures, actual reading of plays in class, possible staging of one or more plays.

FRENCH I

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.

TEXT—United French Course by Lecompte and Sundeen.

Besides giving the student a traditional background of the language much stress will be placed on conversation. The class will occasionally dine at the University French House and view French movies.

GERMAN I

Mon. and Wed., 7:00 p.m. to 9:00 p.m.

TEXT—Shorter College German by Evans and Rossler.

Besides giving the student a traditional background of the language, much stress will be placed on conversation. The class will occasionally dine at the University German House and view German movies.

GERMAN II

Friday, 7:00 p.m. to 9:00 p.m.

Special arrangements will be made for advanced students. Should there be a large enough group desiring such study.

SPANISH I

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.

TEXTS—Spanish for Conversation by Leslie. Buenos Dias: One-minute Dialogues by Lopes. A class in conversational Spanish with practice in pronunciation, comprehension of the spoken language, and conversational drill. The core of each lesson is a daily life situation or a "tourist situation" in a Spanish-speaking country.

SPANISH II

Wednesday 7:00 p.m. to 9:00 p.m.

Special arrangements will be made for advanced students. Should there be a large enough group desiring such study.

PUBLIC SPEAKING

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.

FEE—50c

Emphasizes the type of public speaking that the average person is called upon to do in committee meetings, unions, conferences, clubs, and similar smaller groups. It includes units on acquiring poise before an audience, voice, preparation of speech, and special types of speeches, such as courtesy and after-dinner.

LIP READING

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.

Lip reading, or speech reading, is understanding spoken language while watching the speaker, without fully hearing, or if need be, without hearing at all.

This course is designed to give the hard of hearing or deafened adult an understanding of the
general education

various movements of speech and to help him acquire skill in reading the lips. The lessons consist of an explanation of the various movements used in speech with drills and exercises for practice work.

special services

constructive workshop

monday 7:00 p.m. to 9:00 p.m.

constructive workshop is offered to those who are about to retire because of age. In this workshop special projects are planned according to the individual's interests and needs such as chair caning, refinishing woodwork, making jewelry, etc. Other projects may be developed as desired.

course for parents of deaf children

organized to meet the needs of parents of deaf children. This course will be presented in units including lectures and discussions of different types of problems which parents meet in teaching deaf children to speak and to adjust to normal living.

art

art metal

wed., 7:00 p.m. to 9:00 p.m.
laboratory fee—$1.50

design processes and techniques as applied to copper and brass. Processes include beating down, piercing, soldering, filing, etching, construction design and pattern making, joints, oxidizing and finishing.

costume jewelry

tues. or thurs. or fri., 7:00 p.m. to 9:00 p.m.
laboratory fee—$1.50

flat work in copper, brass and silver. Various processes include sawing, filing, soldering, piercing, repoussé, chasing, casting, enameling, wire drawing, ring sizing, stone setting and finishing.

stone cutting or lapidary

mon. 7:00 p.m. to 9:00 p.m.
laboratory fee—$1.50

recognition and classification of semi-precious stones. The processes used on the lapidary machine include sawing, grinding, sanding and polishing stones suitable for costume jewelry.

drawing

tues. and thurs., 7:00 p.m. to 9:00 p.m.
laboratory fee—$3.00

basic training in structural relationship of form—mass, line, value and perspective from still life and imagination. Foreshortening and anatomy of the head and figure from models. Emphasis on individual interpretation. Mediums: pencil, charcoal, pen and ink, crayon and wash.

painting and composition

mon. and wed., 7:00 p.m. to 9:00 p.m.
laboratory fee—$1.50

prerequisite: drawing

basic training in the study of form—arrangement, color and texture from still life, outdoor sketches and life. Emphasis is given on techniques, new subject matter, dynamic color, creativeness and individual expression of form. Mediums: charcoal, conte crayon, water color and oil.

portrait painting

friday, 7:00 p.m. to 9:00 p.m.

prerequisite: drawing

laboratory fee—$2.50

study of the head in light and shade; the anatomy: structure for solidity; gesture expression; design element and composition. Mediums: pencil, charcoal, conte crayon, water color and oil.

ceramics

tues. and thurs., 7:00 p.m. to 9:00 p.m.
laboratory fee—$1.50

material fee—$6.00

methods of building pottery include: pinch, coil, slab, throwing on potter's wheel, mold making and casting. Surface enrichment, glazing, placing and firing the kiln are taught.

clay modeling

mon. wed. and fri., 7:00 p.m. to 9:00 p.m.
laboratory fee—$1.50

material fee—$6.00

an elementary course executing original designs in clay. Experimentation with clays, glazes, making of chip molds, two and three-part molds, casting, firing and glazing are included in the course.
WOOD CARVING
Fri. 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$1.50
MATERIAL FEE—$4.00
Wood carving in bas relief, sculptural design, and chip carving. The student is taught the various techniques of wood carving and finishes; the use of tools and their application to wood.
This class will be held if there is sufficient enrollment.

LETTERING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$2.00
Fundamental alphabets. Practical training in lettering adaptable to commercial uses. Techniques include pen and ink and brush lettering. Show card layouts and color theory. Mediums include pencil, pen and ink.

PHOTOGRAPHY
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$4.00
An elementary course for beginners, stressing the construction and proper use of the camera, picture composition, developing, printing, enlarging and other darkroom procedure.

INTERIOR DESIGN
Tues., 7:00 p.m. to 9:00 p.m.
Wed., 7:00 p.m. to 9:00 p.m.
Thurs., 7:00 p.m. to 9:00 p.m.
Lectures on backgrounds, floor and wall treatment, color, fabrics, window treatment, furniture arrangement and combination of furniture styles, accessories, pictures and illumination. Field trips and individual home problems are discussed.

BRAIDED RUGS
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
Size, shape, color and design arrangement stressed. Processes include braiding with three, four and five strands, splicing, padding, dyeing, and lacing. Discarded materials recommended.

WEAVING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$1.50
Planned for the homemaker, craftsman, teacher, camp instructor or youth leader. An elementary course which includes the various processes and techniques in producing plain and pattern weaving.
VIOLIN FUNDAMENTALS
Mon., 7:00 p.m. to 8:00 p.m.

PIANO I
Mon., Tues., Wed., Thurs., 7:00 p.m. to 9:00 p.m.
Oxford course for adult beginners. Easy solo pieces to suit individuals; basic principles.

PIANO II
Tues., 7:00 p.m. to 9:00 p.m.
Scales, arpeggios, hand building exercises. Supplementary pieces; sonatas. Two piano ensemble music.

POPULAR PIANO THROUGH KEYBOARD HARMONY
Thurs., 7:00 p.m. to 9:00 p.m.
Designed for students having some knowledge of piano. Consists of learning the chords and necessary formations to fill in left hand of popular music, creating necessary breaks, etc. Also valuable to classic music students since it provides reading short cuts and helps create a technique usually ignored by methods. A practical course, students learning to do their own arranging.

MUSIC APPRECIATION
Wed., 7:00 p.m. to 8:00 p.m.
A general survey of music—how to listen to good music and enjoy it. No advance study necessary.

INDIVIDUAL PRACTICE PERIODS
Limited practice facilities for piano students, having no piano at home, may be arranged by consulting the Music Supervisor, Mr. Heermann, Room 132.

Business
Education

Accounting
Business Principles
Office Training
Distributive Education
Training of Sales People
ACCOUNTING

ACCOUNTING I (Elementary)
Mon. and Wed. 7:00 p.m. to 9:00 p.m.
The elementary principles of accounting and the procedures of double entry bookkeeping are thoroughly covered in this course. A comprehensive study is made of both the cash and accrual basis of keeping accounts. Work covered includes journalizing, posting, trial balance, preparing financial reports, adjusting and closing the books at the close of the business period. This course is intended primarily for those who have had no previous training in bookkeeping or accounting. Successful completion of the prescribed work will provide the student with a general knowledge of accounting useful in business or professional fields.

ACCOUNTING II
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
This is a continuation of Accounting I enlarging upon the theories and practices in use today. The work is devoted to the partnership and corporation types of organizations with emphasis on the wholesale merchandising enterprise. Such subjects as adjusting and classifying accounts, preparing statements and closing books, profit and loss distribution, admission of new partners, partnership dissolution, accounting for purchases, sales, negotiable instruments, taxes, and the acquisition and disposal of fixed assets will be a part of this course. It serves as basic training for students planning to major in accounting or for work as a bookkeeper or junior accountant.

ACCOUNTING III
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
Consideration is given to the corporate form of business organization with emphasis on the industrial or manufacturing type of enterprise. Accounts and accounting procedures with cost implications for a manufacturer or concern are presented. Subjects covered include legal organization and records of a corporation, classes and value of capital stock, surplus and dividends, reserves and funds, the voucher system of accounting, manufacturing accounts, annual reports and closing the books of a manufacturer.

ACCOUNTING IV
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
A pre-requisite to this course is the completion of a preliminary course in general accounting. The job cost or production order system, the process cost system and the standard cost system are discussed. Accounting for materials, labor and factory overhead expenses gives the student knowledge basic in the field of cost accounting.

BUSINESS PRINCIPLES

BUSINESS ARITHMETIC
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
Especially intended to serve the needs of people in business. The student intending to study accounting or calculating machines but who is not strong in arithmetic will do well to elect this as a preparatory course. Cashiers, clerks and general office workers will find this course very helpful. The course embraces the following: intensive review of the fundamentals, percentage, practical shortcut methods, bank discounts, trade and cash discounts, profit and loss, and payrolls.

BUSINESS ENGLISH I (Grammar)
Mon. 7:00 p.m. to 8:00 p.m.
This course covers a review of capitalization, grammar, sentence structure, unity, coherence, emphasis, punctuation, diction, hyphenation, word division as applied to business situations, spelling and vocabulary building.

BUSINESS ENGLISH II (Business Correspondence)
Mon. 8:00 p.m. to 9:00 p.m.
Business letter writing takes up the study of essential qualities of effective business letters, proper layout, and the development of good tone. This course will stress the importance of using natural phrasing, proofreading and correcting letters. A study of the various types of business letters from routine inquiries to more complicated forms of adjustment, collection and sales letters, and the preparation of letters of application and data sheets will be included.

GENERAL ECONOMICS
Mon. 7:00 p.m. to 9:00 p.m.
For business people who are interested in the principles underlying business. General Economics deals with present-day problems of American society, the relation of these problems to the past, and their possible effect on the future economic and political systems of our nation.
FILING AND INDEXING

Wed. 7:00 p.m. to 9:00 p.m.
The length of this course is ten weeks. It is divided into several units as follows: (1) Rules for alphabetizing and their application by use of 200 cards. (2) Study of filing equipment. (3) Methods of filing and practical application by the use of 75 miniature letters and filing trays—alphabetical, numeric, geographic, subject, triple check, soundex and variadex. (4) Cross filing. (5) Check methods. (6) Transfer methods. (7) Follow-up. Visual aids and outside speakers are part of the course.

OFFICE TRAINING

BURROUGHS AND COMPTOMETER MACHINE CALCULATION
(Key-Driven)

Mon. and Wed., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m. Tues. and Thurs., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m. Fri., 7:00 p.m. to 9:00 p.m.
FEE—$0c

For beginners, the course includes the fundamental operations of two and three column cross addition, split addition, multiplication from right and left of keyboard, and over the permanent decimal points, subtraction and division.

For advanced students, the course includes four and five column cross addition and the application of the fundamental operations to practical business problems such as discounts, percentages, commissions, payrolls, profit and loss, mark-up, mark-down and interest.

MONROE, MARCHANT AND FRIDEN MACHINE CALCULATION

Mon. and Wed., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m. Tues. and Thurs., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m. Fri., 7:00 p.m. to 9:00 p.m.
FEE—$0c

Covers addition and the various methods of multiplying, subtracting, and dividing, followed by their applications to problems in business arithmetic. Upon completion of the course, a student should have a thorough training in the fundamental processes as they apply in business and sufficient knowledge to operate the machine in any business office. The course consists of thirty assignments.

REMINGTON RAND MACHINE CALCULATION

Mon. and Wed., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m. Tues. and Thurs., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m.; Fri., 7:00 to 9:00 p.m.
FEE—$0c

Instruction is given on the new automatic printing calculator. This machine prints as it divides automatically, as it multiplies electrically, as it adds and subtracts. All factors for each calculation are recorded with totals automatically delivered and printed. The combined features of a calculator and the printing adding machine tape are covered.

I. B. M. KEY PUNCH MACHINE

Mon. and Wed., 7:00 p.m. to 8:00 p.m. and 8:00 p.m. to 9:00 p.m.; Tues. and Thurs., 7:00 to 8 p.m. to 9:00 p.m. Fri., 7:00 to 9:00 p.m.
FEE—$0c

For beginners, the course includes the fundamental operations of two and three column cross addition, split addition, multiplication from right and left of keyboard, and over the permanent decimal points, subtraction and division.

For advanced students, the course includes four and five column cross addition and the application of the fundamental operations to practical business problems such as discounts, percentages, commissions, payrolls, profit and loss, mark-up, mark-down and interest.

SHORTHAND I (Beginning Theory)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$0c

This course is intended for students who are skilled typists but who have had little or no previous training in shorthand. The beginning principles of shorthand are thoroughly covered in this course. The last four weeks of the term are devoted to a rapid review of shorthand principles and to the introduction to beginning dictation and transcription at the typewriter. Homework and attendance are necessary for progress in the study of beginning shorthand.

SHORTHAND II (Advanced Theory)

Tues. and Thurs., 7:30 to 9:00 p.m.
FEE—$0c

Prerequisite: Shorthand I (Beginning Theory) and typing skill
A continuation of Shorthand I. It consists of a review of the theory of shorthand. Practice in beginning dictation and transcription on the typewriter. The class period is divided into one hour of shorthand and one-half hour of transcription.
STENOGRAPHY I (Beginning Shorthand Theory and Typewriting)

Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
FEE—50c

This is a course for beginners in shorthand and typewriting. Two years are required to complete it. At the end of the first year the student should be able to take notes on the beginning shorthand principles covered. Students enrolled in this course should continue their training in the following evening school term by enrolling in Stenography II. The class period is divided into one hour of typewriting and one hour of shorthand. Homework and regular attendance are necessary.

STENOGRAPHY II (Advanced Shorthand Theory and Typewriting)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—50c
Prerequisite: Stenography I

A continuation of Stenography I. It consists of a rapid review of the beginning principles of shorthand, the completion of the advanced principles and dictation practice in beginning dictation and transcription on the typewriter. The class period is divided into one hour of typewriting and one hour of shorthand.

STENOGRAPHY III

Tues. and Thurs., 7:00 p.m. to 8:30 p.m.
FEE—50c
Prerequisite: Stenography II

Consists of a rapid review of shorthand principles and beginning dictation work. Dictation is given at the rate of 60-80 words per minute. Transcription at the typewriter is required.

STENOGRAPHY IV

Tues. and Thurs., 7:30 to 9:00 p.m.
FEE—50c
Prerequisite: Stenography III

A course for stenographers who are working for a shorthand speed of 80-100 words per minute. Transcription at the typewriter is required. Students selecting this course should have a good understanding of the shorthand principles. Special emphasis is given to the writing of advanced phrases and to the building of a shorthand vocabulary of business terms.

STENOGRAPHY V

Tues. and Thurs., 7:00 p.m. to 9:30 p.m.
FEE—50c
Prerequisite: Stenography IV

A course for stenographers who have attained a shorthand speed of 100 words per minute. Transcription on the typewriter is required. The emphasis of this course is on building up a dictation taking speed of at least 150 words per minute on new material and teaching the techniques of accurate and rapid transcription. The advanced phrasing principle is also stressed in this course.

TYPEWRITING I

Mon. and Wed., 6:00 p.m. to 7:00 p.m.; 7:00 p.m. to 8:00 p.m.; Mon. and Wed., 8:00 p.m. to 9:00 p.m. Tues. and Thurs., 7:00 p.m. to 8:00 p.m.
FEE—50c

For those who wish to learn the touch system of typewriting. It includes the study of the parts of the machine, mastery of the keyboard, drills for rhythm and accuracy, correct typing habits, simple letter setup, simple tabulation, and timed writings.

TYPEWRITING II

Mon. and Wed., 7:00 p.m. to 8:00 p.m.
Tues. and Thurs., 8:00 p.m. to 9:00 p.m.
FEE—50c

Typewriting II is a continuation of Typewriting I. The course includes the following: technique check-up, speed and accuracy drills, tabulation practice, letter setup and placement, use of carbon paper, and office typing problems.

TYPEWRITING III

Mon. and Wed., 7:00 p.m. to 8:00 p.m.
Tues. and Thurs., 8:00 p.m. to 9:00 p.m.
FEE—50c

Typewriting III includes special forms, special skills in typewriting, stenciling, tabulation and preparation for Civil Service tests.

DISTRIBUTIVE EDUCATION

RETAIL SALESMASTSHIP

(Inside Selling)

LENGTH OF COURSE—one or two terms

Wed., 7:00 p.m. to 9:00 p.m.
Salesmanship in modern sense; retail selling fundamentals; study of the customer; selling techn-
niques that help customers buy; meeting the
customer; developing the sales presentation; mak­
ing the sales talk convincing; helping the customer
over buying obstacles; building permanent business.

ADVANCED SALESMA NSHIP
(Contact Selling)
LENGTH OF COURSE—two terms
Tues., 7:00 p.m. to 9:00 p.m.
No ceiling on selling; what makes a good sales­
man better; how to find prospects; how to handle
the price problem; how to build your sales talk;
how to use advertising; how to dramatize your
selling; how to close your sales; how to avoid com­
petition complexes; how to sell quality products;
how to make more sales.

FITTING AND SELLING OF SHOES
LENGTH OF COURSE—Two terms
Wed., 7:00 p.m. to 9:00 p.m.
All phases of shoe fitting; correct measuring of
feet; knowledge of lasts; causes of shoe discom­
fort; shoe retailing in all its phases.

BALANCED SELLING
LENGTH OF COURSE—5 two-hour sessions. time to
be arranged
Need for a balanced selling program; value of
product knowledge; position of the wholesale dis­
tributor; the retailer’s problems; the salesmen’s
problems; responsibilities of the participants in the
channels of distribution; the retailer’s assets and
liabilities; objectives of merchandising; the sales
target; record keeping; professional salesmanship;
requisites and results of good merchandising; ef­
fects of creative selling; measuring results; self­
management; recognizing trends; objectives of bal­
anced selling training.

ROUTE SELLING
LENGTH OF COURSE—10 two-hour sessions or 20
one-hour sessions, time and length to be arranged.
For Routemen
Covers the balanced job; satisfying the customer;
customer relationships; the stop order; turning col­
collection calls to advantage; increasing family
consumption; “top line” products; suggestive sell­
ing; new business; handling obstacles; closing the
sale.

ADVERTISING
LENGTH OF COURSE—two terms
Wed., 7:00 p.m. to 9:00 p.m.
Advertising in relation to distribution of merchan­
dise and services; physical structure of advertise­
ments; layouts, printing, photogravuring; relative
values of various media for advertising; news­
papers, magazines, radio, dealers’ displays, outdoor
advertising, car cards.

MERCHANDISE DISPLAY
LENGTH OF COURSE—one term
Thurs., 7:00 p.m. to 9:00 p.m.
Values of display; physical makeup of display;
display in the retail program; manufacturers’ ad­
vertising in display; special display suggestions;
testing the student.

RETAIL CREDIT FUNDAMENTALS
LENGTH OF COURSE—two terms
Wed., 7:00 p.m. to 9:00 p.m.
Nature and importance of credit; developing new
sources of credit customers; methods of identifying
charge customers; safeguards; reducing merchan­
dise returns; how to handle complaints; how to
stimulate preferred customers; how to revive in­
active accounts; how to develop effective col­
collection methods; how to rehabilitate delinquent
customers.

COLOR, LINE AND DESIGN
LENGTH OF COURSE—one term
Thurs., 7:00 p.m. to 9:00 p.m.
Color and effect on modern merchandising;
adequates of color, color behavior, physical and
psychological aspects of color, mixing and matching
of color; line in modern application; definition and
aims of design, economic aspects of trends in
merchandising design.

JOB INSTRUCTOR TRAINING
LENGTH OF COURSE—6 two-hour sessions
Fri., 7:00 p.m. to 9:00 p.m.
Benefits derived from mastery of efficient teach­
ing techniques; weaknesses of the two common
training methods-telling and showing; need for task
analysis; four basic steps of instructing; similarity
of selling and teaching; principles of learning used
in teaching an employee; teaching a manipulative
type of task; teaching some necessary facts; help­
ing to modify an attitude.
HUMAN RELATIONS IN RETAILING

LENGTH OF COURSE—5 two-hour sessions
Fri., 7:00 p.m. to 9:00 p.m.
Training supervisory personnel in the use of the four-step method of problem solving; application of the four keys to good human relations; stimulating supervisor to further study of the important field of worker relations; supervisory personnel developing skill in getting results through the people they supervise.

JOB SIMPLIFICATION TRAINING

LENGTH OF COURSE—3 two-hour sessions
Fri., 7:00 p.m. to 9:00 p.m.
A practical plan to produce greater quantities of quality products in less time with less fatigue by the best use of manpower, machines and materials available. Objectives are to be accomplished through the four-step method of breaking down the job, questioning every detail that makes up the job, developing the new method through elimination, combination, rearrangement, simplification of the various details that make up the job.

MANAGEMENT CLINIC

LENGTH OF COURSE—6 two-hour sessions
Fri., 7:00 p.m. to 9:00 p.m.
Training in the techniques of job analysis, personnel selection, placement and training; to encourage management to make use of the techniques to insure successful and profitable operation; to point out management's responsibility in a training program.

PAINT POWER

LENGTH OF COURSE—One term of ten weeks; in two-hour sessions. Time and length to be arranged.
Opportunities in the paint, varnish and lacquer industry; types of products; application of products; estimating; the power of color; paint selling; salesmanship and management; the painting contractor; effective sales promotion; advertising and publicity.

*INTRODUCTION TO LIFE UNDERWRITING

LENGTH OF COURSE—10 two-hour sessions
Mon. 10:00 to 12:00 a.m.
An organized study program of the basic principles of life insurance salesmanship.
a. How life insurance serves
b. How to sell life insurance
c. How life insurance operates

*FIDELITY AND SURETY BONDS

LENGTH OF COURSE—6 two-hour sessions
Mon., 2:00-5:00 p.m.
Covers all types of bonds—Fidelity, individual, name, position, blanket, fiduciary, contract, public official, litigants.

*C. L. U.—UNIT B

LENGTH OF COURSE—13 two-hour sessions
Mon. 1:00 to 3:00 p.m.
Human needs, policy forms, contract, life insurance as property insurance, government life insurance, social security, mortality tables, calculating premiums, disability insurance—reserves, industrial insurance, group insurance, operations of life insurance companies.
Sessions hold alternate weeks.

RETAIL MEAT MERCHANDISING

LENGTH OF COURSE—two terms
Tues., 7:30 p.m. to 9:30 p.m.
Meat from farm to table; processing meat; kinds and classes of meat; grading; conducting a cutting test; refrigeration and care; meat cookery; what customers expect from meatmen.

RETAIL GROCERY MERCHANDISING, COURSE I

LENGTH OF COURSE—two terms
Time to be arranged
Code for grocers: Meal planning; sugar, salt, spices; food values and diet, history of canning, tea, coffee, cocoa; butter and dairy products; cooking methods; olive oil; canned fruits and vegetables; anchovy, ham, meat and meat products; cereals; bread; soap; bananas, coconuts, vanilla, oranges, avocados.

RETAIL GROCERY MERCHANDISING, COURSE II

LENGTH OF COURSE—two terms
Time to be arranged
Salesmanship diet and food values; helpful selling; principles of refrigeration; air conditioning; the grocer and his competitors; baking powder; vinegar; understanding the homemaker's problems; crackers and biscuits; fresh fruits and vegetables; salads and dressings.
RETAIL GROCERY MERCHANDISING, COURSE III

LENGTH OF COURSE—two terms
Time to be arranged

What is merchandising; importance of turnover; relationship of cost to selling price; markup and margin; profits—gross and net; pricing for profit and patronage; determining cost of doing business; soap and detergents; merchandising staples, fresh meats, fresh produce, dairy products, frozen foods, specialties and sundries.
FAMILY DEVELOPMENT

CHILD DEVELOPMENT (For Preschool Level)

Tues., 7:30 p.m. to 9:00 p.m.
Planned for parents of pre-school age children. Topics to be covered: goals for parents; habits and principles of habit formation; beginnings of patterns of behavior and how they develop; books, music, toys, games and occupations; children’s clothing; obedience; imagination; truth, falsehood; curiosity; tears and emotional control; child’s use of money; community services for the parents. This is a lecture and discussion course.

PERSONALITY AND CHARM

Wed., 7:30 p.m. to 9:00 p.m.
Many phases of personality studied to learn how to develop naturalness of manner and relaxation. Importance of personality in career life and home life. Some of the highlights of the course are: developing a new or understanding philosophy of life, gaining self-assurance and poise; relation of dress and grooming to personality; leisure time activities; development of individuality; desirable personality traits and how to cultivate them.

HOSPITALITY AND TABLE DECORATION

Tues., 7:30 p.m. to 9:00 p.m.
FEE—$1.00
Planned for anyone who is interested in learning more about the art of entertaining and being a successful, gracious hostess. It will include table setting for all occasions; arrangement of the table for teas and buffet meals; flower arrangement; selection of china, linen, silver and crystal. One tea and one buffet supper will be given sometime during the course. Correct table service for formal and informal occasions is given.

HOME NURSING

Fri., 7:00 p.m. to 9:00 p.m.
This course is the regular Red Cross Home Nursing course which entitles the student to a certificate on completion of the course. There will be an opportunity for actual practice in taking temperatures, bathing the patient, making the bed with the patient in it, and practice in other sickroom procedures. This course will be offered throughout the year. The course consists of seven lessons.

Foods and Nutrition

FOODS I (Meals for Moderns)

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$5
Meals in the modern way suggest new methods in cookery: streamlining cooking processes; pressure-pan cookery; use of frozen foods; comparison of commercial mixes with home mixes; cooking to retain vitamins and minerals; planning of balanced meals. This is a practical course planned around the family meals—lunch, breakfast and dinner. It will include something in quick breads, vegetables, salads, casseroles, dishes, meals, sandwiches and simple desserts. An excellent course for brides-to-be or anyone desiring help in practical cookery.

FOODS II (Baking, Meat Cookery, Vegetable Cookery)

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$8
The baking unit includes quick breads, yeast breads, cakes, cookies and pastry. Selection and cooking of poultry, stuffing and trussing a fowl for roasting are given prior to the holiday season. Selection of meat is stressed. Both tender and less tender cuts of meat are prepared as well as meat extenders. Sea food and fresh water fish cookery is a part of the course. Retention of vitamins and minerals in vegetable cookery is stressed. Unusual ways of preparing vegetables are given, as well as vegetable plates and casseroles.

FOODS III (Salads, Casseroles, Desserts and Hospitality Cookery)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$8
New and unusual salads, casseroles dishes for the main part of the meal or for buffet suppers, unusual desserts and a variety of meals for special occasions are given. The latter part of the course
will feature buffet suppers, holiday dinners, receptions, teas, guest dinners and after-theater snacks. One should have some experience in cooking before taking this course.

FOODS IV (Supper Class)

Tues. and Thurs., 5:15 p.m. to 7:00 p.m.
FEE—$12 Per Semester

This is a supper class for business girls. It includes planning and preparing simple dinners and suppers suitable to serve in a small apartment for two to four people. Time management is featured. Nutritional principles are stressed in the planning and preparation of meals. Only those who can be here promptly at 5:15 are enrolled.

CAKE DECORATING I

Thurs., 7:15 p.m. to 9:00 p.m.
FEE—$3

Short course on the decorating of cakes. Actual practice will be given in the techniques of making flowers and other forms of decoration for wedding cakes, petit four mints.

CAKE DECORATING II

Thurs., 7:15 p.m. to 9:00 p.m.
FEE—$3

Advanced problems in cake decorating for those students who completed Cake Decorating I; also open to people on the job who wish to brush up on techniques.

NUTRITION

Tues., 7:30 p.m. to 9:00 p.m.

For the individual who wishes to have a working knowledge of the importance of balanced meals in the achievement of radiant health and successful careers, this course is suggested. Some of the highlights of the course are: body requirements of vitamins, minerals, proteins, fats and carbohydrates; how to plan the family meals so as to secure these requirements; how to choose foods when eating all meals out; foods to eat to take care of deficiencies in the diet; the relation of food to personality; how overcrowding of one class of foods results in lowered vitality; pointers on weight reduction and also on body building. This is a lecture and discussion course.

CLOTHING AND TEXTILES

CLOTHING I (Firsts in Sewing)

Mon., Tues., Wed., Thurs., or Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1

First lessons in sewing include the construction of simple garments such as blouses, cotton dresses, skirts and other simple garments. Streamlined methods of clothing construction are taught. Emphasis is given to care and use of the sewing machine; selection and use of patterns; basic principles in construction of simple garments. This is a foundation for more advanced classes.

CLOTHING II (Children's Garments)

Tues., 7:00 p.m. to 9:00 p.m.
FEE—$1

Consists of a study of special problems in the selection and making of children's garments. Selection of suitable patterns and material for all types of garments will be discussed. Special attention will be given to the making of worked and bound buttonholes, plackets, zippers, making and applying collars, patch and slot pocket. Decorative stitches such as fagoting and smocking will be applied on cotton or silk dresses.

CLOTHING III (Refresher Course)

Mon., 7:00 p.m. to 9:00 p.m.
FEE—$1

Planned for the person who has done some sewing at home but who needs help in some of the construction processes such as bound buttonholes; corded buttonholes; putting in zippers; how to use a pattern correctly; how to use the buttonholer; worked buttonholes; cutting of true bias; pockets. Garments will not be made; people taking this course may also take Clothing IV or V as the purpose of this course is to give special help on the above processes to people who may be ready for more advanced work than Clothing I.

CLOTHING IV (Casual Clothes)

Mon., Tues., or Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1

An elementary dressmaking course which follows Clothing I or its equivalent. There will be opportunity to choose the types of garments to be made. It may be dresses for morning wear, casual clothes, blouses and skirts or active sport clothes. Problems found in this type of garment will be used as a basis for the lessons. Concise explanation with the detailed illustrative material will be used to simplify each step of construction.
CLOTHING V (That Ready-Made Effect)
Mon., Wed., or Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1
How to secure that much desired ready-made effect will be one of the purposes of this course. Selection of material and patterns will be stressed, with emphasis on color, texture and becoming design for each individual. Such fabrics as silk, wool, rayon, nylon and the new fabrics on the market will be studied. Garments to be made will be chosen from the following: rayon dresses, wool dresses, two-piece dresses, formal and dinner dresses. Short cuts in construction processes, identification of materials, interpretation and application of pattern principles, and coordinating of the wardrobe will be included. This course is for the advanced student.

CLOTHING VI (Tailoring I)
Mon. and Wed., 7:00 p.m. to 9:00 p.m., or Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
FEE—$1.00
For the advanced student, and is planned for those people who want to make tailored garments. Some of the specific tailoring principles which are given are: pattern altering to fit the figure, use of interfacing, tape and pad stitch for collars, reverse hand stitching of collars and front facing, fitting problems, use of pressing board for shaping garment to the figure, bound and patch pockets, lining and interlining for coats and suits, types of pads most suitable, selection of fabrics for coats, suit linings, interlinings, and interfacings. Garments to be made are suits and coats from new material as well as make-over problems in suits and coats.

CLOTHING VII (Challenge of Make-over)
Mon., 7:00 p.m. to 9:00 p.m.
FEE—$1.00
It is essential that members of the class have completed Clothing IV or its equivalent before enrolling in the remodeling class. Instruction will be given on the preparation of the garment for class work, combination of new and old material, and selection of garments for remodeling. Almost any garment can be remodeled.

CLOTHING VIII (Tailoring II)
Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1

For students who have completed Tailoring I. The problems to be emphasized are: moulding of garments with the iron, bound and welt pockets, cording and worked buttonholes, study of sleeve and other fitting problems. Suits and coats will be made.

MILLINERY I
Tues., Wed., or Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2
This is a course in Millinery especially for the beginner. A basic knowledge of sewing is necessary. The course includes the fundamental principles and millinery techniques. Its objective is to develop an understanding of millinery methods, materials, frames, trimmings, the different basic hat styles, and the choosing of becoming hats in proportion to face and figure. The blocking of felts and straws over simple blocks, familiarizing the student with blocks and steaming, as well as re-blocking of good quality used felts is included. Various types of hats are made.

MILLINERY II
Mon., 7:00 p.m. to 9:00 p.m.
FEE—$2
This course is planned for the student who has had Millinery I and is ready for more advanced problems. More difficult problems employing a wider variety of millinery processes are given. The student has an opportunity to gain more knowledge regarding feather, flower, and ribbon trimmings, and the uses of these trimmings, as well as the various uses and ways of applying veiling to each type of hat. Hats, as well as remodeled hats, are made.

FUR REMODELING
Wed., or Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1
Making over fur coats, restyling and modernizing the fur garment are two features of this course. Putting fur collars on coats and suits, and mending rips are also included. The actual work is done in the class under the instruction of an expert in fur work.

PERSONALITY WARDROBE
Thur., 7:30 p.m. to 9:00 p.m.
How to bring out one's personality through choice of wardrobe is the keynote of this course. Some of the highlights of the course are the plann-
ing of a perfect wardrobe and the down-to-earth reality wardrobe, new silhouettes for old, skillful shopping, accessories, foundation garments, weight control, care of skin and use of cosmetics.

DRAPERIES AND LAMPSHADES
Fri., 7:00 p.m. to 9:00 p.m.
Draperies—Curtains and draperies are studied from the standpoint of fabrics, styles, colors, patterns, relation to architectural features, kinds of windows and to the color and material of the exterior. Emphasis is placed upon the techniques of construction for both curtains and draperies suitable for each room in the home.
Lamps—Sugestions for planning a color scheme are given as well as choosing appropriate shades (formal or informal). Emphasis is placed upon construction techniques in the making of the panel shade, winding, fitting, placing outside and inside panels, trimming and finishing. Directions are also given for measuring, cutting, pasting, and trimming the paper or parchment shade.

SLIP COVERS
Wed., or Fri., 7:00 p.m. to 9:00 p.m.
A study of furniture, its line and construction is made as far as it is related to advisability of slip covering. Suggestions are given on color schemes, choice of fabrics, estimation of yordage and placing the pattern. Definite instruction is given upon the techniques of cutting, fitting, basting, stitching and the application of fasteners. Both slip covers and slip upholstery covers are made in class under supervision.

UPHOLSTERY I
Mon., or Tues., 6:30 p.m. to 9:30 p.m.
FEE—$2
This is an introductory course in simple upholstery techniques. Emphasis will be placed upon the following: proper care and use of tools; how and where to place the webbing; how to fasten the springs; how to pad the chair; how to put on the muslin cover; careful estimation of the upholstery fabric. Careful supervision will be given to selection and estimation of fabric and to the recovering of the furniture. It is recommended that beginners choose simple projects for the first work such as footstools, pull-up chairs, or bedroom chairs.

UPHOLSTERY II
Thurs., 6:30 p.m. to 9:30 p.m.
FEE—$2
A thorough review of Upholstery I will be given. Emphasis will be placed on stitched edges, padding, channeling, tufting, planning and cutting of covers, and trimmings. More complicated projects will be undertaken, such as overstuffed chairs, Cogswell chairs, daybeds, and davenports. Only simple processes of wood finishing will be undertaken. It is necessary to complete Upholstery I before enrolling in Upholstery II.

KNITTING I
Mon., Tues., or Wed., 7:00 p.m. to 9:00 p.m.
This is for the beginners or those who have had very little experience in knitting. Typical of what might be made are scarfs, sweaters, mittens, afghans and similar articles. Equipment needed for first lesson: two number-three knitting needles (ten or twelve-inch bone), a small ball of any kind of yarn, note-book and pencil.

KNITTING II
Thurs., 7:00 to 9:00 p.m.
This is for the advanced student and will include planning, styling, and charting of garments to measurements. Types of garments which may be made are sweaters, blouses, skirts, suits, gloves and socks. Tools needed for first meeting are: two number-three knitting needles (ten or twelve-inch bone), a small ball of yarn, notebook and pencil.

NEEDLEWORK
Mon., 7:00 p.m. to 9:00 p.m.
FEE—$1
This course is for all people interested in fine needlework. It includes all decorative stitches, some of which are satin stitch, needlepoint, outline stitch, crewel stitch, tatting, smocking, Italian hem-stitching, applique, Swedish weaving. The instructor of this course has many rare patterns which are available to the class.

CROCHETING
Wed. or Thurs., 7:00 p.m. to 8:00 p.m.
This class is for beginners or for those people who have done some crocheting and wish help in more advanced problems. The meaning of terms used in crocheting and how to read directions will be given. There are a variety of articles which may be made, such as holders, edgings, insertions, afghans, dollies, place mats, hats, bags, table-cloths, bedspreads and of course many other things.
CLOTHING CLASSES
AT OTHER CENTERS
Clothing IV—Fri., 7:00 to 8:00—Lapham School
Clothing V—Tues., 7:00 to 8:00—West High
Clothing VI—Tues., 7:00 to 8:00—West High
Clothing VII—Tues., 7:00 to 8:00—West High
General Clothing—Fri., 7:00 to 9:00—Franklin
FEE—$1 for above classes

Trade and Industry

Automotive
Building and Allied Trades
Metal Industries
Service Occupations
Printing
AUTOMOTIVE

AUTO MECHANICS—CONSUMERS

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE — $2

This course is designed to show how the units of the car operate, why repairs are necessary, cost of maintenance, where to have the car serviced, dealer relations, insurance, new car purchase and depreciation.

AUTO MECHANICS—TRADE PREPARATORY

Tues. and Thurs., 6:30 p.m. to 9:30 p.m.
FEE — $3

This course is designed for those people who are interested in becoming Automotive Apprentices. It will deal with the various units of the car such as brakes, electrical and fuel feed systems, front wheel alignment, and wheel suspension.

AUTO MECHANICS TRADE EXTENSION

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE — $3.00

This course is prepared for persons employed in the automotive field and covers both theory and practice in the following units of instruction—electrical systems, fuel systems, engine tune-up, brakes, front wheel alignment and steering.

AUTOMATIC TRANSMISSION—TRADE EXTENSION

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE — $2.50

This course is designed for garage mechanics who need to become familiar with automatic transmissions and their component parts.

The instruction will cover service, adjustment and overhaul of General Motor and Chrysler transmissions, torque converters, fluid coupling and controls for each unit.

It is possible for the student to enroll for only the units he requires. A list of units and dates for each may be obtained from the trade supervisor.

AUTO BODY REPAIR ESTIMATING

Mon., 7:00 p.m. to 9:00 p.m.
FEE — None

This course covers an analysis of the processes and methods used in arriving at the costs of re-painting and refinishing damaged auto bodies. How to use parts books, a study of materials and estimating labor is covered by lecture, illustrations and films. This course is for men employed in auto body work.

AUTO BODY TRADE PREPARATORY

Tues. and Thurs., 6:30 p.m. to 8:30 p.m.
FEE — $5

This is a practical course designed for those who would like to prepare themselves to be Auto Body Mechanics. It covers welding light gauge metals in all positions, metal finishing and repair, alignment, bumping, dimpling, filing and soldering, as well as refinishing, preparing of undercoats, and spray painting of lacquer and enamel.

BUILDING AND ALLIED TRADES

WOODWORKING (Cabinetmaking)

Mon. and Wed., 5:00 p.m. to 7:00 p.m.; 7:00 p.m. to 9:00 p.m.
Tues. and Thurs., 5:00 p.m. to 7:00 p.m.; 7:00 p.m. to 9:00 p.m.
FEE — $2.50

Knowing the woods we use, selecting the woods suitable for the job, stock sizes and actual sizes of lumber, drying and storing of lumber, matching wood for its beauty of grain and working the wood to achieve the desired results. The care, use and sharpening of tools, project making, machine woodworking and milling of stock on power machines, joints and joint making, glue and gluing, preparing surfaces and applying finishes. Wood burning. Safety practices of hand and power tools.

All materials used for personal projects must be paid for by the student.

BLUEPRINT READING

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE — $1.00

The student has a choice of studying either the blueprints for the machine trades or for the building trades. Both courses present many practical applications. The student progresses easily from the basic and fundamental concepts to a thorough understanding of each subject.

CARPENTRY—TRADE EXTENSION

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.

This is a course designed for men who are employed in the carpentry trade. It is divided into several units of instruction, each being offered on designated evenings thus making it possible for the
TRADE AND INDUSTRY

student to enroll for only the instruction he is anxious to obtain. A list of the units and the dates each is offered may be obtained from the trade supervisor.

DRAFTING (Architectural)
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1
Covers vocabulary, construction details, pictorial drawing, isometric, oblique and perspective drawing; layout of rafter, drafting and layout techniques; house layout and arrangement, selecting and planning a project; house plans and details, developing a drafting project; estimating, specifications, transmogrifying plans into objective reality; perspective of house, drawing a convincing picture of the house.

DRAFTING (Mechanical Drawing)
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1
Covers geometric problems, how to handle drawing equipment and study geometric relations; elementary working drawings, elements of orthographic projection, dimensioning skill in letters and numbers; problems in projection, advanced projection problems; layout and development; basic instructional and review material completion problems; free-hand sketching; auxiliary views, true-length lines; and angles and planes; cross sectioning and symbols; dimensioning; pictorial drawing; screw threads; pattern drawing.

ELECTRICITY
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$1
Covers elements of electricity; elementary circuits, mathematics, electrical formulas; kinds of wiring, types to use and where; motors, kinds, usage and repairs; generators, principles, practices, case; layout work, blueprints and estimating; code, state and federal building laws.

METAL INDUSTRIES
MACHINE SHOP
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$3
This course covers nomenclature of the engine lathe, milling machine, shaper, grinders and drill press, and the basic operating principles of these machines. Also, layout procedures, the use of precision instruments and gauges, machine shop trade standards and data including care of hand tools. Any materials other than those used by the student for class exercises must be paid for by the student.

SHEET METAL PATTERN DRAFTING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2
Covers essential and advanced pattern layout; parallel line; radical; triangulation development of the various problems and fittings used in sheet metal work; instruction in simplified and short-cut methods of layout to those well grounded in fundamentals.
The fee covers cost of material used to prove the layout work only; any materials used for project work will cost extra.

WELDING (Arc)
Tues. and Thurs., 5:00 p.m. to 7:00 p.m.
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$10
Industrial application of arc welding; arc welding machines and accessories; classification of welding electrodes; joint and weld characteristics; basic training in arc welding of mild steel in the flat, horizontal, vertical and overhead positions. Army and navy qualification tests. Pipe welding. Pressure vessel welding. Heliarc welding of stainless steels and alloys.

WELDING (Oxy-Acetylene)
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$10
Basic training in welding mild steel in flat, horizontal, vertical, and overhead positions, care of equipment, pipe welding, bronze welding, steel and cast iron welding. Oxy-acetylene cutting of metals, white metal welding, aluminum welding, and lead burning.

SERVICE OCCUPATIONS
CATERING SPECIALTIES
Tues., 5:00 p.m. to 7:00 p.m.
TYPE OF STUDENT—Adult women
FEE—$10 (covering materials and one meal each session)
LENGTH OF COURSE—10 weeks
Preparation and serving of delicate food specialties for buffet and party tables. Assistance in the solution of special food problems, particularly food service for large groups.

RESTAURANT TRADE PROBLEMS
Thurs., 7:00 p.m. to 9:00 p.m.
TYPE OF STUDENT—Adult men working in hotels or restaurants
FEE—$5 (covering text material and special recipes)
LENGTH OF COURSE—10 weeks
Preparation and serving of quality foods, utilizing the more abundant food sources, and obtaining reasonable profit. Special consideration given to individual problems in the hotel and restaurant field.

RADIO I—THEORY AND SERVICE OF RECEIVERS
Tues. and Thurs., 8:30 p.m. to 9:30 p.m.
FEE—$5.00
Covers basic theory, radio fundamentals, vacuum tubes, amplifiers, power supplies, detectors, oscillators, couplings, mixer circuits, control circuits, mechanical practice and use of hand tools, soldering, construction and operation of radio receivers, service methods, use of service instruments, signal tracing, alignment of receivers; elementary radio mathematics, laws, and electrical formulas.

TELEVISION—THEORY AND SERVICE OF TV RECEIVERS
Mon. and Wed., 6:30 p.m. to 9:30 p.m.
FEE—$3.00
Prerequisite: Radio I or equivalent; ability to pass entrance examination.
Covers basic television theory, elementary television mathematics, the TV high and low voltage power supplies, vertical and horizontal deflection circuits, the radio frequency unit, the sound channel, the picture IF, the picture second detector, the video amplifier, the DC restorer, synchronizing circuits, the kinescope tube; use of television test equipment in the location of defects, alignment of television receivers.

TECHNICAL MATHEMATICS
Tues., and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—None
For adults who wish to pursue a Technical Course we offer the following courses of a technical nature to prepare the students for their special fields.

Applied Mathematics—This is a course of trade mathematics where practical applications of mathematics are considered.
Algebra I. A high school course in Algebra where a unit of high school work is credited upon completion.
Algebra II. The second course in Algebra is for students who have had a year of elementary algebra. It consists of advanced work of many of the principles taught in the first year course.
Geometry. A high school course in Geometry where a unit of high school work is credited upon completion.
Trigonometry. An elementary course in trigonometry where a half unit of credit is given.

REFRIGERATION AND AIR CONDITIONING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2
Covers introduction to refrigeration, fundamentals of refrigeration and air conditioning; refrigeration cycle (operating cycle of a refrigeration unit); typical compressor cycle; study of refrigeration, chemical properties, hazards, and testing; machines and systems, unit setups for various applications; refrigeration and air-conditioning accessories, motors controls, liquid controls and valves; laboratory exercises, shop work in all types of units and refrigeration accessories; psychrometric charts and computing heat gain of air; properties of air including the study of the chemical make up of air; air-conditioning units, chemical types of units employed from package units to large industrial installations.

PRINTING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2
Hand composition, presswork, and machine composition are the main divisions of work offered in printing. Some work may also be taken in cost estimating, paper estimating, and cutting. Related work will be given concerning inks and papers. The instruction is individual and the student progresses at his own pace.

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Day School Catalog

Madison Vocational and Adult School
Madison Vocational
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Day School
Catalog
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P. H. Folk, Secretary
F. G. Collester
R. E. Dresser

R. W. Bardwell, Director
211 North Carroll Street
Madison, Wisconsin
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GENERAL INFORMATION

The Madison Vocational and Adult School is a public school in which Madison residents above the age of fourteen may enroll without tuition cost. Laboratory fees to cover the cost of supplies used by the students enrolled in the course are charged as listed in the catalog. Material used for an individual project is paid for by the student. Registration is not complete until all fees are paid.

For many of the courses persons may enroll at any time and receive individualized instruction. They may enroll for part-time, half-time, or full-time attendance. Students who are working may arrange a part-time school program to fit into their work schedule.

In most of the courses there are no specific educational requirements for entrance. Individual differences are met by individual instruction.

VETERANS' TRAINING

This school is approved for training by the Veterans Administration under P. L. 346 and P. L. 16. A full-time program under the G. I. Bill requires that a veteran attend school a minimum of thirty hours per week. Further information on veterans' training may be obtained in Room 148.

HIGH SCHOOL CREDIT

Students wishing to secure high school credits for work done in the Vocational School will take this matter up with the Director before enrolling in the courses. Otherwise, no high school credit can be granted.

RECORDS

Permanent records of students' attendance and achievements are kept in the registration office and may be obtained for reference or school admission purposes by the student at any time.

ATTENDANCE

A record is kept on attendance of all students including the adults. This is necessary because of the great demand for the use of the school's equipment and the need to eliminate any who are not serious about their work. Those who must be absent are requested to call 5-4541 so that they will not be withdrawn from class.

GUIDANCE AND PLACEMENT

The Guidance Office is located in Room 136. This department is at the service of all students.
who have health, welfare, placement and guidance problems. It offers counseling service to all adults. Aptitude, interest and general information tests are given when indicated as a part of this service. Any young student or adult wishing to avail himself of an opportunity to take these tests may arrange for them at this office. Adults who are retired or about to retire because of age are invited to use the counseling services.

The Placement Department is in a sense an extension of the teacher’s classroom activities. Teacher’s ratings of students are sent to the Placement Department where an effort is made to place students in positions suitable to aptitudes and skills demonstrated in classwork. Vocational School students who wish to be considered for employment should inform the Placement Office of this fact.

The Placement Department has contacts with the various industries and business organizations in the city. Employers place calls with the Vocational School when they need help.

ADULT EDUCATION SPECIAL SERVICES

Adults wishing to meet special educational requirements for civil service classification, or to make up educational deficiencies in order that they may enter fields of training which require certain educational requirements, may make up these deficiencies by making arrangements at the time of registration. These courses are in the nature of refresher courses which do not require full semester attendance.

NON-RESIDENT STUDENTS

In accordance with the laws of Wisconsin, non-resident tuition for persons under twenty-one years of age is chargeable to the city, village or town in which the student resides. Those desiring to enroll under the benefits of this law are requested to obtain the proper blank from the Registration Office and have it signed and returned to the school as evidence of residence.

Those persons who desire to pay their own tuition may do so, and the charges are as follows:

75 cents per one-half day—8:30 a.m. to 12:06 p.m.
75 cents per one-half day—12:26 p.m. to 4:24 p.m.
Tuition is payable in advance for each nine-week period. Tuition may be charged for only actual days of attendance; hence all unused tuition will be refunded to the student if a written request is presented to the Director.

REGISTRATION HOURS

8:30 a.m. to 11:30 a.m.
1:30 p.m. to 3:30 p.m.
Monday through Friday

MADISON VOCATIONAL AND ADULT SCHOOL

CALENDAR

1951-1952

Tuesday and Wednesday, September 4 and 5, 1951—Workshop for supervisors to plan for work of year.
Thursday and Friday, September 6 and 7, 1951—Day school registration.
Saturday, September 8, 1951—Meetings of staff and supervisors.
Monday, September 10, 1951—Day school opens.
Monday, October 1, through Wednesday, October 3, 1951—Registration for evening school.
Monday, October 8, 1951—Evening school begins.
Thursday and Friday, November 1 and 2, 1951—Day and evening school close for Milwaukee meeting of Wisconsin Education Association.
Thursday and Friday, November 22 and 23, 1951—Day and evening school close for Thanksgiving vacation.
Friday, December 14, 1951—Evening school closes for Christmas vacation.
Saturday, December 22, 1951, through Sunday, January 6, 1952—Day school closes for Christmas vacation.
Monday, January 7, 1952—Day and evening school reopen.
Monday, Tuesday and Wednesday, January 7, 8 and 9, 1952—Registration for second term of evening school.
Friday, February 1, 1952—End of first semester of day school.
Monday, February 4, 1952—Beginning of second semester of day school.
Friday, February 8, 1952—Day and evening school close for meeting of Southern Wisconsin Education Association.
Friday, March 14, 1952—Evening school closes.
Friday, April 11, through Sunday, April 20, 1952—Day school closes for spring vacation (Good Friday, April 11; Easter Sunday, April 13.)
Monday, April 21, 1952—Day school reopen.
Friday, May 2, 1952—Day school closes for meeting of Wisconsin Association of Vocational and Adult Education.
Friday, May 30, 1952—Day school closes for Memorial Day.
Friday, June 13, 1952—End of school year.
ACADEMIC
MATHEMATICS

ALGEBRA I (Beginning)
COURSE NUMBERS—1131, 2131
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—Progressive First Algebra by W. W. Hart
COURSE CONTENT—Covers beginning of algebra
for which one high school unit is given. Consists
of nine assignment sheets. Unit tests are
given when each assignment sheet is completed.
A final test is given.

ALGEBRA II
(Advanced High School Algebra)
COURSE NUMBERS—1132, 2132
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
PREREQUISITE—Algebra I
TEXT—Progressive Second Algebra by W. W. Hart
COURSE CONTENT—Reviews the principles
learned in algebra I. Advanced topics in factor-
ing and quadratics are included. Progressions
and the binomial theorem are introduced at the
end of the course. There are twenty short assign-
ments. A final test is given and upon completion
a one-half high school unit is given.

GEOMETRY
COURSE NUMBERS—1133, 2133
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
PREREQUISITE—Algebra I
TEXT—Progressive Geometry by W. W. Hart
COURSE CONTENT—Emphasis in this course is
to develop in the individual the ability of form-
ing a logical geometric proof. There are six as-
ignment sheets covering the course. Tests are
given when a unit is completed as well as a fi-
nal test. One high school unit is given for the
successful completion of this course.

APPLIED MATHEMATICS
COURSE NUMBERS—1134, 2134
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
PREREQUISITE—Algebra I
TEXT—Applied Mathematics by James F. Johnson
COURSE CONTENT—Arithmetic fundamentals are
studied and applied to practical problems. One-
half high school unit is given. The course can be
used only as an elective. There are seventeen
assignment sheets and a final test is given when
the course is completed.

TRIGONOMETRY
COURSE NUMBER—2135
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Plane Trigonometry by Rosenbach, Whit-
man, Moskovitz
PREREQUISITE—Algebra, geometry
COURSE CONTENT—High school course in triko-
nometry. Emphasis is placed on problem solving
after the trigonometric relations are mastered.
Twenty assignment sheets with a final exami-
nation after satisfactory completion of the as-
ignment sheets constitute the course. One-half
high school unit is given.

BUSINESS MATHEMATICS
COURSE NUMBERS—1137, 2137
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
PREREQUISITE—Arithmetic I
TEXT—College Business Arithmetic by Hanna and
Walker
COURSE CONTENT—Consists of mastering arith-
metic fundamentals and then applying them to
situations in business. A book which enables the
student to progress at his own speed is used.
One-half high unit is earned when course is
completed.

SCIENCE

CHEMISTRY
COURSE NUMBERS—1121, 2121
TYPE OF STUDENT—Adult, Junior
FEE—$7.50 per semester
LENGTH OF COURSE—180 fifty minute periods
TEXT—Fundamentals of Chemistry by Gray,
Sandifur and Hanna
COURSE CONTENT—Parallels the average chem-
istry course given in high school. One high
school unit is given for the successful comple-
tion of this course.

PHYSICS
COURSE NUMBERS—1122, 2122
TYPE OF STUDENT—Adult, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Modern Physics by Charles E. Dall
COURSE CONTENT—Parallels the average physics
course given in high school. One high school
unit will be given for the successful completion
of this course.
ENGLISH EDUCATION

ENGLISH FOR PART-TIME BOYS
COURSE NUMBER-1103
TYPE OF STUDENT—Part-time
FEE—None
LENGTH OF COURSE—37 fifty minute periods
TEXTS—Adapted Classics, such as The Count of Monte Cristo, The Adventures of Sherlock Holmes, A Tale of Two Cities, and Moby Dick.
COURSE CONTENT—Materials used to improve the boy's ease and fluency of reading and understanding of what he reads, and to improve the quality of his writing through frequent practice in class.

ENGLISH FOR FOREIGNERS
BEGINNING M. W. F.
ADVANCED T. TH.
COURSE NUMBER—2101
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—The Constitution of Our Country by Rexford and Carson; Applied English Essentials by Reiniger; Practical Exercises Sheets
COURSE CONTENT—For all foreigners—those who wish to become American citizens, those who speak and read but cannot write English, and those who do not know any English. The needs of each group are considered and the instruction is conducted accordingly.

ELEMENTARY GRAMMAR
COURSE NUMBER—1103
TYPE OF STUDENT—Junior Part-time Girls
FEE—None
LENGTH OF COURSE—56 fifty minute periods
TEXTS—Practical English published by Scholastic Magazine; Literary Cavalcade published by Scholastic
COURSE CONTENT—This is a short course based on the chief "Stumbling Blocks" in grammar, spelling, punctuation, usage, vocabulary, reading and compositions.

ADVANCED GRAMMAR
COURSE NUMBER—2104
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—Handbook of English Usage by Conry and Oddyke, Workbooks: Applied English Essentials and Practical Punctuation Drills by Charles G. Reigner
COURSE CONTENT—Basic principles of grammar— the sentence, parts of speech, spelling, and punctuation taught through study and drill on correct usage.

ENGLISH COMPOSITION AND LITERATURE
COURSE NUMBER—2105
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—The Technique of Composition by Taf, McDermott, and Jenson; Modern English Readings, edited by Loosin and Clark.
COURSE CONTENT—Literature, selected to improve the student's tastes in reading and to give him an appreciation of good writing; themes to teach the student to write a good paper. Through such an approach, the student is given guidance not only in self-expression but also in personal growth and happiness.

ENGLISH FOR PRINTERS
COURSE NUMBER—3107
TYPE OF STUDENT—Full-time Junior, Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—English for Printers, International Typographical Union; Applied Punctuation, Charles G. Reigner
For reference: College Business English, Charles G. Reigner; Century Collegiate Handbook, Greer and Jones; Daily Drills for Better English, Edward H. Webster; Mimeographed exercise sheets
COURSE CONTENT—A specialized course for students interested in becoming printers. Each pupil's needs and abilities are discovered by especially prepared tests and each is helped accordingly. Correctness and variety of sentence construction are stressed. Punctuation, spelling and word meaning are included. To recognize errors and to be able to correct them is the purpose of the classroom work. This class work is helpful for all those interested in proofreading.

JOURNALISM
COURSE NUMBER—2108
TYPE OF STUDENT—Full time Junior, Adult
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—the purpose of this course in journalism is to help students to see, observe, and evaluate the events of everyday life and to tell about them in brief, concise English. Class practice will include writing news stories, reports, interviews, biographical sketches, short features, club and activity reports and radio news releases such as the average person may be called upon to write for his firm, club, lodge or church. THE VOCATIONAL NEWS will be the outlet for these stories.
ELEMENTARY SPEECH

COURSE NUMBER—1110
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—Everyday Speech by Smith, Koebing and Lewis; Practical English and Literary Cavalcade published by Scholastic Magazine
COURSE CONTENT—For the junior who needs grammar, spelling, and pronunciation, and who needs to improve his reading speed and understanding.
A short unit is included on personality traits which spell success on the job. Students are encouraged to rate themselves on these traits and the articles are used for class-room round-table discussions. The course aims to improve the student in all of his everyday speaking situations.

SPEECH (GENERAL)
COURSE NUMBERS—2111, 2112
TYPE OF STUDENT—Adult
FEE—Laboratory fee 50c per semester
LENGTH OF COURSE—180 fifty minute periods
TEXTS—Principles and Types of Speech, Allen H. Monroe; The Art of Conversation, Milton Wright; 30 Days to a More Powerful Vocabulary, Wilfred Funk and Norman Lewis
COURSE CONTENT—The average person should realize how great a part his speech plays in his everyday life. Dress and physical appearance are secondary. Voice makes or mars. This course will teach what effective speech can mean in everyday speaking, the greeting, telephone conversation, giving directions, making explanations, the interview, specific speech situations, the talk to convince, developing a technique, the impromptu talk, speeches for social occasions, welcome, introductions, award presentation, and after dinner speeches. Group speaking, group discussion, round table, the panel, the forum, the function of the chairman will be studied. Speaking props—ideas, words, voice, and action. Oral reading techniques. Prose and poetry selections for general practice.

SPEECH FOR APPRENTICES
COURSE NUMBER—3112
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—72 fifty minute periods
TEXTS—Principles and Types of Speech, Revised by Allen H. Monroe; 30 Days to a More Powerful Vocabulary by Wilfred Funk and Norman Lewis; The Art of Conversation by Milton Wright

COURSE CONTENT—To understand and develop skill in conversational speech; to learn how to express and defend one's attitude in a discussion, to learn how to give and receive criticism; to learn something about the cooperative discussion of a common problem such as the speech which is used in a committee or conference; to develop skill in making short public speeches for various purposes such as introductions, presentations, and the speech of welcome; to understand and develop skill in the oral reading of various types of literature; to master the pronunciation and spelling of 500 to 1000 words that are in daily use but are frequently misspelled and mispronounced such as data, apparatus and address; master the correct forms of fifty expressions in which the correct usage is frequently violated as "between you and me.". The student must (1) fulfill eight speech assignments before the close; (2) prepare and hand in outlines for four speeches.

UNITED STATES HISTORY
COURSE NUMBERS—1116, 2116
TYPE OF STUDENT—Full-Time Junior, Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—America by Faulkner and Kepner
COURSE CONTENT—This course is planned for students interested in broadening their knowledge on the history of the United States. Assignment sheets for each chapter enable the student to progress at his own rate. Class discussions cover: Discovery and colonization; formation of our Constitution and Government; industrialization of America; development of our cultural and social life; acquisition of boundaries and territories; current problems.

WORLD HISTORY
COURSE NUMBERS—1117, 2117
TYPE OF STUDENT—Full-Time Junior, Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—World History by Smith, Muzzey and Lloyd
COURSE CONTENT—A comprehensive study of the beginnings of civilization; what it is, how our ancestors lived, what the Egyptians accomplished and civilizations of Western Asia. A study of the great civilizations of Greece and Rome; their contributions and influence on the world. Life in the Middle Ages, the Barborian Invasions, Christianity, feudalism, the Crusades. Beginnings of the modern world and the struggle
for democracy. The growth of nationalism and con­
lict of the great powers. World War I. Treaty of Versailles, League of Nations, Europe and the
United States. Reconstruction of Europe, rise of totalitarian powers. World War II and results.
A critical analysis of current events and world
problems.

SOCIAL SCIENCE

\textbf{COURSE NUMBER-} 1115
\textbf{TYPE OF STUDENT—} Full-time, Part-time Junior
\textbf{FEE—} None
\textbf{TEXTS—} Current Events; Junior Review; the Scholastic
\textbf{LENGTH OF COURSE—} 36 fifty minute periods for part-time and 180 fifty minute periods for full-
time
\textbf{COURSE CONTENT—} Planned to create an interest in what is happening today at home and abroad, and to gain information for a better understanding of the world we live in. During each class period the important news of the previous day is read and discussed. As a result of this class period activity a diary or summary of the significant news of each week is recorded by the pupils. Special emphasis is placed on the location of world news by map projects. Names associated with the most important news stories are learned and interesting details connected with such personalities are presented.

TWENTIETH CENTURY MIDPOINT

\textbf{COURSE NUMBER—} 2118
\textbf{TYPE OF STUDENT—} Adult
\textbf{FEE—} None
\textbf{TEXTS—} None
\textbf{LENGTH OF COURSE—} 9 fifty minute periods
\textbf{COURSE CONTENT—} This course is a summary and evaluation of contemporary human activities, with emphasis upon political and social changes and trends of the recent past and their probable future development.

LANGUAGE

\textbf{FOREIGN LANGUAGE}

\textbf{SPANISH I}
\textbf{COURSE NUMBER—} 1140, 2140
\textbf{TYPE OF STUDENT—} Junior, Adult
\textbf{FEE—} None
\textbf{LENGTH OF COURSE—} 140 fifty minute periods
\textbf{COURSE CONTENT—} A class in conversational Spanish with practice in pronunciation, comprehension of the spoken language, and conversational drill.

\textbf{BASIC READING AND COMPREHENSION}

\textbf{COURSE NUMBER—} 1108, 2109
\textbf{TYPE OF STUDENT—} Junior, Adult
\textbf{FEE—} None
\textbf{LENGTH OF COURSE—} 20 fifty minute periods
\textbf{COURSE CONTENT—} Reading is a skill which is learned by constant practice and evaluation of comprehension. To be able to read more rapidly and to better understand what has been read are necessary tools for gaining success in any field as well as everyday living. In this course a careful analysis is made of present reading methods and training will be given in rapid reading, increased comprehension of reading, skimming and eliminating faulty habits.

\textbf{ART}

\textbf{DRAWING (Elementary)}
\textbf{COURSE NUMBER—} 1201
\textbf{TYPE OF STUDENT—} Part-time, Full-time Junior
\textbf{FEE—} None
\textbf{LENGTH OF COURSE—} 80 fifty minute periods Daily 10:15-12:50
\textbf{COURSE CONTENT—} Still-life drawing in line, value and color, stressing perspective and composition. Mediums are charcoal, colored pencils, crayons and pencil.

\textbf{DRAWING AND PAINTING}

Elementary and Advanced
\textbf{COURSE NUMBERS—} 2202, 5202
\textbf{TYPE OF STUDENT—} Apprentice, Adult
\textbf{FEE—} Laboratory $1.50 per semester; materials to be furnished by student
\textbf{LENGTH OF COURSE—} 72 to 180 fifty minute periods per semester
\textbf{COURSE CONTENT—} Outdoor sketching and still life; preparation of painting grounds; the palette —under-painting, glazing and critical analysis; painting mediums —oil and water color.

\textbf{DESIGN}

\textbf{COURSE NUMBERS—} 2203, 5203
\textbf{TYPE OF STUDENT—} Adult
\textbf{FEE—} Laboratory $1.50 per semester
\textbf{LENGTH OF COURSE—} 72 fifty minute periods first semester; 72 fifty minute periods second semester
GENERAL EDUCATION

Tues. and Thur. 12:52-4:24 first semester
Tues. and Thur. 12:52-4:24 second semester

COURSE CONTENT—A basis for artist, craftsman and homemaker. Instructional problems in line, space, light and dark, color, tone and texture to develop a person's feeling for expression and fine relationships.

FIGURE DRAWING

COURSE NUMBERS—2204, 5204
TYPE OF STUDENT—Full-time, advanced Adult and apprentice 1st and 2nd semester
FEE—Laboratory fee $2.50 per semester
LENGTH OF COURSE—36 fifty minute periods each semester
COURSE CONTENT—Emphasizing line, proportion, rhythm, anatomy and construction of model.

PORTRAIT PAINTING

COURSE NUMBERS—2206, 5206
TYPE OF STUDENT—Advanced Adult
PREREQUISITE—Still life and figure drawing
FEE—Laboratory fee $2.50 per semester; materials to be furnished by the student
LENGTH OF COURSE—36 fifty minute periods first semester and second semester
Fri. 12:52-4:24
COURSE CONTENT—Study of the head in light and shade; the anatomy; structure for solidity; gesture; expression; design element and composition; media: pencil, charcoal, conte crayon, water color and oil.

LETTERING

COURSE NUMBER—1230
TYPE OF STUDENT—Part-time Junior
FEE—None
LENGTH OF COURSE—36 fifty minute periods
COURSE CONTENTS—Single stroke alphabet in pencil and speedball pen; proportion, spacing and layout stressed.

ART METAL

COURSE NUMBER—1260
TYPE OF STUDENT—Full-time, Half-time, Part-time
FEE—None
LENGTH OF COURSE—90 fifty minute periods
COURSE CONTENT—An elementary course in design processes and techniques as applied to copper and brass. Processes include beating down, soldering, filing and etching.

ART METAL

COURSE NUMBERS—2261, 5261
TYPE OF STUDENT—Adult
FEE—Laboratory $1.50 per semester; material $3.50 per semester
LENGTH OF COURSE—108 fifty minute periods
Mon. 1:45-4:24
COURSE CONTENT—Design processes and techniques as applied to copper and brass. The processes include beating down, piercing, soldering, filing, etching, construction design, patternmaking, finishing and oxidizing.

COSTUME JEWELRY

COURSE NUMBERS—2262, 5262
TYPE OF STUDENT—Adult
FEE—Laboratory $1.50 per semester; material $3.50 per semester
LENGTH OF COURSE—324 fifty minute periods
Tues., Wed., Thur. 1:45-4:24
COURSE CONTENT—Design, processes and techniques as applied to flat silver and silver wire. These processes include sawing, filing, soldering, piercing, repousse, chasing, enameling, casting, ring sizing, stone setting and finishing.

STONE CUTTING

COURSE NUMBERS—2263, 5263
TYPE OF STUDENT—Adult
FEE—Laboratory $1.50 per semester; stones to be purchased by student
LENGTH OF COURSE—108 fifty minute periods
Fri. 1:45-4:24
COURSE CONTENT—Recognition and classification of semi-precious stones. The processes used on the lapidary machine include sawing, grinding, sanding and polishing stones suitable for costume jewelry.

COMMERCIAL ART

COURSE NUMBERS—1231, 2231, 3231, 4231, 5231
TYPE OF STUDENT—Apprentice, Full-time, Part-time and Adult
FEE—Laboratory $3 per semester
TEXTS—Commercial Art by Wallace; Graphic Design by Friend
LENGTH OF COURSE—360 fifty minute periods
Daily 8:30-10:14
COURSE CONTENT—Design, perspective drawing, light and shade, lettering, pen techniques, wash techniques, color theory advertising layout, poster advertising, brush lettering, reproduction processes.
SHOW CARD WRITING

COURSE NUMBERS—1232, 2232, 3232
TYPE OF STUDENT—Adult
FEE—Laboratory fee $3 per semester
TEXTS—Martius Idea Books, 1, 2, 3, and 4
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—Pen lettering; brush lettering; layouts for show cards; color in show cards; miscellaneous hints; banners and window strips; illustrations for show cards; silk screen process; displays.

GENERAL CRAFTS

COURSE NUMBERS—2241, 5241
TYPE OF STUDENT—Full-time, Part-time Adult
FEE—Laboratory fee $1.50
LENGTH OF COURSE—540 fifty minute periods
Mon. 12:52 to 3:30
COURSE CONTENT—Leather craft, block printing, textile decoration, caning, decorative painting (Rosemaling) and other related hand crafts.

CERAMICS

COURSE NUMBER—1223
TYPE OF STUDENT—Adult
FEE—Laboratory fee $1.50 per semester; material fee $6.00 per semester
LENGTH OF COURSE—108 fifty minute periods per semester
Mon., Wed., Fri. 2:30 to 4:24 first semester
Mon., Wed. 2:40 to 4:24 second semester
COURSE CONTENT—An elementary course which includes essential processes in the making of pottery: coil method, hand building, pouring, glazing, surface enrichment; placing and firing the kiln. Advanced students use the potter’s wheel.

APPLIED ART I

COURSE NUMBER—1240
TYPE OF STUDENT—Full-time, Part-time Junior Girls
FEE—None
LENGTH OF COURSE—180 fifty minute periods
Daily 12:32 to 2:36
COURSE CONTENT—Design and application of monograms for stencilling, border designs for textile painting; Christmas cards for block printing; original designs for hooked rugs; and weaving on inkle and four-harness looms.

WEAVING (Elementary)

COURSE NUMBER—2272
TYPE OF STUDENT—Adult
FEE—Laboratory fee $1.50 per semester. Materials to be purchased by student
LENGTH OF COURSE—224 fifty minute periods
Tues., Wed., Thurs. 1:46 to 4:24
COURSE CONTENT—Processes and techniques in producing plain and pattern weaves; colonial overshot; summer and winter; bronson and bound weaves.

ADVANCED WEAVING

COURSE NUMBER—2273
TYPE OF STUDENT—Adult
FEE—Laboratory fee $1.50 per semester. Materials to be purchased by student
LENGTH OF COURSE—222 ninety minute periods
Mon. and Fri. 1:46 to 4:24
COURSE CONTENT—Design methods on two and four harness looms; laid-in (lace pile and tapestry weaves); draft writing for overshot colonial, summer and winter; end bronson weaves on four six and eight looms.

MUSIC

HARMONY

COURSE NUMBERS—1304, 2304
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—36 fifty minute periods
TEXT—Modern Harmony by Foote and Spalding
COURSE CONTENT—Intervals, consonance and dissonance in versions, major and minor scales, circle of the fifths, chromatic scale, triads, open and close position, voice leading, leading tone in both major and minor keys, inversion of triads, first and second inversions, rules and the uses of the seventh chord including the dominant and leading tone sevenths, modulation, modulations into related keys, both major and minor.

PIANO I

COURSE NUMBERS—1301, 2301
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXT—Adult Piano Course, Book 1 by Wagness
PIANO II
COURSE NUMBERS—1302, 2302
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—37 fifty minute periods
COURSE CONTENT—Texts suited to individual needs. Hanon, Czerny exercises. For students who are not interested in popular music.

POPULAR PIANO THROUGH KEYBOARD HARMONY
COURSE NUMBERS—1303, 2303
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—36 fifty minute periods
TEXT—Modern Piano by Lee Sims
COURSE CONTENT—This course is designed for students having some knowledge of piano and consists of learning of popular music, chords, creating necessary breaks, etc. Also valuable to classic music students, since it provides reading short cuts and helps create a technique usually ignored by other methods. A practical course, students learning to do their own arranging.

Business Education

Accounting
Business Principles
Office Training
Distributive Education
Training of Sales People
ACCOUNTING

ACCOUNTING I

COURSE NUMBER—2401
TYPE OF STUDENT—Adult
LENGTH OF COURSE—90 fifty minute periods
TEXT—"College Accounting", Sherwood & Boling Workbook, Part I.
J. C. Allen, personal service, practice set.
W. L. Mann, mercantile, practice set.

COURSE CONTENT—The elementary principles of accounting and the procedures of double entry bookkeeping are thoroughly covered in this course. A comprehensive study is made of both the cash and accrual basis of keeping accounts. Work covered includes journalizing, posting, trial balance, preparing financial reports, adjusting and closing the books at the close of the business period.

This course is intended primarily for those who have had no previous training in bookkeeping or accounting. Successful completion of the prescribed work will provide the student with a general knowledge of accounting useful in business or professional fields.

ACCOUNTING II

COURSE NUMBERS—2402, 4402
TYPE OF STUDENT—Adult, On-the-job
LENGTH OF COURSE—90 fifty minute periods
TEXT—"College Accounting", Sherwood & Boling Workbook, Part II.

COURSE CONTENT—For veterans who are working and attending school four hours each week. The complete bookkeeping cycle is covered including journalizing, posting, trial balance, work sheet, business statements and adjusting and closing the ledger.

ACCOUNTING III

COURSE NUMBERS—2403, 4403
TYPE OF STUDENT—Adult, On-the-job
LENGTH OF COURSE—90 fifty minute periods
TEXT—"College Accounting", Sherwood & Boling Workbook, Part III.
The King Manufacturing Company, practice set

COURSE CONTENT—Consideration is given to the corporate form of business organization with emphasis on the industrial or manufacturing type of enterprise. Accounts and accounting procedures with cost implications for a manufacturer or concern are presented.

Subjects covered include legal organization and records of a corporation, classes and values of capital stock, surplus and dividends, reserves and funds, the voucher system of accounting, manufacturing accounts, annual reports and closing the books of a manufacturer.

ACCOUNTING IV

COURSE NUMBERS—2404, 4404
TYPE OF STUDENT—Adult, On-the-job
LENGTH OF COURSE—90 fifty minute periods
TEXT—"Principles of Cost Accounting" by Sherwood-Chace
The Mathews Manufacturing Company, practice set

COURSE CONTENT—A pre-requisite to this course is the completion of a preliminary course in general accounting. The job cost or production order system, the process cost system and the standard cost system are discussed. Accounting for materials, labor and factory overhead expenses gives the student knowledge basic in the field of cost accounting.

ACCOUNTING V

COURSE NUMBER—2405
TYPE OF STUDENT—Adult
LENGTH OF COURSE—37 fifty minute periods
TEXTS—Varied advanced texts

COURSE CONTENT—A thorough knowledge of accounting principles or two years accounting training is a prerequisite of this course. The work is individual and the needs and problems of
the students are fulfilled as far as possible. Work in advanced accounting, C. P. A. problems, cost accounting, federal income tax, and auditing is presented.

BURROUGHS TYPEWRITER BOOKKEEPING - Machine Model 7600

COURSE NUMBERS—2445, 4445
TYPE OF STUDENT—Adult, On-the-Job
FEE—$50 per semester
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—Prerequisite: Ability to operate a typewriter. Knowledge of bookkeeping is of great value. The student first learns the parts of the machine by name, the function of the various keys, the general principles of operation, and the various methods of posting debits and credits to accounts receivable and proving the operation. After the student has mastered these operations, he posts a set of business transactions using individual ledger and statement sheets and a control account. A Model 76 machine is less automatic than a Model 78 machine and requires the use of more keys to perform the various operations.

BURROUGHS TYPEWRITER BOOKKEEPING - Machine Model 7800

COURSE NUMBERS—2446, 4446
TYPE OF STUDENT—Adult, On-the-Job
FEE—$50 per semester
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—Prerequisite: Ability to operate a typewriter. Knowledge of bookkeeping is of great value. The student first learns the parts of the machine by name, the function of the various keys, the general principles of operation, and the various methods of posting debits and credits to accounts receivable and proving the operation. After the student has mastered these operations, he posts a set of business transactions using individual ledger and statement sheets and a control account. A Model 78 machine is more automatic in operation than a Model 76 machine.

BURROUGHS COMPUTING-BILLING Machine Model 7200

COURSE NUMBERS—2447, 4447
TYPE OF STUDENT—Adult, On-the-Job
FEE—$50 per semester
LENGTH OF COURSE—25 fifty minute periods
TEXT—Operating Instructions and Practice Problems by Burroughs Adding Machine Co.

BUSINESS PRINCIPLES

BUSINESS ARITHMETIC

COURSE NUMBERS—2436, 4436
TYPE OF STUDENT—Adult, On-the-Job
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—College Business Arithmetic by J. Marshall Hanna
COURSE CONTENT—Especially intended to serve the needs of people in business. The student intending to study accounting or calculating machines but who is not strong in arithmetic will do well to elect this as a preparatory course. Cashiers, clerks, and general office workers will find this course very helpful. The course embraces the following: intensive review of the fundamentals, percentages, practical short methods, bank discounts, trade and cash discounts, profit and loss, and payrolls.

ADVANCED BUSINESS MATHEMATICS AND PROJECTS

COURSE NUMBERS—2435, 4435
TYPE OF STUDENT—Adult, On-the-Job
FEE—None
LENGTH OF COURSE—18 weeks (90 fifty minute periods)
TEXT—Problems and Projects by J. Marshall Hanna
COURSE CONTENT—This course is only for students who have satisfactorily completed the basic business arithmetic course. The student will be required to spend some time each day on outside preparation and drill. The units covered include horizontal addition, determining averages,
ratios, transportation costs, depreciation, inventory sheets and stock turn, consignment sales, distribution of expenses, property taxes, pricing of goods, stocks and bonds, bank discounts, bank reconciliation statements, payrolls, using sales data, invoicing and marking goods, miscellaneous application problems, insurance sinking fund and amortization schedules.

BUSINESS PRACTICE

COURSE NUMBER—1437
TYPE OF STUDENT—Part-time Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
TEXT—ZuTavem’s Business Practice Set
COURSE CONTENT—Aims to prepare the junior student for a general clerical position. The course covers arithmetic test, invoices, requisitions, stock record, payroll sales reports, salesman’s report, purchase record, invoice (compute amounts and verify work done by others), parcel post, mailing list, itinerary, code telegrams, circular letter, branch store manager.

COMMERCIAL LAW

COURSE NUMBERS—2460, 4460
TYPE OF STUDENT—Adult, On-the-Job
FEE—None
LENGTH OF COURSE—80 fifty minute periods
TEXT—Everyday Law by Sidney Bliss and Clyde Rowe
COURSE CONTENT—To serve the needs of bookkeepers, accountants, clerks and others engaged in business. It includes a study of the following: contracts, negotiable instruments, market transactions and business organizations. It is conducted as a combination of lecture, text material, cases and discussion problems.

FILING AND INDEXING

COURSE NUMBERS—1450, 2450, 4450
TYPE OF STUDENT—Junior, Adult, On-the-Job
FEE—None
LENGTH OF COURSE—45 fifty minute periods
TEXT—Progressive Indexing and Filing by Remington Rand, Inc
COURSE CONTENT—Divided into seven units as follows: (1) rules for alphabetizing and their application by use of 200 cards; (2) study of filing equipment; (3) methods of filing and practical application by the use of 75 miniature letters and filing trays—alphabetical, numeric, geographic, subject, triple check, Soundex and Variadex; (4) cross-filing; (5) charge methods; (6) transfer methods; (7) follow-up. The work is organized on an individual basis to fit the needs of individual pupils.

GENERAL ECONOMICS

COURSE NUMBER—2455
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Everyday Problems in Economics by Dr. May Wood-Simons
COURSE CONTENT—Deals with present-day problems of American society, the relation of these problems of the past, and their possible effect on the future economic and political systems of our nation.

GENERAL ECONOMICS

COURSE NUMBER—4456
TYPE OF STUDENT—On-the-job
FEE—None
LENGTH OF COURSE—36 fifty minute periods
TEXT—Everyday Problems in Economics by Dr. May Wood-Simons
COURSE CONTENT—For veterans who are working and attending school four hours each week. It aims to give the student the basic principles of economics and their application in analyzing business problems intelligently. The units covered include historical background, definition of economics, the consumer, production, exchange, price determination, study of business cycle, national income, distribution, economic theory, the farm problem, labor problems, trade association.

RECORD KEEPING

COURSE NUMBERS—2440, 4440
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—Basic Bookkeeping and Accounting by Schneider-Sell-Lazenby
COURSE CONTENT—For veterans who are working and attending school four hours each week. Unit I is a study of general records including budget, income and expenses and cash records. Also information regarding forms such as checks, notes, drafts and other papers used in business. Elementary bookkeeping including journalizing, posting, closing the ledger and making business statements is a part of this unit. Unit II is a one-book outfit for keeping books in a small business. All transactions appear on one page by use of columns. Column headings include O. A. B. and withholding taxes and profit and loss information at end of month.
BUSINESS CORRESPONDENCE

COURSE NUMBERS—2425, 4425
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Effective Business Correspondence by Aurner

COURSE CONTENT—A course in business letter writing intended for students who are studying to be stenographers, bookkeepers, clerical workers, sales people and other office workers. Objectives are: to develop skill in use of words, sentences; to learn principles underlying effective letters, to write effective reports. The units studied in this course are: (1) creating effective business letters; (2) different types of letters; (3) forms letters and mailing lists; (4) business reports.

BUSINESS INFORMATION

COURSE NUMBERS—2426, 4426
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Consumer Economic Problems by Shields and Wilson

COURSE CONTENT—A course in English for general office workers and stenographers. The objectives are: to teach the students to use and define the technical terms common to banking, real estate, investments, insurance and general merchandising, and to know the simple problems involved in borrowing and investing money in insurance and real estate.

GRAMMAR

COURSE NUMBERS—2427, 4427
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—90 fifty minute periods

COURSE CONTENT—Objectives are: to help the pupil to speak and write correctly, to construct varied effective sentences, to punctuate correctly, to read with understanding and comprehension, and to spell simple words correctly.

JUNIOR ENGLISH

COURSE NUMBERS—1428, 2428
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—90 fifty minute periods

TEXT—A Workbook Course in Business English by Kate Mora

COURSE CONTENT—For juniors and adults who have not completed their high school education. The course presents the essentials of English, correct use of words, capitalization, punctuation, and the essentials of an effective sentence. The use of the dictionary, spelling and syllabication are also presented.

PART-TIME ENGLISH

COURSE NUMBER—1429
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—37 fifty minute periods
TEXT—Applied English Essentials by Chas. H. Reigner

COURSE CONTENT—For the part-time student who attends school one day a week. It presents the principles of grammar, the parts of speech, the correct tense, the proper use of common words, and the spelling of simple words used in the text.

OFFICE TRAINING

COMPTOMETER AND BURROUGHS MACHINE CALCULATION

COURSE NUMBER—2430-4430
TYPE OF STUDENT—Adult, On-the-job
FEE—$0.50 per semester
LENGTH OF COURSE—45 fifty minute periods
TEXT—Key-Driven Calculator Course by Goodfellow and Agnew

COURSE CONTENT—This is a nine-week introductory course for beginners. The four fundamental principles—addition, multiplication, division and subtraction—are taught. The course is not planned to train operators but to acquaint students with the fundamental operations of the above machines.

COMPTOMETER AND BURROUGHS MACHINE CALCULATION

COURSE NUMBERS—2431, 4431
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Key-Driven Calculator Course by Goodfellow and Agnew

COURSE CONTENT—Includes all phases of machine operation. Students should take the introductory try-out course before Calculating II to determine whether or not they have a liking or
BUSINESS EDUCATION

an aptitude for the work before specializing in it. It is inadvisable for students who cannot obtain a grade of at least 85 in the introductory try-out course to take Calculating II. This course includes the application of fundamentals to business problems: percentages, discounts, inventories, reciprocals, parcel post charges, etc. It qualifies students for jobs with a fair degree of speed on all possible uses of the machine.

COMPTOMETER AND BURROUGHS MACHINE CALCULATION

COURSE NUMBER—1432
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—37 fifty minute periods
TEXT—Key-Driven Calculator Course by Goodfellow and Agnew
COURSE CONTENT—A two-semester course for the part-time student who attends school one day a week. The units include the four basic operations: addition, multiplication, division, subtraction. After the student has completed nine units of work a timed test is given on the processes studied. A grade of at least 80 is required in order to continue. Beginning with unit 10 the course includes additional work in multiplication, split addition, crossfoot addition, long division, timed test and review problems.

MARCHANT, MONROE AND FRIDEN MACHINE CALCULATION

COURSE NUMBERS—2433-4433
TYPE OF STUDENT—Adult, On-the-Job
FEE—50c per semester
LENGTH OF COURSE—45 fifty minute periods
TEXT—Key-Driven Calculator Course by Goodfellow and Agnew
COURSE CONTENT—Covers addition and the various methods of multiplying, subtracting and dividing, followed by their application to problems in business arithmetic. Upon the completion of the course a student should have a thorough training in the fundamental processes as they apply in business, and sufficient knowledge to operate the machine in any business office.

REMINGTON RAND AUTOMATIC PRINTING CALCULATOR

COURSE NUMBER—2434-4434
TYPE OF STUDENT—Adult, On-the-Job
FEE—50c per semester

LENGTH OF COURSE—20 fifty minute periods
COURSE CONTENT—Instruction is given on the new Automatic Printing Calculator. This machine prints as it divides automatically, as it multiplies electrically, as it adds and subtracts. All factors in each calculation are recorded with totals automatically delivered and printed. It has the speedy ten-key board and the combined features of a calculator and the printing adding machine tape.

KEY-PUNCH MACHINE

COURSE NUMBERS—1435-2435-4435
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—Long enough to develop speed; varies with the individual
TEXT—Supplementary Material
COURSE CONTENT—The student is given instruction and practice in the operation of the Electric Key-Punch Machines. Development of speed and accuracy on the ten-key keyboard is the ultimate aim of this course. Opportunity is offered, through field trips, for observation of key-punching and its relationship to sorting, tabulating and accounting as performed on IBM equipment.

DUPLICATING MACHINE—MIMEOGRAPH AND DITTO

COURSE NUMBER—2466
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—5 fifty minute periods
COURSE CONTENT—This course is designed to give students an adequate working knowledge of the mimeograph and ditto machines. The prerequisite is a minimum typing rate of forty-five words a minute. For the mimeograph, instructions include the cutting of stencils, the use of the mimeo scope, the use of the various styluses, screen plates, lettering guides, various methods of correcting errors, the running of copies, operation and care of the machine, and the filing of stencils for future use. The instruction for the ditto machine includes instruction in the preparation of the master copy, using ditto carbons, ribbons, pencils and inks, as well as the actual experience of running copies on both the gelatin and liquid process machines.

TRANSCRIBING MACHINES—DICTAPHONE AND EDIPHONE

COURSE NUMBER—2467
TYPE OF STUDENT—Adult
BUSINESS EDUCATION

FEE—None
LENGTH OF COURSE—5 fifty minute periods
COURSE CONTENT—Designed to train students to become experienced on both the Dictaphone and Ediphone machines. Each operator transcribes a prescribed set of permanent practice records on both machines. Instruction is also given on the dictating and shorthand machines.

SHORTHAND I-A, Full-Time
COURSE NUMBER—2410
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Gregg Simplified Functional Method by Leslie and Zoubek
COURSE CONTENT—For beginners in Gregg Shorthand. The theory of shorthand is completed in the first quarter. The second quarter of the course consists of an automatic review, dictation and transcription on the typewriter. The dictation speed is between 80 and 100 words per minute on a five-minute take. Students should be able to write the City, County, State and Federal Civil Service examinations after completing a semester’s work.

SHORTHAND I-B, Half-Time
COURSE NUMBER—2411
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Gregg Simplified Functional Method by Leslie and Zoubek; Gregg Simplified Dictation
COURSE CONTENT—This course is for beginners in Gregg Shorthand. The beginning principles of shorthand are thoroughly covered. The last four weeks of the semester are devoted to the introduction to beginning dictation and transcription at the typewriter.

REVIEW AND BEGINNING DICTATION
COURSE NUMBER—2412
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Functional Method Dictation by Louis A. Leslie
COURSE CONTENT—For students who have completed the shorthand theory, or a refresher course for those who have had some previous work in shorthand. The course consists of a thorough review of shorthand theory, supplementary reading, and dictation and transcription. The dictation range is between 80 and 100 words per minute. The English and shorthand teachers cooperate in checking errors and improving the transcripts.

INTERMEDIATE DICTATION
COURSE NUMBER—2413
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXTS—Speed Drills in Gregg Shorthand by Leslie and Zoubek, Refresher Course in Gregg Shorthand by John R. Gregg, Gregg Transcription Simplified by Leslie and Zoubek
COURSE CONTENT—For students who have fulfilled the requirements of the beginning dictation course. It consists of advanced vocabulary and phrase building, dictation and transcription. Dictation is given at rates ranging from 75 to 90 words per minute. Emphasis is placed on correct setup, spelling and typing. A carbon copy of each letter transcribed is required.

ADVANCED DICTATION
COURSE NUMBER—2414
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXTS—Speed Drills in Gregg Shorthand by Leslie and Zoubek, Refresher Course in Gregg Shorthand by John R. Gregg, Gregg Speed Building Simplified by Leslie and Zoubek
COURSE CONTENT—For advanced dictation students. The objective is the development of shorthand power through sustained dictation at high rates of speed. Emphasis is given to the writing of advanced phrases and to the building of a shorthand vocabulary of business terms. The dictation speed is between 90 and 120 words per minute on a five-minute basis.

TECHNICAL DICTATION
COURSE NUMBER—2415
TYPE OF STUDENT—Adult, Full-time, Half-time, Part-time
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
COURSE CONTENT—A continuation of the advanced dictation course and is open to advanced students who wish highly specialized vocabulary in the legal medical fields etc.

TRANSCRIPTION
COURSE NUMBER—2416
TYPE OF STUDENT—Adult
BUSINESS EDUCATION

LENGTH OF COURSE—90 fifty minute periods
COURSE CONTENT—Transcription begins with an automatic review or Refresher Course and accompanies each one of the dictation courses. It consists of transcribing at the typewriter letters or other materials which have been dictated in the dictation classes. Emphasis is given to correct placement of the letter on the page, use of carbon paper, correct erasure procedure, typing of different size envelopes, folding of letters, and production tests on minimum office standards.

GENERAL OFFICE TRAINING
COURSE NUMBER—2485
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—For students who are studying to be stenographers, bookkeepers, clerks, and other office workers. The study includes nineteen units of work: (1) types of office workers; (2) the business letter; (3) mailing; (4) telegrams, cablegrams and radiograms; (5) express service; (6) office economy; (7) the telephone; (8) enclosures; (9) freight service; (10) miscellaneous Information; (11) reference books; (12) office machines; (13) freight service; (14) method of travel; (15) business enterprise and ownership; (16) business ethics; (17) business ethics; (18) personality and personal analysis; (19) applying for the position. Pre-requisite: Typing.

TYPEWRITER FUNDAMENTALS I
COURSE NUMBERS—1420-2420-4421
TYPE OF STUDENT—Junior, Adult, On-the-Job
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—One-Year 20th Century Typewriting, Fourth Edition by Lessenberry
COURSE CONTENT—Course for beginners in typing. Course includes history and the importance of the typewriter, care of typewriter, parts of the machine, position of the typewriter and individual, mastery of keyboard, letters, numbers, symbols and characters on the keyboard. Letters (semi and modified block), carbons, erasures, simple tabulation, syllabication should also be included in this course.

TYPEWRITER FUNDAMENTALS II
COURSE NUMBERS—1422-2422-4422
TYPE OF STUDENT—Junior, Adult, On-the-Job
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Advanced 20th Century Typewriting, Fourth Edition by Lessenberry
COURSE CONTENT—Advanced 20th Century Typewriting, Fourth Edition by Lessenberry; Various Advanced Texts
COURSE CONTENT—Objective is to prepare for civil service or special types of office work. Individualized review for students who need a refresher course. Includes preparation of legal forms, letters of application, types of questions and details in public examinations, operation of duplicating machines, manuscript writings, composition, typing, outlines, financial statements, advanced tabulation, characters not on the machine. Improve technique and raise speed to 70-80 words per minute.

DISTRIBUTIVE EDUCATION
(Training for Sales People)

FUNDAMENTALS OF SELLING
COURSE NUMBER—1501, 3501
TYPE OF STUDENT—Junior, Apprentice
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Fundamentals of Selling by Walters and Wingate
Manual: Workbook for use with fundamentals
of selling
COURSE CONTENT—Functions of the seller, basic knowledge needed in selling, the seller, the sales transactions, special mediums for selling, selling policies, selling oneself.

RETAIL SALESMANSHIP*
COURSE NUMBER—2502, 3502, 4502
TYPE OF STUDENT—Adult, Apprentice
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXT—Successful Retail Salesmanship by Robinson
Manual: Student Study Guide in Retail Salesmanship
COURSE CONTENT—Salesmanship in the modern sense; retail selling fundamentals: study of the customer; selling techniques that help customers buy; meeting the customer; developing the sales presentation; making the sales talk convincing; helping the customer over buying obstacles; stimulating buying action; suggestion selling; building permanent business.

ADVANCED SALESMANSHIP**
COURSE NUMBER—2507, 3507, 4507
TYPE OF STUDENT—Adult, Apprentice
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXT—Successful Selling for the New Day by Simmons
COURSE CONTENT—No selling on selling; America’s next ten years: introduction to successful selling; what makes a good salesman better; how to find prospects; how to handle the price problem; how to build your sales talk; how to use advertising; how to dramatize your selling; how to close the sale; how to avoid competition complexes; how to sell quality products; how to make more sales.

MERCHANDISE INFORMATION**
COURSE NUMBER—2508, 3508, 4508
TYPE OF STUDENT—Adult, Apprentice
FEE—None
LENGTH OF COURSE—38 fifty minute periods
TEXTS—Know Your Merchandise by Wriggall, Allespie and Addison; Materials of Industry by Minnetonka, Reen and Holdeman
COURSE CONTENT—Determine guides to customer satisfaction: what merchandise is in stock; sources that contribute to the salesperson’s knowledge; how to get the most out of merchandise; what services are offered; to what use merchandise is put; what possible objections; what to know about the trends in style and fashion; what about color, line and design in merchandise; value of information and how to secure it; what are the selling points about merchandise; how to present them effectively.

STORE ORGANIZATION AND MANAGEMENT*
COURSE NUMBER—2504, 3504, 4504
TYPE OF STUDENT—Apprentice, Adult
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXT—Retailing by A. Briscoe
COURSE CONTENT—Scope of retailing; location, layout, equipment; store organization and function of management; market contacts; buying; receiving and marketing of merchandise; invoices, mark-up of merchandise; the merchandise plan; employment problems; legal aspects of merchandising.

ADVERTISING*
COURSE NUMBER—2505, 3505, 4505
TYPE OF STUDENT—Adult, Apprentice
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXT—Fundamentals of Advertising by Rowe and Fish
COURSE CONTENT—Advertising in relation to distribution of merchandise and services; physical structure of advertisements; layouts, printing, photo engraving; relative values of various media for advertising; newspapers, magazines, radio, dealers, displays, outdoor advertising, car cards.

MERCHANDISE DISPLAY**
COURSE NUMBER—2510, 3510, 4510
TYPE OF STUDENT—Adult, Apprentice
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXT—Fundamentals of Window Display by Charles Ellinca
Manual: Student Study Guide in Merchandise Display
COURSE CONTENT—Values of display; selling idea behind the display; physical makeup of display; display in the retail program; manufacturer’s advertising in display.
COLOR LINE AND DESIGN**
COURSE NUMBER—2511, 3511, 4511
TYPE OF STUDENT—Junior, Adult, Apprentice
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXTS—Practical Color Management by Bernice Chambers; Art Today by Faulkner
Manual; Study Guide in Color, Line and Design
COURSE CONTENT—(1) Color and effect it has on modern merchandising: fundamentals of color; color behavior, physical and psychological aspects of color mixture and matching of color. (2) Line in modern application. (3) Definitions and aims of design; economic aspects of trends in merchandising design.

RETAIL CREDIT FUNDAMENTALS*
COURSE NUMBER—2506, 3506, 4506
TYPE OF STUDENT—Apprentice, Adult
FEE—None
LENGTH OF COURSE—38 fifty minute periods
TEXT—Retail Credit Fundamentals by C. W. Phelps
Manual; Student Study Guide in Retail Fundamentals
COURSE CONTENT—Nature and importance of credit; developing new sources of credit customers; the double checking credit plan; methods of identifying charge customers; safeguards; reducing merchandise returns; how to handle complaints; how to stimulate preferred customers; how to revive inactive accounts; how to develop effective collection methods; how to rehabilitate delinquent customers.

CERTIFIED LIFE UNDERWriters
UNIT C***
COURSE NUMBERS—3514, 4514
TYPE OF STUDENT—Apprentice, Adult
FEE—None
LENGTH OF COURSE—19 fifty minute periods
COURSE CONTENT—Law, wills, trusts, estates and taxation.

PUBLIC LIABILITY INSURANCE***
COURSE NUMBERS—3516, 4516
TYPE OF STUDENT—Apprentice, Adult
FEE—None
COURSE CONTENT—Comprehensive personal, comprehensive general, O. L. & T., M. & C., products, contractual, protective, professional, and farmer's insurance.

* Course offered first semester
** Course offered second semester
*** Sessions held alternate weeks throughout school year 1951-1952; time of day to be arranged.
FAMILY DEVELOPMENT

SOCIAL LIVING

COURSE NUMBER: 1600
TYPE OF STUDENT: Junior
FEE: None

LENGTH OF COURSE—This course is planned for the beginning full-time or half-time student and includes the following units:
1. Personal Care and Improvement—personal, social and financial values of a well-groomed appearance are given emphasis.
2. Courtesy—social customs at home, conduct in public, manners in hotels and restaurants and proper introductions are points emphasized. Value to individual who puts courteous behavior into use.
3. Understanding Yourself and Others—some of the topics emphasized in this unit are: personal characteristics which affect people; importance of understanding one’s own behavior and behavior of others; need for security; meaning of friendship; use of leisure time, hobbies, their place in one’s development.

HOME LIVING

COURSE NUMBER: 1601
TYPE OF STUDENT: Junior
FEE: None

LENGTH OF COURSE—60 fifty minute periods

COURSE CONTENT—This course is for the beginning half-time and full-time students and consists of the following units:
1. The Child in the Home—this includes a study of the normal development of children, the health needs of the preschool child, children's clothing, play, games and development of social behavior.
2. Family Relationship—points emphasized are importance of family life in the home, characteristics of a satisfying home, the contributions which each individual can make to the home life.
3. Social Life in the Home—this includes group activities of family recreation, determining amount of money to be used for recreation; the home as a hospitable center for friends; making friends and entertaining friends.

HUMAN RELATIONS AND MARRIAGE

COURSE NUMBER: 1602
TYPE OF STUDENT: Junior
FEE: None

LENGTH OF COURSE—18 fifty minute periods

COURSE CONTENT—This is a semester course for the part-time student who attends school one day
CERTIFIED LIFE UNDERWRITERS
COURSE—C. L. U.
COURSE NUMBER—2514
TYPE OF STUDENT—Adult
FEE—
LENGTH OF COURSE—74 hours
Mon., 1:30-3:00
COURSE CONTENT—Content to be selected by the Madison Life Underwriters Association.

PERSONALITY AND CHARM
COURSE NUMBER—2500
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 double periods
COURSE CONTENT—Many phases of personality studied to learn how to develop naturalness of manner and relaxation. Importance of personality in career life and home life. Some of the highlights of the course are: developing a new or understanding philosophy of life; gaining self-assurance and poise; relation of dress and grooming to personality; leisure time activities; development of individuality. This is a lecture and discussion course.

Hospitality—How to entertain, actual preparation of meals. Buffet meals and teas.

JR. FOODS IV (Meal Planning and Preparation)
COURSE NUMBER—1623
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
the part-time student in the second year.
Meal Planning—The planning and preparation of meals. This includes meat cookery and vegetable cookery, as well as desserts.
Breads—Quick breads and yeast breads. Orange

HOSPITALITY AND TABLE DECORATION
COURSE NUMBER—2601
TYPE OF STUDENT—Adult
FEE—$1 per semester
LENGTH OF COURSE—18 double periods
COURSE CONTENT—This course is planned for anyone who is interested in learning more about the art of entertaining and being a successful, gracious hostess. It will include: table setting for all occasions; arrangement of table for tea and buffet meals; flower arrangement; selection of china, linen, silver and crystal.
HOSPITALITY AND TABLE DECORATION

COURSE NUMBER—1604
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—18 fifty minute periods
COURSE CONTENT—Hospitality through simple guest meals, invitations, conversations, selection of guests, responsibilities of hostess and of the guest. Some of the features of this course are the selection of silver, china, glassware, and linen as well as flower arrangements and table decoration are included.

SAFETY IN THE HOME

COURSE NUMBER—1605
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—This course will include safety measures in the home, use and care of electrical equipment, arrangement and use of kitchen equipment, hazards in the home, safety measures in building a home, use and care of equipment, demonstrations, use of films, and

BUDGETING

COURSE NUMBER—2602
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—8 double periods
COURSE CONTENT—Planned for those who would like some help on keeping a record of money spent and planning expenditures. Choosing an account system, what should the family understand about credit, consumer credit sources, savings and investments, life insurance. Each student may work out a budget to suit her needs.

CONSUMER PROBLEMS

COURSE NUMBER—2603
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 double periods
COURSE CONTENT—The consumer and buying will be stressed. Some other topics are: how to use the food dollar to best advantage, the clothing dollar and how to spend it, the rental dollar and purchases for the home, inflation, new items on the market, evaluation of advertising, responsibilities of the consumer.

Pressure-cooker canning, jelly making, jams and pickles.

Lunch Box—Preparation of various types of lunches for the employed, as well as the packing of the lunch.

Hospitality—How to entertain, actual preparation of meals. Buffet meals and teas.

JR. FOODS IV (Meal Planning and Preparation)

COURSE NUMBER—1623
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—A course in consumer problems for the part-time student. Emphasis will be placed on the use of the girl's own income; this will include wise spending and saving as well as the working out of an individual budget.

MODERN HOME LAUNDRY TECHNIQUES

COURSE NUMBER—1608
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—Nine double periods
COURSE CONTENT—This course is for the part-time student who comes to school one day a week. Demonstrations will be given showing how to use the automatic washer and ironer. Class will have opportunity to practice use of the equipment. Some of the points to be stressed
HOMEMAKING

are: equipment of the home laundry; laundry methods; ironing; putting your clothes away; stain removal; care of equipment; washing of sweaters; how to handle fine fabrics.

MODERN HOME LAUNDRY TECHNIQUES

COURSE NUMBER—1609
TYPE OF STUDENT—Junior—Full-time
FEE—None
LENGTH OF COURSE—27 double periods
COURSE CONTENT—Modern methods of doing the home laundry as compared with former methods will be given. In this class the students will be given an opportunity to bring garments from home for actual class work. Demonstrations on the use of the equipment will precede actual use by class. The actual steps to be followed in doing the home laundry will be given; this includes both the washing and the ironing. Care of electrical equipment, arrangement and use of kitchen equipment, hazards in the home, safety measures in building a home, use and care of equipment, demonstrations, use of films, and

JR. FOODS II (2nd Semester)

COURSE NUMBER—1621
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—This is for the full-time and half-time student who has completed Foods I or its equivalent. Food preservation, the family dinner, the guest dinner, casserole dishes, meat cookery, pastry, cake making, baking and salad making are included.

JR. FOODS III (Cooking for Two)

COURSE NUMBER—1622
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—This is for the full-time and half-time student who has completed Foods I or its equivalent. Food preservation, the family dinner, the guest dinner, casserole dishes, meat cookery, pastry, cake making, baking and salad making are included.

JR. FOODS IV (Meal Planning and Preparation)

COURSE NUMBER—1623
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—The planning and preparation of meals. This includes meat cookery and vegetable cookery, as well as desserts.

Breads—Quick breads and yeast breads. Orange bread, prune bread and banana bread are included. Regular enriched white flour, whole wheat flour, and soybean flour are used.

Hot Weather Dishes—Nutritive, appetizing and attractive dishes for hot weather go to make up this unit. Meats, salads and desserts are featured.

JR. NUTRITION I

COURSE NUMBER—1624
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—18 fifty minute periods
COURSE CONTENT—What is meant by the nu-
HOMEMAKING

Nutrition yardstick or the basic seven foods introduces this course. Eating for body needs and for efficiency on the job or at home is stressed. Films are used in the presentation of the lesson when needed. Actual planning of balanced meals for all class members is included. This is for the part time student.

PRACTICAL NUTRITION

COURSE NUMBER—2610
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 double periods
COURSE CONTENT—This course is a combination of both lecture and discussion, and laboratory work. Some of the high points in the discussion section will be: the seven basic foods; vitamins and minerals; body requirements and deficiencies; planning balanced family meals; food costs; low calorie meals; weight building and weight reduction. The laboratory work will feature the actual preparation of typical meals, such as: meals which include required amounts of minerals, vitamins and proteins; meals for children; meals for adults; for the aged; low calorie meals for those who wish to take off weight; meals for body building; special diets for individual cases.

FOODS I (Meals for Moderns)

COURSE NUMBER—2611
TYPE OF STUDENT—Adult
FEE—$4 per semester
LENGTH OF COURSE—36 three period sessions
COURSE CONTENT—Meals in the modern way suggests new methods in cookery; streamlining cooking processes; pressure-pan cookery; use of frozen foods; comparison of commercial mixes with home mixes; cooking to retain vitamins and minerals; planning of balanced meals. This is a practical course planned around the family meals—breakfast, lunch and dinner. It will include something in quick breads, vegetables, salads, casserole dishes, meats, sandwiches and simple desserts. An excellent course for brides, brideto-be or anyone desiring help in practical cookery.

FOODS II

UNIT I—BREADS AND ROLLS
(1st semester)

COURSE NUMBER—2612
TYPE OF STUDENT—Adult
LENGTH OF COURSE—10 double period sessions
Fee—$3.00 per semester
COURSE CONTENT—All types of quick breads and yeast breads are given in this unit. Banana bread, date bread, nut bread, and various fruit breads such as orange and prune are given. Many varieties of rolls are given. Comparison of prepared mixes and homemade mixes, and the use of the deep freeze are also included.

UNIT II—PASTRY
(3rd Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$1.50 per quarter
COURSE CONTENT—Principles underlying the making of pastry are given; also digestibility and place in the diet are included. Various kinds of shortening are used; also comparison between prepared mixes and home mixes. One-shell, two-crust, and deep-dish pies are made. Some of the more popular pies, as well as some of the unusual pies, are prepared. Each student has the opportunity of making some form of pastry each time the class meets.

UNIT III—UNUSUAL DESSERTS
(3rd Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$1.50 per quarter
COURSE CONTENT—The desserts featured in this unit are for special occasions; for instance, something for dessert bridge. Meringues, tortes, ice box desserts, and new things in pastry and frozen desserts are some of the desserts given.

FOODS III

UNIT I—SALADS FOR ALL OCCASIONS (1st Quarter)

COURSE NUMBER—2613
TYPE OF STUDENT—Adult
FEE—$1.50 per quarter
LENGTH OF COURSE—9 two period sessions
COURSE CONTENT—Dinner salads, luncheon salads, and main course salads are included in this unit. Various combinations of vegetables, fruits, chicken, fish and meat are some of the materials used. Molded salads and frozen salads are also featured. All types of salad dressings are made. The place of salads in the diet is emphasized.
UNIT II—CAKES AND COOKIES
(2nd Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$2 per quarter
COURSE CONTENT—Modern up-to-date methods of mixing cakes are stressed. Types of so-called butter cakes and sponge cakes are included, giving a variety of new, unusual cakes. Various types of icings and frostings are a part of the unit. Christmas cookies and fruitcakes are given prior to the holiday season.

UNIT III—CASSEROLE DISHES
(3rd Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$2 per quarter
COURSE CONTENT—A wide variety of casserole dishes are given in this course. Some of the types to be made are: various kinds of meat; vegetable; fish; chicken. Both fresh meat and leftover meats may be used. Their place in the family meal or for buffet meals is presented.

UNIT IV—HOT WEATHER MEALS
(4th Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$1.50 per quarter
COURSE CONTENT—Attractive foods for hot days. Easy to prepare main dishes, simple and healthful desserts, summer salads and summertime beverages are some of the things featured.

FOODS IV
UNIT I—MEAT, POULTRY AND FISH COOKERY (1st semester)
COURSE NUMBER—2614
TYPE OF STUDENT—Adult
FEE—$4 per semester
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—Identification, selection and preparation of both tender and less tender cuts of meat are included in this course. Some of the highlights of the course are: comparison of food value of inexpensive and higher cost meat cuts; importance of meat in the diet; garnishing, carving and serving; interesting ways to serve the less expensive cuts of meat; how to build menus around the meat dish in the meal. Early in the course a demonstration will be given on the pressure canning of chicken or other fowl. Prior to the holiday season there will be demonstrations on the stuffing, trussing and roasting of the holiday fowl. Both fresh water fish and seafood lessons are included. Nutritive value, new methods and unusual recipes for preparing and serving vegetables are included.

UNIT II—POCKETBOOK MEALS
(3rd Quarter)
FEE—$1.50 per quarter
LENGTH OF COURSE—9 three period sessions
COURSE CONTENT—Delicious meals to fit the family pocketbook are featured in this unit. Some of the highlights of this unit are: meals for economy; modern and liberal budget meals; how to reduce food costs; use ingenuity and imagination in planning meals and marketing.

UNIT III—PLATTER DINNERS
(4th Quarter)
FEE—$1.50 per quarter
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—All-in-one menu course dishes are featured. Oven dish meals are included. Planning to save time and money is stressed. Attractive, nutritious dishes are prepared.

FOODS V—HOSPITALITY COOKERY
(3rd and 4th Quarters)
COURSE NUMBER—2615
TYPE OF STUDENT—Adult
FEE—$4 per semester
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—How to prepare and serve attractive, unusual guest meals is a part of this course. The art of being a gracious hostess is stressed. Some of the types of entertaining given are: teas; buffet meals; wedding reception; after-theater snacks; bridge desserts; guest dinners. Table setting for these special occasions is included in the course.

FOODS VI—CAKE DECORATING FOR SPECIAL OCCASIONS (1st and 2nd semester)
COURSE NUMBER—2616
TYPE OF STUDENT—Adult
FEE—$4.00 per semester
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—This course is for homemakers who are interested in learning the fundamentals of cake decorating for special occasions. The highlights of the course are techniques of making flowers and other forms of decoration; application
of decoration to cakes and desserts: the making of petits-fours and mint juleps. Various types of cakes will be made and frozen in the deep freeze. In later lessons, these will be decorated.

CLOTHING AND TEXTILES

JUNIOR CLOTHING I
COURSE NUMBER—1630
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—This course is planned for the full-time or half-time student who has little or no training in clothing construction. Basic principles and fundamentals of sewing are stressed. Blouses, skirts and dresses are made.

JUNIOR CLOTHING II
COURSE NUMBER—1631
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—This course is for the full-time or half-time student who has completed Clothing I or its equivalent. Included in this course are the following: study of linen and wool fabrics; planning of individual wardrobes; care and repair of clothing; adjusting the pattern to fit the figure. Some of the more advanced construction processes; dressmaking as a creative art; importance of being well dressed.

JUNIOR CLOTHING III
COURSE NUMBER—1632
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—Unit I—My Ideal Wardrobe. Inventory of wardrobe is made and plans made for garments which are needed to complete the wardrobe. The garment selected to be made will depend upon the student’s previous experience. Demonstrations will be given which apply to garments under construction. Review of the sewing machine is included.
UNIT II—What to Wear on the Job. What shall I wear to work and the importance of being dressed properly for the job. Garment construction is continued.
UNIT III—Care and Repair of clothing. Clothing conservation, a need of all times, is given empha-

UNIT IV—Fabric Study and Clothing Purchase. The study of the new fabrics on the market and a review of cotton, rayon, linen and wool is given in this unit. All students may make a garment for summer.

CLOTHING I (Firsts in Sewing)
COURSE NUMBER—2620
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—First lessons in sewing include the construction of simple garments such as cotton dresses, blouses, skirts and simple gowns. Streamlined methods of clothing construction are taught. Emphasis is given to: care and use of the sewing machine; selection and use of patterns; basic principles in construction of simple garments. This is a foundation for more advanced courses.

CLOTHING II (Children’s Garments)
COURSE NUMBER—2621
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This course consists of a study of special problems in the selection and making of children’s garments. Selection of suitable patterns and materials for all types of garments will be discussed. Special attention will be given to the making of worked and bound buttonholes, plackets and zippers, making and applying collars, patch and slot pockets, decorative stitches such as fagoting and smocking will be applied on cotton or silk dresses.

CLOTHING III (Refresher Course)
COURSE NUMBER—2622
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—9 double periods
COURSE CONTENT—This course is planned for the person who has done some sewing at home, but who needs help in some of the construction processes such as: bound buttonholes; cording buttonholes; putting in zippers; how to use a pattern correctly; how to use the buttonholer; worked buttonholes; cutting of true bias; pockets. Garments will not be made; people taking this
CLOTHING IV (Casual Clothes)
COURSE NUMBER—2623
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This is an elementary dressmaking course and follows Clothing I or its equivalent. There will be opportunity to choose the types of garment to be made. It may be dresses for morning wear, garden dresses or active sport clothes. Problems found in this type of garment will be used as a basis for the lessons. Concise explanations with the detailed illustrative material will be used to simplify each step of construction.

CLOTHING V (That Ready-Made Effect)
COURSE NUMBER—2624
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—How to secure that much desired ready-made effect will be one of the purposes of this course. Selection of material and patterns will be stressed, with emphasis on color, texture and becoming design for each individual. Such fabrics as silk, wool, rayon, nylon and the new fabrics on the market will be studied. Garments to be made will be chosen from the following: rayon dresses, wool dresses, two-piece dresses, formals and dinner dresses. Short cuts in construction processes, identification of materials, interpretation and application of pattern principles, and coordinating of the wardrobe will be included. This course is for the advanced student.

CLOTHING VI (Tailoring)
COURSE NUMBER—2625
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This course is for the advanced student and is planned for those people who want to make tailored garments. Some of the specific tailoring principles which are given are: pattern altering to fit the figure, use of interfacing, tape and pad stitch for collars, revers, hand stitching of collars and front facing, fitting problems, use of pressing boards for shaping garment to the figure, bound and patch pockets, lining and interlining for coats and suits, types of pads most suitable, selection of fabrics for coats, suit linings, interlinings, and interfacings. Garments to be made are suits and coats from new material as well as make-over problems in suits and coats.

CLOTHING VII (Challenge of Make-over)
COURSE NUMBER—2626
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—It is essential that members of the class have had Clothing IV or its equivalent before enrolling in the remodeling class. Instruction will be given on the preparation of the garment for classwork, combination of new and old material and selection of garments for remodeling. Almost any garment may be remodeled.

CLOTHING VIII (Tailoring II)
COURSE NUMBER—2627
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This course is for students who have completed Tailoring I. The problems to be emphasized are: molding of garments with the iron, bound and welt pockets, cording and worked buttonholes, study of sleeve and other fitting problems. Suits and coats will be made.

CLOTHING IX (Workshop)
COURSE NUMBER—2628
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This is only for students who have completed Clothing VI satisfactorily. Because of the nature of the course it is essential that all class members have a thorough understanding of both the elementary and advanced courses. Any type of garment may be made in this class.

CLOTHING X (Accessories)
COURSE NUMBER—2629
TYPE OF STUDENT—Adult
FEE—None
HOMEMAKING

LENGTH OF COURSE—5 double periods
COURSE CONTENT—This course is planned for those people who are interested in making accessories for the wardrobe. Types of accessories which might be made are: blouses and blousettes: bags; dickeys; collar and cuffs; scarfs; men's ties; belts, sashes; gloves; slippers; earrings from buttons, aprons. Others may be suggested.

MILLINERY I
COURSE NUMBER—2630
TYPE OF STUDENT—Adult
FEE—$1.50 per semester
LENGTH OF COURSE—18 three or four period sessions
COURSE CONTENT—This is a course in millinery especially for the beginner. A basic knowledge of sewing is necessary. The course includes the fundamental principles and millinery techniques. Its objective is to develop an understanding of millinery methods, materials, frames, trimmings, the different basic hat styles, and the choosing of becoming hats in proportion to face and figure. The blocking of felts and straw over simple blocks, familiarizing the student with blocks and steaming, as well as re-blocking of good quality used felts is included. Various types of hats are made.

MILLINERY II
COURSE NUMBER—2631
TYPE OF STUDENT—Adult
FEE—$1.50 per semester
LENGTH OF COURSE—18 three or four period sessions
COURSE CONTENT—This is a course in millinery for the student who has had Millinery I, and is ready for more advanced problems. More difficult problems employing a wider variety of millinery processes are given. The student has an opportunity to gain more knowledge regarding feather, flower, and ribbon trimmings, and the uses of these trimmings, as well as the various uses and ways of applying veiling to each type of hat. Hats, as well as remodeled hats, are made.

MILLINERY III
COURSE NUMBER—2632
TYPE OF STUDENT—Adult
FEE—$1.50 per semester
LENGTH OF COURSE—18 three or four period sessions
COURSE CONTENT—This is an advanced course for students who have completed Millinery II. It will feature the creation of original designs. The relation of millinery to the costume as a whole, coordinating style, line, shape, and color harmony, is stressed. Color analysis, as related to millinery, including color schemes, colors for the individual and seasonal colors are given.

FUR REMODELING
COURSE NUMBER—2633
TYPE OF STUDENT—Adult
FEE—$1 per semester
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—Making over fur coats, restyling and modernizing the fur garments are two features of this course. Putting fur collars on coats and suits, and mending rips are also included. The actual work is done in class under the instruction of an expert in fur work.

SLIP COVERS
COURSE NUMBER 2634
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—A study of furniture, its line and construction is made in so far as it is related to advisability of slipcovering. Suggestions are given on planning a color scheme, choice of fabrics, estimating yardage and placing the pattern. Detailed instruction is given upon the techniques of cutting, fitting, basting, stitching, and the application of fasteners. Both slipcovers and slip upholstery covers are made in class under supervision.

UPHOLSTERY I
COURSE NUMBER—2635
FEE—$1.50 per semester
LENGTH OF COURSE—18 or 36 four period sessions
COURSE CONTENT—This is an introductory course in simple upholstery techniques. Emphasis will be placed upon the following: proper care and use of tools; how and where to place the webbing; how to fasten the springs; how to put the chair; how to put on the muslin cover; careful estimation of the upholstery fabric. Careful supervision will be given to selection and estimation of fabric and to the recovering of the furniture. It is recommended that beginners choose simple projects for the first work such as foot-stools, pull-up chairs, or bedroom chairs.

UPHOLSTERY II
COURSE NUMBER—2636
FEE—$1.50 per semester
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—A thorough review of upholstery will be given. Emphasis will be placed on stitch edges, padding, channeling, tufting, planning and cutting of covers, and trimmings. More complicated projects will be undertaken, such as overstuffed chairs, Cogswell chairs, day-beds, and davenports. Only simple processes of wood finishing will be undertaken. It is necessary to complete Upholstery I before enrolling in Upholstery II.

DRAPERIES AND LAMP SHADES
COURSE NUMBER—2637
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 three period sessions
COURSE CONTENTS—DRAPERIES—Curtains and draperies are studied from the standpoint of fabrics, styles, colors, patterns, relation to architectural features, kinds of windows and to the color and material of the exterior. Emphasis is placed upon the techniques of construction for both curtains and draperies suitable for each room in the house.
LAMPSHADES—Suggestions for planning a color scheme are given as well as choosing appropriate shades (formal or informal). Emphasis is placed upon construction techniques in the making of the panel shade, winding, lining, placing outside and inside panels, trimming and finishing. Directions are also given for measuring, cutting, pasting, and trimming the paper or parchment shade.

CROCHETING
COURSE NUMBER—2338
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—Both the beginner and the more advanced student may enter this course. Some of the points included in the course are: kinds and types of materials with which to work; how to read and understand directions and patterns; where do we use crocheting. Suggested articles for class work are: place mats; doilies; holders; afghans; berets and other types of hats; table cloths; bedspreads; lace edging and insertion.

KNITTING I
COURSE NUMBER—2639
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—This is for the beginners or those who have had very little experience in knitting, and this will include fundamentals of knitting. Typical of what might be knit are: tunic, scarfs, sweaters, mittens, afghans, and other similar articles. Equipment needed first lesson: two number-three knitting needles 10 or 12 inch bone, a small ball of any kind of yarn, notebook and pencil.

KNITTING II
COURSE NUMBER—2640
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—This is for the advanced student. It will include planning, styling, and charting of garments to measurements. Types of garments which may be made are: sweaters, skirts, blouses, suits, gloves and socks. Tools needed for first meeting are: two number-three knitting needles 10 or 12 inch bone, a small ball of yarn, notebook and pencil.

CLOTHING CLASSES AND FUR REMODELLING ARE OFFERED AT THE FOLLOWING CENTERS:

LAPHAM SCHOOL—Tuesday P.M. the second semester
LOWELL SCHOOL—Wednesday P.M.
FRANKLIN—Thursday P.M.
NEIGHBORHOOD HOUSE—Tuesday A.M.
Trade and Industry

Automotive
Building and Allied Trades
Metal Industries
Service Occupations
Printing
AUTO BODY

COURSE NUMBER—2701
TYPE OF STUDENT—Adult, Full-time
FEE—15c per day of four periods
LENGTH OF COURSE—740 fifty minute periods
COURSE NUMBER—1701
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

TEXT—Auto Body Fender and Repair Manual by C. E. Packer

COURSE CONTENT—Welding, to weld light gauge metal and other metals of the auto body including aluminum and white metal. Metal work, to perform minor and major body repairs with the analysis of estimating and rebuilding wrecked bodies. Painting, spray painting, matching and blending in colors and the performance of repaint jobs.

AUTO DRIVER TRAINING

COURSE NUMBER—2702
TYPE OF STUDENT—Full-time, Part-time, and Adult
FEE—$20
LENGTH OF COURSE—8 weeks
TEXT—Sportsmanlike Driving by the American Automobile Association
COURSE CONTENT—
I. Lecture and Discussion, Mondays from 1 p.m. to 2:30 p.m.
II. Behind-the-wheel training.

The student selects the hours between 1 and 4 p.m. which are best suited to his convenience for driving practice. Each student receives a minimum of six hours of actual driving practice. As soon as he masters the fundamentals of driving, he is taken into traffic where he develops good judgment in live situations.

After having completed the course, a driver's test is given by the Motor Vehicle Department of the State of Wisconsin. A satisfactory test entitles the student to his permanent driver's license.

AUTOMOTIVE ELECTRICIAN

COURSE NUMBER—3703
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours

TEXT—Automobile Ignition and Electrical Equipment by Kuns and Plumridge
Automotive Maintenance by Kuns and Plumridge
Automotive Electrical Equipment by Crouse
COURSE CONTENT—General electricity and storage battery, fundamentals of electricity and testing, checking and charging of battery; ignition system, check and repair; starter, check and overhaul; generator and regulators, check and repair; car wiring. Check and repair; periodic inspection.

AUTOMOTIVE MACHINIST

COURSE NUMBER—3704
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Automotive Engines by Kuns and Plumridge
Automotive Electrical Equipment by Crouse
COURSE CONTENT—Brakes, clutch, transmissions, engines, electrical system, accessories, welding oxy-acetylene and arc—machine shop, and how to operate the lathe, drill press, external grinder, and all hand tools.

AUTO MECHANICS

COURSE NUMBER—2705
TYPE OF STUDENT—Adult, Full-time
TYPE OF TRAINING—Pre-apprentice
FEE—15c per day of 4 periods
LENGTH OF COURSE—1,480 fifty minute periods
TEXT—Automotive Fundamentals by Kuns and Plumridge
Automotive Engines by Kuns and Plumridge
Automotive Ignition and Electrical Equipment by Kuns and Plumridge
Automotive Maintenance by Kuns and Plumridge
Principles of wheel Alignment by Bear
COURSE NUMBER—3705
TYPE OF STUDENT—Apprentice
FEE—15c per day of 4 periods
LENGTH OF COURSE—400 hours
TEXT—Automobile Fundamentals by Kuns and Plumridge
Automotive Engines by Kuns and Plumridge
Automotive Ignition and Electrical Equipment by Kuns and Plumridge
Automotive Maintenance by Kuns and Plumridge
Principles of wheel Alignment by Bear
Bear Wheel Alignment, Axle and Frame Straightening Service
COURSE CONTENT—Washing, polishing, lubrication, accessories, brakes, electrical systems, engines, engine tune-up, clutches, transmissions.
drive shafts, fuel systems, rear axles, care of tools and equipment, engine rebuilding, front wheel alignment, frame straightening, wheel balancing.

AUTOMOTIVE SCIENCE
COURSE NUMBER—2700
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—One semester—fifty minute period daily
TEXT—Modern Physics by Charles E. Duel
COURSE CONTENT—Matter and mechanics, force and motion, friction, work, power and energy, machines, heat, magnetism, and electricity.

AUTOMOTIVE WHEEL ALIGNER
COURSE NUMBER—3707
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Principles of Wheel Alignment by Bear
COURSE CONTENT—Wheel balancing, checking Bear Wheel Alignment, Axle and Frame Straightening Service
Check and Correct Instruction Manual, Mambee Equipment Company wheel alignment with Bear and Mambee equipment, correcting or adjusting wheel alignment, checking frames, straightening frames and axles—steering, checking, adjusting, and overhauling—welding, oxy-acetylene and arc.

BUILDING AND ALLIED TRADES
BLUEPRINT READING
COURSE NUMBER—2710
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Building Trades Blueprint Reading by Dalzell (2 volumes)
COURSE CONTENT—This course covers basic blueprint reading, essential to anyone seeking success in the building trades. This course is built around several practical sets of blue prints which take the student from the elementary on through specifications of masonry buildings.

BRICKLAYING
COURSE NUMBER—3712
TYPE OF STUDENT—Apprentice

WOODWORKING (Cabinet Making)
COURSE NUMBER—1713
TYPE OF STUDENT—Junior, Part-time and Adult
FEE—None
LENGTH OF COURSE—1,480 fifty minute periods
TEXT—Principles of Woodwork by Herman Bjorth
General Woodworking by Johnson and Kirkland
COURSE CONTENT—Knowing the woods we use, selecting the woods suitable for the job, stock sizes of lumber, drying and storing of lumber, matching wood for its beauty of grain, working the wood to achieve the desired results. The care, use, and sharpening of tools, project making, machine woodworking, milling of stock on power machines, joints and joint making, glue and gluing, preparing surfaces and applying finishes. Wood turning, laying out the workshop as to size, purpose and equipment needed. Safety practices of hand and power tools.

CARPENTRY
COURSE NUMBER—3714
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXT—Fundamentals of Carpentry, Volumes I and II by Durbohn
Roof Framing by Wilson and Werner
Building Trades Blueprint Reading by Dalzell
Cyclopedia of Building Terms of American Lumbermen
COURSE CONTENT—Wood and its properties; carpentry tools; fasteners; layout for basement; basement form construction; construction, types of framing; floor construction; walls and partitions;
DRAFTING, ARCHITECTURAL

COURSE NUMBER—2715
TYPE OF STUDENT—Adult, Full-time
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods

COURSE NUMBER—3715
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—460 hours
FEE—$5 per semester

TEXT—Problems in Architectural Drawing and References by Franklin G. Elwood

COURSE CONTENT—Vocabulary; construction details, pictorial drawing, isometric, oblique and perspective drawing; layout of rafters, drafting and layout techniques; house layout and arrangement, select and plan a project; house plans and details; develops a drafting project; estimating, study of construction; specifications, translate plans into objective reality; perspective of house, draw a convincing picture of the house.

MECHANICAL DRAFTING

COURSE NUMBER—1716
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—480 fifty minute periods

COURSE NUMBER—2716
TYPE OF STUDENT—Adult, Full-time
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods

COURSE NUMBER—3716
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—1480 fifty minute periods

TEXT—Strength of Materials by Breneman

COURSE CONTENT—Simple stresses; shear, application of stresses to shear problems; riveted joints; riveted joints and their design, stresses in thin-walled cylinders, hydraulic pressure and retaining vessels; welded joints; torsion, torque and strength of shafts; beams, shear and moment diagrams, to study the design of beams; stresses in beams; beam deflections, to study the theory of bending; combined axial and bending stresses, advanced theory and design of loaded members; columns, to study the theory of columns.

APPLIED SCIENCE

FOR APPRENTICES

COURSE NUMBER—3750
TYPE OF STUDENT—Apprentice
FEE—None

COURSE CONTENT—A course consisting of lecture and demonstration of basic principles of Physics and Chemistry as applied to everyday trade practice.

ELECTRICITY

COURSE NUMBER—2718
TYPE OF STUDENT—Adult, Full-time
FEE—34c per day of four periods
LENGTH OF COURSE—1480 fifty minute periods

COURSE NUMBER—3718
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—400 hours

COURSE CONTENT—Basic electrical theory; Ohms Law; circuits and circuit calculation; power and distribution; instruments and measurements.
construction and use of meters; D. C. motors and generators, operational characteristics of motors; alternating current, Part 1, Part 2; A. C. power; A. C. 3-phase, relation of single and polyphase; A. C. motors and generators, characteristics, repair and maintenance, electronics, understanding of industrial electronics.

The following texts are used in Electricity 2718 and Electricity 3718:
TEXTS—Industrial Electricity by Nadon and Glavine
Essentials of Electricity by Timble
Essentials of Alternating Currents by Timble
Essentials of Electrical Mathematics by Timble
How to Read Electrical Blueprints by Heine and Dunlop
State Electric Code, State Bureau of Purchases
American Electricians Handbook by Craft
State Apprenticeship program—Electricity, Racine Vocational School
Electrical Motor Repair by R. Rosenberg
National Electric Code Handbook by Abbott

PAINTING AND DECORATING
COURSE NUMBER—3718
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXT—Painting and Decorating Craftsmen’s Manual and Textbook

COURSE CONTENT—Color mixing, color harmony; exterior painting; materials; new materials and processes; drawing and design; preparation of wall services; varnishing and enamaling; glazing; graining of woods; graining of marble; plastic paints; paper hanging.

PLUMBING
COURSE NUMBER—3720
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—How to Design and Install Plumbing by Matthias
Math for the Plumbing Trade by Delmar
Joint Wiping and Lead Work by Hutton
How to Read Blueprints by Owen and Slaght
Wisconsin State Plumbing Code, State Board of Health
Systems, State Board of Health
Cross Connections in Plumbing and Water Supply
Chapter 145, Wisconsin Statutes, State Plumbing Law, State Board of Health

COURSE CONTENT—Plumbing theory, the principles of sewage treatment; types and use of materials: proper methods of drainage, ventilation, water supply and distribution; pumps and lifts; plumbing fixtures and appliances; plumbing safety; codes and laws; interpretation; and use of the Wisconsin State Plumbing Law, the Wisconsin State Plumbing Code, and local plumbing ordinances; plumbing mathematics, use and application of formulas; plumbing drawing, ventilation design and layout, to make isometric layouts; blueprint reading; lead work, layout and design, joint wiping, and lead burning; related welding, care and use of the oxy-acetylene torch in pipe cutting and welding. Also related chemistry and physics.

SHEET METAL
COURSE NUMBER—1721
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

COURSE NUMBER—2721
TYPE OF STUDENT—Adult, Full-time
FEE—15c per day of four periods
LENGTH OF COURSE—740 fifty minute periods

COURSE NUMBER—3721
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—600 hours
TEXTS—Sheet Metal Work Study Guide, Wisconsin Schools of Vocational Education
Sheet Metal Pattern Drafting and Shop Problems by Dougherty
Triangulation Short-cuts Layout by Kaberlein
Air Conditioning Metal Layout by Kaberlein
Duct Construction by Kolbe

COURSE CONTENT—Basic blueprint reading; shop tools and machines; parallel line pattern development, radial line pattern development, triangulation development, to develop skill in layout work, heat loss calculations, to develop understanding of heating requirements, advanced shop practice, to supplement shop work on the job. Welding (1) oxy acetylene, (2) electric arc, (3) cutting; to develop skills necessary to trade in welding, mathematics, bookkeeping, to help the worker understand the problems of management.

STEAMFITTING
COURSE NUMBER—3722
TYPE OF STUDENT—Apprentice
FEE—20c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Instructional Manual for Steamfitter Apprentice

COURSE CONTENT—Science related to the steam-
TRADE AND INDUSTRY

litter trade, the underlying scientific principles of pressure, weight, density and type of heat; related drawing, blueprint reading, fundamentals of isometric drawing, and heating plant layout; heating, design and installation procedures; heat transmission, calculating heat losses; review of mathematics; process piping, pipe standards, accessories, and pipe fittings; pipe welding, the use of acetylene and arc welding equipment; controls, application and regulation of all automatic controls used in heating and ventilating; refrigeration fundamentals of refrigeration and the handling of refrigerants; air conditioning, the theory of air conditioning.

METAL INDUSTRIES

BLUE PRINT READING (MACHINE TRADES)

COURSE NO.—2730
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Blue Print Reading by Nicholson & Jones to operate the lathe, drill press, external

COURSE CONTENT—This course covers the fundamentals of blueprint reading which are essential to success in the machine trades. The course is made up of a series of blueprint reading lessons increasing in difficulty from the elementary to the advanced with each lesson introducing a machine tool operation or precision instrument function.

FOUNDRY PRACTICE

COURSE NUMBER—3731
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—Elementary Foundry Technology by Harty Metal Castings by Campbell
Advanced Blueprint Reading, Delmar Publishers
Mechanical Drawing by French and Svensen
Mathematics by Slade and Margolis
Handbook of Cupola Operation, American Foundrymen’s Association
Recommended Practices for the Sand Coating of Non-Ferrous Alloys, American Foundrymen’s Association

COURSE CONTENT—Introduction, to give apprentices an interview of the foundry and patternmaking industry; molding practices, core prac-

TRADE AND INDUSTRY

tics; elementary metallurgy; foundry sands; related patternmaking theory; elements of arithmetic calculation of areas and volumes; weights of castings; calculation of metal mixtures; slide-rule practice; principles of projection; sketching practices; use of instruments and equipment; blueprint reading.

WELDING—ELECTRIC ARC

WELDING—ELECTRIC ARC
COURSE NUMBER—1738
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

WELDING—ELECTRIC ARC
COURSE NUMBER—2738
TYPE OF STUDENT—Adult, Full-time
LENGTH OF COURSE—400 hours
TEXTS—Theory and practice for Arc Welding by Sack; Welding Study Guide, Wisconsin Vocational Schools

COURSE CONTENT—Industrial application of arc welding, arc welding machines; and accessories, classification of welding electrodes, joint and weld characteristics, basic training in arc welding of mild steel in the flat, horizontal, vertical and overhead positions. Army and navy qualification tests, pipe welding. Pressure vessel welding. Helical welding of stainless steels and alloys.

WELDING—OXY-ACETYLENE

WELDING—OXY-ACETYLENE
COURSE NUMBER—1739
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

WELDING—OXY-ACETYLENE
COURSE NUMBER—2739
TYPE OF STUDENT—Adult, Full-time
FEE—94c per day of four periods
LENGTH OF COURSE—740 fifty minute periods

COURSE CONTENT—Basic training in welding mild steel in flat, horizontal, vertical, and overhead positions, care of equipment, pipe welding, bronze welding, steel and cast iron welding. Oxy-acetylene cutting of metals, white metal welding, aluminum welding, and lead burning.
HYDRAULICS
COURSE NUMBER—3733
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—9 fifty minute periods
TEXT—Hydraulics as Applied to Machines—Henry Ford Trades School and references.
COURSE CONTENT—The basic laws of fluids, pressure and buoyancy, piping, valves, and pumps. The major part of the work relates to pumps and hydraulic circuits.

METALLURGY*
COURSE NUMBER—3734
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—32 fifty minute periods
TEXT—Elementary Metallurgy by Frier
COURSE CONTENT—Iron smelting; iron refining; cast and wrought iron, melting and metal forming; iron carbon diagram; physical structure; hardening of steel; grain structure; steel alloys.

APPRENTICE MATHEMATICS*
COURSE NUMBER—3735
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—54 fifty minute periods
TEXT—Machine Shop Mathematics by Aaron Axelrod
COURSE CONTENT—Weights and measures; practical measurements and geometry, formulas and methods used in area and volume problems; geometric construction; graphs; shop trigonometry, how trig functions can be used to solve length and angle problems; belting, mathematics and physics of belting; speeds of pulleys and gears, speed reduction formulas; speeds and feeds, application and relation of mathematics and machine shop practice; lathe work, taper turning and thread screw problems; gears, gear cutting and gear layout; milling machines, applications and indexing.

APPRENTICE PHYSICS*
COURSE NUMBER—3736
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—50 fifty minute periods
TEXT—Lesson Sheets
COURSE CONTENT—Composition and resolution of forces, and how forces can be analyzed; simple beams, the loading of beams and machine parts
TRADE AND INDUSTRY

COURSE CONTENT—This course covers nomenclature of the engine lathe, milling machine, shaper, grinders and drill press, and the basic operating principles of these machines. Also, layout procedures, the use of precision instruments and gauges, machine shop trade standards and data including care and use of hand tools.

Any materials other than those used by the student for class exercises must be paid for by the student.

SERVICE OCCUPATIONS

ADVANCED COOKING

COURSE NUMBER—3761
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours

COURSE NUMBER—2761
TYPE OF STUDENT—Adult, Full-time
FEE—$5 a week (covers uniforms, tools, text books, and one meal a day)
LENGTH OF COURSE—2 nine week quarters

TEXT—Escoffier Cook Book; Book of Sauces

COURSE DESCRIPTION—Preparation of quality food on a quantity basis to prepare students for positions as first and second cooks. Students are given gradual increase in responsibility in the preparation and service of finer foods. Problems of culinary management are presented and discussed in class sessions. To prepare students to meet requirements of a quality position in the culinary trade.

BASIC RESTAURANT TRADES

COURSE NUMBER—3760
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours

COURSE NUMBER—2760
TYPE OF STUDENT—Adults
FEE—$5 a week, covering uniform, text books, and one meal a day
LENGTH OF COURSE—4 nine week quarters

TEXT—Escoffier Cook book

COURSE DESCRIPTION—Practical instruction in food procurement, preparation and service. Selective menus or daily bills of fare are purchased, prepared, served and discussed by the students under the supervision of the food director and his assistants. This work is supplemented by demonstrations and lectures on allied subjects by specialists from various fields of sanitation, personal hygiene, nutrition, restaurant accounting, and food control.

BARBERING

COURSE NUMBER—3740
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—432 hours

TEXT—14 Units, 14 Assignment Units in Barber Science

COURSE CONTENT—Introduction to apprenticeship, anatomy and physiology, diseases, shop problems, facials and packs, barber law, therapeutic lights, hair, art of shaving, selling standard service, pathology, bacteriology.

COSMETOLOGY

COURSE NUMBER—3741
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—288 hours

TEXT—Home Study Course, Wisconsin Schools of Vocational Education

COURSE CONTENT—Wisconsin laws of cosmetology; sterilization and sanitation; anatomy—familiarize student with location, function of bones, nerves, muscles and blood supply of head, face, hands and neck; hair and scalp diseases; structure and care of hair; recognize scalp diseases and their treatment; electricity and common knowledge of electrical wiring, operation of electrical devices, and application of electrical current; shampooing; hair dyeing; facials; skin and its diseases, structure of skin and disease treatment; hair dressing, hands and nails; permanent waving, theory and technique of waving hair permanently with electricity and chemicals.

RADIO

COURSE NUMBER—2742
TYPE OF STUDENT—Adult, Full-time
FEE—34 cents per day of four periods
LENGTH OF COURSE—1,480 fifty minute periods

COURSE NUMBER—3742
TYPE OF STUDENT—Apprentice
FEE—34 cents per day of four periods
LENGTH OF COURSE—400 hours

TEXTS—Applied Drafting
Elements of Radio by Marcus and Horton
Elements of Radio Servicing
Essentials of Electricity by Timble
Inside of the Vacuum
Master Guide, United Catalog Publishers
Radio Fundamentals
Servicing, Signal Tracking Rider

COURSE CONTENT—Basic theory; radio funda-
mentals; vacuum tubes; amplifiers; power supplies; signal tracing; signal amplifications; detection; couplings; oscillators; mixer circuits; control circuits; public address systems; localizing defects; mathematics; laws and formulas; mechanical practice, use of hand tools; circuits, automatic circuits code, state and federal laws; wiring and how to install; mechanical practice, bearings and fittings.

REFRIGERATION

COURSE NUMBER—2743
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—582 fifty minute periods
COURSE CONTENT—Introduction to refrigeration, fundamentals of refrigeration, refrigeration cycle, operating cycle of a refrigeration unit, typical compression cycle; properties of refrigerants; refrigeration accessories, motor controls, refrigerant controls, heat transfer, computing heat gain and losses, absorption type refrigeration.

AIR CONDITIONING

COURSE NUMBER—2744
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—592 fifty minute periods
TEXT—Air Conditioning and Fundamentals of Refrigeration, S.P. Brown
COURSE CONTENT—Physical and chemical properties of air, psychrometric charts, heat gains and losses of buildings, properties of steam, computing cooling and heating coils, duct work, fans, accessories, motor controls.

PRINTING

PRINTING

COURSE NUMBER—1745
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—412 fifty minute periods
COURSE NUMBER 2745
TYPE OF STUDENT—Adult, Full-time
FEE—None
LENGTH OF COURSE—2,072 fifty minute periods

COURSE NUMBER—3745
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—T. U. Lessons in Printing, General Printing by Cleeton and Pitkin, Applied Course for Student Printers, Elementary Platen Presswork
COURSE CONTENT—The student in this course will begin with hand composition (elementary and advanced); take presswork (Kelly, Kluge, and Open Jobber); and linotype composition. A student may concentrate on one of the three divisions, or take an equal amount of work in each section. Additional work in the related fields of Graphic Arts will include printing inks and papers, binding work, and the allied trades. Such information concerning the industry will be given as it comes up. Printers’ English and Printers’ Math are additional courses given to printing students.
AUTOMOTIVE

AUTO BODY
COURSE NUMBER—2701
TYPE OF STUDENT—Adult, Full-time
FEE—15c per day of four periods
LENGTH OF COURSE—740 fifty minute periods
COURSE NUMBER—1701
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—140 fifty minute periods
COURSE NUMBER—3701
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
COURSE CONTENT—Welding, to weld light gauge metal and other metals of the auto body including aluminum and white metal. Metal work, to perform minor and major body repairs with the analysis of estimating and rebuilding wrecked bodies. Painting, spray painting, matching and blending in colors and the performance of repaint jobs.

AUTO DRIVER TRAINING
COURSE NUMBER—2702
TYPE OF STUDENT—Full-time, Part-time, and Adult
FEE—$20
LENGTH OF COURSE—9 weeks
TEXT—Sportsmanship Driving by the American Automobile Association
COURSE CONTENT—
I. Lecture and Discussion, Mondays from 3 p.m. to 2:30 p.m.
II. Behind-the-wheel-training.
The student selects the hours between 1 and 4 p.m. which are best suited to his convenience for driving practice. Each student receives a minimum of six hours of actual driving practice. As soon as he masters the fundamentals of driving, he is taken into traffic where he develops good judgment in live situations. After having completed the course, a driver’s test is given by the Motor Vehicle Department of the State of Wisconsin. A satisfactory test entitles the student to his permanent driver’s license.

AUTOMOTIVE ELECTRICIAN
COURSE NUMBER—3703
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Automobile Ignition and Electrical Equipment by Kuns and Plumridge
Automobile Maintenance by Kuns and Plumridge
Automotive Electrical Equipment by Crouse
COURSE CONTENT—General electricity and storage battery, fundamentals of electricity and testing, checking and charging of battery; ignition system, check and repair: starter, check and overhaul: generator and regulators, check and repair: car wiring. Check and repair: periodic inspection.

AUTOMOTIVE MACHINIST
COURSE NUMBER—3704
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Automotive Engines, by Kuns and Plumridge
Automotive Mechanics by Crouse
COURSE CONTENT—Brakes, clutch, transmissions, engines, electrical system, accessories, welding oxy-acetylene and arc—machine shop, and how to operate the lathe, drill press, external grinder, and all hand tools.

AUTO MECHANICS
COURSE NUMBER—2705
TYPE OF STUDENT—Adult, Full-time
TYPE OF TRAINING—Pre-apprentice
FEE—15c per day of 4 periods
LENGTH OF COURSE—1,480 fifty minute periods
TEXT—Automotive Mechanics by Crouse
Bear Wheel Alignment, Axle and Frame Straightening Service
COURSE NUMBER—3705
TYPE OF STUDENT—Apprentice
FEE—15c per day of 4 periods
LENGTH OF COURSE—400 hours
TEXT—Automobile Fundamentals by Kuns and Plumridge
Automobile Engines by Kuns and Plumridge
Automobile Ignition and Electrical Equipment by Kuns and Plumridge
Automobile Maintenance by Kuns and Plumridge
COURSE CONTENT—Washing, polishing, lubrication, accessories, brakes, electrical systems, engines, engine tune-up, clutches, transmissions.
drive shafts, fuel systems, rear axles, care of tools and equipment, engine rebuilding, front wheel alignment, frame straightening, wheel balancing.

AUTOMOTIVE SCIENCE

COURSE NUMBER—2706
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—One semester—fifty minute periods daily
TEXT—Modern Physics by Charles E. Duel
COURSE CONTENT—Matter and mechanics, force and motion, friction, work, power and energy, machines, heat, magnetism, and electricity.

AUTOMOTIVE WHEEL ALIGNER

COURSE NUMBER—3707
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Principles of Wheel Alignment by Bear
COURSE CONTENT—Wheel balancing, checking Bear Wheel Alignment, Axle and Frame Straightening Service Check and Correct Instruction Manual, Mambee Equipment Company wheel alignment with Bear and Mambee equipment, correcting or adjusting wheel alignment, checking frames, straightening frames and axles—steering, checking, adjusting, and overhauling—welding, oxy-acetylene and arc.

BUILDING AND ALLIED TRADES

BLUEPRINT READING

COURSE NUMBER—2710
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Building Trades Blueprint Reading by Daisell (2 volumes)
COURSE CONTENT—This course covers basic blueprint reading, essential to anyone seeking success in the building trades. This course is built around several practical sets of blueprints which take the student from the elementary to through specifications of masonry buildings.

BRICKLAYING

COURSE NUMBER—3712
TYPE OF STUDENT—Apprentice
rough stairs; gable roof framing; equal pitch hip roof; intersecting roof; equal pitch intersecting roof; shingled roof; finish carpentry; interior trim; hardware; main stairs; power machines; safety construction; building codes; blueprint reading (house and masonry construction); blueprint reading (reinforced concrete plans); transit operations; general reference reading.

DRAFTING, ARCHITECTURAL

COURSE NUMBER—2715
TYPE OF STUDENT—Adult, Full-time
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods
COURSE NUMBER—3715
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—400 hours
FEE—None
TEXT—Problems in Architectural Drawing and References by Franklin G. Elwood
COURSE CONTENT—Vocabulary; construction details; pictorial drawing; isometric, oblique and perspective drawing; layout of rafters, drafting and layout techniques; house plans and details; develop a drafting project; estimating; study of construction; specifications; translate plans into objective reality; perspective of house, draw a convincing picture of the house.

MECHANICAL DRAFTING

COURSE NUMBER—1716
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—480 fifty minute periods
COURSE NUMBER—2716
TYPE OF STUDENT—Adult, Full-time
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods
COURSE NUMBER—3716
TYPE OF STUDENT—Apprentice
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods
COURSE CONTENT—Geometric problems, handle drawing equipment and to study geometric relations: elementary working drawings, elements of orthographic projection, dimensioning, skill in completion problems; free-hand sketching; auxiliary views, true-length lines, and angles and planes; cross sectioning and symbols; dimensioned advanced projection problems, layout and development; basic instructional and review material; letters and numbers; problems in projection, ad-drawing.

STRENGTH OF MATERIALS

COURSE NUMBER—2717
TYPE OF STUDENT—Adult, Full-time
FEE—None
LENGTH OF COURSE—96 fifty minute periods
TEXT—Strength of Materials by Breseman
COURSE CONTENT—Simple stresses; shear, application of stresses to shear problems; riveted joints; riveted joints and their design; stresses in thin-walled cylinders, hydraulic pressure and rotating vessels; welded joints; torsion, torque and strength of shafts; beams, shear and moment diagrams, to study the design of beams; stresses in beams; beam deflections, to study the theory of bending; combined axial and bending stresses, advanced theory and design of loaded members; columns, to study the theory of columns.

APPLIED SCIENCE FOR APPRENTICES

COURSE NUMBER—3750
TYPE OF STUDENT—Apprentice
FEE—None
COURSE CONTENT—A course consisting of lecture and demonstration of basic principles of Physics and Chemistry as applied to everyday trade practice.

ELECTRICITY

COURSE NUMBER—2718
TYPE OF STUDENT—Adult, Full-time
FEE—34c per day of four periods
LENGTH OF COURSE—1480 fifty minute periods
COURSE CONTENT—Elements of electricity; elementary circuits; mathematics, electrical formulas; kinds of wiring, types to use and where; motors, kinds, usage and repair; generators, principles, practices, care; layout work, blueprints and estimating; code, state and federal building laws.

ELECTRICITY

COURSE NUMBER—3718
TYPE OF STUDENT—Apprentice
FEE—34c per day of four periods
LENGTH OF COURSE—400 hours
COURSE CONTENT—Basic electrical theory; Ohms Law; circuits and circuit calculation; power and distribution; instruments and measurements.
Trade and Industry

constitutions and use of meters; D. C. motors and

alternating current, Part 1, Part 2; A. C. power;

A. C. 3-phase, relation of single and polyphase;

A. C. motors and generators, characteristics, re-

pair and maintenance; electronics, understanding

of industrial electronics.

The following texts are used in Electricity 2718

and Electricity 3718:

TEXTS—Industrial Electricity by Noden and Gle-

min.

Essentials of Electricity by Timbie

Essentials of Alternating Currents by Timbie

Essentials of Electrical Mathematics by Timbie

How to Read Electrical Blueprints by Haine and

Dunlap

State Electric Code, State Bureau of Purchases

American Electricians Handbook by Crott

State Apprenticeship program—Electricity, Rac-

ise Vocational School

Electrical Motor Repair by R. Rosenberg

National Electric Code Handbook by Abbott

Painting and Decorating

COURSE NUMBER—3719

TYPE OF STUDENT—Apprentice

FEE—None

LENGTH OF COURSE—400 hours

TEXT—Painting and Decorating Craftsman’s Manu-

dal and Textbook

COURSE CONTENT—Color mixing, color harmony;

exterior painting; materials; new materials and

processes; cleaning and design; preparation of

wall services; painting and enameling, glass-

ing; graining of woods, graining of marble;

plastic paints; paper hanging.

Plumbing

COURSE NUMBER—3720

TYPE OF STUDENT—Apprentice

FEE—None

LENGTH OF COURSE—400 hours

TEXTS—How to Design and Install Plumbing by

Matthias

Math for the Plumbing Trade by Delmar

Joint Wiping and Lead Work by Hutton

How to Read Blueprints by Owen and Slingluff

Wisconsin State Plumbing Code, State Board of

Health

Systems, State Board of Health

Cross Connections in Plumbing and Water Supply

Chapter 145, Wisconsin Statutes, State Plumbing

Law, State Board of Health

COURSE CONTENT—Plumbing theory, the prin-

ciples of sewage treatment; types and use of

materials; proper methods of drainage, ventila-

tion, water supply and distribution; pumps and

lifts; plumbing fixtures and appliances; plumbing

safety; codes and laws, to interpret and use the

Wisconsin State Plumbing Code, the Wisconsin

State Plumbing Code, and local plumbing ordi-

nances; plumbing mathematics, use and apply

formulas, plumbing drafting, ventilation design

and layout, to make isometric layouts; blueprint

reading; lead work, layout and design, joint

wiping, and lead burning; related welding, care

and use of the oxy-acetylene torch in pipe cutting

and welding. Also related chemistry and physics.

Sheet Metal

COURSE NUMBER—1721

TYPE OF STUDENT—Junior, Part-time

FEE—None

LENGTH OF COURSE—140 fifty minute periods

COURSE NUMBER—2721

TYPE OF STUDENT—Adult, Full-time

FEE—15c per day of four periods

LENGTH OF COURSE—740 fifty minute periods

COURSE NUMBER—3721

TYPE OF STUDENT—Apprentice

FEE—15c per day of four periods

LENGTH OF COURSE—600 hours

TEXTS—Sheet Metal Work, Study Guide, Wiscon-

sin Schools of Vocational Education

Sheet Metal Pattern Drafting and Shop Problems

by Daugherty

Triangulation Short-cuts Layout by Kaberlein

Air Conditioning Metal Layout by Kaberlein

Duct Construction by Rothe

COURSE CONTENT—Basic blueprint reading, shop

tools and machines; parallel line pattern develop-

ment, radial line pattern development, triangula-

tion development, to develop skill in layout

work, heat loss calculations, to develop under-

standing of heating requirements, advanced

shop practice, to supplement shop work on the

job. Welding (1) oxy acetylene, (2) electric arc,

(3) cutting; to develope skills necessary to trade in welding, mathematics, bookkeeping, to help the worker understand the problems of

management.

Steamfitter

COURSE NUMBER—3722

TYPE OF STUDENT—Apprentice

FEE—20c per day of four periods

LENGTH OF COURSE—400 hours

TEXT—Instructional Manual for Steamfitter Appren-

tices

COURSE CONTENT—Science related to the steam-
fitter trade, the underlying scientific principles of pressure, weight, density and type of heat; related drawing, blueprint reading, fundamentals of isometric drawing, and heating plant layout; heating, design and installation procedures; heat transmission, calculating heat losses; review of mathematics; process piping, pipe standards, accessories, and pipe fittings; pipe welding, the use of acetylene and arc welding equipment; controls, application and regulation of all automatic controls used in heating and ventilating; refrigeration, fundamentals of refrigeration and the handling of refrigerants; air conditioning, the theory of air conditioning.

METAL INDUSTRIES

BLUE PRINT READING
(MACHINE TRADES)

COURSE NO.—2730
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Blue Print Reading by Nicholson & Jones

FOUNDRY PRACTICE

COURSE NUMBER—3731
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—Elementary Foundry Technology by Hartly
Metal Castings by Campbell
Advanced Blueprint Reading, Delmar Publishers
Mechanical Drawing by French and Svensen
Mathematics by Slade and Margolis
Handbook of Cupola Operation, American Foundrymen’s Association
Recommended Practices for the Sand Casting of Non-Ferrous Alloys, American Foundrymen’s Association
Foundry Manual, U. S. Navy Bureau of Ships
International Textbook Library on Foundry and Patternmaking Foundry Work by West

COURSE CONTENT—Introduction, to give apprentices an interview of the foundry and patternmaking industry; molding practices, core prac-

tics; elementary metallurgy; foundry sands; related patterncasting theory; elements of arithme-
tic calculation of areas and volumes; weights of castings; calculation of metal mixtures; slide-rule practice; principles of projection; sketching prac-
tice; use of instruments and equipment; blueprint reading.

WELDING—ELECTRIC ARC

WELDING—ELECTRIC ARC

COURSE NUMBER—1738
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods
COURSE NUMBER—2738
TYPE OF STUDENT—Adult, Full-time
FEE—84c per day of four periods
LENGTH OF COURSE—740 fifty minute periods

WELDING—OXY-ACETYLENE

WELDING—OXY-ACETYLENE

COURSE NUMBER—1739
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods
COURSE NUMBER—2739
TYPE OF STUDENT—Adult, Full-time
FEE—84c per day of four periods
LENGTH OF COURSE—740 fifty minute periods
COURSE NUMBER—3739
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—400 hours

COURSE CONTENT—Basic training in welding mild steel in flat, horizontal, vertical, and overhead positions, care of equipment, pipe welding, bronze welding, steel and cast iron welding, oxy-acetylene cutting of metals, while metal welding, aluminum welding, and lead burning.
HYDRAULICS

COURSE NUMBER—3733
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—9 fifty minute periods
TEXT—Hydraulics as Applied to Machines—Henry Ford Trades School and references.
COURSE CONTENT—The basic laws of fluids, pressure and buoyancy, piping, valves, and pumps. The major part of the work relates to pumps and hydraulic circuits.

METALLURGY

COURSE NUMBER—3734
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—32 fifty minute periods
TEXT—Elementary Metallurgy by Friar
COURSE CONTENT—Iron smelting; iron refining; cost and wrought iron, modeling and metal forming; iron carbon diagram; physical structure; hardening of steel; grain structure; steel alloys.

APPRENTICE MATHEMATICS

COURSE NUMBER—3735
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—54 fifty minute periods
TEXT—Machine Shop Mathematics by Aaron Axelrod
COURSE CONTENT—Weights and measures; practical measurements and geometry; formulas and methods used in area and volume problems; geometric construction; graphs; shop trigonometry; how trig functions can be used to solve length and angle problems; belting; mathematics and physics of belting; speeds of pulleys and gears, speed reduction formulas; speeds and feeds, application and relation of mathematics and machine shop practice; lathe work; taper turning and thread screw problems; gears, gear cutting and gear layout; milling machines, applications and indexing.

APPRENTICE PHYSICS

COURSE NUMBER—3736
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—28 fifty minute periods
TEXT—Lesson Sheets
COURSE CONTENT—Composition and resolution of forces, and how forces can be analyzed; simple beams, the loading of beams and machine parts

MACHINE SHOP

COURSE NUMBER—1732
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods
COURSE NUMBER—2732
TYPE OF STUDENT—Adult, Full-time
FEE—20c per day of four periods
LENGTH OF COURSE—1480 fifty minute periods
COURSE NUMBER—3732
TYPE OF STUDENT—Apprentice
FEE—20c per day of four periods
LENGTH OF COURSE—400 hours
TEXTS—How to Run a Lathe by O'Brien
Machine Shop Theory by Searles
Machinery Handbook by Oberg and Jones
TRADE AND INDUSTRY

COURSE CONTENT—This course covers nomenclature of the engine lathe, milling machine, shaper, grinders and drill press, and the basic operating principles of these machines. Also, layout procedures, the use of precision instruments and gauges, machine shop trade standards and data including care and use of hand tools.

Any materials other than those used by the student for class exercises must be paid for by the student.

SERVICE OCCUPATIONS

ADVANCED COOKING

COURSE NUMBER—3761
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
COURSE NUMBER—2761
TYPE OF STUDENT—Adult, Full-time
FEE—$5 a week (covers uniforms, tools, text books, and one meal a day)
LENGTH OF COURSE—2 nine week quarters
TEXT—Escoffier Cook Book; Book of Sauces
COURSE DESCRIPTION—Preparation of quality food on a quantity basis to prepare students for positions as first and second cooks. Students are given gradual increase in responsibility in the preparation and service of finer foods. Problems of culinary management are presented and discussed in class sessions. To prepare students to meet the requirements of a quality position in the culinary trade.

BASIC RESTAURANT TRADES

COURSE NUMBER—3760
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
COURSE NUMBER—2760
TYPE OF STUDENT—Adults
FEE—$5 a week, covering uniform, text books, and one meal a day
LENGTH OF COURSE—4 nine week quarters
TEXT—Escoffier Cook book
COURSE DESCRIPTION—Practical instruction in food procurement, preparation and service. Selective menus or daily bills of fare are purchased, prepared, served and discussed by the students under the supervision of the food director and his assistants. This work is supplemented by demonstrations and lectures on allied subjects by specialists from various fields of sanitation, personal hygiene, nutrition, restaurant accounting, and food control.

BARBERING

COURSE NUMBER—3740
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—432 hours
TEXT—14 Units, 14 Assignment Units in Barber Science
COURSE CONTENT—Introduction to apprenticeship, anatomy and physiology, diseases, shop problems, facials and packs, barber law, therapeutic lights, hair, art of shaving, selling standard service, pathology, bacteriology.

COSMETOLOGY

COURSE NUMBER—3741
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—288 hours
TEXT—Home Study Course, Wisconsin Schools of Vocational Education
COURSE CONTENT—Wisconsin laws of cosmetology; sterilization and sanitation; anatomy—familiarize student with location, function of bones, nerves, muscles and blood supply of head, face, hands and neck; hair and scalp diseases; structure and care of hair; recognize scalp diseases and their treatment; electricity and common knowledge of electrical wiring, operation of electrical devices, and application of electrical current; shampooing; hair dying; facials; skin and its diseases, structure of skin and disease treatment; hair dressing; hands and nails; permanent waving, theory and technique of waving hair permanently with electricity and chemicals.

RADIO

COURSE NUMBER—2742
TYPE OF STUDENT—Adult, Full-time
FEE—34 cents per day of four periods
LENGTH OF COURSE—1,480 fifty minute periods
COURSE NUMBER—3742
TYPE OF STUDENT—Apprentice
FEE—34 cents per day of four periods
LENGTH OF COURSE—400 hours
TEXTS—Applied Drafting
Elements of Radio by Marcus and Horton
Elements of Radio Servicing
Essentials of Electricity by Timbie
Inside of the Vacuum
Master Guide, United Catalog Publishers
Radio Fundamentals
Servicing, Signal Tracing Rider
COURSE CONTENT—Basic theory; radio funda-
ments; vacuum tubes; amplifiers; power supplies; signal tracing; signal amplifications; detection; couplings; oscillators; mixer circuits; control circuits; public address systems; localizing defects; mathematics; laws and formulas; mechanical practice, use of hand tools; circuits, automatic circuits code, state and federal laws; wiring and how to install; mechanical practice, bearings and fittings.

REFRIGERATION

COURSE NUMBER—2743
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—592 fifty minute periods

COURSE NUMBER—3743
TYPE OF STUDENT—Apprentice
FEE—20c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Instructional Manual for Steamfitters, Washburne Trade School
COURSE CONTENT—Introduction to refrigeration, fundamentals of refrigeration, refrigeration cycle, operating cycle of a refrigeration unit; typical compression cycle; properties of refrigerants; refrigeration accessories, motor controls, refrigerant controls, heat transfer, computing heat gain and losses, absorption type refrigeration.

AIR CONDITIONING

COURSE NUMBER—2744
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—592 fifty minute periods
TEXT—Air Conditioning and Fundamentals of Refrigeration, S.P. Brown
COURSE CONTENT—Physical and chemical properties of air, psychrometric charts, heat gains and losses of buildings, properties of steam, computing cooling and heating coils, duct work, fans, accessories, motor controls.

PRINTING

PRINTING—
COURSE NUMBER—1745
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—412 fifty minute periods
COURSE NUMBER—2745
TYPE OF STUDENT—Adult, Full-time
FEE—None
LENGTH OF COURSE—2,072 fifty minute periods
GUIDANCE

COUNSELING

JUNIORS

Students may obtain counseling service in the Guidance Department directly or by referral through teachers or supervisors.

ADULTS

Any new registrant who desires it may receive help from the guidance counselors in planning his course of study. The guidance counselors also will arrange for any desired testing. This may include aptitude, interest, and personality tests and the interpretation of results in relation to the individual. During the school year students are always welcome to consult the guidance counselors in Room 136.

The vocational and educational counseling and testing services of the school are available also to nonstudent adult residents of the city of Madison. A maximum fee of one dollar and a half ($1.50) is charged nonstudents who register for these services, but no further registration fee is required for the current school year if the counselee later enrolls in regular day or evening classes.

SENIOR ADULTS

In an effort to give intelligent counseling to adults who have reached retirement age or who are making readjustments, the guidance department is prepared to give appropriate aptitude tests and analysis of job and life opportunities. The counselors will be glad to discuss with senior adults vocational and avocational opportunities available in the school and community.

JOB PLACEMENT

Employers in the Madison area have available the services of our placement office in their effort to obtain the best qualified workers for jobs which become vacant. It will be the purpose of this office to recommend to employers only those who appear to be well qualified. Students in the school may register with the placement office for prospective jobs for which they would like to receive consideration. Supervisors and teachers will report to the placement office all inquiries and requests from employers as well as students recommended.

HEALTH GUIDANCE

The health of the students in the school is of first importance and will receive the special consideration of the guidance office. Any student may obtain emergency health service as well as counseling on health problems in Room 136 during all hours of the school day.

A special course in Mothercraft is offered for expecting mothers. This course is taught by a public health nurse. The class meets twice a week for ten lessons. The course is repeated every five weeks. Prenatal care, diet, hospital procedures, and baby care are among the subjects included.
1951-52
Evening
School
Catalog

Madison
Vocational
and Adult
School
Madison Vocational
and
Adult School

Evening School
Catalog
1951-52

Board of
Vocational and Adult Education

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211 North Carroll Street
Madison, Wisconsin
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GENERAL INFORMATION

The Madison Vocational and Adult School is a public school and is open to all residents of the city of Madison.

There is no tuition charge for Madison residents, but there is a general registration fee of $1 a term, and in some classes fees will be charged to cover the cost of laboratory expenses, incidental breakage, texts and supplies. Students registered in the first term, who continue in the second term, are not required to pay the second fee.

Should an insufficient number of registrations be received for any course listed in the Evening School Catalog, the school administration reserves the right to withdraw the offering.

A class may be discontinued or combined with another if the enrollment becomes low.

Courses not listed may be organized if a sufficient number of persons register for such classes.

For many of the courses persons may enroll at any time and receive individualized instruction. Some of the courses are purposely short where the instructional objectives can be achieved within a few weeks.

TWO TERMS OF EVENING SCHOOL

The evening school year is composed of two terms of ten weeks each, the first term coming before the Christmas holidays and the second term in the New Year. If interest of students and value of the class instruction warrants it, the Director may authorize the continuation of a class for a maximum of five weeks after the close of the second term.

RECORDS

Permanent records of students' attendance and achievement are kept in the Registration office and may be obtained for reference or school admission purposes by the student at any time.

ATTENDANCE

A record is kept on attendance of all students. This is necessary because of the great demand for the use of the school's equipment and the need to eliminate any who are not serious about their work. Those who must be absent are requested to call 54541 so that they will not be withdrawn from class.

GUIDANCE AND PLACEMENT

The Guidance Office is located in Room 135. This department is at the service of all students who have health, welfare, placement and guidance
problems. It offers counseling service to all adults. Aptitude, interest and general information tests are given when indicated as a part of this service. Any young student or adult wishing to avail himself of an opportunity to take these tests may arrange for them at this office. Adults who are retired or about to retire because of age are invited to use the counseling services.

The Placement Department is in a sense an extension of the teacher's classroom activities. Teacher's ratings of the student are sent to the Placement Department where an effort is made to place students in positions suitable to aptitudes and skills demonstrated in classwork. Vocational School students who wish to be considered for employment should inform the Placement Office of this fact. The Placement Department has contracts with the various industries and business organizations in the city. Employers place calls with the Vocational School when they need help.

ADULT EDUCATION SPECIAL SERVICES

Adults wishing to meet special educational requirements for civil service classification or to make up educational deficiencies in order that they may enter fields of training which require certain educational requirements, may make up these deficiencies by making arrangements at the time of registration. These courses are in the nature of refresher courses which do not require full semester attendance.

NON-RESIDENT STUDENTS

All persons who are twenty-one years of age or older will pay their tuition when they register. The tuition fees are 50 cents per evening session, payable in advance by the term. Tuition may be charged for only actual evenings of attendance; hence all unused tuition will be refunded to the student if a written request is presented to the Director.

REFUNDS

Registration fee—No refunds. However, in cases where classes do not materialize because of insufficient enrollment, the registration fee will be returned.

Laboratory fee—If a person withdraws from school before completion of the course, a refund will be made which in no case shall exceed fifty per cent of the original fee. No refunds of less than 50 cents will be made. Laboratory fees may be transferred from one course to another.

Tuition fee—All unused tuition will be refunded to a student if a written request is presented to the Director.

CLASS SCHEDULE

Classes will be held from 7 to 9 p.m. unless otherwise designated.

The building will be open to students at 6:45 p.m. Class instruction will start promptly at 7 p.m. and close at 9 p.m. The doors of the building will be locked at 9:30 p.m.

EVENING REGISTRATION HOURS

6:30 p.m. to 8:30 p.m.

Monday, Tuesday, Wednesday and Thursday evenings

EVENING SCHOOL CALENDAR

1951-52

Monday, October 1, through Wednesday, October 3, 1951—Registration for evening school

Monday, October 8, 1951—First term of evening school begins

Thursday and Friday, November 1 and 2, 1951—Evening school closes for Milwaukee meeting of Wisconsin Education Association

Thursday and Friday, November 22 and 23, 1951—School closes for Thanksgiving vacation

Friday, December 14, 1951—First term of evening school closes

Monday, January 7, 1952—Second term of evening school begins

Monday, Tuesday and Wednesday, January 7, 8 and 9, 1952—Registration for second term of evening school

Friday, February 8, 1952—Evening school closes for meeting of Southern Wisconsin Education Association

Friday, March 14, 1952—Second term of evening school closes

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General Education

Academic
Art
Music
GENERAL EDUCATION

ACADEMIC

ALGEBRA I
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
This course covers beginning algebra for which high school credit is given. It consists of nine assignment sheets. Unit tests are given when each assignment sheet is completed. A final test is given.

ALGEBRA II
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Prerequisite: Algebra I
Reviews the principles learned in Algebra I. Advanced topics in factoring and quadratics are included. Progressions and the binomial theorem are introduced at the end of the course. There are twenty short assignments. A final test is given and upon completion a one-half high school credit is given.

GEOMETRY
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Prerequisite: Algebra I
Emphasis is to develop in the individual the ability to form a logical geometric proof. There are six assignment sheets covering the course. Tests are given when a unit is completed as well as a final test. One high school credit is given for successful completion of this course.

APPLIED MATHEMATICS
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Arithmetic fundamentals are studied and applied to practical shop problems. One high school credit is given. This course can only be used as an elective. There are seventeen assignment sheets and a final test is given when the course is completed.

TRIGONOMETRY
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Prerequisite: Algebra, Geometry
This is a high school course in trigonometry. Emphasis is placed on problem solving after the trigonometric relations are mastered. Twenty assignment sheets with a final examination after satisfactory completion of the assignment sheets constitute the course. One-half high school credit is given.

ARITHMETIC
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Introduces arithmetic fundamentals and mastery comes with drills and tests. Practical applications are given for all operations. So the student will not waste time doing work he already knows, a complete course is mapped out for him after he has taken an inventory test.

BUSINESS MATHEMATICS
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Prerequisite: Arithmetic I
Course consists of mastering the arithmetic fundamentals and then applying them to situations in business. A book which enables the student to progress at his own speed is used.

CHEMISTRY
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$7.50
TEXT—Fundamentals of Chemistry by Gray, Sandi­hurst, and Hansa.
Parallels the average chemistry course given in high school. One high school credit is given for the successful completion of the course.

ENGLISH I
Mon. and Wed, 7:00 p.m. to 9:00 p.m.
Planned to meet the needs of those of our foreign­born residents who wish to learn to speak, read, and write everyday English. This course will teach the beginner to use English for practical everyday purposes and it will enable him to use idiomatic expressions, simple grammatical uses, and to build a vocabulary.

ENGLISH II
Mon. and Wed, 7:00 p.m. to 9:00 p.m.
Organized to meet the needs of those foreign-born who are already able to speak, read, and write English quite readily, and who wish to increase their vocabulary and knowledge of English grammar.

ENGLISH III
(Enjoying English by self expression)
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
An elementary course in applied grammar which places emphasis upon the correct use of the several parts of speech, punctuation, capitalization, spelling,
and the building of good sentences. The language difficulties of each member of the class are dealt with according to individual need.

ENGLISH IV
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
An advanced course in English grammar, giving the student a thorough review of the principles of sentence construction, punctuation, capitalization, paragraphing, spelling, and vocabulary building.

ENGLISH V
(Creative Writing)
Mon., 7:00 p.m. to 9:00 p.m.
For writers who will produce copy and give and take criticism. They choose the literary form: short-short, essay, verse, etc. They select the level: juvenile or adult. They pick the subject-matter: religious or secular, serious or non-serious. One hour is used for ms. reading, criticism, literary mechanics, etc. Marketing problems get some consideration. One hour is used for writing in class, but material may be written outside of class also.

GREAT BOOKS
Alternate Thursdays, 7:00 p.m. to 9:00 p.m.
The best thinking that men have done has found its way into the Great Books which compel those who read to think hard and straight. Authors of Great Books to be read and discussed are Montaigne, Shakespeare, Locke, Rousseau, Smith, Marx, Homer, Herodotus and Aeschylus.

SHAKESPEARE FOR YOU AND ME
Wednesday 7:00 p.m. to 9:00 p.m.
A course of study of the great Poet-Dramatist: his life, times, plays. Lectures, actual reading of plays in class, possible staging of one or more plays.

FRENCH I
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
TEXT—United French Course by LeCompte and Sundeen.
Besides giving the student a traditional background of the language much stress will be placed on conversation. The class will occasionally dine at the University German House and view French movies.

(Great arrangements will be made for advanced students, should there be a large enough group desiring such study.)

GERMAN I
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
TEXT—Shorter College German by Evans and Rossler.
Besides giving the student a traditional background of the language, much stress will be placed on conversation. The class will occasionally dine at the University German House and view German movies.

GERMAN II
Friday, 7:00 p.m. to 9:00 p.m.
Special arrangements will be made for advanced students, should there be a large enough group desiring such study.

SPANISH I
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
TEXT—Spanish for Conversation by Leslie.
Buenos Dias: One-minute Dialogues by Lopes.
A class in conversational Spanish. With practice in pronunciation, comprehension of the spoken language, and conversational drill. The core of each lesson is a daily life situation or a "tourist situation" in a Spanish-speaking country.

SPANISH II
Wednesday 7:00 p.m. to 9:00
Special arrangements will be made for advanced students, should there be a large enough group desiring such study.

PUBLIC SPEAKING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—50c
Emphasizes the type of public speaking that the average person is called upon to do in committee meetings, unions, conferences, clubs, and similar smaller groups. It includes units on acquiring poise before an audience, voice, preparation of speech, and special types of speeches, such as courtesy and after-dinner.

LIP READING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
Lip reading, or speech reading, is understanding spoken language while watching the speaker, without fully hearing, or if need be, without hearing at all.
This course is designed to give the hard of hearing or deafened adult an understanding of the
SPECIAL SERVICES

CONSTRUCTIVE WORKSHOP
Monday 7:00 p.m. to 9:00 p.m.
Constructive workshop is offered to those who are about to retire because of age. In this workshop special projects are planned according to the individual's interests and needs such as chair caning, refinishing woodwork, making jewelry, etc. Other projects may be developed as desired.

COURSE FOR PARENTS OF DEAF CHILDREN
Organized to meet the needs of parents of deaf children. This course will be presented in units including lectures and discussions of different types of problems which parents meet in teaching deaf children to speak and to adjust to normal living.

ART

ART METAL
Wed., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$1.50
Design processes and techniques as applied to copper and brass. Processes include beating down, piercing, soldering, filing, etching, construction design and patterning; joints, oxidizing and finishing.

COSTUME JEWELRY
Tues., or Thurs., or Fri., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$1.50
Flat work in copper, brass and silver. Various processes include sawing, filing, soldering, piercing, repoussé, chasing, casting, enameling, wire drawing, ring sizing, stone setting and finishing.

STONE CUTTING OR LAPIDARY
Mon. 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$1.50
Recognition and classification of semi-precious stones. The processes used on the lapidary machine include sawing, grinding, sanding and polishing stones suitable for costume jewelry.
WOOD CARVING
Fri. 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$1.50
MATERIAL FEE—$4.00
Wood carving in bas relief, sculptural design, and chip carving. The student is taught the various techniques of wood carving and finishes; the use of tools and their application to wood. This class will be held if there is sufficient enrollment.

LETTERING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$2.00
Fundamental alphabets. Practical training in lettering adaptable to commercial uses. Techniques include pen and ink and brush lettering. Show card layouts and color theory. Mediums include pencil, pen and ink.

PHOTOGRAPHY
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$4.00
An elementary course for beginners, stressing the construction and proper use of the camera, picture composition, developing, printing, enlarging and other darkroom procedure.

INTERIOR DESIGN
Tues., 7:00 p.m. to 9:00 p.m.
Wed., 7:00 p.m. to 9:00 p.m.
Thurs., 7:00 p.m. to 9:00 p.m.
Lectures on backgrounds, floor and wall treatment, color, fabrics, window treatment, furniture arrangement and combination of furniture styles, accessories, pictures and illumination. Field trips and individual home problems are discussed.

BRAIDED RUGS
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
Size, shape, color and design arrangement stressed. Processes include braiding with three, four and five strands, splicing, padding, dyeing, and lacing. Discarded materials recommended.

WEAVING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
LABORATORY FEE—$1.50
Planned for the homemaker, craftsman, teacher, camp instructor or youth leader. An elementary course which includes the various processes and techniques in producing plain and pattern weaving.
VIOLIN FUNDAMENTALS
Mon., 7:00 p.m. to 8:00 p.m.

PIANO I
Mon., Tues., Wed., Thurs., 7:00 p.m. to 9:00 p.m.
Oxford course for adult beginners. Easy solo pieces to suit individuals; basic principles.

PIANO II
Tues., 7:00 p.m. to 9:00 p.m.
Scales, arpeggios, hand building exercises. Supplementary pieces; sonatas. Two piano ensemble music.

POPULAR PIANO THROUGH KEYBOARD HARMONY
Thurs., 7:00 p.m. to 9:00 p.m.
Designed for students having some knowledge of piano. Consists of learning the chords and necessary formations to fill in left hand of popular music, creating necessary breaks, etc. Also valuable to classic music students since it provides reading short cuts and helps create a technique usually ignored by methods. A practical course, students learning to do their own arranging.

MUSIC APPRECIATION
Wed., 7:00 p.m. to 8:00 p.m.
A general survey of music—how to listen to good music and enjoy it. No advance study necessary.

INDIVIDUAL PRACTICE PERIODS
Limited practice facilities for piano students, having no piano at home, may be arranged by consulting the Music Supervisor, Mr. Haerrman, Room 132.
BUSINESS EDUCATION

ACCOUNTING

ACCOUNTING I (Elementary)
Mon. and Wed. 7:00 p.m. to 9:00 p.m.
The elementary principles of accounting and the procedures of double entry bookkeeping are thoroughly covered in this course. A comprehensive study is made of both the cash and accrual basis of keeping accounts. Work covered includes journalizing, posting, trial balance, preparing financial reports, adjusting and closing the books at the close of the business period. This course is intended primarily for those who have had no previous training in bookkeeping or accounting. Successful completion of the prescribed work will provide the student with a general knowledge of accounting useful in business or professional fields.

ACCOUNTING II
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
This is a continuation of Accounting I enlarging upon the theories and practices in use today. The work is devoted to the partnership and corporation types of organizations with emphasis on the wholesale merchandizing enterprise. Such subjects as adjusting and classifying accounts, preparing statements and closing books, profit and loss distribution, admission of new partners, partnership dissolution, accounting for purchases, sales, negotiable instruments, taxes, and the acquisition and disposal of fixed assets will be a part of this course. It serves as basic training for students planning to major in accounting or for work as a bookkeeper or junior accountant.

ACCOUNTING III
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
Consideration is given to the corporate form of business organization with emphasis on the industrial or manufacturing type of enterprise. Accounts and accounting procedures with cost implications for a manufacturer or concern are presented. Subjects covered include legal organization and records of a corporation, classes and value of capital stock, surplus and dividends, reserves and funds, the voucher system of accounting, manufacturing accounts, annual reports and closing the books of a manufacturer.

ACCOUNTING IV
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
A pre-requisite to this course is the completion of a preliminary course in general accounting. The job cost or production order system, the process cost system and the standard cost system are discussed. Accounting for materials, labor and factory overhead expenses gives the student knowledge basic in the field of cost accounting.

BUSINESS PRINCIPLES

BUSINESS ARITHMETIC
Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
Especially intended to serve the needs of people in business. The student intending to study accounting or calculating machines but who is not strong in arithmetic will do well to elect this as a preparatory course. Cashiers, clerks and general office workers will find this course very helpful. The course embraces the following: intensive review of the fundamentals, percentage, practical shortcut methods, bank discounts, trade and cash discounts, profit and loss, and payrolls.

BUSINESS ARITHMETIC
Mon. 7:00 p.m. to 8:00 p.m.
This course covers a review of capitalization, grammar, sentence structure, unity, coherence, emphasis, punctuation, diction, hyphenation, word division as applied to business situations, spelling and vocabulary building.

BUSINESS ENGLISH I (Grammar)
Mon. 7:00 p.m. to 8:00 p.m.
This course covers a review of capitalization, grammar, sentence structure, unity, coherence, emphasis, punctuation, diction, hyphenation, word division as applied to business situations, spelling and vocabulary building.

BUSINESS ENGLISH II (Business Correspondence)
Mon. 8:00 p.m. to 9:00 p.m.
Business letter writing takes up the study of essential qualities of effective business letters, proper layout, and the development of good tone. This course will stress the importance of using natural phrasology, proofreading and correcting letters. A study of the various types of business letters from routine inquiries to more complicated forms of adjustment, collection and sales letters, and the preparation of letters of application and data sheets will be included.

GENERAL ECONOMICS
Mon. 7:00 p.m. to 9:00 p.m.
For business people who are interested in the principles underlying business. General Economics deals with present-day problems of American society, the relation of these problems to the past, and their possible effect on the future economic and political systems of our nation.
FILING AND INDEXING

Wed. 7:00 p.m. to 9:00 p.m.

The length of this course is ten weeks. It is divided into several units as follows: (1) Rules for alphabetizing and their application by use of 200 cards. (2) Study of filing equipment. (3) Methods of filing and practical application by the use of 75 miniature letters and filing trays—all alphabetical, numeric, geographic, subject, triple check, soundex and variordered. (4) Cross filing. (5) Charge methods. (6) Transfer methods. (7) Follow-up. Visual aids and outside speakers are part of the course.

OFFICE TRAINING

BURROUGHS AND COMPTOMETER MACHINE CALCULATION

( Key-Driven )

Mon. and Wed., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m.; Tues. and Thurs., 7:00 p.m. to 8:00 p.m., 8:00 p.m. to 9:00 p.m; Fri., 7:00 p.m. to 9:00 p.m.

FEE—$50

For beginners, the course includes the fundamental operations of two and three column cross addition, split addition, multiplication from right and left of keyboard and over the permanent decimal points, subtraction and division.

For advanced students, the course includes four and five column cross addition and the application of the fundamental operations to practical business problems such as discounts, percentages, commissions, payrolls, pro-rating, mark-up, mark-down and interest.

MONROE, MARCHANT AND FRIDEN MACHINE CALCULATION

Mon. and Wed., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m.; Tues. and Thurs., 7:00 p.m. to 8:00 p.m., 8:00 p.m. to 9:00 p.m.; Fri., 7:00 p.m. to 9:00 p.m.

FEE—$50

Covers addition and the various methods of multiplying, subtracting, and dividing, followed by their applications to problems in business arithmetic. Upon completion of the course, a student should have a thorough training in the fundamental processes as they apply in business and sufficient knowledge to operate the machine in any business office. The course consists of thirty assignments.

REMINGTON RAND MACHINE CALCULATION

Mon. and Wed., 7:00 p.m. to 8:00 p.m.; 8:00 p.m. to 9:00 p.m.; Tues. and Thurs., 7:00 p.m. to 8:00 p.m., 8:00 p.m. to 9:00 p.m.; Fri., 7:00 p.m. to 9:00 p.m.

FEE—$50

Instruction is given on the new automatic printing calculator. This machine prints as it divides automatically, as it multiplies electrically, as it adds and subtracts. All factors for each calculation are recorded with totals automatically delivered and printed on the key keyboard, and the combined features of a calculator and the printing adding machine tape.

I. B. M. KEY PUNCH MACHINE

Mon. and Wed., 7:00 p.m. to 8:00 p.m. and 8:00 p.m. to 9:00 p.m.; Tues. and Thurs., 7:00 p.m. to 8:00 p.m., 8:00 p.m. to 9:00 p.m.; Fri., 7:00 p.m. to 9:00 p.m.

FEE—$50

Rapid, accurate performance, by the touch method, is the object on the numeric key punch machine.

The part played by the punched card in the various systems is studied. Because of the wide variation in coding and the need for learning a particular company's system, little stress is placed upon this subject.

SHORTHAND I (Beginning Theory)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.

Prerequisite: Typing skill

This is a study of shorthand only and is intended for students who are skilled typists but who have had little or no previous training in shorthand. The beginning principles of shorthand are thoroughly covered in this course. The last four weeks of the term are devoted to a rapid review of shorthand principles and to the introduction to beginning dictation and transcription at the typewriter. Homework and regular attendance are necessary for progress in the study of beginning shorthand.

SHORTHAND II (Advanced Theory)

Tues. and Thurs., 7:30 to 9:00 p.m.

Prerequisite: Shorthand I (Beginning Theory) and typing skill

A continuation of shorthand I. It consists of a review of the theory of shorthand, practice in beginning dictation and transcription on the typewriter. The class period is divided into one hour of shorthand and one-half hour of transcription.
STENOGRAPHY I (Beginning Shorthand Theory and Typewriting)

Tues. and Thurs. 7:00 p.m. to 9:00 p.m.
FEE—50c

This is a course for beginners in shorthand and typewriting. Two years are required to complete it. At the end of the first year the student should be able to take notes on the beginning shorthand principles covered. Students enrolled in this course should continue their training in the following evening school term by enrolling in Stenography II. The class period is divided into one hour of typewriting and one hour of shorthand. Homework and regular attendance are necessary.

STENOGRAPHY II (Advanced Shorthand Theory and Typewriting)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—50c
Prerequisite: Stenography I

A continuation of Stenography I. It consists of a rapid review of the beginning principles of shorthand, the completion of the advanced principles and dictation practice in beginning dictation and transcription on the typewriter. The class period is divided into one hour of typewriting and one hour of shorthand.

STENOGRAPHY III

Tues. and Thurs., 7:00 p.m. to 8:30 p.m.
FEE—50c
Prerequisite: Stenography II

Consists of a rapid review of shorthand principles and beginning dictation work. Dictation is given at the rate of 60-80 words per minute. Transcription at the typewriter is required.

STENOGRAPHY IV

Tues. and Thurs., 7:30 to 9:00 p.m.
FEE—50c
Prerequisite: Stenography III

A course for stenographers who are working for a shorthand speed of 80-100 words per minute. Transcription at the typewriter is required. Students selecting this course should have a good understanding of the shorthand principles. Special emphasis is given to the writing of advanced phrases and to the building of a shorthand vocabulary of business terms.

STENOGRAPHY V

Tues. and Thurs., 7:00 p.m. to 8:30 p.m.
FEE—50c
Prerequisite: Stenography IV

A course for stenographers who have attained a shorthand speed of 100 words per minute. Transcription on the typewriter is required. The emphasis of this course is on building up a dictation taking speed of at least 150 words per minute on new material and teaching the techniques of accurate and rapid transcription. The advanced phrasing principle is also stressed in this course.

TYPEWRITING I

Mon. and Wed., 6:00 p.m. to 7:00 p.m.; 7:00 p.m. to 8:00 p.m. Mon. and Wed., 8:00 p.m. to 9:00 p.m. Tues. and Thurs., 7:00 p.m. to 8:00 p.m.
FEE—50c

For those who wish to learn the touch system of typewriting. It includes the study of the parts of the machine, mastery of the keyboard, drills for rhythm and accuracy, correct typing habits, simple letter setup, simple tabulation, and timed writings.

TYPEWRITING II

Mon. and Wed., 7:00 p.m. to 8:00 p.m.
Tues. and Thurs., 8:00 p.m. to 9:00 p.m.
FEE—50c

Typewriting II is a continuation of Typewriting I. The course includes the following: technique check-up, speed and accuracy drills, tabulation practice, letter setup and placement, use of carbon paper, and office typing problems.

TYPEWRITING III

Mon. and Wed., 7:00 p.m. to 8:00 p.m.
Tues. and Thurs., 8:00 p.m. to 9:00 p.m.
FEE—50c

Typewriting III includes special forms, special skills in typewriting, stenciling, tabulation and preparation for Civil Service tests.

DISTRIBUTIVE EDUCATION

RETAIL SALESMANSHIP
(Inside Selling)

LENGTH OF COURSE—one or two terms
Wed. 7:00 p.m. to 9:00 p.m.
Salesmanship in modern sense; retail selling fundamentals; study of the customer; selling tech-
Business Education

Techniques that help customers buy; meeting the customer; developing the sales presentation; making the sales talk convincing; helping the customer over buying obstacles; building permanent business.

Advanced Salesmanship
(Contact Selling)
LENGTH OF COURSE—two terms
Tues. 7:00 p.m. to 9:00 p.m.
No ceiling on selling; what makes a good salesman better; how to find prospects; how to handle the price problem; how to build your sales talk; how to use advertising; how to dramatize your selling; how to close your sales; how to avoid competition complexes; how to sell quality products; how to make more sales.

Fitting and Selling of Shoes
LENGTH OF COURSE—Two terms
Wed. 7:00 p.m. to 9:00 p.m.
All phases of shoe fitting; correct measuring of feet; knowledge of lasts, causes of shoe discomfort, shoe retailing in all its phases.

Balanced Selling
LENGTH OF COURSE—5 two-hour sessions, time to be arranged
Need for a balanced selling program; value of product knowledge; position of the wholesale distributor; the retailer’s problems; the salesmen’s problems; responsibilities of the participants in the channels of distribution; the retailer’s assets and liabilities; objectives of merchandising; the sales target; record keeping; professional salesmanship; requisites and results of good merchandising; effects of creative selling; measuring results; self-management; recognizing trends; objectives of balanced selling training.

Route Selling
LENGTH OF COURSE—10 two-hour sessions or 20 one-hour sessions, time and length to be arranged.
For Routemen
Covers the balanced job; satisfying the customer: customer relationships; the stop order; turning collection calls to advantage; increasing family consumption; “top line” products; suggestive selling; new business; handling obstacles; closing the sale.
HUMAN RELATIONS IN RETAILING

LENGTH OF COURSE—5 two-hour sessions
Fri., 7:00 p.m. to 9:00 p.m.
Training supervisory personnel in the use of the four-step method of problem solving; application of the four keys to good human relations; stimulating supervisor to further study of the important field of worker relations; supervisory personnel developing skill in getting results through the people they supervise.

JOB SIMPLIFICATION TRAINING

LENGTH OF COURSE—5 two-hour sessions
Fri., 7:00 p.m. to 9:00 p.m.
A practical plan to produce greater quantities of quality products in less time with less fatigue by the best use of manpower, machines and materials available. Objectives are to be accomplished through the four-step method of breaking down the job, questioning every detail that makes up the job, developing the new method through elimination, combination, rearrangement, simplification of the various details that make up the job.

MANAGEMENT CLINIC

LENGTH OF COURSE—6 two-hour sessions
Fri., 7:00 p.m. to 9:00 p.m.
Training in the techniques of job analysis, personnel selection, placement and training; to encourage management to make use of the techniques to insure successful and profitable operation; to point out management’s responsibility in a training program.

PAINT POWER

LENGTH OF COURSE—One term of ten weeks; in two-hour sessions. Time and length to be arranged.
Opportunities in the paint, varnish and lacquer industry; types of products; application of products; estimating; the power of color; paint styling; salesmanship and management; the painting contractor; effective sales promotion; advertising and publicity.

*INTRODUCTION TO LIFE UNDERWRITING

LENGTH OF COURSE—10 two-hour sessions
Mon. 10:00 to 12:00 a.m.
An organized study program of the basic principles of life insurance salesmanship.
a. How life insurance serves
b. How to sell life insurance
c. How life insurance operates

*FIDELITY AND SURETY BONDS

LENGTH OF COURSE—6 two-hour sessions
Mon., 2:00-5:00 p.m.
Covers all types of bonds—Fidelity, individual, name, position, blanket, fiduciary, contract, public official, litigants.

*C. L. U.—UNIT B

LENGTH OF COURSE—13 two-hour sessions
Mon. 1:00 to 3:00 p.m.
Human needs, policy forms, contract, life insurance as property insurance, government life insurance, social security, mortality tables, calculating premiums, disability insurance—reserves, industrial insurance, group insurance, operations of life insurance companies.
*Sessions held alternate weeks.

RETAIL MEAT MERCHANDISING

LENGTH OF COURSE—Two terms
Tues., 7:30 p.m. to 9:30 p.m.
Meat from farm to table; processing meat; kinds and classes of meat; grading; conducting a cutting test; refrigeration and care; meat cookery; what customers expect from meatmen.

RETAIL GROCERY MERCHANDISING, COURSE I

LENGTH OF COURSE—Two terms
Time to be arranged
Code for grocers: Meal planning; sugar, salt, spices, food values and diets, history of canning, tea, coffee, cocoa; butter and dairy products; cooking methods; olive oil; canned fruits and vegetables; anchovy, hams, meat and meat products; cereals; bread; soap; bananas, coconuts, vanilla, oranges, avocados.

RETAIL GROCERY MERCHANDISING, COURSE II

LENGTH OF COURSE—Two terms
Time to be arranged
Salesmanship diet and food values; helpful selling; principles of refrigeration; air conditioning; the grocer and his competitors; baking powder; vinegar; understanding the homemaker’s problems; crackers and biscuits; fresh fruits and vegetables; salads and dressings.
RETAIL GROCERY MERCHANDISING, COURSE III

LENGTH OF COURSE—two terms
Time to be arranged
What is merchandising; importance of turnover; relationship of cost to selling price; markup and margin; profit—gross and net; pricing for profit and patronage; determining cost of doing business; soap and detergents; merchandising staples, fresh meats, fresh produce, dairy products, frozen foods, specialties and sundries.
FAMILY DEVELOPMENT

CHILD DEVELOPMENT (For Pre-School Level)

Tues., 7:30 p.m. to 9:00 p.m.
Planned for parents of pre-school age children. Topics to be covered: goals for parents; habits and principles of habit formation; beginnings of patterns of behavior and how they develop; books, music, toys, games and occupations; children's clothing; obedience; imagination; truth, falsehood; curiosity; tears and emotional control; child's use of money; community services for the parents. This is a lecture and discussion course.

PERSONALITY AND CHARM

Wed., 7:30 p.m. to 9:00 p.m.
Many phases of personality studied to learn how to develop naturalness of manner and relaxation. Importance of personality in career life and home life. Some of the highlights of the course are: developing a new or understanding philosophy of life, gaining self-assurance and poise; relation of dress and grooming to personality; leisure time activities; development of individuality; desirable personality traits and how to cultivate them.

HOSPITALITY AND TABLE DECORATION

Tues., 7:30 p.m. to 9:00 p.m.
FEE—$1.00
Planned for anyone who is interested in learning more about the art of entertaining and being a successful, gracious hostess. It will include table setting for all occasions; arrangement of the table for teas and buffet meals; flower arrangement; selection of china, linen, silver and crystal. One tea and one buffet supper will be given sometime during the course. Correct table service for formal and informal occasions is given.

HOME NURSING

Fri., 7:00 p.m. to 9:00 p.m.
This course is the regular Red Cross Home Nursing course which entitles the student to a certificate on completion of the course. There will be an opportunity for actual practice in taking temperatures, bathing the patient, making the bed with the patient in it, and practice in other sickroom procedures. This course will be offered throughout the year. The course consists of seven lessons.

BUDGETING

Tues., 7:30 p.m. to 9:00 p.m.
Planned for those who would like some help on keeping a record of money spent and planning expenditures. Choosing an account system, what should the family understand about credit, customer credit sources, savings and investments, life insurance, are covered. Each student may work out a budget to suit her needs.

FOODS AND NUTRITION

FOODS I (Meals for Moderns)

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$5
Meals in the modern way suggests new methods in cookery; streamlining cooking processes; pressure-pan cookery; use of frozen foods; comparison of commercial mixes with home mixes; cooking to retain vitamins and minerals; planning of balanced meals. This is a practical course planned around the family meals—lunch, breakfast and dinner. It will include something in quick breads, vegetables, salads, casseroles, dishes, meals, sandwiches and simple desserts. An excellent course for brides-to-be or anyone desiring help in practical cookery.

FOODS II (Baking, Meat Cookery, Vegetable Cookery)

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$6
The baking unit includes quick breads, yeast breads, cakes, cookies and pastry. Selection and cooking of poultry, stuffing and trussing a fowl for roasting are given prior to the holiday season. Selection of meat is stressed. Both tender and less tender cuts of meat are prepared as well as meat extenders. Sea food and fresh water fish cookery is a part of the course. Retention of vitamins and minerals in vegetable cookery is stressed. Unusual ways of preparing vegetables are given, as well as vegetable plates and casseroles.

FOODS III (Salads, Casseroles, Desserts and Hospitality Cookery)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$6
New and unusual salads, casseroles, dishes for the main part of the meal or for buffet suppers, unusual desserts and a variety of meals for special occasions are given. The latter part of the course
will feature buffet suppers, holiday dinners, receptions, teas, guest dinners and after-theater snacks. One should have some experience in cooking before taking this course.

FOODS IV (Supper Class)

Tues. and Thurs., 5:15 p.m. to 7:00 p.m.
FEE—$12 Per Semester

This is a supper class for business girls. It includes planning and preparing simple dinners and suppers suitable to serve in a small apartment for two to four people. Time management is featured. Nutritional principles are stressed in the planning and preparation of meals. Only those who can be here promptly at 5:15 are enrolled.

CAKE DECORATING I

Thurs., 7:15 p.m. to 9:00 p.m.
FEE—$3

Short course on the decorating of cakes. Actual practice will be given in the techniques of making flowers and other forms of decoration for wedding cakes, petit four mints.

CAKE DECORATING II

Thurs., 7:15 p.m. to 9:00 p.m.
FEE—$3

Advanced problems in cake decorating for those students who completed Cake Decorating I; also open to people on the job who wish to brush up on techniques.

NUTRITION

Tues., 7:30 p.m. to 9:00 p.m.

For the individual who wishes to have a working knowledge of the importance of balanced meals in the achievement of radiant health and successful careers, this course is suggested. Some of the highlights of the course are: body requirements of vitamins, minerals, proteins, fats and carbohydrates; how to plan the family meals so as to secure these requirements; how to choose foods when eating all meals out; foods to eat to take care of deficiencies in the diet; the relation of food to personality; how overeating of one class of food results in lowered vitality; pointers on weight reduction and also on body building. This is a lecture and discussion course.

CLOTHING AND TEXTILES

CLOTHING I (Firsts in Sewing)

Mon., Tues., Wed., Thurs., or Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1

First lessons in sewing include the construction of simple garments such as blouses, cotton dresses, skirts and other simple garments. Streamlined methods of clothing construction are taught. Emphasis is given to caring for and use of the sewing machine; selection and use of patterns; basic principles in construction of simple garments. This is a foundation for more advanced classes.

CLOTHING II (Children's Garments)

Tues., 7:00 p.m. to 9:00 p.m.
FEE—$1

Consists of a study of special problems in the selection and making of children's garments. Selection of suitable patterns and material for all types of garments will be discussed. Special attention will be given to the making of worked and bound buttonholes, plackets and zippers, making and applying collars, patch and slot pocket. Decorative stitches such as fagoting and smocking will be applied on cotton or silk dresses.

CLOTHING III (Refresher Course)

Mon., 7:00 p.m. to 9:00 p.m.
FEE—$1

Planned for the person who has done some sewing at home but who needs help in some of the construction processes such as bound buttonholes; corded buttonholes; putting in zippers; how to use a pattern correctly; how to use the buttonholer; worked buttonholes; cutting of true bias; pockets. Garments will not be made; people taking this course may also take Clothing IV or V as the purpose of this course is to give special help on the above processes to people who may be ready for more advanced work than Clothing I.

CLOTHING IV (Casual Clothes)

Mon., Tues., or Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1

An elementary dressmaking course which follows Clothing I or its equivalent. There will be opportunity to choose the types of garments to be made. It may be dresses for morning wear, casual clothes, blouses and skirts or active sport clothes. Problems found in this type of garment will be used as a basis for the lessons. Concise explanation with the detailed illustrative material will be used to simplify each step of construction.
CLOTHING V (That Ready-Made Effect)

Mon., Wed., or Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1

How to secure that much desired ready-made effect will be one of the purposes of this course. Selection of material and patterns will be stressed, with emphasis on color, texture and becoming design for each individual. Such fabrics as silk, wool, rayon, nylon and the new fabrics on the market will be studied. Garments to be made will be chosen from the following: rayon dresses, wool dresses, two-piece dresses, formal and dinner dresses. Short cuts in construction processes, identification of materials, interpretation and application of pattern principles, and coordinating of the wardrobe will be included. This course is for the advanced student.

CLOTHING VI (Tailoring I)

Mon. and Wed., 7:00 p.m. to 9:00 p.m., or Tues., and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1.00

For the advanced student, and is planned for those people who want to make tailored garments. Some of the specific tailoring principles which are given are: pattern altering to fit the figure, use of interfacing, tape and pad stitch for collars, reverse hand stitching of collars and front facing, fitting problems, use of pressing board for shaping garment to the figure, bound and pocket pockets, lining and interlining for costs and suits, types of pads most suitable, selection of fabrics for coats, suit linings, interlinings, and interfacings. Garments to be made are suits and coats from new material as well as make-over problems in suits and coats.

CLOTHING VII (Challenge of Make-over)

Mon., 7:00 p.m. to 9:00 p.m.
FEE—$1.00

It is essential that members of the class have had Clothing IV or its equivalent before enrolling in the remodeling class. Instruction will be given on the preparation of the garment for class work, combination of new and old material, and selection of garments for remodeling. Almost any garment can be remodeled.

CLOTHING VIII (Tailoring II)

Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1

For students who have completed Tailoring I. The problems to be emphasized are: molding of garments with the iron, bound and welt pockets, cording and worked buttonholes, study of sleeve and other fitting problems. Suits and coats will be made.

MILLINERY I

Tues., Wed., or Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2

This is a course in Millinery especially for the beginner. A basic knowledge of sewing is necessary. The course includes the fundamental principles and millinery techniques. Its objective is to develop an understanding of millinery methods, materials, frames, trimmings, the different basic hat styles, and the choosing of becoming hats in proportion to face and figure. The blocking of felt and straw over simple blocks, familiarizing the student with blocks and steaming, as well as re-blocking of good quality used felts is included. Various types of hats are made.

MILLINERY II

Mon., 7:00 p.m. to 9:00 p.m.
FEE—$2

This course is planned for the student who has had Millinery I and is ready for more advanced problems. More difficult problems employing a wider variety of millinery processes are given. The student has an opportunity to gain more knowledge regarding feather, flower, and ribbon trimmings, and the various uses and ways of applying veiling to each type of hat. Hats, as well as remodeled hats, are made.

FUR REMODELING

Wed., or Fri., 7:00 p.m. to 9:00 p.m.
FEE—$1

Making over fur coats, restyling and modernizing the fur garment are two features of this course. Putting fur collars on coats and suits, and mending rips are also included. The actual work is done in the class under the instruction of an expert in fur work.

PERSONALITY WARDROBE

Thur., 7:30 p.m. to 9:00 p.m.

How to bring out one's personality through choice of wardrobe is the keynote of this course. Some of the highlights of the course are the plann-
Homemaking

Making of a perfect wardrobe and the down-to-earth reality wardrobe, new silhouettes for old, skillful shopping, accessories, foundation garments, weight control, care of skin and use of cosmetics.

DRAPE RIES AND LAMPSHADE S
Fri., 7:00 p.m. to 9:00 p.m.

Draperies—Curtains and draperies are studied from the standpoint of fabrics, styles, colors, patterns, relation to architectural features, kinds of windows and to the color and material of the exterior. Emphasis is placed upon the techniques of construction for both curtains and draperies suitable for each room in the home.

Lamps shades—Suggestions for planning a color scheme are given as well as choosing appropriate shades (formal or informal). Emphasis is placed upon construction techniques in the making of the panel shade, winding, fitting, placing outside and inside panels, trimming and finishing. Directions are also given for measuring, cutting, pasting, and trimming the paper or parchment shade.

SLIP COVERS
Wed. or Fri., 7:00 p.m. to 9:00 p.m.

A study of furniture, its line and construction is made in so far as it is related to advisability of slip covering. Suggestions are given on color schemes, choice of fabrics, estimation of yardage and placing the pattern. Definite instruction is given upon the techniques of cutting, fitting, basting, stitching and the application of fasteners. Both slip covers and slip upholstery covers are made in class under supervision.

UPHOLSTERY I
Mon., or Tues., 6:30 p.m. to 9:30 p.m.
FEE—$2

This is an introductory course in simple upholstery techniques. Emphasis will be placed upon the following: proper care and use of tools; how and where to place the webbing; how to fasten the springs; how to pad the chair; how to put on the muslin cover; careful estimation of the upholstery fabric. Careful supervision will be given to selection and estimation of fabric and to the recovering of the furniture. It is recommended that beginners choose simple projects for the first work such as footstools, pull-up chairs, or bedroom chairs.

KNITTING II
Thurs. 7:00 to 9:00 p.m.

This is for the advanced student and will include planning, styling, and charting of garments to measurements. Types of garments which may be made are sweaters, blouses, mittens, afghans and similar articles. Equipment needed for first lesson: two number-three knitting needles (ten or twelve-inch bone), a small ball of any kind of yarn, note-book and pencil.

KNITTING II
Mon., Tues., or Wed., 7:00 p.m. to 9:00 p.m.

This is for the beginners or those who have had very little experience in knitting. Typical of what might be made are scarfs, sweaters, mittens, afghans and similar articles. Equipment needed for first lesson: two number-three knitting needles (ten or twelve-inch bone), a small ball of any kind of yarn, note-book and pencil.

NEEDLEWORK
Mon., 7:00 p.m. to 9:00 p.m.
FEE—$1

This course is for all people interested in fine needlework. It includes all decorative stitches, some of which are satin stitch, needlepoint, outline stitch, crewel stitch, tatting, smocking, Italian hem-stitching, applique, Swedish weaving. The instructor of this course has many rare patterns which are available to the class.

CROCHETING
Wed. or Thurs., 7:00 p.m. to 9:00 p.m.

This class is for beginners or for those people who have done some crocheting and wish help in more advanced problems. The meaning of terms used in crocheting and how to read directions will be given. There are a variety of articles which may be made, such as holders, edgings, insertions, afghans, doilies, place mats, hats, bags, tablecloths, bedspreads and of course many other things.
HOMEMAKING

CLOTHING CLASSES
AT OTHER CENTERS

Clothing IV—Fri., 7:00 to 9:00—Lapham School
Clothing I—Tues., 7:00 to 9:00—West High
Clothing V—Tues., 7:00 to 9:00—West High
Clothing VII—Tues., 7:00 to 9:00—West High
General Clothing—Fri., 7:00 to 9:00—Franklin
FEE—$1 for above classes

Trade and Industry

Automotive
Building and Allied Trades
Metal Industries
Service Occupations
Printing
AUTOMOTIVE

AUTO MECHANICS—CONSUMERS
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$2
This course is designed to show how the units of the car operate, why repairs are necessary, cost of maintenance, how to have the car serviced, dealer relations, insurance, new car purchase and depreciation.

AUTO MECHANICS—TRADE PREPARATORY
Tues., and Thurs., 6:30 p.m. to 9:30 p.m.
FEE—$3
This course is designed for those people who are interested in becoming Automotive Apprentices. It will deal with the various systems of the car such as brakes, electrical and fuel feed systems, front wheel alignment, and wheel suspension.

AUTO MECHANICS TRADE EXTENSION
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$3.00
This course is prepared for persons employed in the automotive field and covers both theory and practice in the following units of instruction—electrical systems, fuel systems, engine tune-up, brakes, front wheel alignment and steering.

AUTOMATIC TRANSMISSION—TRADE EXTENSION
Tues., and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$3
This course is designed for garage mechanics who need to become familiar with automatic transmissions and their component parts.
The instruction will cover service, adjustment and overhaul of General Motor and Chrysler transmissions, torque converters, fluid coupling and controls for each unit. It is possible for the student to select only the units he requires. A list of units and dates for each may be obtained from the trade supervisor.

AUTO BODY REPAIR ESTIMATING
Mon., 7:00 p.m. to 9:00 p.m.
FEE—None
This course covers an analysis of the processes and methods used in arriving at the cost of repairing and refinishing damaged auto bodies. How to use parts books, a study of materials and estimating labor is covered by lecture, illustrations and films. This course is for men employed in auto body work.

AUTO BODY TRADE PREPARATORY
Tues., and Thurs., 8:30 p.m. to 8:30 p.m.
FEE—$5
This is a practical course designed for those who would like to prepare themselves to be Auto Body Mechanics. It covers filling light gauge metals in all positions, metal finishing and repair, alignment, bumping, dinging, filing and soldering, as well as refinishing, preparing of undercoats and spray painting of lacquer and enamel.

BUILDING AND ALLIED TRADES

WOODWORKING (Cabinetmaking)
Mon. and Wed., 5:00 p.m. to 7:00 p.m.; 7:00 p.m. to 9:00 p.m.
Tues. and Thurs., 5:00 p.m. to 7:00 p.m.; 7:00 p.m. to 9:00 p.m.
FEE—$2.50
Knowing the woods we use, selecting the woods suitable for the job, stock sizes and actual sizes of lumber, drying and storing of lumber, matching wood for its beauty of grain and working the wood to achieve the desired results. The core, use and sharpening of tools, project making, machine woodworking and milling of stock on power machines, joints and joint making, glue and gluing, preparing surfaces and applying finishes. Wood turning. Safety practices of hand and power tools.
All materials used for personal projects must be paid for by the student.

BLUEPRINT READING
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1.00
The student has a choice of studying either the blueprints for the machine trades or for the building trades. Both courses present many practical applications. The student progresses easily from the basic and fundamental concepts to a thorough understanding of each subject.

CARPENTRY—TRADE EXTENSION
Tues., and Thurs., 7:00 p.m. to 9:00 p.m.
This is a course designed for men who are employed in the carpentry trade. It is divided into several units of instruction, each being offered on designated evenings thus making it possible for the
student to enroll for only the instruction he is anxious to obtain. A list of the units and the dates each is offered may be obtained from the trade supervisor.

DRAFTING (Architectural)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1
Covers vocabulary, construction details, pictorial drawing, isometric, oblique and perspective drawing; layout of rafters, drafting and layout techniques; house layout and arrangement, selecting and planning a project; house plans and details, developing a drafting project; estimating, specifications, transposing plans into objective reality; perspective of house, drawing a convincing picture of the house.

DRAFTING (Mechanical Drawing)

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$1
Covers geometric problems, how to handle drawing equipment and study geometric relations; elementary working drawings, elements of orthographic projection, dimensioning skill in letters and numbers; problems in projection, advanced projection problems; layout and development; basic instructional and review material completion problems; free-hand sketching; auxiliary views, true-length lines, and angles and planes; cross sectioning and symbols; dimensioning; pictorial drawing; screw threads; pattern drawing.

ELECTRICITY

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
FEE—$1
Covers elements of electricity; elementary circuits, mathematics, electrical formulas; kinds of wiring, types to use and where; motors, kinds, usage and repairs; generators, principles, practices, care; layout work, blueprints and estimating; code, state and federal building laws.

METAL INDUSTRIES

MACHINE SHOP

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$3
This course covers nomenclature of the engine lathe, milling machine, shaper, grinders and drill press, and the basic operating principles of these machines. Also, layout procedures, the use of precision instruments and gauges, machine shop trade standards and data including care of hand tools. Any materials other than those used by the student for class exercises must be paid for by the student.

SHEET METAL PATTERN DRAFTING

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2
Covers essential and advanced pattern layout; parallel line: radical; triangulation development of the various problems and fittings used in sheet metal work; instruction in simplified and short-cut methods of layout to those well grounded in fundamentals. The fee covers cost of material used to prove the layout work only; any materials used for project work will cost extra.

WELDING (Arc)

Tues. and Thurs., 5:00 p.m. to 7:00 p.m.
Mon. and Wed., 7:00 p.m. to 9:00 p.m.
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$10
Industrial application of arc welding; arc welding machines and accessories; classification of welding electrodes; joint and weld characteristics; basic training in arc welding of mild steel in the flat, horizontal, vertical and overhead positions. Army and navy qualification tests. Pipe welding. Pressure vessel welding. Heliarc welding of stainless steels and alloys.

WELDING (Oxy-Acetylene)

Mon. and Wed., 7:00 p.m. to 9:00 p.m.
Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$10
Basic training in welding mild steel in flat, horizontal, vertical, and overhead positions, care of equipment, pipe welding, bronze welding, steel and cast iron welding. Oxy-acetylene cutting of metals, white metal welding, aluminum welding, cad lead burning.

SERVICE OCCUPATIONS

CATERING SPECIALTIES

Tues., 5:00 p.m. to 7:00 p.m.
TYPE OF STUDENT—Adult women
FEE—$10 (covering materials and one meal each session)
LENGTH OF COURSE—10 weeks
PREPARATION AND SERVING OF FOOD SPECIALTIES

Preparation and serving of delicate food specialties for buffet and party tables. Assistance in the solution of special food problems, particularly food service for large groups.

RESTAURANT TRADE PROBLEMS

Thurs., 7:00 p.m. to 9:00 p.m.
TYPE OF STUDENT—Adult men working in hotels or restaurants
FEE—$5 (covering text material and special recipes)
LENGTH OF COURSE—10 weeks
Preparation and serving of quality foods, utilizing the more abundant food sources, and obtaining reasonable profit. Special consideration given to individual problems in the hotel and restaurant field.

RADIO I—THEORY AND SERVICE OF RECEIVERS

Tues. and Thurs., 8:30 p.m. to 9:30 p.m.
FEE—$5.00
Covers basic theory, radio fundamentals, vacuum tubes, amplifiers, power supplies, detectors, oscillators, couplings, mixer circuits, control circuits; mechanical practice and use of hand tools; soldering, construction and operation of radio receivers; service methods, use of service instruments, signal tracing, alignment of receivers; elementary radio mathematics, laws, and electrical formulas.

TELEVISION—THEORY AND SERVICE OF TV RECEIVERS

Mon. and Wed., 6:30 p.m. to 9:30 p.m.
FEE—$8.00
Prerequisite: Radio I or equivalent; ability to pass entrance examination.
Covers basic television theory, elementary television mathematics, the TV high and low voltage power supplies, vertical and horizontal deflection circuits, the radio frequency unit, the sound channel, the picture IF, the picture second detector, the video amplifier, the DC restorer, synchronizing circuits, the kinescope tube; use of television test equipment in the location of defects, alignment of television receivers.

TECHNICAL MATHEMATICS

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—None
For adults who wish to pursue a Technical Course, we offer the following courses of a technical nature to prepare the students for their special fields.

Applied Mathematics—This is a course of trade mathematics where practical applications of mathematics are considered.

Algebra I. A high school course in Algebra where a unit of high school work is credited upon completion.

Algebra II. The second course in Algebra is for students who have had a year of elementary algebra. It consists of advanced work of many of the principles taught in the first year course.

Geometry. A high school course in Geometry where a unit of high school work is credited upon completion.

Trigonometry. An elementary course in trigonometry where a half unit of credit is given.

REFRIGERATION AND AIR CONDITIONING

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2
Covers introduction to refrigeration, fundamentals of refrigeration and air conditioning; refrigeration cycle (operating cycle of a refrigeration unit); typical compression cycle; study of refrigeration, chemical properties, hazards and testing; machines and systems, unit setups for various applications; refrigeration and air-conditioning accessories, motor controls, liquid controls and valves; laboratory exercises, shop work in all types of units and refrigeration accessories; psychrometric charts and computing heat gain of air; properties of air including the study of the chemical makeup of air; air-conditioning units, chemical types of units employed from package units to large industrial installations.

PRINTING

PRINTING

Tues. and Thurs., 7:00 p.m. to 9:00 p.m.
FEE—$2
Hand composition, presswork, and machine composition are the main divisions of work offered in printing. Some work may also be taken in cost estimating, paper estimating, and cutting. Related work will be given concerning inks and papers. The instruction is individual and the student progresses at his own pace.
1951-52
Day
School
Catalog

Madison
Vocational
and Adult
School
Madison Vocational
and
Adult School

Day School
Catalog
1951-52

Board of
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Madison, Wisconsin
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GENERAL INFORMATION

The Madison Vocational and Adult School is a public school in which Madison residents above the age of fourteen may enroll without tuition cost. Laboratory fees to cover the cost of supplies used by the students enrolled in the course are charged as listed in the catalog. Material used for an individual project is paid for by students. Registration is not complete until all fees are paid.

For many of the courses persons may enroll at any time and receive individualized instruction. They may enroll for part-time, half-time, or full-time attendance. Students who are working may arrange a part-time school program to fit into their work schedule.

In most of the courses there are no specific educational requirements for entrance. Individual differences are met by individual instruction.

VETERANS' TRAINING

This school is approved for training by the Veterans Administration under P.L. 346 and P.L. 16. A full-time program under the G.I. Bill requires that a veteran attend school a minimum of thirty hours per week. Further information on veterans’ training may be obtained in Room 148.

HIGH SCHOOL CREDIT

Students wishing to secure high school credits for work done in the Vocational School will take this matter up with the Director before enrolling in the courses. Otherwise, no high school credit can be granted.

RECORDS

Permanent records of students' attendance and achievements are kept in the registration office and may be obtained for reference or school admission purposes by the student at any time.

ATTENDANCE

A record is kept on attendance of all students including the adults. This is necessary because of the great demand for the use of the school's equipment and the need to eliminate any who are not serious about their work. Those who must be absent are requested to call 5-4541 so that they will not be withdrawn from class.

GUIDANCE AND PLACEMENT

The Guidance Office is located in Room 136. This department is at the service of all students.
who have health, welfare, placement and guidance problems. It offers counseling service to all adults. Aptitude, interest and general information tests are given when indicated as a part of this service. Any young student or adult wishing to avail himself of an opportunity to take these tests may arrange for them at this office. Adults who are retired or about to retire because of age are invited to use the counseling services.

The Placement Department is in a sense an extension of the teacher’s classroom activities. Teacher’s ratings of students are sent to the Placement Department where an effort is made to place students in positions suitable to aptitudes and skills demonstrated in classroom work.

Vocational School students who wish to be considered for employment should inform the Placement Office of this fact.

The Placement Department has contacts with the various industries and business organizations in the city. Employers place calls with the Vocational School when they need help.

ADULT EDUCATION SPECIAL SERVICES

Adults wishing to meet special educational requirements for civil service classification, or to make up educational deficiencies in order that they may enter fields of training which require certain educational requirements, may make up these deficiencies by making arrangements at the time of registration. These courses are in the nature of refresher courses which do not require full semester attendance.

NON-RESIDENT STUDENTS

In accordance with the laws of Wisconsin, non-resident tuition for persons under twenty-one years of age is chargeable to the city, village or town in which the student resides. Those desiring to enroll under the benefits of this law are requested to obtain the proper blank from the Registration Office and have it signed and returned to the school as evidence of residence.

Those persons who desire to pay their own tuition may do so, and the charges are as follows:

- 75 cents per one-half day—8:30 a.m. to 12:06 p.m.
- 75 cents per one-half day—12:52 p.m. to 4:24 p.m.

Tuition is payable in advance for each nine-week period. Tuition may be charged for only actual days of attendance; hence all unused tuition will be refunded to the student if a written request is presented to the Director.

REGISTRATION HOURS

8:30 a.m. to 11:30 a.m.
1:30 p.m. to 3:30 p.m.
Monday through Friday
General Education

Academic
Art
Music
ACADEMIC
MATHEMATICS

ALGEBRA I (Beginning)
COURSE NUMBERS—1131, 2131
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—Progressive First Algebra by W. W. Hart
COURSE CONTENT—Covers beginning of algebra
for which one high school unit is given. Consists of
nine assignment sheets. Unit tests are given when
each assignment sheet is completed. A final test is
given.

ALGEBRA II
(Advanced High School Algebra)
COURSE NUMBERS—1132, 2132
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
PREREQUISITE—Algebra I
TEXT—Progressive Second Algebra by W. W. Hart
COURSE CONTENT—Reviews the principles
learned in algebra I. Advanced topics in factoring
and quadratic equations are included. Progressive
and the binomial theorem are introduced at the
end of the course. There are twenty short assign-
ments. A final test is given and upon completion a
one-half high school unit is given.

GEOMETRY
COURSE NUMBERS—1133, 2133
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
PREREQUISITE—Algebra I
TEXT—Progressive Geometry by W. W. Hart
COURSE CONTENT—Emphasis in this course is
developed in the individual the ability of form-
ing a logical geometric proof. There are six as-
ignment sheets covering the course. Tests are
given when a unit is completed as well as a fi-
nal test. One high school unit is given for the
successful completion of this course.

APPLIED MATHEMATICS
COURSE NUMBERS—1134, 2134
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—Applied Mathematics by James F. Johnson
COURSE CONTENT—Arithmetic fundamentals are
studied and applied to practical problems. One-
half high school unit is given. The course can be
used only as an elective. There are seventeen
assignment sheets and a final test is given when
the course is completed.

TRIGONOMETRY
COURSE NUMBER—2135
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Plane Trigonometry by Rosenbach, Whit-
man, Moskovitz
PREREQUISITE—Algebra, geometry
COURSE CONTENT—High school course in trigo-
ometry. Emphasis is placed on problem solving
after the trigonometric relations are mastered.
Twenty assignment sheets with a final exami-
nation after satisfactory completion of the as-
ignment sheets constitute the course. One-half
high school unit is given.

BUSINESS MATHEMATICS
COURSE NUMBERS—1137, 2137
TYPE OF STUDENT—Adult, Apprentice, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
PREREQUISITE—Arithmetic I
TEXT—College Business Arithmetic by Hanna and
Walker
COURSE CONTENT—Consists of mastering arith-
metic fundamentals and then applying them to
situations in business. A book which enables the
student to progress at his own speed is used.
One-half high unit is earned when course is
completed.

SCIENCE

CHEMISTRY
COURSE NUMBERS—1121, 2121
TYPE OF STUDENT—Adult, Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—Fundamentals of Chemistry by Gray,
Sandifur and Hanna
COURSE CONTENT—Parallels the average chem-
istry course given in high school. One high
school unit is given for the successful comple-
tion of this course.

PHYSICS
COURSE NUMBERS—1122, 2122
TYPE OF STUDENT—Adult, Junior
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Modern Physics by Charles E. Dall
COURSE CONTENT—Parallels the average physics
course given in high school. One high school
unit will be given for the successful completion
of this course.
GENERAL EDUCATION

ENGLISH

ENGLISH FOR PART-TIME BOYS
COURSE NUMBER-1103
TYPE OF STUDENT—Part-time
FEE—None
LENGTH OF COURSE—37 fifty minute periods
TEXTS—Adapted Classics, such as The Count of Monte Cristo, The Adventures of Sherlock Holmes, A Tale of Two Cities, and Moby Dick.
COURSE CONTENT—Materials used to improve the boy's ease and fluency of reading and understanding of what he reads, and to improve the quality of his writing through frequent practice in class.

ENGLISH FOR FOREIGNERS
BEGINNING M. W. F.
ADVANCED T. TH.
COURSE NUMBER-2101
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—The Constitution of Our Country by Relford and Carson; Applied English Essentials by Reigner; Practical Exercise Sheets
COURSE CONTENT—For all foreigners—those who wish to become American citizens, those who speak and read but cannot write English, and those who do not know any English. The needs of each group are considered and the instruction is conducted accordingly.

ELEMENTARY GRAMMAR
COURSE NUMBER-1103
TYPE OF STUDENT—Junior Part-time Girls
FEE—None
LENGTH OF COURSE—96 fifty minute periods
TEXTS—Practical English published by Scholastic Magazine; Literary Cavalcade published by Scholastic
COURSE CONTENT—This is a short course based on the chief "Stumbling Blocks" in grammar, spelling, punctuation, usage, vocabulary, reading and compositions.

ADVANCED GRAMMAR
COURSE NUMBERS—2104
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—Basic principles of grammar—the sentence, parts of speech, spelling, and punctuation taught through study and drill on correct usage.

ENGLISH COMPOSITION AND LITERATURE
COURSE NUMBER-2105
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—The Technique of Composition by Taft, McDermott, and Jenson; Modern English Readings, edited by Loomis and Clark.
COURSE CONTENT—Literature, selected to improve the student's tastes in reading and to give him an appreciation of good writing; themes to teach the student to write a good paper. Through such an approach, the student is given guidance not only in self-expression but also in personal growth and happiness.

ENGLISH FOR PRINTERS
COURSE NUMBER-3107
TYPE OF STUDENT—Full-time Junior, Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—English for Printers, International Typographical Union; Applied Punctuation, Charles G. Reigner
For reference: College Business English, Charles G. Reigner; Century Collegiate Handbook, Greener and Jones; Daily Drills for Better English, Edward H. Webster; Mimeographed exercise sheets
COURSE CONTENT—A specialized course for students interested in becoming printers. Each pupil's needs and abilities are discovered by especially prepared tests and each is helped accordingly. Correctness and variety of sentence construction are stressed. Punctuation, spelling and word meaning are included. To recognize errors and to be able to correct them is the purpose of the classroom work. This class work is helpful for all those interested in proofreading.

JOURNALISM
COURSE NUMBER-2108
TYPE OF STUDENT—Full-time Junior, Adult
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—The purpose of this course in journalism is to help students to see, observe, and evaluate the events of everyday life and to tell about them in brief, concise English. Class practice will include writing news stories, reports, interviews, biographical sketches, short features, club and activity reports and radio news releases such as the average person may be called upon to write for his firm, club, lodge or church. THE VOCATIONAL NEWS will be the outlet for these stories.
ELEMENTARY SPEECH

COURSE NUMBER—1110
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXTS—Everyday Speech by Smith, Kreeting and Lewis; Practical English and Literary Cavalcade published by Scholastic Magazine

COURSE CONTENT—For the junior who needs grammar, spelling, and pronunciation, and who needs to improve his reading speed and understanding.

A short unit is included on personality traits which spell success on the job. Students are encouraged to rate themselves on these traits and the articles are used for class-room round-table discussions. The course aims to improve the student in all of his everyday speaking situations.

SPEECH (GENERAL)

COURSE NUMBERS—1111, 2111
TYPE OF STUDENT—Adult
FEE—Laboratory fee $50 per semester
LENGTH OF COURSE—180 fifty minute periods
TEXTS—Principles and Types of Speech, Allan H. Monroe; The Art of Conversation, Milton Wright; 30 Days to a More Powerful Vocabulary, Wilfred Funk and Norman Lewis

COURSE CONTENT—The average person should realize how great a part his speech plays in his everyday life. Dress and physical appearance are secondary. Voice makes or mars. This course will teach what effective speech cannot be taught in everyday speaking, the greeting, telephone conversation, giving directions, making explanations, the interview, specific speech situations, the talk to convince, describing a technique, spontaneous talk, speeches for social occasions, introductions, award presentations, and after dinner speeches. Group speaking, group discussion, round table, the panel, the forum, the function of the chairman will be studied. Speaking props—ideas, words, voice, and diction. Oral reading techniques. Prose and poetry selections for general practice.

SPEECH FOR APPRENTICES

COURSE NUMBER—3112
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—27 fifty minute periods
TEXTS—Principals and Types of Speech, Revised by Allan K. Monroe; 30 Days to a More Powerful Vocabulary by Wilfred Funk and Norman Lewis; The Art of Conversation by Milton Wright

COURSE CONTENT—To understand and develop skill in conversational speech; to learn how to express and defend one’s attitude in a discussion; to learn how to give and receive criticism; to learn something about the cooperative discussion of a common problem such as the speech which is used in a committee or conference; to develop skill in making short public speeches for various purposes such as introductions, presentations, and the speech of welcome; to understand and develop skill in the oral reading of various types of literature; to master the pronunciation and spelling of 500 to 1000 words that are in daily use but are frequently mis-spelled and mispronounced such as data, apparatus and address; master the correct forms of fifty expressions in which the correct usage is frequently violated as “between you and me.” The student must (1) fulfill eight speech assignments before the close; (2) prepare and hand in outlines for four speeches.

SOCIAL STUDIES

UNITED STATES HISTORY

COURSE NUMBERS—1115, 2115
TYPE OF STUDENT—Full-time Junior, Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—America by Faulkner and Kepner

COURSE CONTENT—This course is planned for students interested in broadening their knowledge on the history of the United States. Assignment sheets for each chapter enable the student to progress at his own rate. Class discussion, cover. Discovery and colonization; formation of our Constitution and Government; industrialization of America; development of our cultural and social life; acquisition of boundaries and territories; current problems.

WORLD HISTORY

COURSE NUMBERS—1117, 2117
TYPE OF STUDENT—Full-time Junior, Adult
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—World History by Smith, Muzzey and Lloyd

COURSE CONTENT—A comprehensive study of the beginnings of civilization; what it is, how our ancestors lived, what the Egyptians accomplished and civilizations of Western Asia. A study of the great civilization of Greece and Rome: their contributions and influence on the world. Life in the Middle Ages, the Barbary Invasions, Christianity, feudalism, the Crusades. Beginnings of the modern world and the struggle

A critical analysis of current events and world problems.

**SOCIAL SCIENCE**

COURSE NUMBER- 1115
TYPE OF STUDENT—Full-time, Part-time Junior
FEE—None
TEXTS—Current Events; Junior Review; the Scholastic
LENGTH OF COURSE—36 fifty minute periods for part-time and 180 fifty minute periods for full-time

COURSE CONTENT—Planned to create an interest in what is happening today at home and abroad, and to gain information for a better understanding of the world we live in. During each class period the important news of the previous day is read and discussed. As a result of this class period activity a diary or summary of the significant news of each week is recorded by the pupils. Special emphasis is placed on the location of world news by map projects. Names associated with the most important news stories are learned and interesting details connected with such personalities are presented.

**TWENTIETH CENTURY MIDPOINT**

COURSE NUMBER—2118
TYPE OF STUDENT—Adult
FEE—None
TEXTS—None
LENGTH OF COURSE—9 fifty minute periods

COURSE CONTENT—This course is a summary and evaluation of contemporary human activities, with emphasis upon political and social changes and trends of the recent past and their probable future development.

**LANGUAGE**

**FOREIGN LANGUAGE**

SPANISH I
COURSE NUMBERS—1140, 2140
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—148 fifty minute periods

COURSE CONTENT—A class in conversational Spanish with practice in pronunciation, comprehension of the spoken language, and conversational drill.

**BASIC READING AND COMPREHENSION**

COURSE NUMBER—1108, 2109
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—20 fifty minute periods

COURSE CONTENT—Reading is a skill which is learned by constant practice and evaluation of comprehension. To be able to read more rapidly and to better understand what has been read are necessary tools for gaining success in any field as well as everyday living. In this course a careful analysis is made of present reading methods and training will be given in rapid reading, increased comprehension of reading, skimming, and eliminating faulty habits.

**ART**

**DRAWING (Elementary)**

COURSE NUMBER—1281
TYPE OF STUDENT—Part-time, Full-time Junior
FEE—None
LENGTH OF COURSE—360 fifty minute periods

COURSE CONTENT—Still-life drawing in line, value and color, stressing perspective and composition. Mediums are charcoal, colored pencils, crayons and pencil.

**DRAWING AND PAINTING**

Elementary and Advanced

COURSE NUMBERS—2202, 5202
TYPE OF STUDENT—Apprentice, Adult
FEE—Laboratory $1.50 per semester; materials to be furnished by student
LENGTH OF COURSE—72 to 180 fifty minute periods per semester

**DESIGN**

COURSE NUMBERS—2203, 5203
TYPE OF STUDENT—Adult
FEE—Laboratory $1.50 per semester
LENGTH OF COURSE—72 fifty minute periods first semester; 72 fifty minute periods second semester
GENERAL EDUCATION

Tues. and Thur. 12:52-2:24 first semester
Tues. and Thur. 12:52-4:24 second semester

COURSE CONTENT—A basis for artist, craftsman
and homemaker. Instructional problems in line,
space, light and dark, color, tone, and texture to
develop a person's feeling for expression and
fine relationships.

FIGURE DRAWING

COURSE NUMBERS—2204, 5204
TYPE OF STUDENT—Full-time, advanced Adult and
apprentice 1st and 2nd semester
FEE—Laboratory fee $2.50 per semester
LENGTH OF COURSE—36 fifty minute periods each
semester
COURSE CONTENT—Emphasizing line, proportion,
rhythm, anatomy and construction of model.

PORTRAIT PAINTING

COURSE NUMBERS—2206, 5206
TYPE OF STUDENT—Advanced Adult
PREREQUISITE—Still-life and figure drawing
FEE—Laboratory fee $2.50 per semester; materials
unto be furnished by the student
LENGTH OF COURSE—36 fifty minute periods first
semester and second semester
Fri. 12:52-4:24
COURSE CONTENT—Study of the head in light
and shade; the anatomy; structure for solidity;
gesture, expression; design element and composi-
tion; media: pencil, charcoal, conte crayon, water
color and oil.

LETTERING

COURSE NUMBER—1230
TYPE OF STUDENT—Part-time Junior
FEE—None
LENGTH OF COURSE—36 fifty minute periods
COURSE CONTENT—Single stroke alphabet in
pencil and Speedball pen; proportion, spacing
and layout stressed.

ART METAL

COURSE NUMBER—1280
TYPE OF STUDENT—Full-time, Half-time, Part-
time and Adult
FEE—Laboratory $3 per semester
LENGTH OF COURSE—90 fifty minute periods
COURSE CONTENT—An elementary course in de-
sign processes and techniques as applied to cop-
per and brass. Processes include beating down,
soldering, filing and etching.

ART METAL

COURSE NUMBER—2261, 5261
TYPE OF STUDENT—Adult
FEE—Laboratory $1.50 per semester; material $3.50
per semester
LENGTH OF COURSE—108 fifty minute periods
Mon. 1:45-4:24
COURSE CONTENT—Design processes and tech-
niques as applied to copper and brass. The proc-
esses include beating down, piercing, soldering,
filing, etching, construction design, patterning,
finishing and oxidizing.

COSTUME JEWELRY

COURSE NUMBERS—2262, 5262
TYPE OF STUDENT—Adult
FEE—Laboratory $1.50 per semester; material $3.50
per semester
LENGTH OF COURSE—324 fifty minute periods
Tues., Wed., Thur. 1:45-4:24
COURSE CONTENT—Design, processes and tech-
niques as applied to flat silver and silver wire.
The processes include sawing, filing, soldering,
piercing, repoussé, chasing, enameling, casting,
ringsizing, stone setting and finishing.

STONE CUTTING

COURSE NUMBERS—2263, 5263
TYPE OF STUDENT—Adult
FEE—Laboratory $1.50 per semester; stones to be
purchased by student
LENGTH OF COURSE—108 fifty minute periods
Fri. 1:45-4:24
COURSE CONTENT—Recognition and classification
of semi-precious stones. The processes used on the
lapidary machine include sawing, grinding, sand-
ing and polishing stones suitable for costume
jewelry.

COMMERCIAL ART

COURSE NUMBERS—1231, 2231, 3231, 4231, 5231
TYPE OF STUDENT—Apprentice, Full-time, Part-
time and Adult
FEE—Laboratory $3 per semester
TEXTS—Commercial Art by Wallace; Graphic De-
sign by Friend
LENGTH OF COURSE—360 fifty minute periods
Daily 8:30-10:14
COURSE CONTENT—Design, perspective drawing,
light and shade, lettering, pen techniques, wash
techniques, color theory advertising layout, post-
er advertising, brush lettering, reproduction proc-
esses.
SHOW CARD WRITING

COURSE NUMBERS—1232, 2232, 3232
TYPE OF STUDENT—Adult
FEE—Laboratory fee $3 per semester
TEXTS—Martius Idea Books, 1, 2, 3, and 4
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—Pen lettering; brush lettering; layouts for show cards; color in show cards; miscellaneous hints; banners and window strips; illustrations for show cards; silk screen process; displays.

GENERAL CRAFTS

COURSE NUMBERS—2241, 5241
TYPE OF STUDENT—Full-time, Part-time Adult
FEE—Laboratory fee $1.50
LENGTH OF COURSE—540 fifty minute periods
Dally 12:52-3:30
COURSE CONTENT—Leather craft, block printing, textile decoration, caning, decorative painting, (Rosemaling) and other related hand crafts.

APPLIED ART I

COURSE NUMBER—1240
TYPE OF STUDENT—Full-time, Half-time Junior Girls
FEE—None
LENGTH OF COURSE—180 fifty minute periods
Daily 12:32-2:36
COURSE CONTENT—Design and application of monograms for stenciling, border designs for textile painting; Christmas cards for block printing; original designs for hooked rugs; and weaving on inkle and four-harness looms.

GENERAL EDUCATION

CERAMICS

COURSE NUMBER—1223
TYPE OF STUDENT—Adult
FEE—Laboratory fee $1.50 per semester; material fee $6.00 per semester
LENGTH OF COURSE—108 fifty minute periods per semester
Mon., Wed., Fri. 2:30 to 4:24 first semester
Mon., Wed. 2:40 to 4:24 second semester
COURSE CONTENT—An elementary course which includes essential processes in the making of pottery; coil method, hand building, pouring, glazing, surface enrichment; placing and firing the kiln. Advanced students use the potters’ wheel.

MUSIC

HARMONY

COURSE NUMBERS—1304, 2304
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—36 fifty minute periods
TEXT—Modern Harmony by Foote and Spolding
COURSE CONTENT—Intervals, consonance and dissonance in versions, major and minor scales, circle of the fifths, chromatic scale, triads, open and close position, voice leading, leading tone in both major and minor keys, inversion of triads, first and second inversions, rules and the uses of the seventh chord including the dominant and leading tone sevenths, modulation, modulations into related keys, both major and minor.

PIANO I

COURSE NUMBERS—1301, 2301
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXT—Adult Piano Course, Book I by Wagness

WEAVING (Elementary)

COURSE NUMBER—2272
TYPE OF STUDENT—Adult
FEE—Laboratory fee $1.50 per semester. Materials to be purchased by student
LENGTH OF COURSE—224 fifty minute periods
Tues., Wed., Thurs. 1:46-4:24
COURSE CONTENT—Processes and techniques in producing plain and pattern weaves; colonial overshot; summer and winter; bronson and bound weaves.

ADVANCED WEAVING

COURSE NUMBER—2273
TYPE OF STUDENT—Adult
FEE—Laboratory fee $1.50 per semester. Materials to be purchased by student
LENGTH OF COURSE—222 ninety minute periods
Mon. and Fri. 1:46-4:24
COURSE CONTENT—Design methods on two and four harness looms; laid-in (lace pile and tapestry weaves); draft writing for overshot colonial, summer and winter—end bronsen weaves on four, six and eight looms.
PIANO II
COURSE NUMBERS—1302, 2302
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—37 fifty minute periods
COURSE CONTENT—Texts suited to individual needs. Hanon, Czerny exercises. For students who are not interested in popular music.

POPULAR PIANO THROUGH KEYBOARD HARMONY
COURSE NUMBERS—1303, 2303
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—36 fifty minute periods
TEXT—Modern Piano by Lee Sims
COURSE CONTENT—This course is designed for students having some knowledge of piano and consists of learning of popular music, chords, creating necessary breaks, etc. Also valuable to classic music students, since it provides reading short cuts and helps create a technique usually ignored by other methods. A practical course, students learning to do their own arranging.

Business Education
Accounting
Business Principles
Office Training
Distributive Education
Training of Sales People
### ACCOUNTING

#### ACCOUNTING I

**COURSE NUMBER**—2401  
**TYPE OF STUDENT**—Adult  
**LENGTH OF COURSE**—90 fifty minute periods  
**TEXT**—"College Accounting", Sherwood & Boiling Workbook, Part I.  
J. C. Allen, personal service, practice set.  
L. Mann, mercantile, practice set.  
**COURSE CONTENT**—The elementary principles of accounting and the procedures of double entry bookkeeping are thoroughly covered in this course. A comprehensive study is made of both the cash and accrual basis of keeping accounts. Work covered includes journalizing, posting, trial balance, preparing financial reports, adjusting and closing the books at the close for the business period. This course is intended primarily for those who have had no previous training in bookkeeping or accounting. Successful completion of the prescribed work will provide the student with a general knowledge of accounting useful in business or professional fields.

#### ACCOUNTING II

**COURSE NUMBERS**—2402, 4402  
**TYPE OF STUDENT**—Adult, On-the-job Trainee  
**LENGTH OF COURSE**—80 fifty minute periods  
**TEXT**—"College Accounting", Sherwood & Boiling Workbook, Part I.  
**COURSE CONTENT**—For veterans who are working and attending school four hours each week. The complete bookkeeping cycle is covered including journalizing, posting, trial balance, work sheet, business statements and adjusting and closing the ledger.

#### ACCOUNTING III

**COURSE NUMBERS**—2403, 4403  
**TYPE OF STUDENT**—Adult, On-the-job  
**LENGTH OF COURSE**—37 fifty minute periods  
**TEXTS**—Varied advanced texts  
**COURSE CONTENT**—A thorough knowledge of accounting principles or two years accounting training is a prerequisite of this course. The work is all individual and the needs and problems of and loss distribution, admission of new partners, partnership dissolution, accounting for purchases, sales, negotiable instruments, taxes, and the acquisition and disposal of fixed assets will be a part of this course. It serves as basic training for students planning to major in accounting or for work as a bookkeeper or junior accountant.

#### ACCOUNTING IV

**COURSE NUMBERS**—2404, 4404  
**TYPE OF STUDENT**—Adult, On-the-job  
**LENGTH OF COURSE**—90 fifty minute periods  
**TEXT**—"Principles of Cost Accounting" by Sherwood & Chace  
The Mathews Manufacturing Company, practice set  
**COURSE CONTENT**—A pre-requisite to this course is the completion of a preliminary course in general accounting. The job cost or production order system, the process cost system and the standard cost system are discussed. Accounting for materials, labor and factory overhead expenses gives the student knowledge basic in the field of cost accounting.
the students are fulfilled as far as possible. Work in advanced accounting, C. P. A. problems, cost accounting, federal income tax, and auditing is presented.

BURROUGHS TYPEWRITER BOOKKEEPING - Machine Model 7600

COURSE NUMBERS—2445, 4445
TYPE OF STUDENT—Adult, On-the-Job
FEE—50¢ per semester
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—Prerequisite: Ability to operate a typewriter, Knowledge of bookkeeping is of great value. The student first learns the parts of the machine by name, the function of the various keys, the general principles of operation, and the various methods of posting debits and credits to accounts receivable and in proving the operation. After the student has mastered these operations, he posts a set of business transactions using individual ledger and statement sheets and a control account. A Model 76 machine is less automatic than a Model 78 machine and requires the use of more keys to perform the various operations.

BURROUGHS TYPEWRITER BOOKKEEPING - Machine Model 7800

COURSE NUMBERS—2446, 4446
TYPE OF STUDENT—Adult, On-the-Job
FEE—50¢ per semester
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—Prerequisite: Ability to operate a typewriter. Knowledge of bookkeeping is of great value. The student first learns the parts of the machine by name, the function of the various keys, the general principles of operation, and the various methods of posting debits and credits to accounts receivable and in proving the operation. After the student has mastered these operations, he posts a set of business transactions using individual ledger and statement sheets and a control account. A Model 78 machine is more automatic in operation than a Model 76 machine.

BURROUGHS COMPUTING-BILLING - Machine Model 7200

COURSE NUMBERS—2447, 4447
TYPE OF STUDENT—Adult, On-the-Job
FEE—50¢ per semester
LENGTH OF COURSE—25 fifty minute periods
TEXT—Operating Instructions and Practice Problems by Burroughs Adding Machine Co.

BUSINESS EDUCATION

BUSINESS PRINCIPLES

BUSINESS ARITHMETIC

COURSE NUMBERS—2436, 4436
TYPE OF STUDENT—Adult, On-the-Job
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—College Business Arithmetic by J. Marshall Hanna
COURSE CONTENT—Especially intended to serve the needs of people in business. The student intending to study accounting or calculating machines but who is not strong in arithmetic will do well to elect this as a preparatory course. Cashiers, clerks, and general office workers will find this course very helpful. The course embraces the following: intensive review of the fundamentals, percentages, practical short methods, bank discounts, trade and cash discounts, profit and loss, and payrolls.

ADVANCED BUSINESS MATHEMATICS AND PROJECTS

COURSE NUMBERS—2435, 4435
TYPE OF STUDENT—Adult, On-the-Job
FEE—None
LENGTH OF COURSE—18 weeks (90 fifty minute periods)
TEXT—Problems and Projects by J. Marshall Hanna
COURSE CONTENT—This course is only for students who have satisfactorily completed the basic business arithmetic course. The student will be required to spend some time each day on outside preparation and drill. The units covered include horizontal addition, determining averages.
ratios, transportation costs, depreciation, inventory sheets and stock turn, consignment sales, distribution of expenses, property taxes, pricing of goods, stocks and bonds, bank discounts, bank reconciliation statements, payrolls, using sales data, invoicing and marking goods, miscellaneous application problems, insurance sinking fund and amortization schedules.

BUSINESS PRACTICE

COURSE NUMBER—1437
TYPE OF STUDENT—Part-time Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
TEXT—ZuTavern’s Business Practice Set
COURSE CONTENT—Aims to prepare the junior student for a general clerical position. The course covers arithmetic test, invoices, requisitions, stock record, payroll sales reports, salesman’s report, purchase record, invoice (compute amounts and verify work done by others), parcel post, mailing list, itinerary, code telegrams, circular letter, branch store manager.

COMMERCIAL LAW

COURSE NUMBERS—2460, 4460
TYPE OF STUDENT—Adult, On-the-Job
FEE—None
TEXT—Everyday Law by Sidney Bliss and Clyde Rowe
LENGTH OF COURSE—80 fifty minute periods
COURSE CONTENT—To serve the needs of bookkeepers, accountants, clerks and others engaged in business. It includes a study of the following: contracts, negotiable instruments, market transactions and business organizations. It is conducted as a combination of lecture, text material, cases and discussion problems.

FILING AND INDEXING

COURSE NUMBERS—1450, 2450, 4450
TYPE OF STUDENT—Junior, Adult, On-the-Job
FEE—None
LENGTH OF COURSE—45 fifty minute periods
TEXT—Progressive Indexing and Filing by Remington Rand, Inc
COURSE CONTENT—Divided into seven units as follows: (1) rules for alphabetizing and their application by use of 200 cards; (2) study of filing equipment; (3) methods of filing and practical application by the use of 75 miniature letters and filing trays—alphabetic, numeric, geographic, subject, triple check, Soundex and Variadex; (4) cross-filing; (5) charge methods; (6) transfer methods; (7) follow-up. The work is organized on an individual basis to fit the needs of individual pupils.

GENERAL ECONOMICS

COURSE NUMBER—2455
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Everyday Problems in Economics by Dr. May Wood-Simons
COURSE CONTENT—Deals with present-day problems of American society, the relation of these problems to the past, and their possible effect on the future economic and political systems of our nation.

GENERAL ECONOMICS

COURSE NUMBER—4456
TYPE OF STUDENT—On-the-Job
FEE—None
LENGTH OF COURSE—36 fifty minute periods
TEXT—Everyday Problems in Economics by Dr. May Wood-Simons
COURSE CONTENT—For veterans who are working and attending school four hours each week. It aims to give the student the basic principles of economics and their application in analyzing business problems intelligently. The units covered include historical background, definition of economics, the consumer, production, exchange, price determination, study of business cycle, national income, distribution, economic theory, the farm problem, labor problems, trade association.

RECORD KEEPING

COURSE NUMBERS—2440, 4440
TYPE OF STUDENT—Adult, On the Job
FEE—None
LENGTH OF COURSE—180 fifty minute periods
TEXT—Basic Bookkeeping and Accounting by Schneider-Sell-Lazenby
COURSE CONTENT—For veterans who are working and attending school four hours each week. Unit I is a study of general records including budget, income and expense and cash records. Also information regarding forms such as checks, notes, drafts and other papers used in business. Elementary bookkeeping including journalizing, posting, closing the ledger and making business statements is a part of this unit. Unit II is a one-book outfit for keeping books in a small business. All transactions appear on one page by use of columns. Column headings include O. A. B. and withholding taxes and profit and loss information at end of month.
BUSINESS CORRESPONDENCE

COURSE NUMBERS—2425, 4425
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Effective Business Correspondence by Armer

COURSE CONTENT—A course in business letter writing intended for students who are studying to be stenographers, bookkeepers, clerical workers, sales people and other office workers. Objectives are: to develop skill in use of words, sentences; to learn principles underlying effective letters, to write effective reports. The units studied in this course are: (1) creating effective business letters; (2) different types of letters; (3) form letters and mailing lists; (4) business reports.

BUSINESS INFORMATION

COURSE NUMBERS—2426, 4426
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Consumer Economic Problems by Shields and Wilson

COURSE CONTENT—A course in English for general office workers and stenographers. The objectives are: to teach the students to use and define the technical terms common to banking, real estate, investments, insurance and general merchandising, and to know the simple problems involved in borrowing and investing money in insurance and real estate.

GRAMMAR

COURSE NUMBERS—2427, 4427
TYPE OF STUDENT—Adult, On-the-job
FEE—None
LENGTH OF COURSE—90 fifty minute periods

COURSE CONTENT—Objectives are: to help the pupil to speak and write correctly, to construct varied effective sentences, to punctuate correctly, to read with understanding and comprehension, and to spell simple words correctly.

JUNIOR ENGLISH

COURSE NUMBERS—1428, 2428
TYPE OF STUDENT—Junior, Adult
FEE—None
LENGTH OF COURSE—90 fifty minute periods

TEXT—A Workbook Course in Business English by Kate Moura

COURSE CONTENT—For juniors and adults who have not completed their high school education. The course presents the essentials of English, correct use of words, capitalization, punctuation, and the essentials of an effective sentence. The use of the dictionary, spelling and syllabication are also presented.

PART-TIME ENGLISH

COURSE NUMBER—1429
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—37 fifty minute periods
TEXT—Applied English Essentials by Charles H. Reigner

COURSE CONTENT—For the part-time student who attends school one day a week. It presents the principles of grammar, the parts of speech, the correct tense, the proper use of common words, and the spelling of simple words used in the text.

OFFICE TRAINING

COMPTOMETER AND BURROUGHS MACHINE CALCULATION

COURSE NUMBER—2430-4430
TYPE OF STUDENT—Adult, On-the-job
FEE—50c per semester
LENGTH OF COURSE—45 fifty minute periods
TEXT—Key-Driven Calculator Course by Goodfellow and Agnew

COURSE CONTENT—This is a nine-week introductory course for beginners. The four fundamental principles—addition, multiplication, division and subtraction—are taught. The course is not planned to train operators but to acquaint students with the fundamental operations of the above machines.

COMPTOMETER AND BURROUGHS MACHINE CALCULATION

COURSE NUMBERS—2431, 4431
TYPE OF STUDENT—Adult, On-the-job
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Key-Driven Calculator Course by Goodfellow and Agnew

COURSE CONTENT—Includes all phases of machine operation. Students should take the introductory try-out course before Calculating II to determine whether or not they have a liking or
an aptitude for the work before specializing in it. It is advisable for students who cannot obtain a grade of at least 85 in the introductory try-out course to take Calculating II. This course includes the application of fundamentals to business problems, percentage, discounts, inventories, reciprocals, parcel post charges, etc. It qualifies students for jobs with a fair degree of speed on all possible uses of the machine.

**COMPTOMETER AND BURROUGHS MACHINE CALCULATION**

**COURSE NUMBER—1432**

**TYPE OF STUDENT—Junior, Part-time**

**FEE—None**

**LENGTH OF COURSE—37 fifty minute periods**

**TEXT—Key-Driven Calculator Course by Goodfellow and Agnew**

**COURSE CONTENT—** A two-semester course for the part-time student who attends school one day a week. The units include the four basic operations: addition, multiplication, division, subtraction. After the student has completed nine units of work a timed test is given on the processes studied. A grade of at least 80 is required in order to continue. Beginning with unit 10 the course includes additional work in multiplication, split addition, crossfoot addition, long division, timed test and review problems.

**MARCHANT, MONROE AND FRIDEN MACHINE CALCULATION**

**COURSE NUMBER—2433-4433**

**TYPE OF STUDENT—Adult, On-the-Job**

**FEE—50c per semester**

**LENGTH OF COURSE—45 fifty minute periods**

**TEXT—Key-Driven Calculator Course by Goodfellow and Agnew**

**COURSE CONTENT—** Covers addition and the various methods of multiplying, subtracting and dividing, followed by their application to problems in business arithmetic. Upon the completion of the course, a student should have a thorough training in the fundamental processes as they apply in business, and sufficient knowledge to operate the machine in any business office.

**REMINGTON RAND AUTOMATIC PRINTING CALCULATOR**

**COURSE NUMBER—2434-4434**

**TYPE OF STUDENT—Adult, On-the-Job**

**FEE—50c per semester**

**LENGTH OF COURSE—20 fifty minute periods**

**COURSE CONTENT—** Instruction is given on the new Automatic Printing Calculator. This machine prints as it divides automatically, as it multiplies electrically, as it adds and subtracts. All factors for each calculation are recorded with totals automatically delivered and printed. It has the speedy ten-key board and the combined features of a calculator and the printing adding machine tape.

**KEY-PUNCH MACHINE**

**COURSE NUMBERS—1435-2435-4435**

**TYPE OF STUDENT—Adult, On-the-Job**

**FEE—None**

**LENGTH OF COURSE—Long enough to develop speed; varies with the individual**

**TEXT—Supplementary Material**

**COURSE CONTENT—** The student is given instruction and practice in the operation of the Electric Key-Punch Machine. Development of speed and accuracy on the ten-key keyboard is the ultimate aim of this course. Opportunity is offered, through field trips, for observation of key-punching and its relationship to sorting, tabulating and accounting as performed on IBM equipment.

**DUPLICATING MACHINE—MIMEOGRAPH AND DITTO**

**COURSE NUMBER—2466**

**TYPE OF STUDENT—Adult**

**FEE—None**

**LENGTH OF COURSE—5 fifty minute periods**

**COURSE CONTENT—** This course is designed to give students an adequate working knowledge of the mimeograph and ditto machines. The prerequisite is a minimum typing rate of forty-five words a minute. For the mimeograph, instructions include the cutting of stencils, the use of the mimeoscope, the use of the various styles, screens plates, lettering guides, various methods of correcting errors, the running of copies, operation and care of the machine, and the filing of stencils for future use. The instruction for the ditto machine includes instruction in the preparation of the master copy, using ditto carbons, ribbons, pencils and inks, as well as the actual experience of running copies on both the gelatin and liquid process machines.

**TRANSCRIBING MACHINES—DICTAPHONE AND EDIPHONE**

**COURSE NUMBER—2467**

**TYPE OF STUDENT—Adult**
BUSINESS EDUCATION

FEES—None
LENGTH OF COURSE—5 fifty minute periods
COURSE CONTENT—Designed to train students to become experienced on both the Dictaphone and Ediphone machines. Each operator transcribes a prescribed set of permanent practice records on both machines. Instruction is also given on the dictating and stenograph machines.

SHORTHAND I-A, Full-Time
COURSE NUMBER—2410
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Gregg Simplified Functional Method by Leslie and Zoubek
COURSE CONTENT—For beginners in Gregg Shorthand. The theory of shorthand is completed in the first quarter. The second quarter of the course consists of an automatic review, dictation, and transcription on the typewriter. The dictation speed is between 80 and 100 words per minute on a five-minute take. Students should be able to write the City, County, State and Federal Civil Service examinations after completing a semester's work.

SHORTHAND I-B, Half-Time
COURSE NUMBER—2411
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Gregg Simplified Functional Method by Leslie and Zoubek; Gregg Simplified Dictation
COURSE CONTENT—This course is for beginners in Gregg Shorthand. The beginning principles of shorthand are thoroughly covered. The last four weeks of the semester are devoted to the introduction to beginning dictation and transcription at the typewriter.

REVIEW AND BEGINNING DICTATION
COURSE NUMBER—2412
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Functional Method Dictation by Louis A. Leslie
COURSE CONTENT—For students who have completed the shorthand theory, or a refresher course for those who have had some previous work in shorthand. The course consists of a thorough review of shorthand theory, supplementary reading, and dictation and transcription. The dictation range is between 60 and 80 words per minute. The English and shorthand teachers cooperate in checking errors and improving the transcripts.

INTERMEDIATE DICTATION
COURSE NUMBER—2413
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXTS—Speed Drills in Gregg Shorthand by Leslie and Zoubek; Refresher Course in Gregg Shorthand by John R. Gregg; Gregg Transcription Simplified by Leslie and Zoubek
COURSE CONTENT—For students who have fulfilled the requirements of the beginning dictation course. It consists of advanced vocabulary and phrase building, dictation and transcription. Dictation is given at rates ranging from 75 to 90 words per minute. Emphasis is placed on letter setup, spelling and typing. A carbon copy of each letter transcribed is required.

ADVANCED DICTATION
COURSE NUMBER—2414
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXTS—Speed Drills in Gregg Shorthand by Leslie and Zoubek; Refresher Course in Gregg Shorthand by John R. Gregg; Gregg Speed Building Simplified by Gregg - Leslie - Zoubek
COURSE CONTENT—For advanced dictation students. The objective is the development of shorthand power through sustained dictation at high rates of speed. Emphasis is given to the writing of advanced phrases and to the building of a shorthand vocabulary of business terms. The dictation speed is between 90 and 120 words per minute on a five-minute basis.

TECHNICAL DICTATION
COURSE NUMBER—2415
TYPE OF STUDENT—Adult, Full-time, Half-time, Part-time
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
COURSE CONTENT—A continuation of the advanced dictation course and is open to advanced students who wish highly specialized vocabulary in the legal medical fields etc.

TRANSCRIPTION
COURSE NUMBER—2416
TYPE OF STUDENT—Adult
BUSINESS EDUCATION

LENGTH OF COURSE—90 fifty minute periods
COURSE CONTENT—Transcription begins with an automatic review or Refresher Course and accompanies each one of the dictation courses. It consists of transcribing at the typewriter letters or other materials which have been dictated in the dictation classes. Emphasis is given to correct placement of the letter on the page, use of carbon paper, correct erasing procedure, typing of different size envelopes, folding of letters, and production tests on minimum office standards.

GENERAL OFFICE TRAINING

COURSE NUMBER—2485
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—For students who are studying to be stenographers, bookkeepers, clerks, and other office workers. The study includes nineteen units of work: (1) types of office workers; (2) the business letter; (3) mailing; (4) telegrams, cablegrams and radiograms; (5) express service; (6) office economy; (7) the telephone; (8) enclosures; (9) freight service; (10) miscellaneous information; (11) reference books; (12) office machines; (13) vocabulary; (14) method of travel; (15) business enterprise and ownership; (16) business ethics; (17) business organization; and personal analysis; (18) applying for the position. Prerequisite: typing.

TYPEWRITER FUNDAMENTALS I

COURSE NUMBERS—1420-2420-4421
TYPE OF STUDENT—Junior, Adult, On-the-Job
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—One-Year 20th Century Typewriting, Fourth Edition by Lessenberry
COURSE CONTENT—Course for beginners in typing. Course includes history and the importance of the typewriter, care of typewriter, parts of the machine, position of the typewriter and individual, mastery of keyboard, letters, numbers, symbols and characters on the keyboard. Letters (semi and modified block), carbons, erasers, simple tabulation, syllabication should also be included in this course.

TYPEWRITER FUNDAMENTALS II

COURSE NUMBERS—1422-2422-4422
TYPE OF STUDENT—Junior, Adult, On-the-Job
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Advanced 20th Century Typewriting, Fourth Edition by Lessenberry
COURSE CONTENT—This course is recommended as a continuation of Typing I. It includes a review of the fundamentals as taught in Typing I. Problems in personal typing, various business letter styles, outlining, rough drafts, tabulation, carbon copies, envelope addressing, folding and insertion of letters in envelopes, Business forms, telegrams, invoices, checks and receipts will be included.

TYPEWRITING III

COURSE NUMBER—1423-2423
TYPE OF STUDENT—Junior, Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Advanced 20th Century Typewriting, Fourth Edition by Lessenberry
COURSE CONTENT—Review of material covered in second semester, introduce combination, simplified, hanging indentation, block and address at bottom styles of letters, profit and loss and balance sheets, complex tabulations, business forms, memorandums, and multiple carbons.

TYPEWRITING IV

COURSE NUMBER—2424
TYPE OF STUDENT—Adult
FEE—50c per semester
LENGTH OF COURSE—90 fifty minute periods
TEXT—Advanced 20th Century Typewriting, Fourth Edition by Lessenberry; Various Advanced Texts
COURSE CONTENT—Objective is to prepare for civil service or special types of office work. Individualized review for students who need a refresher course. Includes preparation of legal forms, letters of application, types of questions and details in public examinations, operation of duplicating machines, manuscript writings, composition typing, outlines, financial statements, advanced tabulation, characters not on the machine. Improve technique and raise speed to 70-80 words per minute.

DISTRIBUTIVE EDUCATION

(Training for Sales People)

FUNDAMENTALS OF SELLING

COURSE NUMBER—1501, 3501
TYPE OF STUDENT—Junior, Apprentice
FEE—None
LENGTH OF COURSE—38 fifty minute periods
TEXT—Fundamentals of Selling by Walters and Wingate
Manual: Workbook for use with fundamentals
## Retail Salesmanship

**Course Number:** 2502, 3502, 4502  
**Type of Student:** Adult, Apprentice  
**Fee:** None  
**Length of Course:** 19 fifty minute periods  
**Text:** Successful Retail Salesmanship by Robinson and Robinson  
**Manual:** Student Study Guide in Retail Salesmanship  

**Course Content:** Salesmanship in the modern sense; retail selling fundamentals; study of the customer; selling techniques that help customers buy; meeting the customer; developing the sales presentation; making the sales talk convincing; helping the customer over buying obstacles; stimulating buying action; suggestion selling; building permanent business.

## Advanced Salesmanship**

**Course Number:** 2507, 3507, 4507  
**Type of Student:** Adult, Apprentice  
**Fee:** None  
**Length of Course:** 19 fifty minute periods  
**Text:** Successful Selling: for the New Day by Simons  

**Course Content:** No ceiling on selling; America's next ten years: introduction to successful selling; what makes a good salesman better; how to find prospects; how to handle the price problem; how to build your sales talk; how to use advertising; how to dramatize your selling; how to close the sale; how to avoid competition complexes; how to sell quality products; how to make more sales.

## Merchandise Information**

**Course Number:** 2508, 3508, 4508  
**Type of Student:** Adult, Apprentice  
**Fee:** None  
**Length of Course:** 38 fifty minute periods  
**Text:** Know Your Merchandise by Wrigley, Alleaple and Addison; Materials of Industry by Morris, Reen and Holderman  
**Course Content:** Determine guides to customer satisfaction: what merchandise is in stock; sources that contribute to the salesperson's knowledge; how to get the most out of merchandise; what services are offered; to what use merchandise is put; what possible objections; what to know about the trends in style and fashion; what about color, line and design in merchandise; value of information and how to secure it; what are the selling points about merchandise; how to present them effectively.

## Store Organization and Management*

**Course Number:** 2504, 3504, 4504  
**Type of Student:** Apprentice, Adult  
**Fee:** None  
**Length of Course:** 38 fifty minute periods  
**Text:** Retailing by A. Brisco  
**Manual:** Student Study Guide in Store Organization and Management  

**Course Content:** Scope of retailing; location, layout, equipment; store organization and function of management; market contacts; buying; receiving and marketing of merchandise; invoices, mark-on of merchandise; the merchandise plan; employment problems; legal aspects of merchandising.

## Advertising*

**Course Number:** 2505, 3505, 4505  
**Type of Student:** Adult, Apprentice  
**Fee:** None  
**Length of Course:** 19 fifty minute periods  
**Text:** Fundamentals of Advertising by Rowe and Fish  
**Manual:** Workbook for Fundamentals of Advertising  

**Course Content:** Advertising in relation to distribution of merchandise and services; physical structure of advertisements; layouts, printing, photo engraving; relative values of various media for advertising; newspapers, magazines, radio, dealers, displays, outdoor advertising, car cards.

## Merchandise Display**

**Course Number:** 2510, 3510, 4510  
**Type of Student:** Adult, Apprentice  
**Fee:** None  
**Length of Course:** 19 fifty minute periods  
**Text:** Fundamentals of Window Display by Charles Ellis  
**Manual:** Student Study Guide in Merchandise Display  

**Course Content:** Values of display; selling idea behind the display; physical makeup of display; display in the retail program; manufacturer's advertising in display.
COLOR LINE AND DESIGN**
COURSE NUMBER—2511, 3511, 4511
TYPE OF STUDENT—Junior, Adult, Apprentice
FEE—None
LENGTH OF COURSE—19 fifty minute periods
TEXTS—Practical Color Management by Bernice Chambers; Art Today by Faulkner
Manual: Study Guide in Color, Line and Design
COURSE CONTENT—(1) Color and effect it has on modern merchandising; fundamentals of color; color behavior, physical and psychological aspects of color mixture and matching of color. (2) Line in modern application. (3) Definitions and aims of design; economic aspects of trends in merchandising design.

RETAIL CREDIT FUNDAMENTALS*
COURSE NUMBER—2506, 3506, 4506
TYPE OF STUDENT—Apprentice, Adult
FEE—None
LENGTH OF COURSE—38 fifty minute periods
TEXT—Retail Credit Fundamentals by C. W. Phelps
Manual: Student Study Guide in Retail Fundamentals
COURSE CONTENT—Nature and importance of credit; developing new sources of credit customers; the double checking credit plan; methods of identifying charge customers; safeguards; reducing merchandise returns; how to handle complaints; how to stimulate preferred customers; how to revive inactive returns; how to handle complaints; how to develop effective collection methods; how to rehabilitate delinquent customers.

CERTIFIED LIFE UNDERWRITERS
UNIT C***
COURSE NUMBERS—3514, 4514
TYPE OF STUDENT—Apprentice, Adult
FEE—
LENGTH OF COURSE—19 fifty minute periods
COURSE CONTENT—Law, wills, trusts, estates and taxation.

PUBLIC LIABILITY INSURANCE***
COURSE NUMBERS—3516, 4516
TYPE OF STUDENT—Apprentice, Adult
FEE—
COURSE CONTENT—Comprehensive personal, comprehensive general, O. L. & T., M. & C., products, contractual, protective, professional, and farmer’s insurance.

* Course offered first semester
** Course offered second semester
*** Sessions held alternate weeks throughout school year 1951-1952; time of day to be arranged.
FAMILY DEVELOPMENT

SOCIAL LIVING
COURSE NUMBER—1600
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—This course is planned for the beginning full-time or half-time student and includes the following units:
1. Personal Care and Improvement—personal, social and financial values of a well-groomed appearance are given emphasis.
2. Courtesy—social customs at home, conduct in public, manners in hotels and restaurants and proper introductions are points emphasized. Value to individual who puts courteous behavior into use.
3. Understanding Yourself and Others—some of the topics emphasized in this unit are: personal characteristics which affect people, importance of understanding one's own behavior and behavior of others, need for security, meaning of friendship, use of leisure time, hobbies, their place in one's development.

HOME LIVING
COURSE NUMBER—1601
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—50 fifty minute periods
COURSE CONTENT—This course is for the beginning half-time and full-time students and consists of the following units:
1. The Child in the Home—this includes a study of the normal development of children, the health needs of the pre-school child, children's clothing, play, games and development of social behavior.
2. Family Relationship—points emphasized are importance of family life in the home, characteristics of a satisfying home, the contributions which each individual can make to the home life.
3. Social Life in the Home—this includes group activities of family recreation: determining amount of money to be used for recreation; the home as a hospitable center for friends; making friends and entertaining friends.

HUMAN RELATIONS AND MARRIAGE
COURSE NUMBER—1602
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—18 fifty minute periods
COURSE CONTENT—This is a semester course for the part-time student who attends school one day
CERTIFIED LIFE UNDERWRITERS
COURSE—C. L. U.
COURSE NUMBER—2514
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—74 hours
Mon., 1:30-3:00
COURSE CONTENT—Content to be selected by the Madison Life Underwriters Association.

PERSONALITY AND CHARM
COURSE NUMBER—2600
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 double periods
COURSE CONTENT—Many phases of personality studied to learn how to develop naturalness of manner and relaxation. Importance of personality in career life and home life. Some of the highlights of the course are: developing new or understanding philosophy of life; gaining self-assurance and poise; relation of dress and grooming to personality; leisure time activities; development of individuality. This is a lecture and discussion course.

Hospitality—How to entertain, actual preparation of meals. Buffet meals and teas.

JR. FOODS IV (Meal Planning and Preparation)
COURSE NUMBER—1623
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
the part-time student in the second year.
Meal Planning—The planning and preparation of meals. This includes meat cookery and vegetable cookery, as well as desserts.
Breads—Quick breads and yeast breads. Orange

HOSPITALITY AND TABLE DECORATION
COURSE NUMBER—2601
TYPE OF STUDENT—Adult
FEE—$1 per semester
LENGTH OF COURSE—18 double periods
COURSE CONTENT—This course is planned for anyone who is interested in learning more about the art of entertaining and being a successful, gracious hostess. It will include: table setting for all occasions; arrangement of table for tea and buffet meals; flower arrangement; selection of china, linen, silver and crystal.
HOSPITALITY AND TABLE DECORATION

COURSE NUMBER—1634
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—18 fifty minute periods
COURSE CONTENT—Hospitality through simple guest meals, invitations, conversations. Selection of guests, responsibilities of hostess and of the guests are some of the features of this course. Selection of silver, china, glassware and linen as well as flower arrangements and table decoration are included.

SAFETY IN THE HOME

COURSE NUMBER—1605
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—45 fifty minute periods
COURSE CONTENT—This course will include safety measures in the home, use and care of electrical equipment, arrangement and use of kitchen equipment, hazards in the home, safety measures in building a home, use and care of equipment, demonstrations, use of films, and

BUDGETING

COURSE NUMBER—2602
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—9 double periods
COURSE CONTENT—Planned for those who would like some help on keeping a record of money spent and planning expenditures. Choosing an account system, what should the family understand about credit, consumer credit sources, savings and investments, life insurance. Each student may work out a budget to suit her needs.

CONSUMER PROBLEMS

COURSE NUMBER—2603
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 double periods
COURSE CONTENT—The consumer and buying will be stressed. Some other topics are: how to use the food dollar to best advantage, the clothing dollar and how to spend it, the rental dollar and purchases for the home, inflation, new items on the market, evaluation of advertising, responsibilities of the consumer.

Lunch Box—Preparation of various types of lunches for the employed, as well as the packing of the lunch.

Hospitality—How to entertain, actual preparation of meals. Buffet meals and teas.

JR. FOODS IV (Meal Planning and Preparation)

COURSE NUMBER—1623
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE NUMBER—1608
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—Nine double periods
COURSE CONTENT—This course is for the part-time student who comes to school one day a week. Demonstrations will be given showing how to use the automatic washer and ironer. Class will have opportunity to practice use of the equipment. Some of the points to be stressed.
HOMEMAKING

are: equipment of the home laundry; laundry methods; ironing; putting your clothes away; stain removal; care of equipment; washing of sweaters; how to handle fine fabrics.

MODERN HOME LAUNDRY TECHNIQUES

COURSE NUMBER—1609
TYPE OF STUDENT—Junior—Full-time
FEE—None
LENGTH OF COURSE—27 double periods
COURSE CONTENT—Modern methods of doing the home laundry as compared with former methods will be given. In this class the students will be given an opportunity to bring garments from home for actual class work. Demonstrations on the use of the equipment will precede actual use by class. The actual steps to be followed in doing the home laundry will be given; this includes both the washing and the ironing. Care measures in the home, use and care of electrical equipment, arrangement and use of kitchen equipment, hazards in the home, safety measures in building a home, use and care of equipment, demonstrations, use of films, and

JR. FOODS II (2nd Semester)

COURSE NUMBER—1621
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—This is for the full-time and half-time student who has completed Foods I or its equivalent. Food preservation, the family dinner, the guest dinner, casserole dishes, meat cookery, pastry, cake making, baking and salad making are included.

JR. FOODS III (Cooking for Two)

COURSE NUMBER—1622
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—This is for the full-time and half-time student who has completed Foods I or its equivalent. Food preservation, the family dinner, the guest dinner, casserole dishes, meat cookery, pastry, cake making, baking and salad making are included.

JR. FOODS IV (Meal Planning and Preparation)

COURSE NUMBER—1623
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—This is for the part-time student in the second year. Meal Planning—The planning and preparation of meals. Canning—This includes hot-water bath and pressure-cooker canning, jelly making, jams and pickles. Lunch Box—Preparation of various types of lunches for the employed, as well as the packing of the lunch. Hospitality—How to entertain, actual preparation of meals. Buffet meals and teas.

JR. NUTRITION I

COURSE NUMBER—1624
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—18 fifty minute periods
COURSE CONTENT—What is meant by the nu-
PRACTICAL NUTRITION

COURSE NUMBER—2610
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 double periods
COURSE CONTENT—This course is a combination of both lecture and discussion, and laboratory work. Some of the high points in the discussion section will be: the seven basic foods; vitamins and minerals; body requirements and deficiencies; planning balanced family meals; food costs; low calorie meals; weight building and weight reduction. The laboratory work will feature the actual preparation of typical meals, such as: meals which include required amounts of minerals, vitamins and proteins; meals for children; meals for adults; for the aged; low calorie meals for those who wish to take off weight; meals for body building; special diets for individual cases.

FOODS I (Meals for Moderns)

COURSE NUMBER—2611
TYPE OF STUDENT—Adult
FEE—$4 per semester
LENGTH OF COURSE—36 three period sessions
COURSE CONTENT—Meals in the modern way suggest new methods in cookery; streamlining cooking processes; pressure-pan cookery; use of frozen foods; comparison of commercial mixes with home mixes; cooking to retain vitamins and minerals; planning balanced meals. This is a practical course planned around the family meals—breakfast, lunch and dinner. It will include something in quick breads, vegetables, salads, casseroles, cakes, pies and simple desserts. An excellent course for those who wish to take off weight; meals for body building; special diets for individual cases.

UNIT II—PASTRY
(3rd Quarter)

COURSE NUMBER—2612
TYPE OF STUDENT—Adult
FEE—$1.50 per quarter
LENGTH OF COURSE—9 two period sessions
COURSE CONTENT—Principles underlying the making of pastry are given; also digestibility and place in the diet are included. Various kinds of shortening are used; also comparison between prepared mixes and home mixes. One-shell, two-crust, and deep-dish pies are made. Some of the more popular pies, as well as some of the unusual pies, are prepared. Each student has the opportunity of making some form of pastry each time the class meets.

UNIT III—UNUSUAL DESSERTS
(3rd Quarter)

COURSE NUMBER—2613
TYPE OF STUDENT—Adult
FEE—$1.50 per quarter
LENGTH OF COURSE—9 two period sessions
COURSE CONTENT—The desserts featured in this unit are for special occasions; for instance, something for dessert bridge. Meringues, tortes, ice box desserts, and new things in pastry and frozen desserts are some of the desserts given.

FOODS III

UNIT I—SALADS FOR ALL OCCASIONS (1st Quarter)

COURSE NUMBER—2614
TYPE OF STUDENT—Adult
FEE—$1.50 per quarter
LENGTH OF COURSE—9 two period sessions
COURSE CONTENT—Dinner salads, luncheon salads, and main course salads are included in this unit. Various combinations of vegetables, fruits, chicken, fish and meat are some of the materials used. Molded salads and frozen salads are also featured. All types of salad dressings are made. The place of salads in the diet is emphasized.
UNIT II—CAKES AND COOKIES
(2nd Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$2 per quarter
COURSE CONTENT—Modern up-to-date methods of mixing cakes are stressed. Types of so-called butter cakes and sponge cakes are included, giving a variety of new, unusual cakes. Various types of icings and frostings are a part of the unit. Christmas cookies and fruitcakes are given prior to the holiday season.

UNIT III—CASSEROLE DISHES
(3rd Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$2 per quarter
COURSE CONTENT—A wide variety of casserole dishes are given in this course. Some of the types to be made are: various kinds of meat; vegetable; fish; chicken. Both fresh meat and leftover meals may be used. Their place in the family meal or for buffet meals is presented.

UNIT IV—HOT WEATHER MEALS
(4th Quarter)
LENGTH OF COURSE—9 two period sessions
FEE—$1.50 per quarter
COURSE CONTENT—Attractive foods for hot days, easy to prepare main dishes, simple and healthful desserts, summer salads and summertime beverages are some of the things featured.

FOODS IV
UNIT I—MEAT, POULTRY AND FISH COOKERY (1st semester)
COURSE NUMBER—2614
TYPE OF STUDENT—Adult
FEE—$4 per semester
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—Identification, selection and preparation of both tender and less tender cuts of meat are included in this course. Some of the highlights of the course are: comparison of food value of inexpensive and higher cost meat cuts; importance of meat in the diet; garnishing, carving and serving; interesting ways to serve the less expensive cuts of meat; how to build menus around the meat dish in the meal. Early in the course a demonstration will be given on the pressure canning of chicken or other fowl. Prior to the holiday season there will be demonstrations on the stuffing, trussing and roasting

UNIT II—POCKETBOOK MEALS
(3rd Quarter)
LENGTH OF COURSE—9 three period sessions
FEE—$1.50 per quarter
COURSE CONTENT—Delicious meals to fit the family pocketbook are featured in this unit. Some of the highlights of this unit are: meals for economy; modem up-to-date methods and unusual recipes for preparing and serving vegetables are included.

UNIT III—PLATTER DINNERS
(4th Quarter)
LENGTH OF COURSE—18 three period sessions
FEE—$1.50 per quarter
COURSE CONTENT—All-in-one menu course dishes are featured. Oven dish meals are included. Planning to save time and money is stressed. Attractive, nutritious dishes are prepared.

FOODS V—HOSPITALITY COOKERY
(3rd and 4th Quarters)
COURSE NUMBER—2615
TYPE OF STUDENT—Adult
FEE—$4 per semester
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—How to prepare and serve attractive, unusual guest meals is a part of this course. Some of the types of entertaining given are: teas, buffet meals, wedding reception, after-theater snacks, bridge dinners, guest dinners. Table setting for these special occasions is included in the course.

FOODS VI—CAKE DECORATING FOR SPECIAL OCCASIONS (1st and 2nd semester)
COURSE NUMBER—2616
TYPE OF STUDENT—Adult
FEE—$4.00 per semester
LENGTH OF COURSE—18 three period sessions
COURSE CONTENT—This course is for homemakers who are interested in learning the fundamental of cake decorating for special occasions. The highlights of the course are techniques of making flowers and other forms of decoration; application
of decoration to cakes and desserts; the making of petits-fours and mint. Various types of cakes will be made and frozen in the deep freeze. In later lessons, these will be decorated.

CLOTHING AND TEXTILES

JUNIOR CLOTHING I

COURSE NUMBER—1630
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—This course is planned for the full-time or half-time student who has little or no training in clothing construction. Basic principles and fundamentals of sewing are stressed. Blouses, skirts and dresses are made.

JUNIOR CLOTHING II

COURSE NUMBER—1631
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—180 fifty minute periods
COURSE CONTENT—This course is for the full-time or half-time student who has completed Clothing I or its equivalent. Included in this course are the following: study of linen and wool fabrics, planning of individual wardrobes, care and repair of clothing, adjusting the pattern to fit the figure. Some of the more advanced construction processes; dressmaking as a creative art; importance of being well dressed.

JUNIOR CLOTHING III

COURSE NUMBER—1632
TYPE OF STUDENT—Junior
FEE—None
LENGTH OF COURSE—72 fifty minute periods
COURSE CONTENT—Unit I—My Ideal Wardrobe. Inventory of wardrobe is made and plans made for garments which are needed to complete the wardrobe. The garment selected to be made will depend upon the student's previous experience. Demonstrations will be given which apply to garments under construction. Review of the sewing machine is included.

UNIT II—What to Wear on the Job. What shall I wear to work and the importance of being dressed properly for the job. Garment construction is continued.

UNIT III—Care and Repair of clothing. Clothing conservation, a need of all times, is given empha-
HoMEMAKING

CLOTHING IV (Casual Clothes)
COURSE NUMBER—2623
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This is an elementary dress-making course and follows Clothing I or its equivalent. There will be an opportunity to choose the type of garment to be made. It may be dresses for morning wear, garden dresses or active sport clothes. Problems found in this type of garment will be used as a basis for the lessons. Concise explanations with the detailed illustrative material will be used to simplify each step of construction.

CLOTHING V (That Ready-Made Effect)
COURSE NUMBER—2624
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—How to secure that much desired ready-made effect will be one of the purposes of this course. Selection of material and patterns will be stressed, with emphasis on color, texture and becoming design for each individual. Such fabrics as silk, wool, rayon, nylon and the new fabrics on the market will be studied. Garments to be made will be chosen from the following: rayon dresses, wool dresses, two-piece dresses, formal and dinner dresses. Short cuts in construction processes, identification of materials, interpretation and application of pattern principles, and coordinating of the wardrobe will be included. This course is for the advanced student.

CLOTHING VI (Tailoring)
COURSE NUMBER—2625
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This course is for the advanced student and is planned for those people who want to make tailored garments. Some of the specific tailoring principles which are given are: pattern altering to fit the figure, use of interfacings, tape and pad stitch for collars, revers, hand stitching of collars and front facing, fitting problems, use of pressing boards for shaping garment to the figure, bound and patch pockets, lining and interlining for coats and suits, types of pads most suitable, selection of fabrics for coats, suit linings, interlinings, and interfacings. Garments to be made are suits and coats from new material as well as make-over problems in suits and coats.

CLOTHING VII (Challenge of Make-over)
COURSE NUMBER—2626
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—It is essential that members of the class have had Clothing IV or its equivalent before enrolling in the remodeling class. Instruction will be given on the preparation of the garment for classwork, combination of new and old material and selection of garments for remodeling. Almost any garment may be remodeled.

CLOTHING VIII (Tailoring II)
COURSE NUMBER—2627
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This course is for students who have completed Tailoring I. The problems to be emphasized are: molding of garments with the iron, bound and welt pockets, cording and worked buttonholes, study of sleeve and other fitting problems. Suits and coats will be made.

CLOTHING IX (Workshop)
COURSE NUMBER—2628
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—This is only for students who have completed Clothing VI satisfactorily. Because of the nature of the course it is essential that all class members have a thorough understanding of both the elementary and advanced courses. Any type of garment may be made in this class.

CLOTHING X (Accessories)
COURSE NUMBER—2629
TYPE OF STUDENT—Adult
FEE—None
HOMEmAKING

LENGTH OF COURSE—9 double periods
COURSE CONTENT—This course is planned for those people who are interested in making accessories for the wardrobe. Types of accessories which might be made are: blouses and blousettes; bags; dicky; collar and cuffs; scarfs; men’s ties; belts, sashes; gloves; slips; earrings from buttons; aprons. Others may be suggested.

MILLINERY I
COURSE NUMBER—2630
TYPE OF STUDENT—Adult
FEE—$1.50 per semester
LENGTH OF COURSE—18 three or four period sessions
COURSE CONTENT—This course is planned for the beginner. A basic knowledge of sewing is necessary. The course includes the fundamental principles and millinery techniques. Its objective is to develop an understanding of millinery methods, materials, frames, trimmings, the different basic hat styles, and the choosing of becoming hats in proportion to face and figure. The blocking of felts and straw over simple blocks, familiarizing the student with blocks and steaming, as well as re-blocking of good quality used felts is included. Various types of hats are made.

MILLINERY II
COURSE NUMBER—2631
TYPE OF STUDENT—Adult
FEE—$1.50 per semester
LENGTH OF COURSE—18 three or four period sessions
COURSE CONTENT—This course is planned for the student who has had Millinery I, and is ready for more advanced problems. More difficult problems employing a wider variety of millinery processes are given. The student has an opportunity to gain more knowledge regarding feather, flower, and ribbon trimmings, and the uses of these trimmings, as well as the various uses and ways of applying veiling to each type of hat. Hats, as well as remodeled hats, are made.

MILLINERY III
COURSE NUMBER—2632
TYPE OF STUDENT—Adult
FEE—$1.50 per semester
LENGTH OF COURSE—18 three or four period sessions
COURSE CONTENT—This is an advanced course for students who have completed Millinery II. It will feature the creation of original designs. The relation of millinery to the costume as a whole, coordinating style, line, shape, and color harmony, is stressed. Color analysis, as related to millinery, including color schemes, colors for the individual and seasonal colors are given.

FUR REMODELING
COURSE NUMBER—2633
TYPE OF STUDENT—Adult
FEE—$1 per semester
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—Making over fur coats, restyling and modernizing the fur garments are two features of this course. Putting fur collars on coats and suits, and mending rips are also included. The actual work is done in class under the instruction of an expert in fur work.

SLIP COVERS
COURSE NUMBER—2634
TYPE OF STUDENT—Adult
FEE—None
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—A study of furniture, its line and construction is made in so far as it is related to advisability of slipcovering. Suggestions are given on planning a color scheme, choice of fabrics, estimating yardage and placing the pattern. Definite instruction is given upon the techniques of cutting, fitting, basting, stitching, and the application of fasteners. Both slipcovers and slip upholstery covers are made in class under supervision.

UPHOLSTERY I
COURSE NUMBER—2635
FEE—$1.50 per semester
LENGTH OF COURSE—18 or 36 four period sessions
COURSE CONTENT—This is an introductory course in simple upholstery techniques. Emphasis will be placed upon the following: proper care and use of tools; how and where to place the webbing; how to fasten the springs; how to pad the chair; how to put on the muslin cover; careful estimation of the upholstery fabric. Careful supervision will be given to selection and estimation of fabric and to the recovering of the furniture. It is recommended that beginners choose simple projects for the first work such as foot-stools, pull-up chairs, or bedroom chairs.

UPHOLSTERY II
COURSE NUMBER—2636
FEE—$1.50 per semester
LENGTH OF COURSE—18 four period sessions
COURSE CONTENT—A thorough review of upholstery will be given. Emphasis will be placed on stitch edges, padding, channeling, tufting, planning and cutting of covers, and trimmings. More complicated projects will be undertaken, such as overstuffed chairs, Cogswell chairs, day-beds, and davenports. Only simple processes of wood finishing will be undertaken. It is necessary to complete Upholstery I before enrolling in Upholstery II.

**DRAPERIES AND LAMP SHADES**

**COURSE NUMBER—2637**
**TYPE OF STUDENT—Adult**
**FEE—None**
**LENGTH OF COURSE—18 three period sessions**
**COURSE CONTENT—**
- Draperies are studied from the standpoint of fabrics, styles, colors, patterns, relation to architectural features, kinds of windows and to the color and material of the exterior. Emphasis is placed upon the techniques of construction for both curtains and draperies suitable for each room in the house.
- Lampshades—Suggestions for planning a color scheme are given as well as choosing appropriate shades (formal or informal). Emphasis is placed upon construction techniques in the making of the panel shade, winding, lining, placing outside and inside panels, trimming and finishing. Directions are also given for measuring, cutting, pasting, and trimming the paper or parchment shade.

**CROCHETING**

**COURSE NUMBER—2338**
**TYPE OF STUDENT—Adult**
**FEE—None**
**LENGTH OF COURSE—18 three period sessions**
**COURSE CONTENT—**
Both the beginner and the more advanced student may enter this course. Some of the points included in the course are: kinds and types of materials with which to work; how to read and understand directions and patterns; where do we use crocheting. Suggested articles for class work are: place mats; doilies; holders; afghans; berets and other types of hats; table cloths; bedspreads; lace edging and insertion.

**KNITTING I**

**COURSE NUMBER—2639**
**TYPE OF STUDENT—Adult**
**FEE—None**
**LENGTH OF COURSE—18 three period sessions**
**COURSE CONTENT—**
This is for the beginners or those who have had very little experience in knitting, and this will include fundamentals of knitting. Typical of what might be knitted are: tuns, scarfs, sweaters, mittens, afghans, and other similar articles. Equipment needed first lesson: two number-three knitting needles, 10 or 12 inch bone, a small ball of any kind of yarn, notebook and pencil.

**KNITTING II**

**COURSE NUMBER—2640**
**TYPE OF STUDENT—Adult**
**FEE—None**
**LENGTH OF COURSE—18 three period sessions**
**COURSE CONTENT—**
This is for the advanced student. It will include planning, styling, and charting of garments to measurements. Types of garments which may be made are: sweaters, skirts, blouses, suits, gloves and socks. Tools needed for first lesson: two number-three knitting needles, 10 or 12 inch bone, a small ball of yarn, notebook and pencil.

**CLOTHING CLASSES AND FUR REMODELING ARE OFFERED AT THE FOLLOWING CENTERS:**

**LAPHAM SCHOOL—Tuesday P.M. the second semester**
**LOWELL SCHOOL—Wednesday P.M.**
**FRANKLIN—Thursday P.M.**
**NEIGHBORHOOD HOUSE—Tuesday A. M.**
Trade and Industry

Automotive
Building and Allied Trades
Metal Industries
Service Occupations
Printing
AUTOMOTIVE

AUTO BODY

COURSE NUMBER—2701
TYPE OF STUDENT—Adult, Full-time
FEE—15c per day of four periods
LENGTH OF COURSE—740 fifty minute periods

COURSE NUMBER—1701
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

COURSE NUMBER—3701
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours

TEXT—Auto Body Fender and Repair Manual by C. E. Packer

COURSE CONTENT—Welding, to weld light gauge metal and other metals of the auto body including aluminum and white metal. Metal work, to perform minor and major body repairs with the analysis of estimating and rebuilding wrecked bodies. Painting, spray painting, matching and blending in colors and the performance of repaint jobs.

AUTO DRIVER TRAINING

COURSE NUMBER—2702
TYPE OF STUDENT—Full-time, Part-time, and Adult
FEE—$20
LENGTH OF COURSE—8 weeks

TEXT—Sportsmanlike Driving by the American Automobile Association

COURSE CONTENT—Lecture and Discussion, Mondays from 1 p.m. to 2:30 p.m.
II. Behind-the-wheel-training.

The student selects the hours between 1 and 4 p.m. which are best suited to his convenience for driving practice. Each student receives a minimum of six hours of actual driving practice. As soon as he masters the fundamentals of driving, he is taken into traffic where he develops good judgment in live situations. After having completed the course, a driver's test is given by the Motor Vehicle Department of the State of Wisconsin. A satisfactory test entitles the student to his permanent driver's license.

AUTOMOTIVE ELECTRICIAN

COURSE NUMBER—3703
TYPE OF STUDENT—Apprentice

FEE—15c per day of four periods
LENGTH OF COURSE—400 hours

TEXT—Automobile Ignition and Electrical Equipment by Kuns and Plumridge

AUTOMOTIVE MACHINIST

COURSE NUMBER—3704
TYPE OF STUDENT—Apprentice

FEE—15c per day of four periods
LENGTH OF COURSE—400 hours

TEXT—Automotive Engines, by Kuns and Plumridge Automotive Engines, Ford Trade School Automotive Mechanics by Crouse

COURSE CONTENT—Brakes, clutch, transmissions, engines, electrical system, accessories, welding oxy-acetylene and arc—machine shop, and how to operate the lathe, drill press, external grinder, and all hand tools.

AUTO MECHANICS

COURSE NUMBER—2705
TYPE OF STUDENT—Adult, Full-time

FEE—15c per day of 4 periods
LENGTH OF COURSE—1,480 fifty minute periods

TEXT—Automotive Fundamentals by Kuns and Plumridge

Automotive Engines by Kuns and Plumridge
Automobile Ignition and Electrical Equipment by Kuns and Plumridge
Automobile Maintenance by Kuns and Plumridge Principles of wheel Alignment by Bear Bear Wheel Alignment, Axle and Frame Straightening Service

COURSE CONTENT—Washing, polishing, lubrication, accessories, brakes, electrical systems, engines, engine tune-up, clutches, transmissions.
drive shafts, fuel systems, rear axles, care of tools and equipment, engine rebuilding, front wheel alignment, frame straightening, wheel balancing.

**AUTOMOTIVE SCIENCE**

**COURSE NUMBER—2700**
**TYPE OF STUDENT—Full-time**
**FEE—None**
**LENGTH OF COURSE—One semester—fifty minute period daily**
**TEXT—Modern Physics by Charles E. Duel**
**COURSE CONTENT—Matter and mechanics, force and motion, friction, work, power and energy, machines, heat, magnetism, and electricity.**

**AUTOMOTIVE WHEEL ALIGNER**

**COURSE NUMBER—3707**
**TYPE OF STUDENT—Apprentice**
**FEE—$1.50 per day of four periods**
**LENGTH OF COURSE—400 hours**
**TEXT—Principles of Wheel Alignment by Bear**
**COURSE CONTENT—Wheel balancing, checking wheel alignment with Bear and Manbee equipment, correcting or adjusting wheel alignment, checking frames, straightening frames and axles—steering, checking, adjusting, and overhauling—welding, oxy-acetylene and arc.**

**BUILDING AND ALLIED TRADES**

**BLUEPRINT READING**

**COURSE NUMBER—2710**
**TYPE OF STUDENT—Full-time**
**FEE—None**
**LENGTH OF COURSE—90 fifty minute periods**
**TEXT—Building Trades Blueprint Reading by Dalzell (2 volumes)**
**COURSE CONTENT—This course covers basic blueprint reading essential to anyone seeking success in the building trades. This course is built around several practical sets of blue prints which take the student from the elementary on through specifications of masonry buildings.**

**BRICKLAYING**

**COURSE NUMBER—3712**
**TYPE OF STUDENT—Apprentice**

**WOODWORKING (Cabinet Making)**

**COURSE NUMBER—1713**
**TYPE OF STUDENT—Junior, Part-time and Adult**
**FEE—None**
**LENGTH OF COURSE—1,480 fifty minute periods**
**TEXTS—Principles of Woodwork by Herman Bjorth, General Woodworking by Johnson and Kirkland**
**COURSE CONTENT—Knowing the woods we use, selecting the woods suitable for the job, stock sizes of lumber, drying and storing of lumber, matching wood for its beauty of grain, working the wood to achieve the desired results. The care, use and sharpening of tools, project making, machine woodworking, milling of stock on power machines, joints and joint making, glue and gluing, preparing surfaces and applying finishes. Wood turning, laying out the workshop as to size, purpose and equipment needed. Safety practices of hand and power tools. All materials used for personal projects must be paid for by the student.**

**CARPENTRY**

**COURSE NUMBER—3714**
**TYPE OF STUDENT—Apprentice**
**FEE—None**
**LENGTH OF COURSE—400 hours**
**TEXT—Fundamentals of Carpentry, Volumes I and II by Durbohn, Roof Framing by Wilson and Werner, Building Trades Blueprint Reading by Dalzell, Cyclopaedia of Building Terms of American Lumbermen**
**COURSE CONTENT—Wood and its properties; carpentry tools; fasteners; layout for basement; basement form construction; construction, types of framing; floor construction; walls and partitions;**
Trade and Industry

rough stairs; gable roof framing; equal pitch hip roof; intersecting roof; equal pitch intersecting roof; shingled roof; finish carpentry; interior trim; hardware; main stairs; power machines; safety construction; building codes; blueprint reading (house and masonry construction); blueprint reading (reinforced concrete plans); transit operations; general reference reading.

DRAFTING, ARCHITECTURAL

COURSE NUMBER—2715
TYPE OF STUDENT—Adult, Full-time
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods

COURSE NUMBER—3715
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—460 hours
FEE—$5 per semester

TEXT—Problems in Architectural Drawing and References by Franklin G. Elwood

COURSE CONTENT—Vocabulary; construction details, pictorial drawing; isometric, oblique and perspective drawing; layout of rafters, drafting and layout techniques; house layout and arrangement, select and plan a project; house plans and details; develops a drafting project; estimating, study of construction; specifications, translate plans into objective reality; perspective of house; draw a convincing picture of the house.

MECHANICAL DRAFTING

COURSE NUMBER—1716
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—480 fifty minute periods

COURSE NUMBER—2716
TYPE OF STUDENT—Adult, Full-time
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods

COURSE NUMBER—3716
TYPE OF STUDENT—Apprentice
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods

COURSE CONTENT—Geometric problems, handle drawing equipment and to study geometric relations; elementary working drawings, elements of orthographic projection, dimensioning, skill in completion problems; free-hand sketching; auxiliary views, true-length lines, and angles and planes; cross sectioning and symbols; dimensioned projection problems, layout and development; basic instructional and review material; letters and numbers; problems in projection, ad-drawing.

STRENGTH OF MATERIALS

COURSE NUMBER—2717
TYPE OF STUDENT—Adult, Full-time
FEE—None
LENGTH OF COURSE—36 fifty minute periods

COURSE NUMBER—3717
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—36 fifty minute periods

TEXT—Strength of Materials by Breneman

COURSE CONTENT—Simple stresses; shear, application of stresses to shear problems; riveted joints; riveted joints and their design; stresses in thin-walled cylinders; hydraulic pressure and retaining vessels; welded joints; torsion, torque and strength of shafts; beams, shear and moment diagrams, to study the design of beams; stresses in beams; beam deflections, to study the theory of bending; combined axial and bending stresses; advanced theory and design of loaded members; columns, to study the theory of columns.

APPLIED SCIENCE FOR APPRENTICES

COURSE NUMBER—3750
TYPE OF STUDENT—Apprentice
FEE—None

COURSE CONTENT—A course consisting of lecture and demonstration of basic principles of Physics and Chemistry as applied to everyday trade practice.

ELECTRICITY

COURSE NUMBER—2718
TYPE OF STUDENT—Adult, Full-time
FEE—34¢ per day of four periods
LENGTH OF COURSE—1480 fifty minute periods

COURSE CONTENT—Elements of electricity; elementary circuits; mathematics, electrical formulas; kinds of wiring, types to use and where; motors, kinds, usage and repairs; motors, principles, practices, care; layout work, blueprint and estimating; code, state and federal building laws.

ELECTRICITY

COURSE NUMBER—3718
TYPE OF STUDENT—Apprentice
FEE—34¢ per day of four periods
LENGTH OF COURSE—400 hours

COURSE CONTENT—Basic electrical theory; Ohms Low; circuits and circuit calculation; power and distribution; instruments and measurements.
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PLUMBING

COURSE NUMBER—3720
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—How to Design and Install Plumbing by Matthias
Math for the Plumbing Trade by Delmar
Joint Wiping and Lead Work by Hutton
How to Read Blueprints by Owen and Slingsby
Wisconsin State Plumbing Code, State Board of Health
Systems, State Board of Health
Cross Connections in Plumbing and Water Supply
Chapter 145, Wisconsin Statistics, State Plumbing Law, State Board of Health
COURSE CONTENT—Plumbing theory, the principles of sewage treatment; types and use of materials; proper methods of drainage, ventilation, water supply and distribution; pumps and lifts; plumbing fixtures and appliances; plumbing safety; codes and laws, to interpret and use the Wisconsin State Plumbing Law, the Wisconsin State Plumbing Code, and local plumbing ordinances; plumbing mathematics, use and apply formulas; plumbing drawing, ventilation design and layout, to make isometric layouts; blueprint reading; lead work, layout and design, joint wiping, and lead burning; related welding, care and use of the oxy-acetylene torch in pipe cutting and welding. Also related chemistry and physics.

SHEET METAL

COURSE NUMBER—1721
TYPE OF STUDENT—Adult, Full-time
FEE—15¢ per day of four periods
LENGTH OF COURSE—740 fifty minute periods
COURSE NUMBER—2721
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods
TEXTS—Sheet Metal Work, Study Guide, Wisconsin Schools of Vocational Education
Sheets Metal Pattern Drafting and Shop Problems by Dougherty
Triangulation Short-cuts Layout by Kaberlein
Air Conditioning Metal Layout by Kaberlein
Duct Construction by Kote
COURSE CONTENT—Basic blueprint reading; shop tools and machines; parallel line pattern development, radial line pattern development, triangulation development, to develop skill in layout work, heat loss calculations, to develop understanding of heating requirements, advanced shop practice, to supplement shop work on the job. Welding (1) oxy acetylene, (2) electric arc. (3) cutting, to develop skills necessary to trade in welding, mathematics, bookkeeping, to help the worker understand the problems of management.

STEAMFITTING

COURSE NUMBER—3722
TYPE OF STUDENT—Apprentice
FEE—20¢ per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Instructional Manual for Steamfitter Apprentices
COURSE CONTENT—Science related to the steam-
Trade and Industry

The trade literature, the underlying scientific principles of trade and industry, the theoretical aspects of trade and industry, the underlying scientific principles of pressure, weight, density, and type of heat; related drawing, blueprint reading, fundamentals of isometric drawing, and heating plant layout; heating, design and installation procedures; heat transmission, calculating heat losses; review of mathematics; process piping, pipe standards, accessories, and pipe fittings; pipe welding, the use of acetylene and arc welding equipment; controls, application and regulation of all automatic controls used in heating and ventilating; refrigeration fundamentals of refrigeration and the handling of refrigerants; air conditioning, the theory of air conditioning.

Metal Industries

Blue Print Reading
(MACHINE TRADES)

COURSE NO.—2730
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—90 twenty minute periods
TEXT—Blue Print Reading by Nicholson & Jones

COURSE CONTENT—This course covers the fundamentals of blueprint reading which are essential to success in the machine trades. The course is made up of a series of blueprint reading lessons increasing in difficulty from the elementary to the advanced with each lesson introducing a machine tool operation or precision instrument function.

Foundry Practice

COURSE NUMBER—3731
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—Elementary Foundry Technology by Harty
Metal Castings by Cambell
Advanced Blueprint Reading, Delmar Publishers
Mechanical Drawing by French and Svenne
Mathematics by Slade and Margolis
Handbook of Cupola Operation, American
Foundrymen’s Association
Recommended Practices for the Sand Casting of Non-Ferrous Alloys, American Foundrymen’s Association
Foundry Manual, U. S. Navy Bureau of Ships
International Textbook Library on Foundry and
Patternmaking Foundry Work by Went

COURSE CONTENT—Introduction, to give apprentices an interview of the foundry and patternmaking industry; molding practices, core prac-

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tices; elementary metallurgy; foundry sands; related patterncasting theory; elements of arithmetic calculation of areas and volumes; weights of castings; calculation of metal mixtures; slide-rule practice; principles of projection; sketching practices; use of instruments and equipment; blueprint reading.

Welding—Electric Arc

Welding—Electric Arc
COURSE NUMBER—1738
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

COURSE NUMBER—2739
TYPE OF STUDENT—Adult, Full-time
FEE—84¢ per day of four periods
LENGTH OF COURSE—740 fifty minute periods

COURSE NUMBER—3739
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—400 hours

TEXTS—Theory and practice for Arc Welding by Sack; Welding Study Guide, Wisconsin Vocational Schools

COURSE CONTENT—Industrial application of arc welding, arc welding machines, and accessories; classification of welding electrodes, joint and weld characteristics, basic training in arc welding of mild steel in the flat, horizontal, vertical and overhead positions. Array and oxy acetylene qualification tests, pipe welding. Pressure vessel welding. Helicopter welding of stainless steels and alloys.

Welding—Oxy-Acetylene

Welding—Oxy-Acetylene
COURSE NUMBER—1739
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

COURSE NUMBER—2739
TYPE OF STUDENT—Adult, Full-time
FEE—84¢ per day of four periods
LENGTH OF COURSE—740 fifty minute periods

COURSE NUMBER—3739
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—400 hours

COURSE CONTENT—Basic training in welding mild steel in flat, horizontal, vertical, and overhead positions, care of equipment, pipe welding, oxy acetylene cutting of metals, white metal welding, aluminum welding, and lead burning.
TRADE AND INDUSTRY

HYDRAULICS
COURSE NUMBER—3733
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—9 fifty minute periods
TEXT—Hydraulics as Applied to Machines—Henry Ford Trades School and references.
COURSE CONTENT—The basic laws of fluids, pressure and buoyancy, piping, valves, and pumps. The major part of the work relates to pumps and hydraulic circuits.

METALLURGY*
COURSE NUMBER—3734
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—32 fifty minute periods
TEXT—Elementary Metallurgy by Frier
COURSE CONTENT—Iron smelting; iron refining; cast and wrought iron, melting and metal forming; iron carbon diagram; physical structure; hardening of steel; grain structure; steel alloys.

APPRENTICE MATHEMATICS*
COURSE NUMBER—3735
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—54 fifty minute periods
TEXT—Machine Shop Mathematics by Aaron Axelrod
COURSE CONTENT—Weights and measures; practical measurements and geometry, formulas and methods used in area and volume problems; geometric construction; graphs; shop trigonometry, how trig functions can be used to solve length and angle problems; belting, mathematics and physics of belting; speeds of pulleys and gears, speed reduction formulas; speeds and feeds, application and relation of mathematics and machine shop practice; lathe work, taper turning and thread screw problems; gears, gear cutting and gear layout; milling machines, applications and indexing.

APPRENTICE PHYSICS*
COURSE NUMBER—3736
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—28 fifty minute periods
TEXT—Lesson Sheets
COURSE CONTENT—Composition and resolution of forces, and how forces can be analyzed; simple beams, the loading of beams and machine parts

PATTERNMAKING
COURSE NUMBER—3737
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—Mechanical Drawing by French and Svensen
Advanced Blueprint Reading, Delmar Publishers
Pattern Design by Hall and Kiley
Metals by Slade and Margolis
Wood Patterncrafting by McCaull
Elementary Foundry Technology by Hartley
COURSE CONTENT—Introduction, the foundry industry and patternmaking trade; general trade qualifications of the patternmaker; apprenticeship; molding and core practices, types and methods; procedure and operations; tools—bench, machine, special; pattern construction, types of patterns and their relation to molding and machine shop; pattern allowances, contraction, draft, finish, layout and templates; cores, core prints and coreboxes; slaved, stepped and segment work; related pattern casting theory, design, engineering, new methods; elements of arithmetic; areas of volume, cylinders, prisms, fillets, bosses, plates, ribs, pads, webs, etc.; irregular and composite solids; weights of castings, density of metals, estimation of casting weight by practical computation; geometry and layout; slide-rule practice; principles of projection; sketching practice; use of instruments and equipment; blueprint reading.

MACHINE SHOP
COURSE NUMBER—1732
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods
COURSE NUMBER—2732
TYPE OF STUDENT—Adult, Full-time
FEE—21c per day of four periods
LENGTH OF COURSE—1480 fifty minute periods
COURSE NUMBER—3732
TYPE OF STUDENT—Apprentice
FEE—21c per day of four periods
LENGTH OF COURSE—400 hours
TEXTS—How to Run a Lathe by O'Brien
Machine Shop Theory by Sealess
Machinery Handbook by Oberg and Jones
TRADE AND INDUSTRY

COURSE CONTENT—This course covers nomenclature of the engine lathes, milling machine, shaper, grinders and drill press, and the basic operating principles of these machines. Also, layout procedures, the use of precision instruments and gauges, machine shop trade standards and data including care and use of hand tools.

Any materials other than those used by the student for class exercises must be paid for by the student.

SERVICE OCCUPATIONS

ADVANCED COOKING

COURSE NUMBER—3761
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
COURSE NUMBER—2761
TYPE OF STUDENT—Adult, Full-time
FEE—$5 a week (covers uniforms, tools, text books, and one meal a day)
LENGTH OF COURSE—2 nine week quarters
TEXT—Escotter Cook Book; Book of Sauces
COURSE DESCRIPTION—Preparation of quality food on a quantity basis to prepare students for positions as first and second cooks. Students are given gradual increase in responsibility in the preparation and service of fine foods. Problems of culinary management are presented and discussed in class sessions. To prepare students to meet requirements of a quality position in the culinary trade.

BASIC RESTAURANT TRADES

COURSE NUMBER—3760
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
COURSE NUMBER—2760
TYPE OF STUDENT—Adults
FEE—$5 a week, covering uniform, text books, and one meal a day
LENGTH OF COURSE—4 nine week quarters
TEXT—Escotter Cook book
COURSE DESCRIPTION—Practical instruction in food procurement, preparation and service. Selective menus or daily bills of fare are purchased, prepared, served and discussed by the students under the supervision of the food director and his assistants. This work is supplemented by demonstrations and lectures on allied subjects by specialists from various fields of sanitation, personal hygiene, nutrition, restaurant accounting, and food control.

BARBERING

COURSE NUMBER—3740
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—432 hours
TEXT—14 Units, 14 Assignment Units in Barber Science
COURSE CONTENT—Introduction to apprenticeship, anatomy and physiology, diseases, shop problems, facials and packages, barber law, therapeutic lights, hair and scalp diseases; structure and care of hair; recognize scalp diseases and their treatment; electricity and common knowledge of electrical wiring; operation of electrical devices; and application of electrical current; shampooing; hair dying; facials; skin and its diseases, structure of skin and disease treatment; hair dressing; hands and nails; permanent waving; theory and technique of waving hair permanently with electricity and chemicals.

COSMETOLOGY

COURSE NUMBER—3741
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—288 hours
TEXT—Home Study Course, Wisconsin Schools of Vocational Education
COURSE CONTENT—Wisconsin laws of cosmetology; sterilization and sanitation; anatomy—familiarize student with location, function of bones, nerves, muscles and blood supply of head, face, hands and neck; hair and scalp diseases; structure and care of hair; recognize scalp diseases and their treatment; electricity and common knowledge of electrical wiring; operation of electrical devices; and application of electrical current; shampooing; hair dying; facials; skin and its diseases, structure of skin and disease treatment; hair dressing; hands and nails; permanent waving; theory and technique of waving hair permanently with electricity and chemicals.

RADIO

COURSE NUMBER—2742
TYPE OF STUDENT—Adult, Full-time
FEE—34 cents per day of four periods
LENGTH OF COURSE—1,480 fifty minute periods
COURSE NUMBER—3742
TYPE OF STUDENT—Apprentice
FEE—34 cents per day of four periods
LENGTH OF COURSE—400 hours
TEXTS—Applied Drafting
Elements of Radio by Marcus and Horton
Essentials of Electricity by Timble
Inside of the Vacuum
Master Guide, United Catalog Publishers
Radio Fundamentals
Servicing, Signal Tracing Rider
COURSE CONTENT—Basic theory; radio funda-
TRADE AND INDUSTRY

TRADE AND INDUSTRY

ments; vacuum tubes; amplifiers; power supplies; signal tracing; signal amplifications; detection; couplings; oscillators; mixer circuits; control circuits; public address systems; localizing defects; mathematics; laws and formulas; mechanical practice, use of hand tools; circuits, automatic circuits code, state and federal laws; wiring and how to install; mechanical practice, bearings and fittings.

REFRIGERATION

COURSE NUMBER—2743
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—582 fifty minute periods
COURSE NUMBER—2743
TYPE OF STUDENT—Apprentice
FEE—20c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Instructional Manual for Steamfitters, Washburne Trade School
COURSE CONTENT—Introduction to refrigeration, fundamentals of refrigeration, refrigeration cycle, operating cycle of a refrigeration unit, typical compression cycle; properties of refrigerants; refrigeration accessories, motor controls, refrigerant controls, heat transfer, computing heat gain and losses, absorption type refrigeration.

AIR CONDITIONING

COURSE NUMBER—2744
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—592 fifty minute periods
TEXT—Air Conditioning and Fundamentals of Refrigeration, S.P. Brown
COURSE CONTENT—Physical and chemical properties of air, psychrometric charts, heat gains and losses of buildings, properties of steam, computing cooling and heating coils, duct work, fans, accessories, motor controls.

PRINTING

PRINTING

COURSE NUMBER—1745
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—412 fifty minute periods
COURSE NUMBER 2745
TYPE OF STUDENT—Adult, Full-time
FEE—None
LENGTH OF COURSE—2,072 fifty minute periods

COURSE NUMBER—3745
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXT—T. U. Lessons in Printing
The Practice of Printing by Folk
General Printing by Cleeton and Pitkin
Applied Course for Student Printers
Elementary Platen Presswork
COURSE CONTENT—The student in this course will begin with hand composition (elementary and advanced); take presswork (Kelly, Kluge, and Open Jobber); and linotype composition. A student may concentrate on one of the three divisions, or take an equal amount of work in each section. Additional work in the related fields of Graphic Arts will include printing inks and papers, binding work, and the allied trades. Such information concerning the industry will be given as it comes up. Printers’ English and Printers’ Math are additional courses given to printing students.
AUTOMOTIVE

AUTO BODY

COURSE NUMBER—2701
TYPE OF STUDENT—Adult, Full-time
FEE—15c per day of four periods
LENGTH OF COURSE—740 fifty minute periods
COURSE NUMBER—1701
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods

COURSE NUMBER—3701
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Auto Body Fender and Repair Manual by C. E. Packer
COURSE CONTENT—Welding, to weld light gauge metal and other metals of the auto body including aluminum and white metal. Metal work to perform minor and major body repairs with the analysis of estimating and rebuilding wrecked bodies. Painting, spray painting, matching and blending in colors and the performance of repaint jobs.

AUTO DRIVER TRAINING

COURSE NUMBER—2702
TYPE OF STUDENT—Full-time, Part-time, and Adult
FEE—$20
LENGTH OF COURSE—9 weeks
TEXT—Sportsmanship Driving by the American Automobile Association
COURSE CONTENT—
I. Lecture and Discussion, Mondays from 7 p.m. to 2:30 p.m.
II. Behind-the-wheel training.
   The student selects the hours between 1 and 4 p.m. which are best suited to his convenience for driving practice. Each student receives a minimum of six hours of actual driving practice. As soon as he masters the fundamentals of driving, he is taken into traffic where he develops good judgment in live situations.
   After having completed the course, a driver's test is given by the Motor Vehicle Department of the State of Wisconsin. A satisfactory test entitles the student to his permanent driver's license.

AUTOMOTIVE ELECTRICIAN

COURSE NUMBER—3703
TYPE OF STUDENT—Apprentice

FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Automobile Ignition and Electrical Equipment by Kuns and Plumridge
Automotive Maintenance by Kuns and Plumridge
Automotive Electrical Equipment by Crouse
COURSE CONTENT—General electricity and storage battery, fundamentals of electricity and testing, checking and charging of battery; ignition system, check and repair; starter, check and overhaul; generator and regulators, check and repair; car wiring. Check and repair: periodic inspection.

AUTOMOTIVE MACHINIST

COURSE NUMBER—3704
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Automotive Engines, by Kuns and Plumridge
Automotive Engines, Ford Trade School
Automotive Mechanics by Crouse
COURSE CONTENT—Brakes, clutch, transmissions, engines, electrical system, accessories, welding oxy-acetylene and arc-machine shop, and how to operate the lathe, drill press, external grinder, and all hand tools.

AUTO MECHANICS

COURSE NUMBER—2705
TYPE OF STUDENT—Adult, Full-time
TYPE OF TRAINING—Pre-apprentice
FEE—15c per day of 4 periods
LENGTH OF COURSE—1480 fifty minute periods
TEXT—Automotive Mechanics by Crouse
Bear Wheel Alignment, Axle and Frame Straightening Service
Principles of wheel Alignment by Bear
COURSE NUMBER—3705
TYPE OF STUDENT—Apprentice
FEE—15c per day of 4 periods
LENGTH OF COURSE—400 hours
TEXT—Automobile Fundamentals by Kuns and Plumridge
Automotive Engines by Kuns and Plumridge
Automobile Ignition and Electrical Equipment by Kuns and Plumridge
Automotive Maintenance by Kuns and Plumridge
Principles of wheel Alignment by Bear
Bear Wheel Alignment, Axle and Frame Straightening Service
COURSE CONTENT—Washing, polishing, lubrication, accessories, brakes, electrical systems, engines, engine tune-up, clutches, transmissions.
drive shafts, fuel systems, rear axles, care of tools and equipment, engine rebuilding, front wheel alignment, frame straightening, wheel balancing.

AUTOMOTIVE SCIENCE

COURSE NUMBER—2706
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—One semester—fifty minute period daily
TEXT—Modern Physics by Charles E. Duel
COURSE CONTENT—Matter and mechanics, force and motion, friction, work, power and energy, machines, heat, magnetism, and electricity.

AUTOMOTIVE WHEEL ALIGNER

COURSE NUMBER—3707
TYPE OF STUDENT—Apprentice
FEE—15c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Principles of Wheel Alignment by Bear
COURSE CONTENT—Wheel balancing, checking Bear Wheel Alignment, Axle and Frame Straightening Service
Check and Correct Instruction Manual, Mambee Equipment Company
wheel alignment with Bear and Mambee equipment, correcting or adjusting wheel alignment, checking frames, straightening frames and axles—steering, checking, adjusting, and overhauling—welding, oxy-acetylene and arc.

BUILDING AND ALLIED TRADES

BLUEPRINT READING

COURSE NUMBER—2710
TYPE OF STUDENT—Full-time
FEE—None
LENGTH OF COURSE—90 fifty minute periods
TEXT—Building Trades Blueprint Reading by Dalsell (2 volumes)
COURSE CONTENT—This course covers basic blueprint reading, essential to anyone seeking success in the building trades. This course is built around several practical sets of blue prints which take the student from the elementary on through specifications of masonry build-

BRICKLAYING

COURSE NUMBER—3712
TYPE OF STUDENT—Apprentice
rough stairs; gable roof framing; equal pitch roof; intersecting roof; equal pitch intersecting roof; shingled roof; finish carpentry; interior trim; hardware; main stairs; power machines; safety construction; building codes; blueprint reading (house and masonry construction); blueprint reading (reinforced concrete plans); transit operations; general reference reading.

DRAFTING, ARCHITECTURAL

COURSE NUMBER—2715
TYPE OF STUDENT—Adult, Full-time
FEE—$3 per semester
LENGTH OF COURSE—1480 fifty minute periods
COURSE NUMBER—2715
TYPE OF STUDENT—Apprentice
LENGTH OF COURSE—400 hours
FEE—$3 per semester
TEXT—Problems in Architectural Drawing and References by Franklin G. Elwood

COURSE CONTENT—Vocabulary; construction details; pictorial drawing; isometric, oblique and perspective drawing; layout of rafters, drafting and layout techniques; house layout and arrangement; select and plan a project; house plans and details; develop a drafting project; estimating; study of construction; specifications; translate plans into objective reality; perspective of house, draw a convincing picture of the house.

MECHANICAL DRAFTING

COURSE NUMBER—1716
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—400 fifty minute periods
COURSE NUMBER—2716
TYPE OF STUDENT—Adult, Full-time
FEE—$5 per semester
LENGTH OF COURSE—1480 fifty minute periods
COURSE NUMBER—3716
TYPE OF STUDENT—Apprentice
FEE—$3 per semester
LENGTH OF COURSE—1480 fifty minute periods

COURSE CONTENT—Geometric problems, handle drawing equipment and to study geometric relations; elementary working drawings, elements of orthographic projection, dimensioning, skill in completion problems; free-hand sketching; auxiliary views, true-length lines, and angles and planes; cross sectioning and symbols; dimensioned advanced projection problems, layout and development; basic instructional and review material; letters and numbers; problems in projection, ad-drawing.

STRENGTH OF MATERIALS

COURSE NUMBER—2717
TYPE OF STUDENT—Adult, Full-time
FEE—None
LENGTH OF COURSE—96 fifty minute periods
COURSE NUMBER—3717
TYPE OF STUDENT—Apprentice
FEE—None

COURSE CONTENT—Simple stresses; shear, application of stresses to shear problems; riveted joints; riveted joints and their design; stresses in thin-walled cylinders, hydraulic pressure and rotating vessels; welded joints; torsion, torque and strength of shafts; beams, shear and moment diagrams, to study the design of beams; stresses in beams; beam deflections, to study the theory of bending; combined axial and bending stresses, advanced theory and design of loaded members; columns, to study the theory of columns.

APPLIED SCIENCE FOR APPRENTICES

COURSE NUMBER—3750
TYPE OF STUDENT—Apprentice
FEE—None

COURSE CONTENT—A course consisting of lecture and demonstration of basic principles of Physics and Chemistry as applied to everyday trade practice.

ELECTRICITY

COURSE NUMBER—2718
TYPE OF STUDENT—Adult, Full-time
FEE—34¢ per day of four periods
LENGTH OF COURSE—1480 fifty minute periods

COURSE NUMBER—3718
TYPE OF STUDENT—Apprentice
FEE—34¢ per day of four periods
LENGTH OF COURSE—400 hours

COURSE CONTENT—Basic electrical theory; Ohm’s Law; circuits and circuit calculation; power and distribution; instruments and measurements.
TRADE AND INDUSTRY

construction and use of meters; D. C. motors and generators, operational characteristics of motors; alternating current, Part 1, Part 2; A. C. power; A. C. 3-phase, relation of single and polyphase; A. C. motors and generators, characteristics, repair and maintenance; electronics, understanding of industrial electronics.

The following texts are used in Electricity 2718 and Electricity 3718:

TEXTS—Industrial Electricity by Nadon and Glennis; Essentials of Electricity by Timbie; Essentials of Alternating Currents by Timbie; Essentials of Electrical Mathematics by Timbie; How to Read Electrical Blueprints by Haines and Dunlap; State Electric Code, State Bureau of Purchases; American Electricity Handbook by Croft; State Apprenticeship program—Electricity, Racine Vocational School; Electrical Motor Repair by R. Rosenberg; State Apprenticeship program—Electricity, Racine Vocational School; Electrical Motor Repair by R. Rosenberg; National Electric Code Handbook by Abbott.

PAINTING AND DECORATING

COURSE NUMBER—3719

TYPE OF STUDENT—Apprentice

FEE—None

LENGTH OF COURSE—400 hours

TEXT—Painting and Decorating Craftsman’s Manual and Textbook

COURSE CONTENT—Color mixing, color harmony; exterior painting; materials; new materials and processes; drawing and design; preparation of wall services; varnishing and enameling; glassing; graining of woods; graining of marble; plastic paints; paper hanging.

PLUMBING

COURSE NUMBER—3720

TYPE OF STUDENT—Apprentice

FEE—None

LENGTH OF COURSE—400 hours

TEXTS—How to Design and Install Plumbing by Matthias; Math for the Plumbing Trade by Delmar; Joint Wiping and Lead Work by Hutton; How to Read Blueprints by Owen and Slingluff; Wisconsin State Plumbing Code, State Board of Health; Cross Connections in Plumbing and Water Supply, Chapter 145, Wisconsin Statutes; State Plumbing Law, State Board of Health

COURSE CONTENT—Plumbing theory, the principles of sewage treatment; types and use of materials; proper methods of drainage, ventilation, water supply and distribution; pumps and lift; plumbing fixtures and appliances; plumbing safety; codes and laws; to interpret and use the Wisconsin State Plumbing Law, the Wisconsin State Plumbing Code, and local plumbing ordinances; plumbing mathematics, use and apply formulas; plumbing drawing; ventilation design and layout, to make isometric layouts; blueprint reading; lead work, layout and design, joint wiping, and lead burning; related welding, care and use of the oxy-acetylene torch in pipe cutting and welding. Also related chemistry and physics.

SHEET METAL

COURSE NUMBER—1721

TYPE OF STUDENT—Junior, Part-time

FEE—None

LENGTH OF COURSE—140 fifty minute periods

COURSE NUMBER—2721

TYPE OF STUDENT—Adult, Full-time

FEE—15c per day of four periods

LENGTH OF COURSE—370 fifty minute periods

COURSE NUMBER—3721

TYPE OF STUDENT—Apprentice

FEE—15c per day of four periods

LENGTH OF COURSE—500 hours

TEXTS—Sheet Metal Work Study Guide, Wisconsin Schools of Vocational Education; Sheet Metal Pattern Drafting and Shop Problems by Daugherty; Triangulation Short-cuts Layout by Koberlein; Air Conditioning Metal Layout by Koberlein; Duct Construction by Rothe

COURSE CONTENT—Basic blueprint reading; shop tools and machines; parallel line pattern development, radial line pattern development, triangulation development, to develop skill in layout work; heat loss calculations, to develop understanding of heating requirements, advanced shop practice, to supplement shop work on the job. Welding (1) oxy-acetylene, (2) electric arc, (3) cutting; to develop skills necessary to trade in welding, mathematics, bookkeeping, to help the worker understand the problems of management.

STEAMFITTING

COURSE NUMBER—3722

TYPE OF STUDENT—Apprentice

FEE—20c per day of four periods

LENGTH OF COURSE—400 hours

TEXT—Instructional Manual for Steamfitter Apprentices

COURSE CONTENT—Science related to the steam-
fitter trade, the underlying scientific principles of pressure, weight, density and type of heat; related drawing, blueprint reading, fundamentals of isometric drawing, and heating plant layout; heating, design, and installation procedures; heat transmission, calculating heat losses; review of mathematics; process piping, pipe standards, accessories, and pipe fittings; pipe welding, the use of acetylene and arc welding equipment; controls, application and regulation of all automatic controls used in heating and ventilating; refrigeration; fundamentals of refrigeration and the handling of refrigerants; air conditioning, the theory of air conditioning.

**METAL INDUSTRIES**

**BLUE PRINT READING**  
(MACHINE TRADES)

**COURSE NO.—2730**  
**TYPE OF STUDENT—Full-time**  
**FEE—None**  
**LENGTH OF COURSE—90 fifty minute periods**  
**TEXT—Blue Print Reading by Nicholson & Jones**

**COURSE CONTENT**—This course covers the fundamentals of blueprint reading which are essential to success in the machine trades. The course is made up of a series of blueprint reading lessons increasing in difficulty from the elementary to the advanced with each lesson introducing a machine tool operation or precision instrument function.

**FOUNDRY PRACTICE**

**COURSE NUMBER—3731**  
**TYPE OF STUDENT—Apprentice**  
**FEE—None**  
**LENGTH OF COURSE—400 hours**  
**TEXTS—**
- Elementary Foundry Technology by Hartly
- Metal Castings by Cambell
- Advanced Blueprint Reading, Delmar Publishers
- Mechanical Drawing by French and Svensen
- Mathematics by Slade and Margolis
- Handbook of Cupola Operation, American Foundrymen's Association
- Recommended Practices for the Sand Casting of Non-Ferrous Alloys, American Foundrymen's Association
- Foundry Manual, U. S. Navy Bureau of Ships
- International Textbook Library on Foundry and Patternmaking Foundry Work by West

**COURSE CONTENT**—Introduction, to give apprentices an interview of the foundry and patternmaking industry, molding practices, core practices; elementary metallurgy; foundry sands; related patterncasting theory; elements of arithmetic calculation of areas and volumes; weights of castings; calculation of metal mixtures; slide-rule practice; principles of projection; sketching practice; use of instruments and equipment; blueprint reading.

**WELDING—ELECTRIC ARC**

**WELDING—ELECTRIC ARC**

**COURSE NUMBER—1738**  
**TYPE OF STUDENT—Junior, Part-time**  
**FEE—None**  
**LENGTH OF COURSE—148 fifty minute periods**

**COURSE NUMBER—2738**  
**TYPE OF STUDENT—Adult, Full-time**  
**FEE—$4 per day of four periods**  
**LENGTH OF COURSE—740 fifty minute periods**

**COURSE NUMBER—3738**  
**TYPE OF STUDENT—Apprentices**  
**LENGTH OF COURSE—400 hours**

**TEXTS—**
- Theory and practice for Arc Welding by Sack; Welding Study Guide, Wisconsin Vocational Schools

**COURSE CONTENT**—Industrial application of arc welding, arc welding machines, and accessories, classification of welding electrodes, joint and weld characteristics, basic training in arc welding of mild steel in the flat, horizontal, vertical and overhead positions, Army and Navy qualification tests, pipe welding, Pressure vessel welding, He...arc welding of stainless steels and alloys.

**WELDING—OXY-ACETYLENE**

**WELDING—OXY-ACETYLENE**

**COURSE NUMBER—1739**  
**TYPE OF STUDENT—Junior, Part-time**  
**FEE—None**  
**LENGTH OF COURSE—148 fifty minute periods**

**COURSE NUMBER—2739**  
**TYPE OF STUDENT—Adult, Full-time**  
**FEE—$4 per day of four periods**  
**LENGTH OF COURSE—740 fifty minute periods**

**COURSE NUMBER—3739**  
**TYPE OF STUDENT—Apprentice**  
**LENGTH OF COURSE—400 hours**

**COURSE CONTENT**—Basic training in welding mild steel in flat, horizontal, vertical, and overhead positions, care of equipment, pipe welding, bronze welding, steel and cast iron welding, oxy-acetylene cutting of metals, white metal welding, aluminum welding, and lead burning.
HYDRAULICS

COURSE NUMBER—3733
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—9 fifty minute periods
TEXT—Hydraulics as Applied to Machines—Henry Ford Trades School and references.
COURSE CONTENT—The basic laws of fluids, pressure and buoyancy, piping, valves, and pumps. The major part of the work relates to pumps and hydraulic circuits.

METALLURGY

COURSE NUMBER—3734
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—32 fifty minute periods
TEXT—Elementary Metallurgy by Friar
COURSE CONTENT—Iron smelting; iron refining; cast and wrought iron, melting and metal forming; iron carbon diagram; physical structure; hardening of steel; grain structure; steel alloys.

APPRENTICE MATHEMATICS

COURSE NUMBER—3735
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—54 fifty minute periods
TEXT—Machine Shop Mathematics by Aaron Axelrod
COURSE CONTENT—Weights and measures; practical measurements and geometry, formulas and methods used in area and volume problems; geometric construction; graphs; shop trigonometry, how trig functions can be used to solve length and angle problems; belling, mathematics and physics of belling; speeds of pulleys and gears, speed reduction formulas; speeds and feeds, application and relation of mathematics and machine shop practice; lathe work, taper turning and thread screw problems; gears, gear cutting and gear layout; milling machines, applications and indexing.

APPRENTICE PHYSICS

COURSE NUMBER—3736
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—28 fifty minute periods
TEXT—Lessen Sheets
COURSE CONTENT—Composition and resolution of forces, and how forces can be analyzed; simple beams, the loading of beams and machine parts

PATTERNMAKING

COURSE NUMBER—3737
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
TEXTS—Mechanical Drawing by French and Svensen
Advanced Blueprint Reading, Delmar Publishers
Pattern Design by Hall and Kiley
Mathematics by Slocd and Marquola
Metal Castings by Campbell
Wood Patternmaking by McCaslin
Elementary Foundry Technology by Hartley
COURSE CONTENT—Introduction, the foundry industry and patternmaking trade; general trade qualifications of the patternmaker; apprenticeship; molding and core practices, types and methods, procedures and operations; tools—beach, machine, special; pattern construction, types of patterns and their relation to molding and machine shop; pattern allowances, contraction, draft, finish, layouts and templates; cores, core prints and coreboxes; staved, stepped and segment work; related pattern casting theory, design, engineering, new methods; elements of arithmetic; areas of volume, cylinders, prisms, fillets, bosses, plates, ribs, pads, webs, etc.; irregular and composite solids; weights of castings, density of metals, estimation of casting weight by practical computation; geometry and layout; slide-rule practice; principles of projection; sketching practice; use of instruments and equipment; blueprint reading.

MACHINE SHOP

COURSE NUMBER—1732
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—148 fifty minute periods
COURSE NUMBER—2732
TYPE OF STUDENT—Adult, Full-time
FEE—2lc per day of four periods
LENGTH OF COURSE—2480 fifty minute periods
COURSE NUMBER—3732
TYPE OF STUDENT—Apprentice
FEE—2lc per day of four periods
LENGTH OF COURSE—400 hours
TEXTS—How to Run a Lathe by O'Brien
Machine Shop Theory by Searles
Machinery Handbook by Oberg and Jones
TRADE AND INDUSTRY

COURSE CONTENT—This course covers nomenclature of the engine lathe, milling machine, shaper, grinders and drill press, and the basic operating principles of these machines. Also, layout procedures, the use of precision instruments and gauges, machine shop trade standards and data including care and use of hand tools.

Any materials other than those used by the student for class exercises must be paid for by the student.

SERVICE OCCUPATIONS

ADVANCED COOKING

COURSE NUMBER—3761
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
COURSE NUMBER—2761
TYPE OF STUDENT—Adult, Full-time
FEE—$5 a week (covers uniforms, tools, textbooks, and one meal a day)
LENGTH OF COURSE—2 nine week quarters
TEXT—Escoffier Cook Book; Book of Sauces
COURSE DESCRIPTION—Preparation of quality food on a quantity basis to prepare students for positions as first and second cooks. Students are given gradual increase in responsibility in the preparation and service of finer foods. Problems of culinary management are presented and discussed in class sessions. To prepare students to meet requirements of a quality position in the culinary trade.

BASIC RESTAURANT TRADES

COURSE NUMBER—3760
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—400 hours
COURSE NUMBER—2760
TYPE OF STUDENT—Adults
FEE—$5 a week, covering uniform, text books, and one meal a day
LENGTH OF COURSE—4 nine week quarters
TEXT—Escoffier Cook book
COURSE DESCRIPTION—Practical instruction in food procurement, preparation and service. Selective menus or daily bills of fare are purchased, prepared, served and discussed by the students under the supervision of the food director and his assistants. This work is supplemented by demonstrations and lectures on allied subjects by specialists from various fields of sanitation, personal hygiene, nutrition, restaurant accounting, and food control.

BARBERING

COURSE NUMBER—3740
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—432 hours
TEXT—14 Units, 14 Assignment Units in Barber Science
COURSE CONTENT—Introduction to apprenticeship, anatomy and physiology, diseases, shop problems, facials and packs, barber law, therapeutic lights, hair, art of shaving, selling standard service, pathology, bacteriology.

COSMETOLOGY

COURSE NUMBER—3741
TYPE OF STUDENT—Apprentice
FEE—None
LENGTH OF COURSE—288 hours
TEXT—Home Study Course, Wisconsin Schools of Vocational Education
COURSE CONTENT—Wisconsin laws of cosmetology; sterilization and sanitation; anatomy—familiarize student with location, function of bones, nerves, muscles and blood supply of head, face, hands and neck; hair and scalp diseases; structure and care of hair; recognize scalp diseases and their treatment; electricity and common knowledge of electrical wiring, operation of electrical devices, and application of electrical current; shampooing; hair dying; facials; skin and its diseases, structure of skin and disease treatment; hair dressing; hands and nails; permanent waving, theory and techniques of waving hair permanently with electricity and chemicals.

RADIO

COURSE NUMBER—2742
TYPE OF STUDENT—Adult, Full-time
FEE—34 cents per day of four periods
LENGTH OF COURSE—1,480 fifty minute periods
COURSE NUMBER—3742
TYPE OF STUDENT—Apprentice
FEE—34 cents per day of four periods
LENGTH OF COURSE—400 hours
TEXTS—Applied Drafting
Elements of Radio by Marcus and Horton
Elements of Radio Servicing
Essentials of Electricity by Timbie
Inside of the Vacuum
Master Guide, United Catalog Publishers
Radio Fundamentals
Servicing, Signal Tracing Rider
COURSE CONTENT—Basic theory; radio funda-
TRADE AND INDUSTRY

ments; vacuum tubes; amplifiers; power supplies; signal tracing; signal amplifications; detection; couplings; oscillators; mixer circuits; control circuits; public address systems; localizing defects; mathematics; laws and formulas; mechanical practice, use of hand tools; circuits, automatic circuits code, state and federal laws; wiring and how to install; mechanical practice, bearings and fittings.

REFRIGERATION

COURSE NUMBER—2743
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—592 fifty minute periods
COURSE NUMBER—3743
TYPE OF STUDENT—Apprentice
FEE—20c per day of four periods
LENGTH OF COURSE—400 hours
TEXT—Instructional Manual for Steamfitters, Washburne Trade School
COURSE CONTENT—Introduction to refrigeration, fundamentals of refrigeration, refrigeration cycle, operating cycle of a refrigeration unit; typical compression cycle; properties of refrigerants; refrigeration accessories, motor controls, refrigerant controls, heat transfer, computing heat gain and losses, absorption type refrigeration.

AIR CONDITIONING

COURSE NUMBER—2744
TYPE OF STUDENT—Adult, Full-time
FEE—20 cents per day of four periods
LENGTH OF COURSE—592 fifty minute periods
TEXT—Air Conditioning and Fundamentals of Refrigeration, S.P. Brown
COURSE CONTENT—Physical and chemical properties of air, psychrometric charts, heat gains and losses of buildings, properties of steam, computing cooling and heating coils, duct work, fans, accessories, motor controls.

PRINTING

PRINTING—
COURSE NUMBER—1745
TYPE OF STUDENT—Junior, Part-time
FEE—None
LENGTH OF COURSE—412 fifty minute periods
COURSE NUMBER 2745
TYPE OF STUDENT—Adult, Full-time
FEE—None
LENGTH OF COURSE—2,072 fifty minute periods
GUIDANCE

Counseling
Placement
Health
GUIDANCE

COUNSELING

JUNIORS

Students may obtain counseling service in the Guidance Department directly or by referral through teachers or supervisors.

ADULTS

Any new registrant who desires it may receive help from the guidance counselors in planning his course of study. The guidance counselors also will arrange for any desired testing. This may include aptitude, interest and personality tests and the interpretation of results in relation to the individual. During the school year students are always welcome to consult the guidance counselors in Room 136.

The vocational and educational counseling and testing services of the school are available also to nonstudent adult residents of the city of Madison. A maximum fee of one dollar and a half ($1.50) is charged nonstudents who register for these services, but no further registration fee is required for the current school year if the counselee later enrolls in regular day or evening classes.

SENIOR ADULTS

In an effort to give intelligent counseling to adults who have reached retirement age or who are making readjustments, the guidance department is prepared to give appropriate aptitude tests and analysis of job and life opportunities. The counselors will be glad to discuss with senior adults vocational and avocational opportunities available in the school and community.

JOB PLACEMENT

Employers in the Madison area have available the services of our placement office in their effort to obtain the best qualified workers for jobs which become vacant. It will be the purpose of this office to recommend to employers only those who appear to be well qualified. Students in the school may register with the placement office for prospective jobs for which they would like to receive consideration. Supervisors and teachers will report to the placement office all inquiries and requests from employers as well as students recommended.

HEALTH GUIDANCE

The health of the students in the school is of first importance and will receive the special consideration of the guidance office. Any student may obtain emergency health service as well as counseling on health problems in room 136 during all hours of the school day.

A special course in Mothercraft is offered to expectant mothers. This course is taught by a public health nurse. The class meets twice a week for ten lessons. The course is repeated every five weeks. Prenatal care, diet, hospital procedures and baby care are among the subjects included.