

# Lamar University

1974-75 College of  
Technical Arts Bulletin

VOL. 24 NO. 4 MARCH 1974

TWENTIETH ANNUAL CATALOG ISSUE

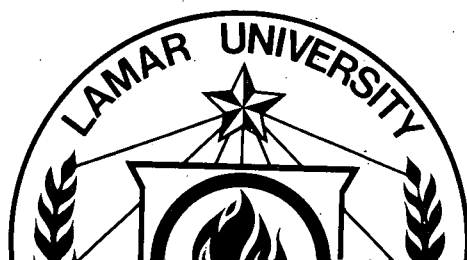
**With Announcements for 1974-75**

Founded in 1923, and established as a four-year coeducational state-supported college on September 1, 1951.

*The courses, tuition and fees and all other conditions and policies set forth in this catalog issue shall be subject to change without notification.*

Lamar University is an equal opportunity/affirmative action educational institution and employer. Students, faculty and staff members are selected without regard to their race, color, creed, sex, or national origin, consistent with the Assurance of Compliance with Title VI of the Civil Rights Act of 1964, and Executive Order 11246 as issued and amended.

Published at Beaumont, Texas. Published by Lamar





4 CAMPUS MAP



# 1974-75 Calendar

FALL SEMESTER

AUGUST 1974

26 Dormitories open.



SPRING SEMESTER  
JANUARY 1975

8 CALENDAR

SUMMER SESSION

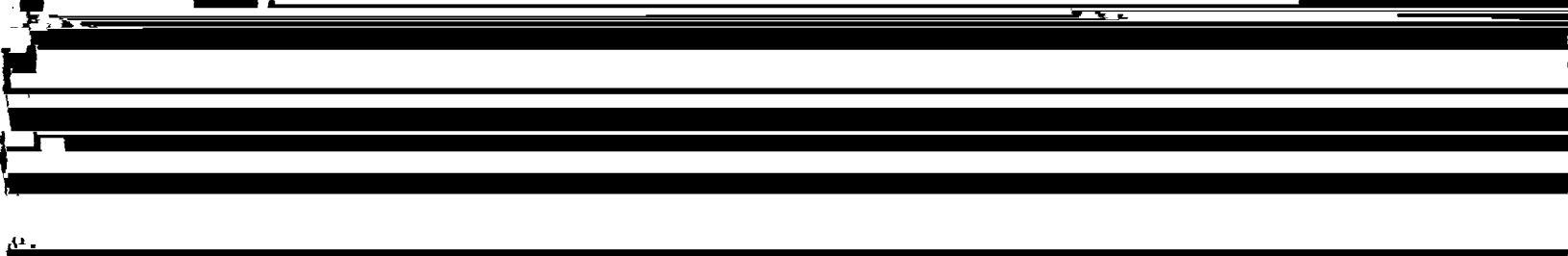
JUNE

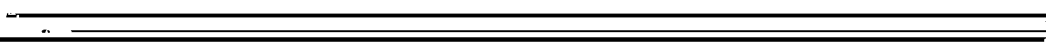
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

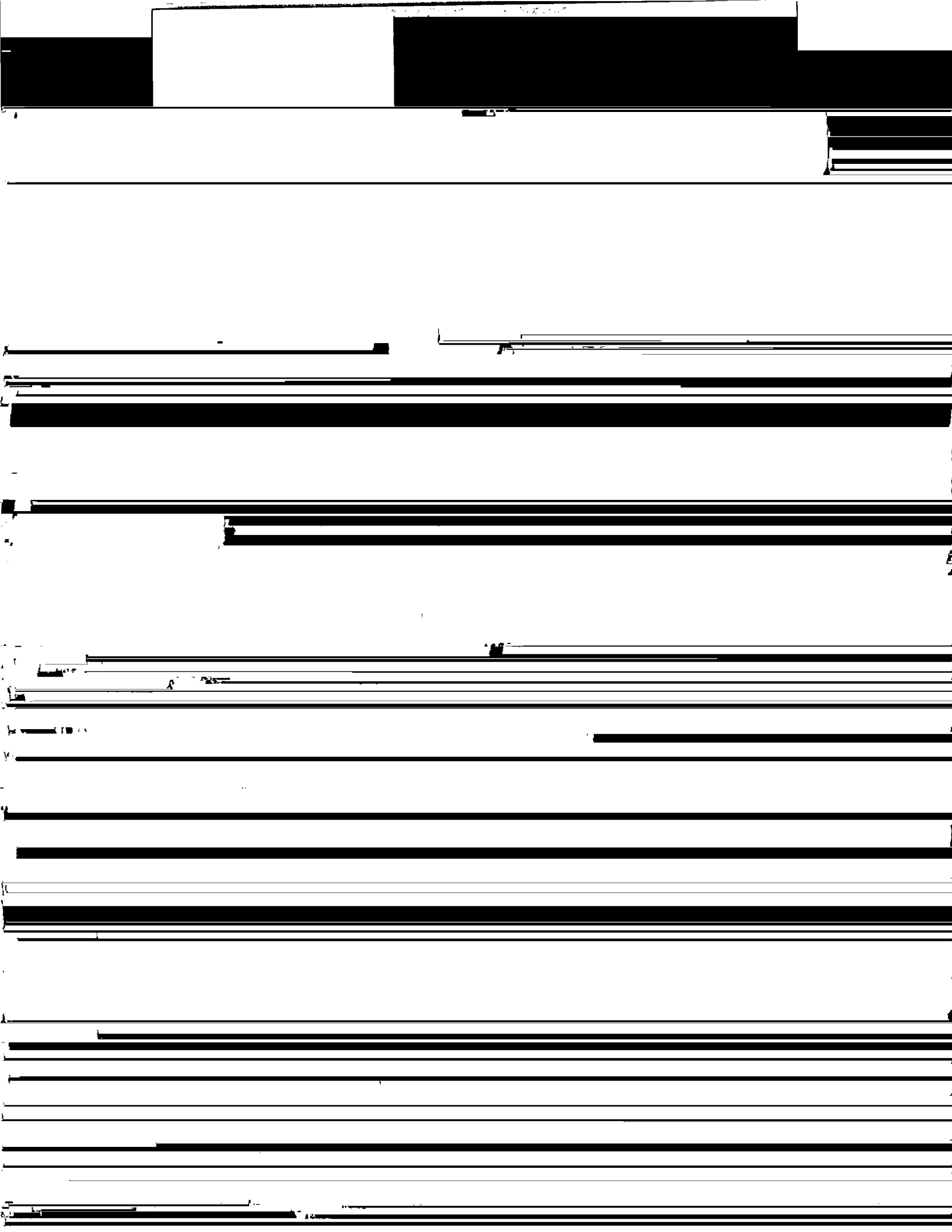
- 1 Limited operation of dormitories.
- 2 Dining halls open.  
Registration.
- 3 Classes begin at 8 a.m.  
No Adds/Drops.
- 4 Last date for registration or for adding courses.
- 5 Fourth class day.
- 17 Last date for dropping courses or for withdrawing  
without penalty.
- 24 Last date of approval for August graduation. (First  
term students.)

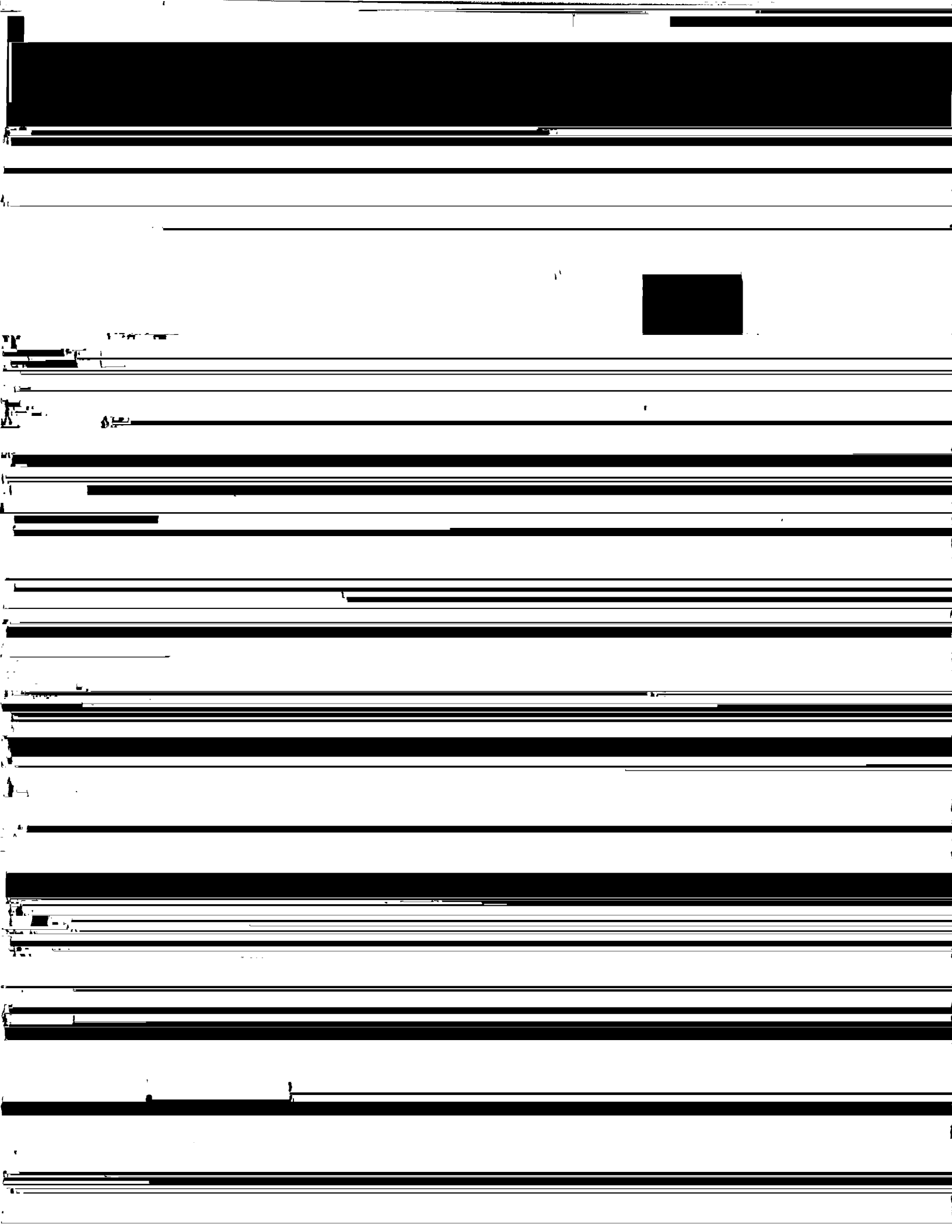
JULY

- 3 Last day for dropping courses or for









FACULTY 13

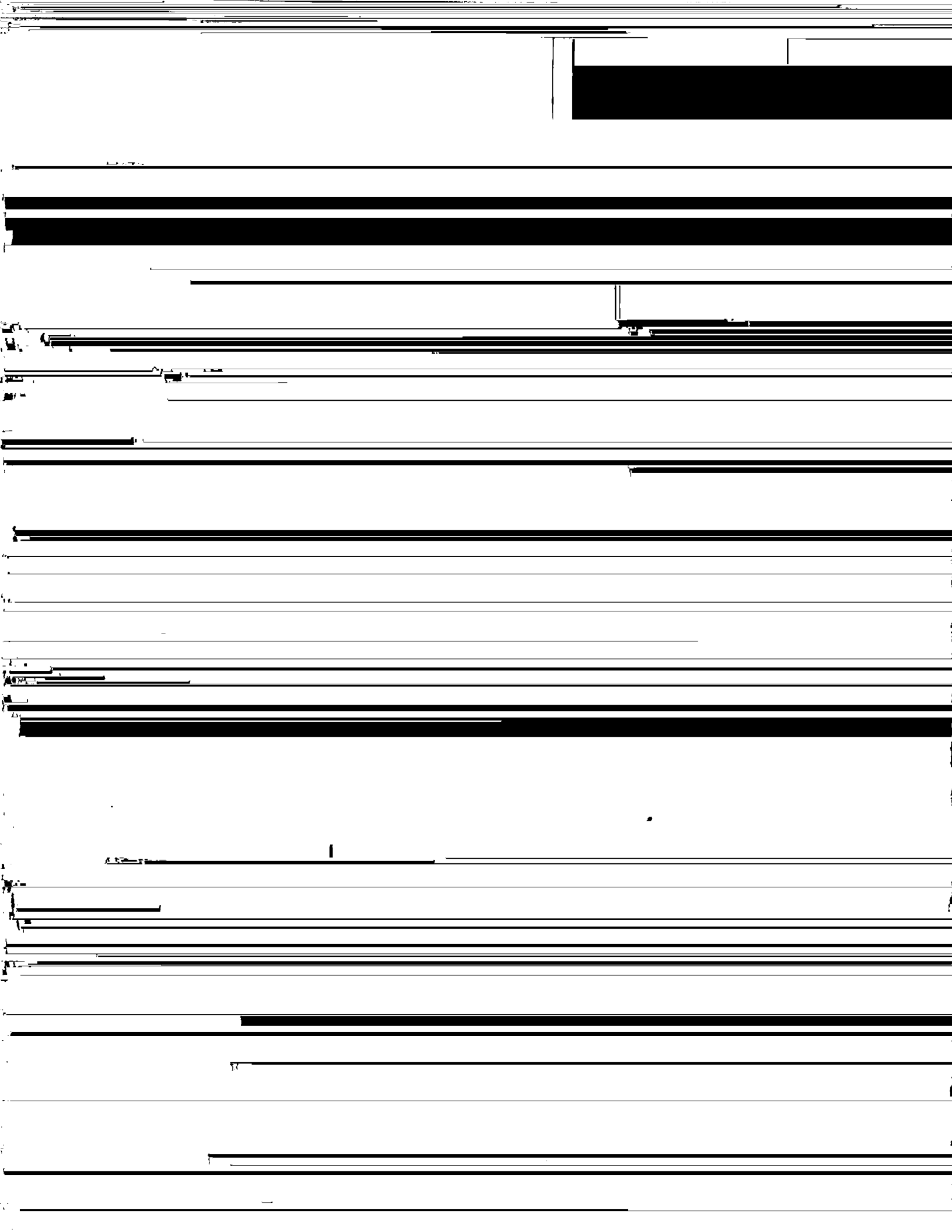
LENOX L. SIGLER, Instructor II of Industrial Electricity and Electronics  
Technology, 1965, 1970

JAMES H. SMITH, Instructor II of Diesel Mechanics, 1968, 1973  
A.A.S., Lamar University

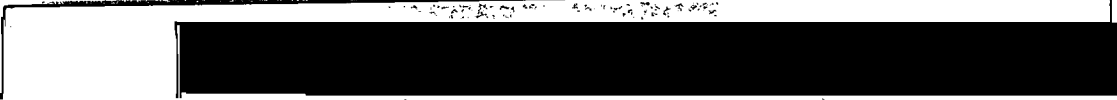
MAX K. SNIFFEN, Instructor II of Mid-Management, 1972  
B.S., B.A., Ohio State University  
M.B.A., Lamar University

JAMES D. SPENCER, Coordinator of Continuing Education, 1970  
B.S., M.Ed., Texas A&M University

DEANNA V. STAHL, Instructor II of Technical Mathematics, 1972







CONFIDENTIAL

[The remainder of the page is heavily redacted with thick black horizontal bars.]

# General Information

## LOCATION

Lamar University, a state-supported institution, is located in Beaumont, the center of industrial Southeast Texas. The campus is adjacent to the Port Arthur Highway (Spur 380) in southeastern Beaumont.

The city features modern schools, churches and shopping districts to serve the industrial community of approximately 120,000 persons. Principal industries in the area are oil refining, shipping, shipbuilding, rubber manufacturing and chemical production. Surrounding the urban communities are ranches and rice farms.

Within the metropolitan area are the cities of Port Arthur, Texas

## ACCREDITATION

Lamar University is accredited by the Association of Texas Colleges and Universities and the Southern Association of Colleges and Schools. It is approved by the Texas Education Agency and for the training of Veterans under all classifications.

Several departments have been accredited by professional agencies. In the College of Engineering, the departments of Chemical, Civil, Electrical, Industrial and Mechanical Engineering are accredited by the Engineers' Council for Professional Development. Other accreditations include the Department of Chemistry by the American Chemical Society; Department of Music by the National Association of Schools of Music; and the Departments of Elementary and Secondary Education by the National Council for the Accreditation of Teacher Education.

The University also is a member of a number of academic councils, societies, associations and other such organizations.

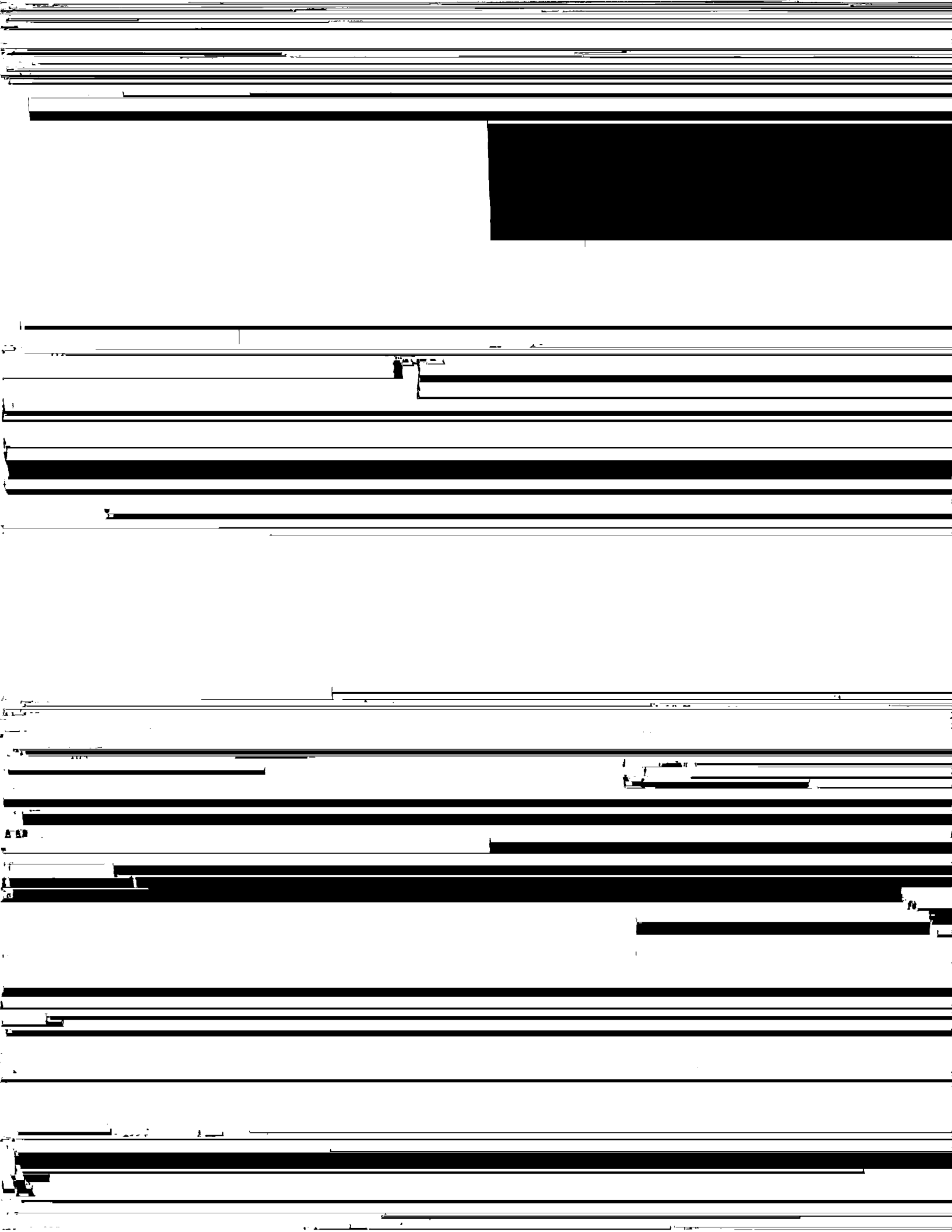
## OBJECTIVES

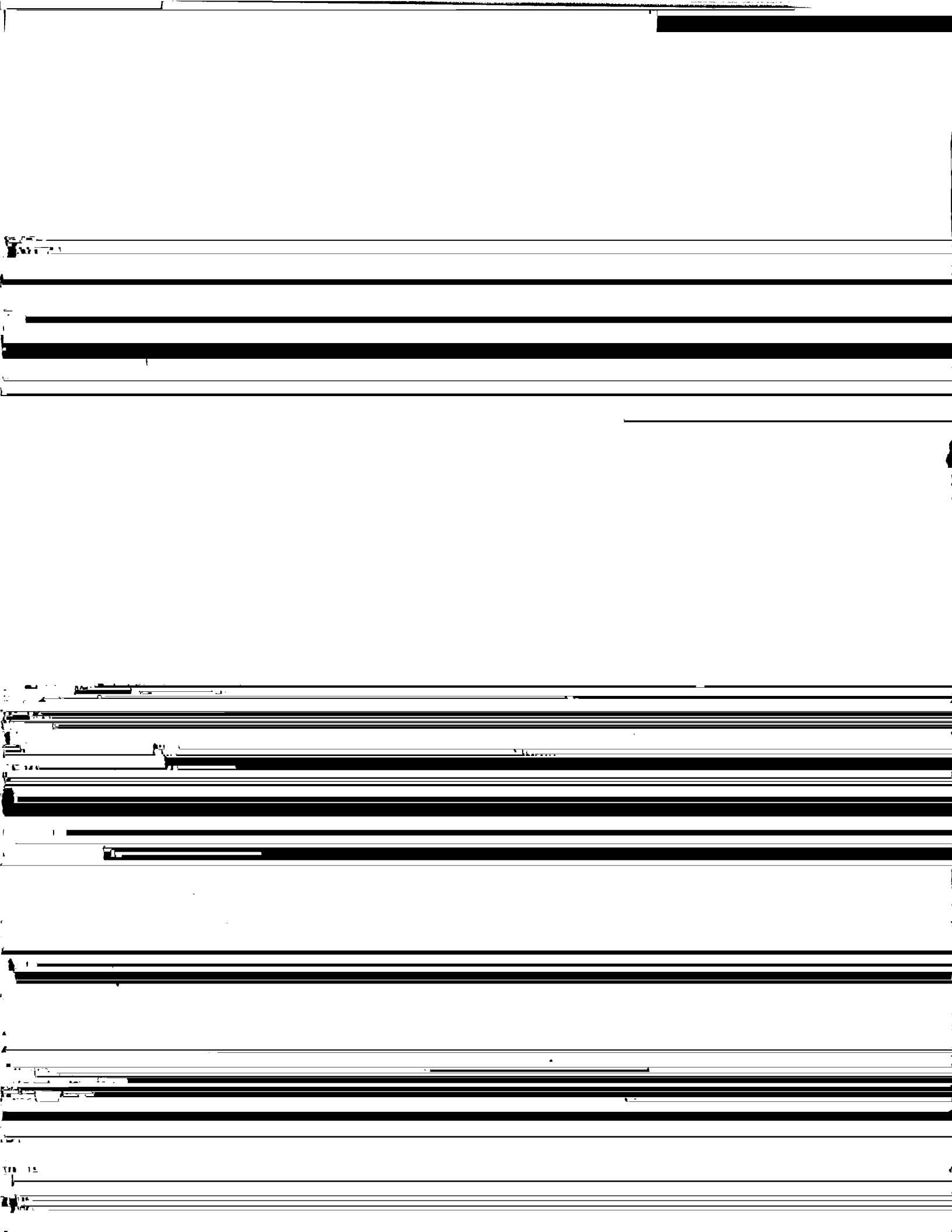
The basic objective of the College of Technical Arts is to help students equip themselves for effective living and for responsible citizenship in our society by offering educational programs and training which will extend their basic knowledge,

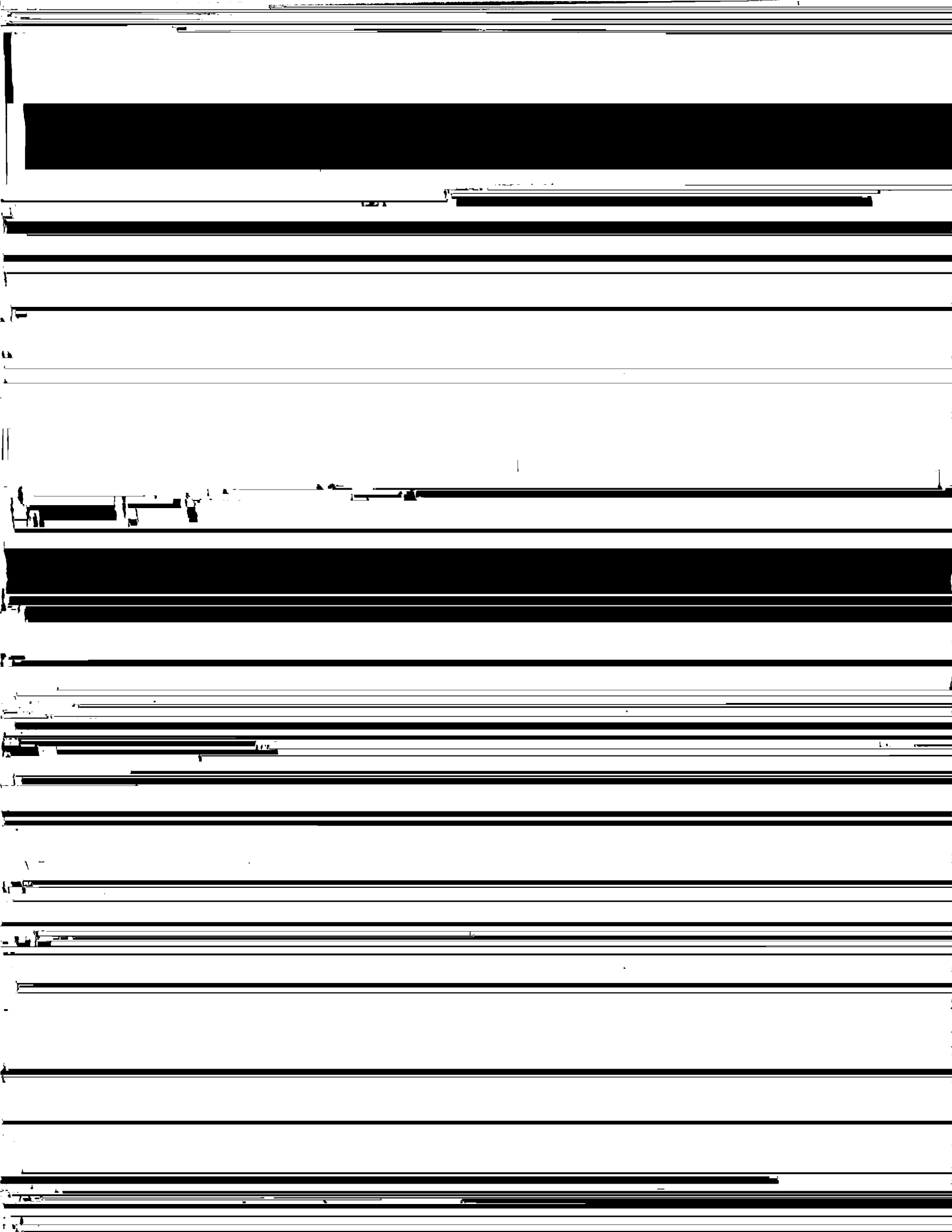
## Facilities

### BUILDINGS AND GROUNDS

Located on a campus of approximately 200 acres and valued at approximately \$40,000,000, the Lamar University plant includes many new and functional buildings of modern design. These structures include:







[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



ADMISSION REQUIREMENTS 23

Students who desire to enter one of the diploma programs must satisfy the following admission requirements.

1. File an application for admission. (Form attached to back of this catalog.)
2. Submit the official health data form executed by a physician (health form attached to back of this catalog).

3. Submit a transcript of high school grades sent directly to the Dean of Admissions

24 ADMISSION REQUIREMENTS

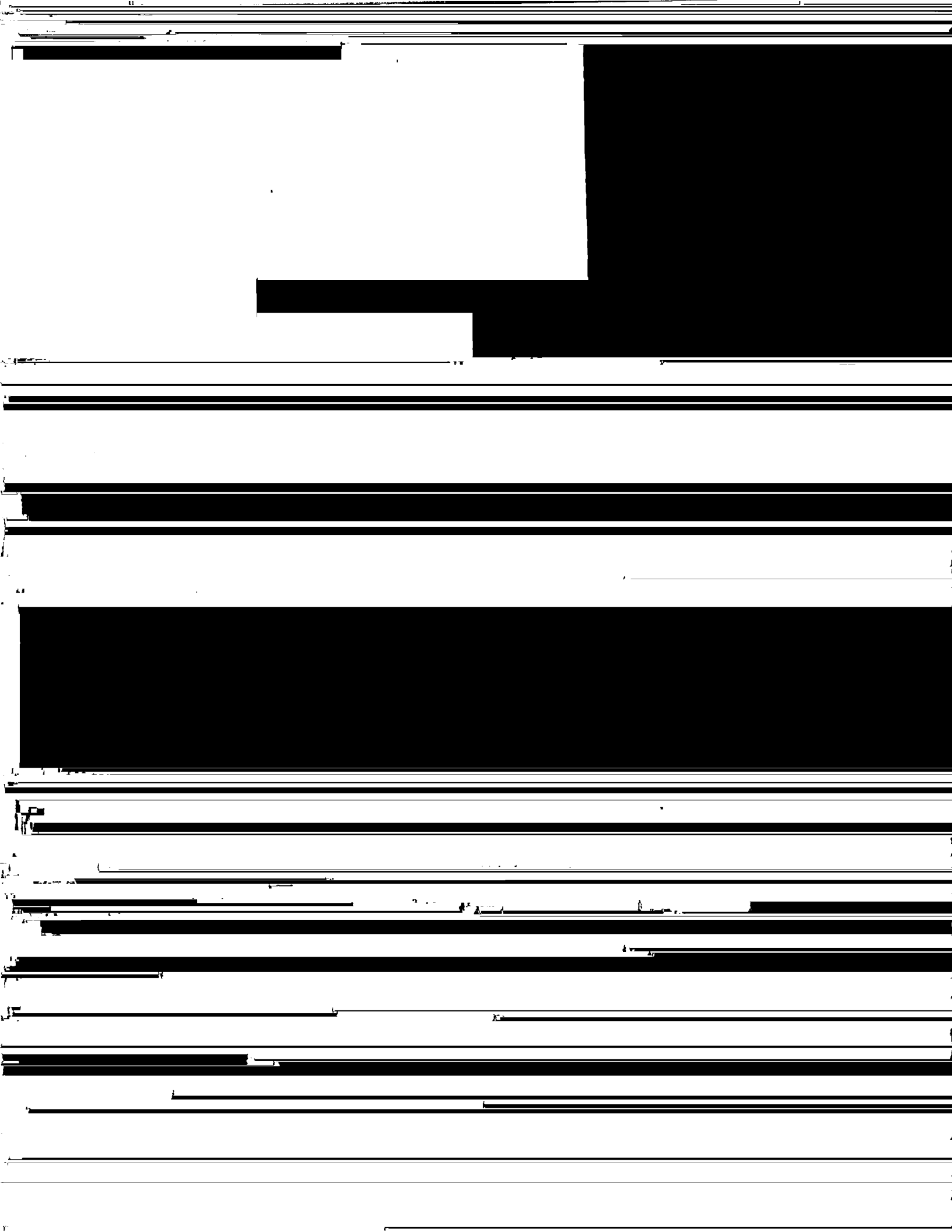
either SAT or ACT scores in fulfillment of this requirement. Both tests

# Fees and Expenses

## PAYMENT OF FEES

Lamar University reserves the right to change fees in keeping with acts of the Texas Legislature and the University's Board of Regents.

26 FEES AND EXPENSES



## 28 FEES AND EXPENSES

Center, student service, laboratory and private lesson fees according to the following schedule:

### Long Session

1. During the first two weeks of the semester, 80 per cent.
2. During the third week of the semester, 60 per cent.
3. During the fourth week of the semester, 40 per cent.
4. During the fifth week of the semester, 20 per cent.

### Summer Session

1. During the first week of the semester, 60 per cent.
2. After the first week no refund.

No refunds are made when dropping courses.

Application for refund must be made to the Vice-President for Finance after the student has officially withdrawn, but not later than the end of the current semester

person controlling his domicile, is required to notify the Dean of Admissions and Records.

Students failing to comply with the residence provisions of the state tuition bill (Art. 2645c, V.C.S. as amended 1957) are subject to penalties as set forth in the law and/or appropriate disciplinary action.

### **RULES AND REGULATIONS FOR DETERMINING RESIDENCE STATUS**

See the general catalog for complete information on how residence status is determined.

A



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[REDACTED]

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[REDACTED]

[REDACTED]



# Academic Regulations

## 32 ACADEMIC REGULATIONS

scheduled for each semester of the program being followed. The normal course load for a six-week Summer term is six to eight semester hours.

### **Overloads**

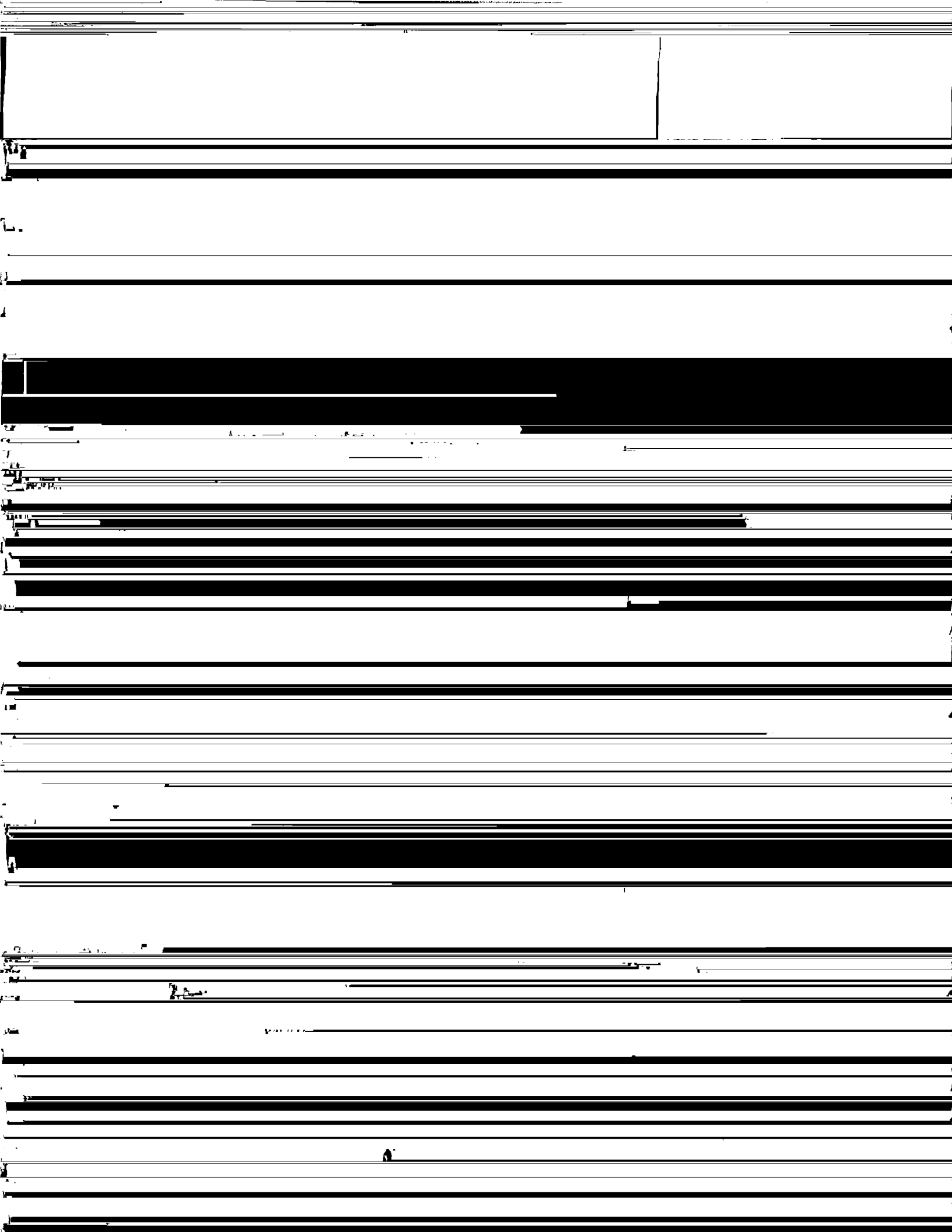
The Dean of the College of Technical Arts must approve all overloads. In general, the student must demonstrate that he is capable of maintaining a high performance level in all classes.

### **CHANGING SCHEDULES**

ACADEMIC REGULATIONS 33

Freshman: has met all entrance requirements but has completed fewer than 30 semester hours.

Minimum of 20 semester hours with 60 grade.



# Graduation Requirements

UNIVERSITY OF CALIFORNIA

# General Regulations

## NEW COURSES

In order to meet changing educational requirements, the University reserves the right to *add any needed courses at any time without regard to the listing of such*

GENERAL REGULATIONS 37

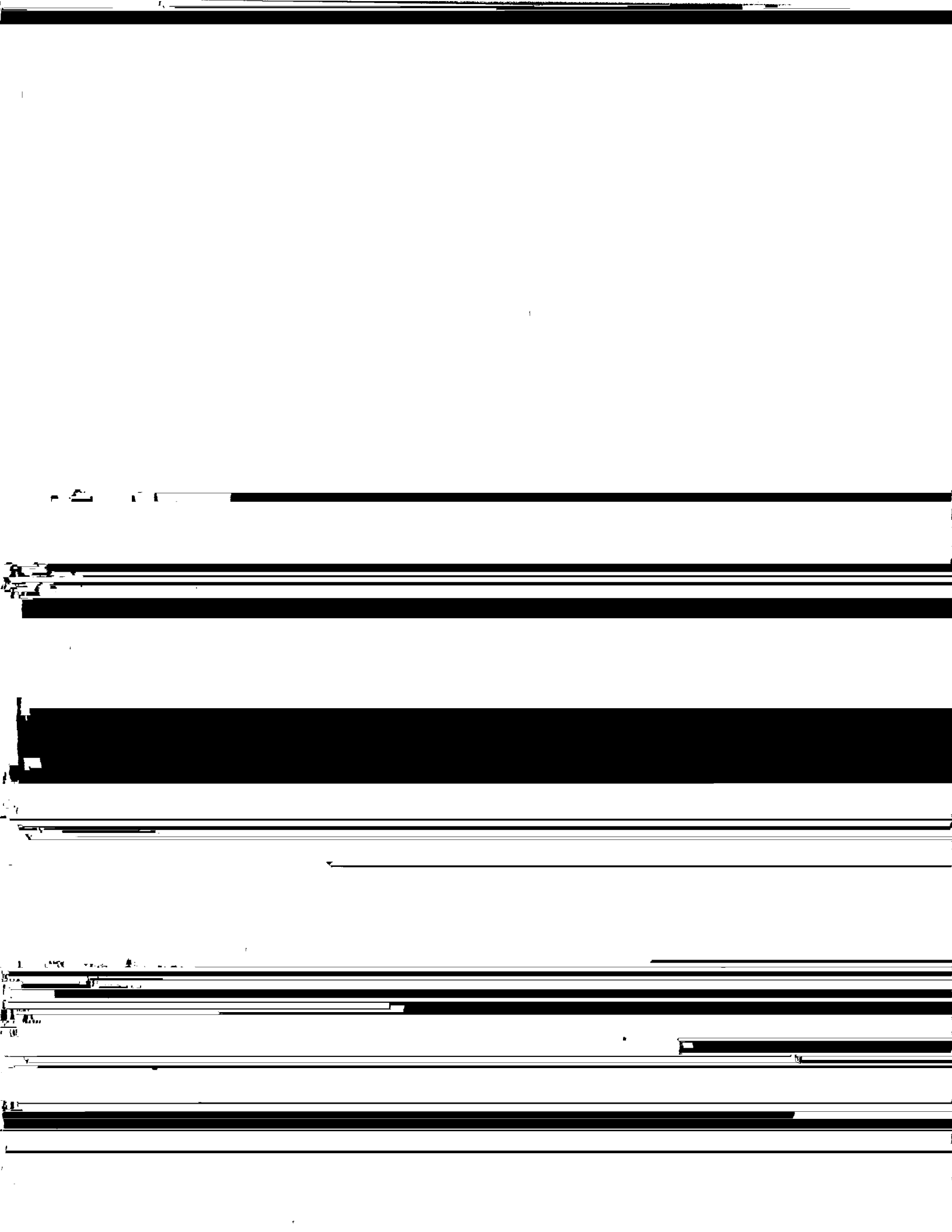
For the purpose of establishing eligibility, two six-week summer terms may count as one semester.

Transfer students have the same eligibility as freshman students until completion of one semester at Lamar.

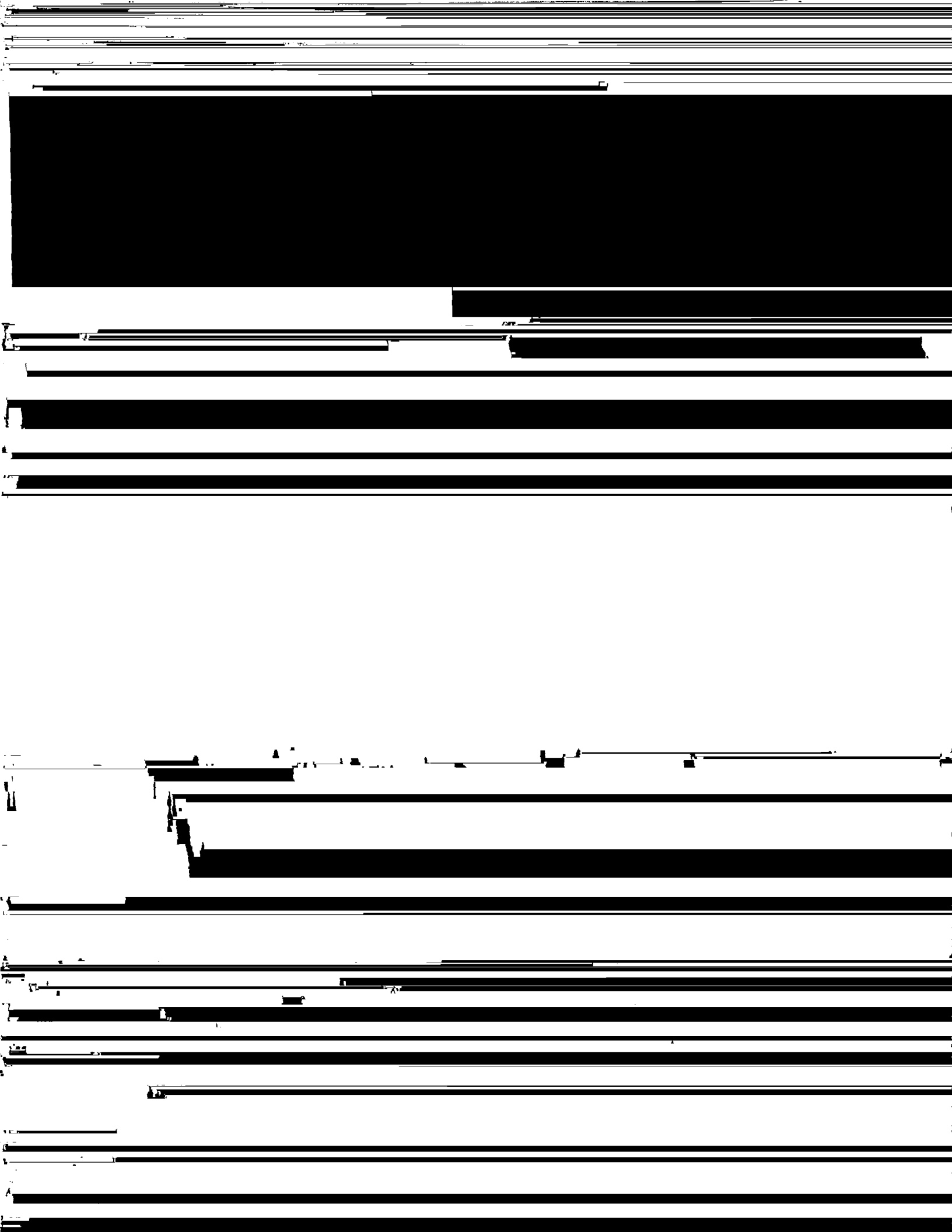
**PARKING REGULATIONS**

Each student who pays the necessary fee is issued a car decal which permits

to be displayed as instructed in



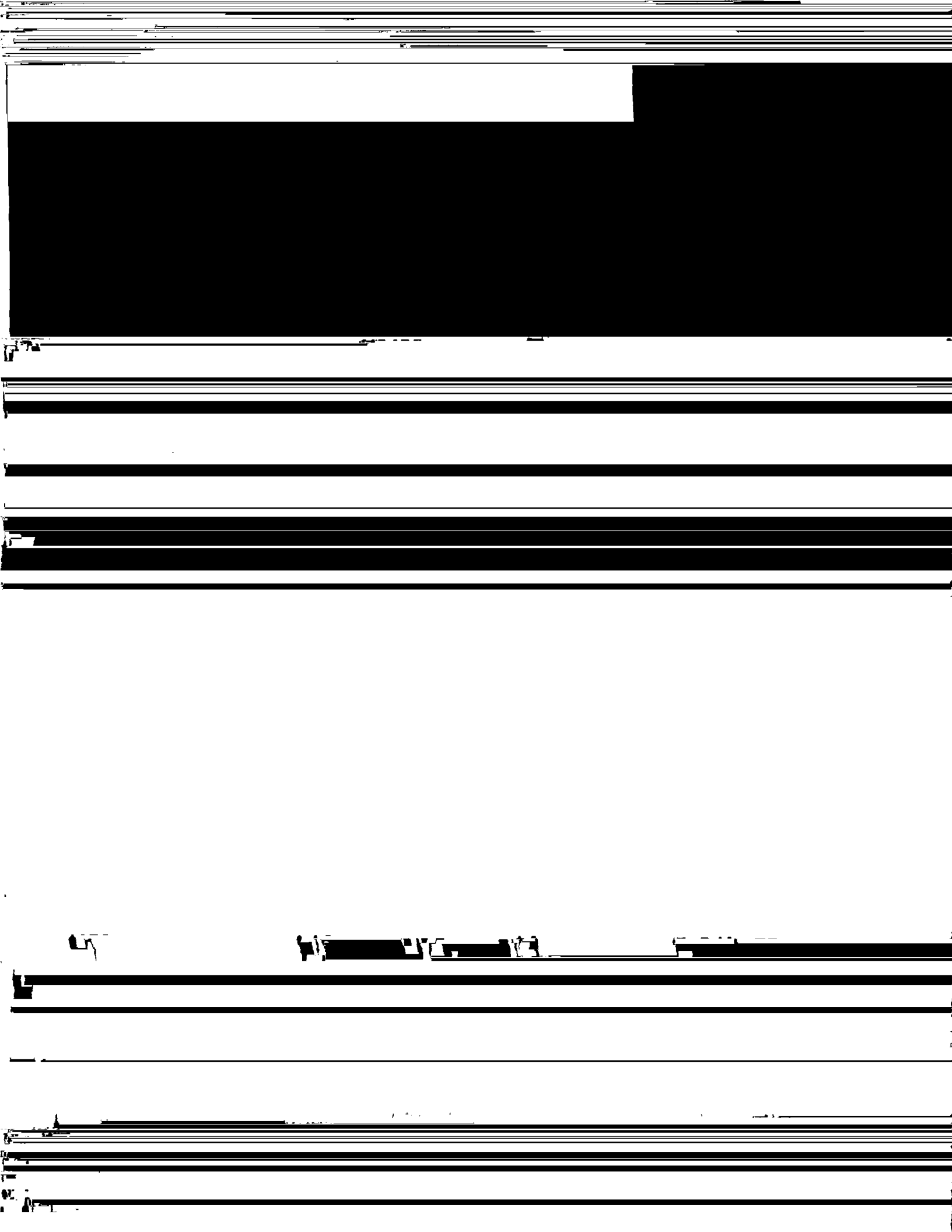


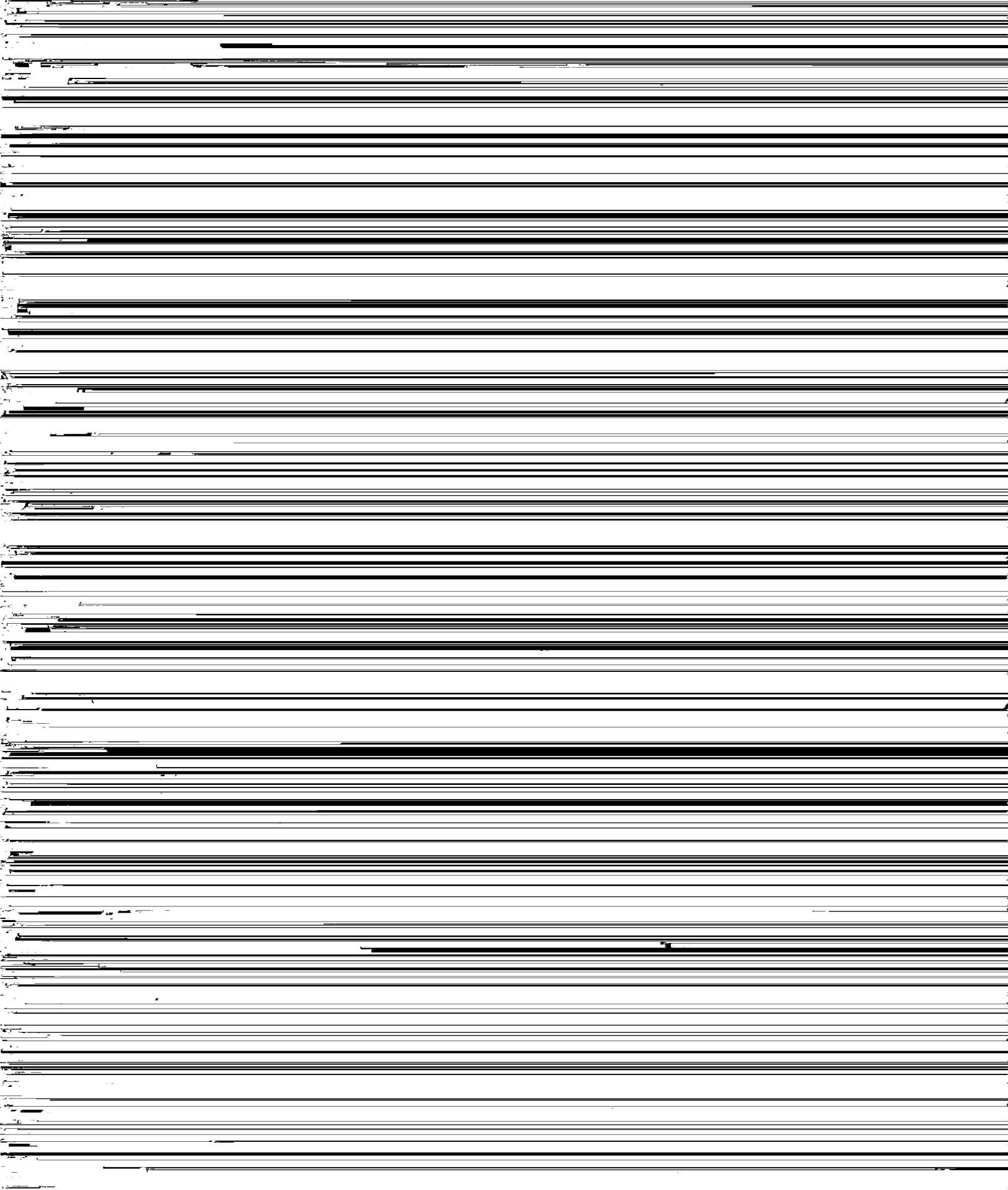
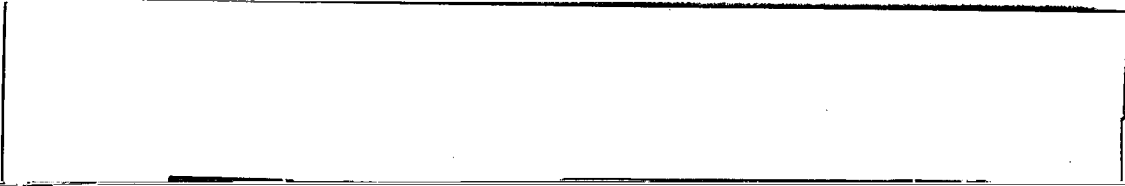


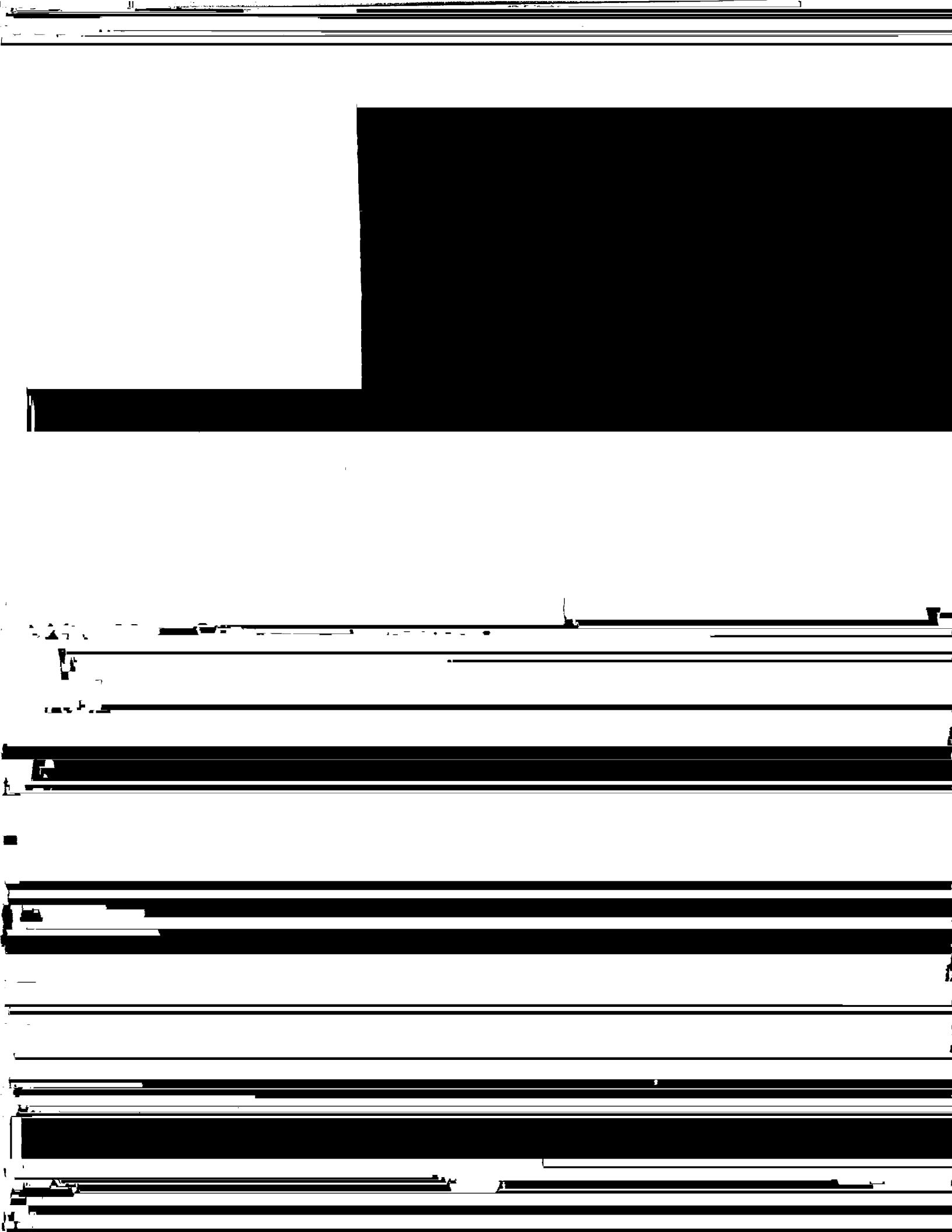
# College of Technical Arts

## DIPLOMA PROGRAMS

The College of Technical Arts offers career-oriented education in seven diploma programs in two of the four departments.







44 HEALTH SERVICES

Second Semester

Eng—English Composition

3 0 3

HEALTH SERVICES 45

143—Oral Anatomy & Embryo-histology. A brief study of the embryological development of the face and oral cavity. A detailed study of the macro and micro anatomy of the oral cavity and related structures. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours.

142—Dental Hygiene Clinic I. Applications of principles in clinical practice of  
obtaining medical history giving oral

46 HEALTH SERVICES

**RADIOLOGIC TECHNOLOGY**

*Instructors* – Marilyn H. Chitwood, R.T., and Martha J. Fontenot, R.T.

*The objectives of this*



HEALTH SERVICES 47

Fourth Semester

RA 243—Special Procedures II	3	2	4
RA 236—Radiologic Technology Seminar	3	0	3
RA 244—Radiologic Technology Practicum VI	0	25	4
Spc 131—Speech Communications	<u>3</u>	<u>0</u>	<u>3</u>
	9	27	14

**RADIOLOGIC TECHNOLOGY (RA)**

131—Radiographic Principles I. Students will become acquainted with the

48 HEALTH SERVICES

233—Radiologic Technology Practicum IV. The student will study the clinical application in this course with emphasis on job responsibilities and confidence in skill performance. Clinical laboratory: 25 hours. Credit: 3 semester hours.

235—Radiographic Physics. An intensive study of electros-

**RESPIRATORY TECHNOLOGY**

*Instructor* — Betty Wyrble A. A. S., A.R. LT



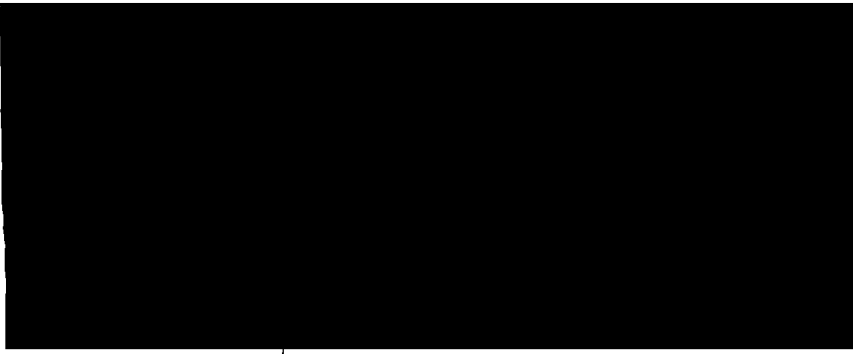
HEALTH SERVICES 51

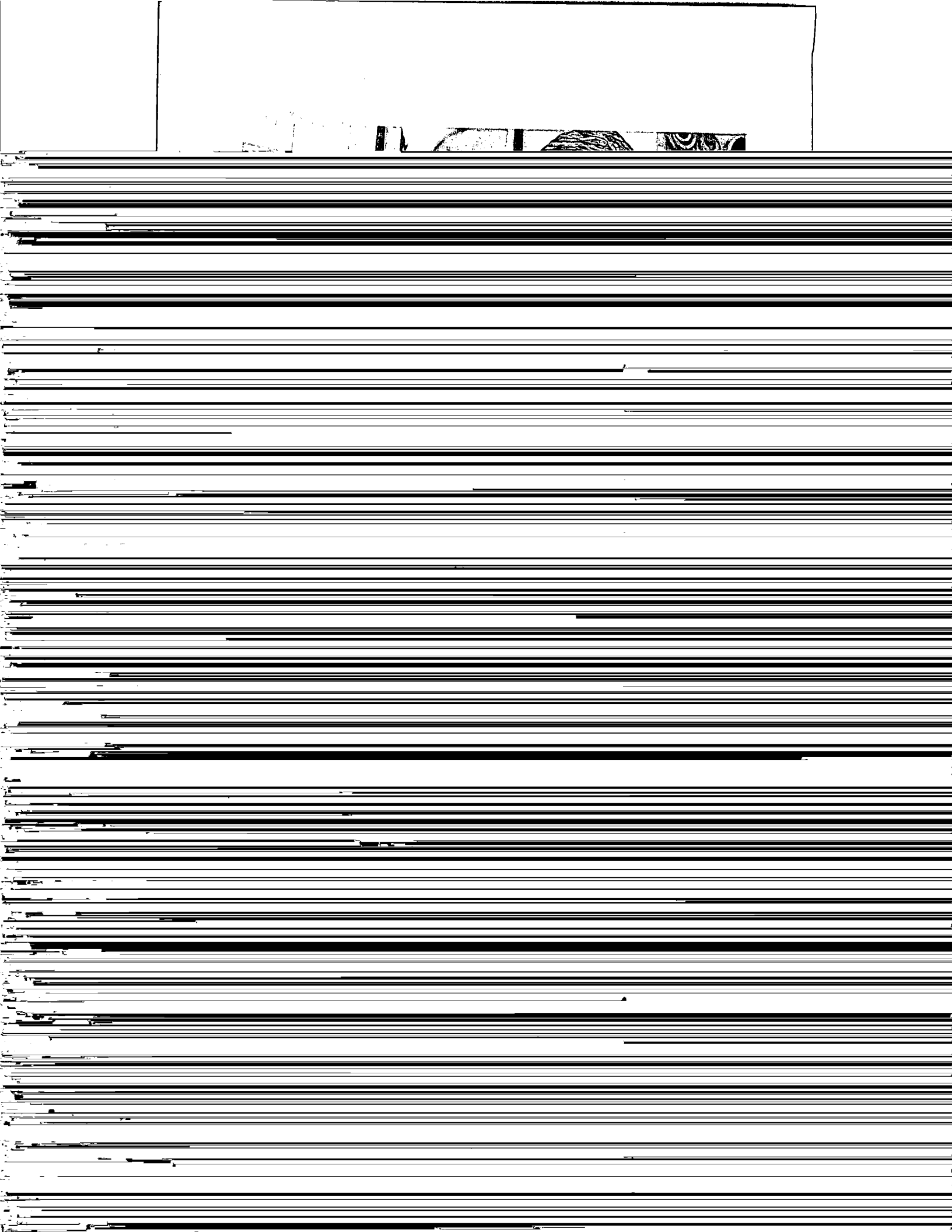
167—Clinical Practice II. General clinical practice utilizing intermittent positive  
breathing and return demonstrations. Basic communications, terminology

52 HEALTH SERVICES

**VOCATIONAL NURSING**

Director: Dolores Lopez, Instructor: Norma Alvarez, Dept. 1







# Industrial Department

Department Diesel

## 56 INDUSTRIAL

### Third Semester

DM 231—Ignition and Combustion Principles	3	0	3
DM 232—Diesel Fuel & Lubrication	3	0	3
DM 236—Troubleshooting & Installation	0	7	3
DM 237—Advanced Diesel Engines Maintenance	0	7	3
TM 231—Applied Geometry	3	0	3
JR 231—Job Relations or Soc 131 (Soc. Dept.)	3	0	3
	<u>12</u>	<u>14</u>	<u>18</u>

### Fourth Semester

DM 234—Overhaul Procedures	3	0	3
DM 235—Fuel Injection System	3	0	3
DM 238—Dynamometer Operation & Analysis	0	7	3
DM 239—Diesel Engine Hydraulics	0	7	3
TM 232—Industrial Mathematics	3	0	3
Elective†	3	0	3
	<u>12</u>	<u>14</u>	<u>18</u>

†By Approval

Suggested Technical Arts electives: MM 131, BC 231, JR 232, MM 233, MT 133, WLD 133, DFT 133, IEE 133, TM 134, MM 132, MM 231, BDP 131.

## DIESEL MECHANICS (DM)

**131—Introduction to Diesel Mechanics.** General description and construction of engines, diesel engine principles, frames, cylinders, heads, and pistons. Class: 3 hours. Credit: 3 semester hours.

**132—Diesel Cycle Application.** The diesel cycle, its advantages and applications. The basic problems of operations and the design and construction of diesel engines are studied. Class: 3 hours. Credit: 3 semester hours.

**133—Small Engines.** The operation and repair of small internal combustion engines. Diagnosis and troubleshooting will be emphasized. Class: 3 hours. Credit: 3 semester hours.

INDUSTRIAL 57

cylinder and piston reconditioning. Prerequisite: DM 136 and 137. Laboratory: 7 hours. Credit: 3 semester hours.

139—Accessory Servicing. Repair of water pumps, oil pumps, fuel pumps, ...

58 INDUSTRIAL

## MACHINE TOOLS

*Instructors* – M. Paul Roy, Emmett L. Black, Otto A. Kriegel.

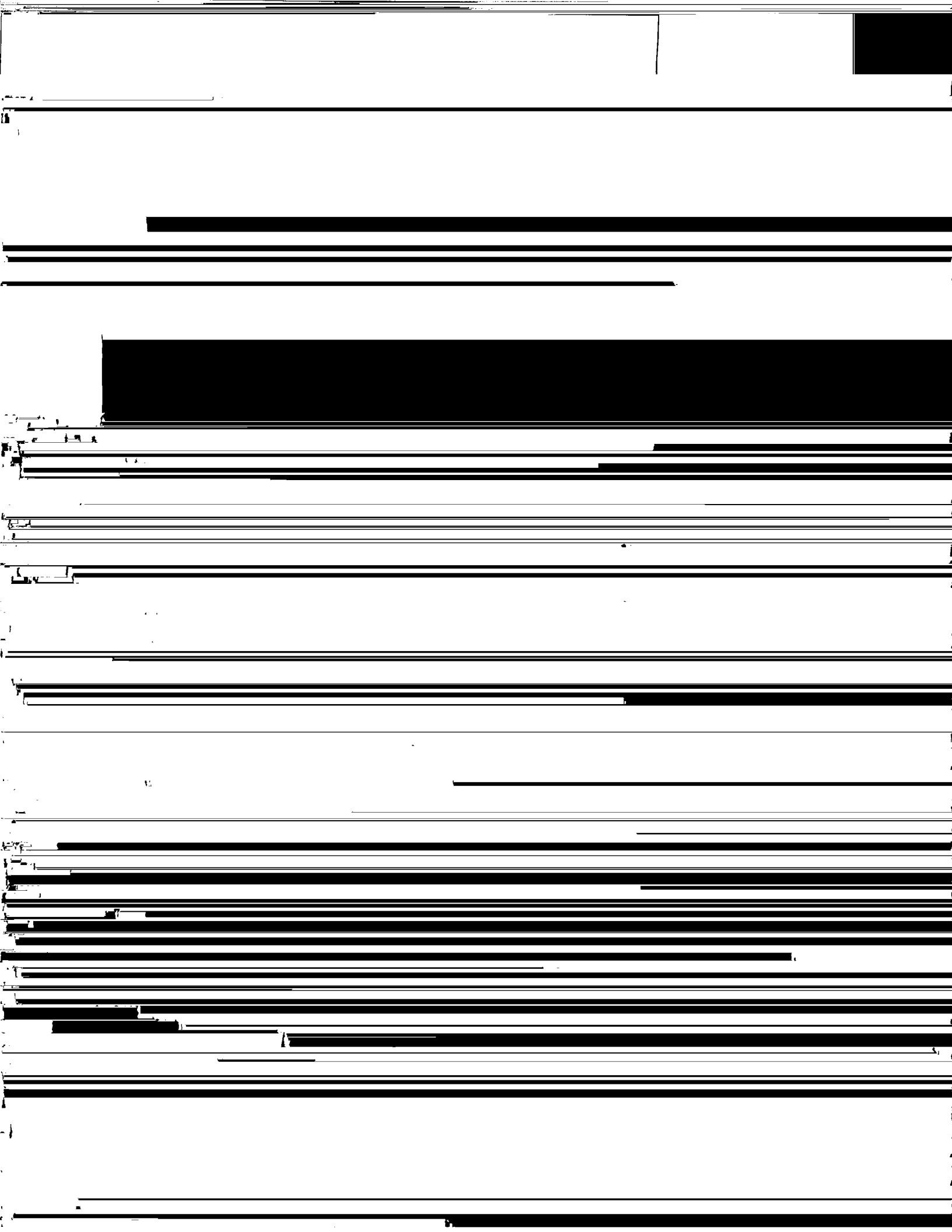
Machine Tools is a two-year program designed to train students in the proper use of modern metal-removing machine tools. The curriculum is designed to develop those skills, abilities and perceptions needed to permit the graduate to advance in the industrial complex as a competent craftsman.

Objectives of the program include the promotion of desirable attitudes and the development of needed work habits.

INDUSTRIAL 59

Fourth Semester

MT 234	Advanced Grinding and Milling Techniques	3	0	3
MT 235	Problems in Grinding and Milling	3	0	3
MT 238	Layout & Set-up	0	7	3
MT 239	Machine Design & Maintenance	0	7	3
MT 290	Industrial Mathematics	3	0	3



INDUSTRIAL 61

REFRIGERATION AND AIR CONDITIONING  
TECHNOLOGY

By M. J. Jerrard

62 INDUSTRIAL

Fourth Semester



[Redacted]

[Redacted]

[Redacted]

[Redacted]

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[Redacted]

[Redacted]

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[Redacted]

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64 INDUSTRIAL

**WELDING**

*Instructors* – Joel C. Shankles, Carey B. Wesley and Ronald I. Marble.

Welding is a program designed to prepare the student for a career in the fields of industrial or construction welding, either as a competent welder or in a position which requires knowledge of welding, welding equipment or supplies.

Objectives of the program include the development of skills required in modern welding techniques. Safety and proper work habits also are stressed.

A graduate of this two-year instructional program is awarded the Applied Science diploma.

PROGRAM OF STUDY

	Lecture Hours	Lab Hours	Semester Hours
<b>First Semester</b>			
WLD 131—Study of Tools, Mat'ls & Processes	3	0	3
WLD 132—Principles of Flame Cutting and Arc Welding Equipment	3	0	3
WLD 136—Operation of Welding Tools	0	7	3
WLD 137—Welding & Cutting	0	7	3
TM 131—Fundamentals of Mathematics I or Mth. 1311 (Math. Dept.)	3	0	3
BC 131—Basic Communications or Eng. Comp (Eng. Dept.)	3	0	3
	<u>12</u>	<u>14</u>	<u>18</u>
<b>Second Semester</b>			
WLD 134—Processes Related to Welding	3	0	3
WLD 135—A.C. and D.C. Supplies	3	0	3
WLD 138—Test Qualifications	0	7	3
WLD 139—Welding and Brazing	0	7	3
TM 132—Fundamentals of Mathematics II or Mth. 1313 (Math. Dept.)	3	0	3
BC 132—Business Communications or Eng. Comp. (Eng. Dept.)	3	0	3
	<u>12</u>	<u>14</u>	<u>18</u>
<b>Third Semester</b>			
WLD 231—Pipe Welding and Layout	3	0	3
WLD 232—Fundamentals of Inert Gas Welding	3	0	3
WLD 236—Ferrous Metals & Pipe	0	7	3
WLD 237—Fundamentals of Welding	0	7	3

INDUSTRIAL 65

Fourth Semester

WLD 234—Special Welding Application

WLD 235—Special Metallurgy and Heat Treatment

3	0	3
3	0	3

66 INDUSTRIAL

234—Special Welding Application. Special welding applications, brazing, soldering and resistance welding will be studied in this course. Continuation of blueprint reading and layout. Prerequisite: WLD 134 and 135 or WLD 231 and 232. Class: 3 hours. Credit: 3 semester hours.

235—Introduction to Metallurgy and Heat Treatment. Introduction to metallurgy, metal manufacture, metal identification and heat treatment. Procedures for welder qualification. Blueprint reading and pipe layout continued. Prerequisite:

# Related Arts Department

Programs: Mid-Management,  
Basic Communications, Technical  
Mathematics, Job Relations

Joe I. Juarez, Acting Head

## MID-MANAGEMENT

Faculty: Mary Sniffen and Nicholas V. Lamson

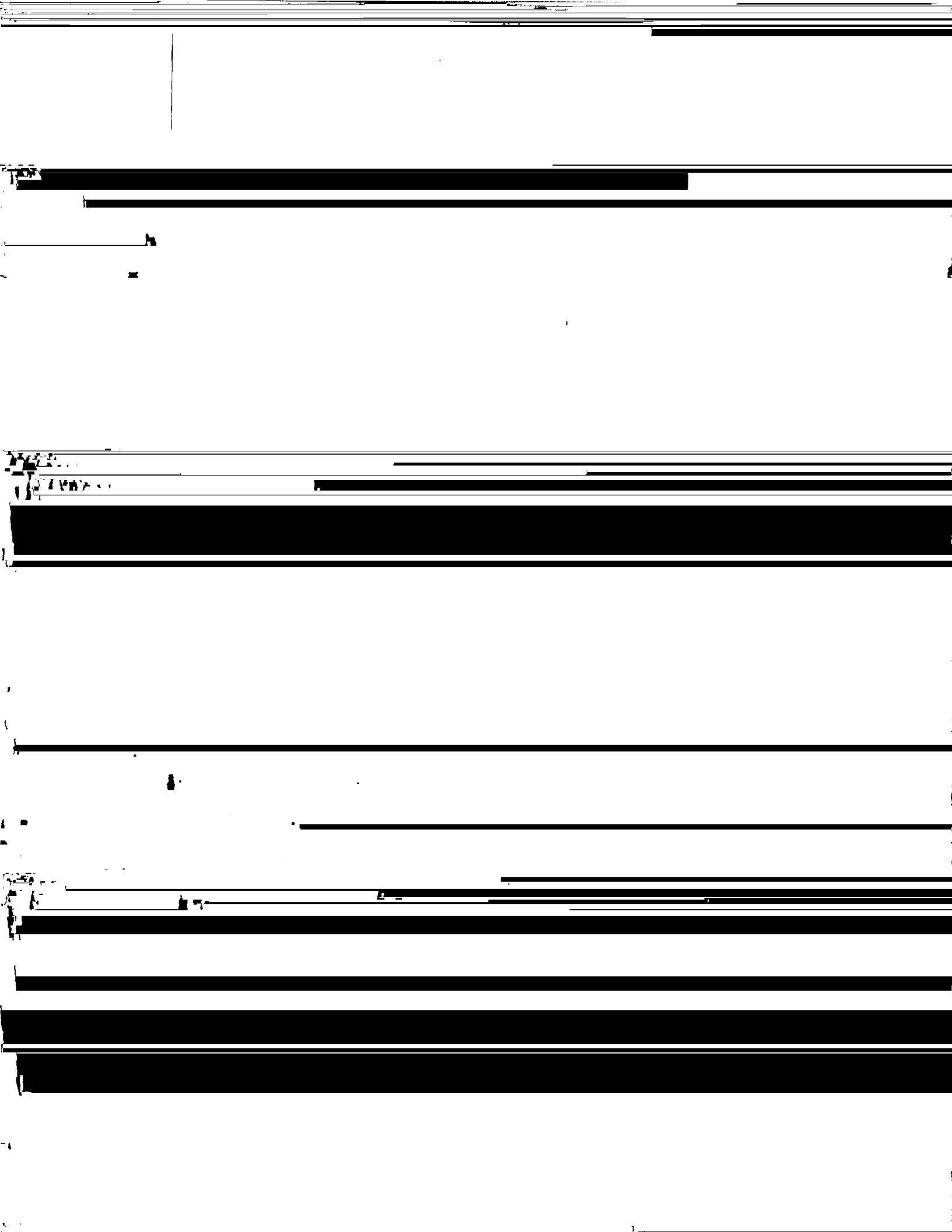


RELATED ARTS 69

236—Business Law. Principles of law which form the legal framework for business activity, applicable statutes, contracts, agency. Class: 3 hours. Credit: 3 semester hours.

237—Retailing. The development, organization, methods, policies of operation, and problems in the marketing structure. Class: 3 hours. Credit: 3 semester hours.





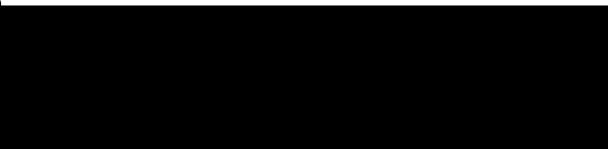
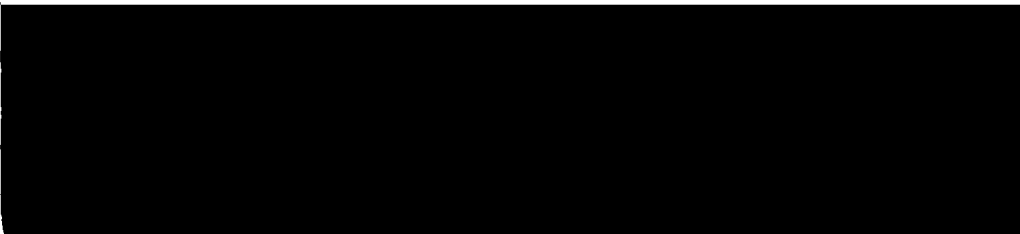


RELATED ARTS 71

134—Business Mathematics. A comprehensive course in basic business mathematics. Presenting work in interest, payrolls, taxes, financial statements, and special problems for the mid-manager. Prerequisite: TM 131 or the equivalent. Class: 3 hours. Credit: 3 semester hours.

231—Applied Geometry. Introduction to geometry, areas of polygons, triangles, circles, prisms, cylinders, pyramids, cones, frustrums, spheres, and special solids. Class: 2 hours. Credit: 3 semester hours.





74 TECHNICAL

**Third Semester**

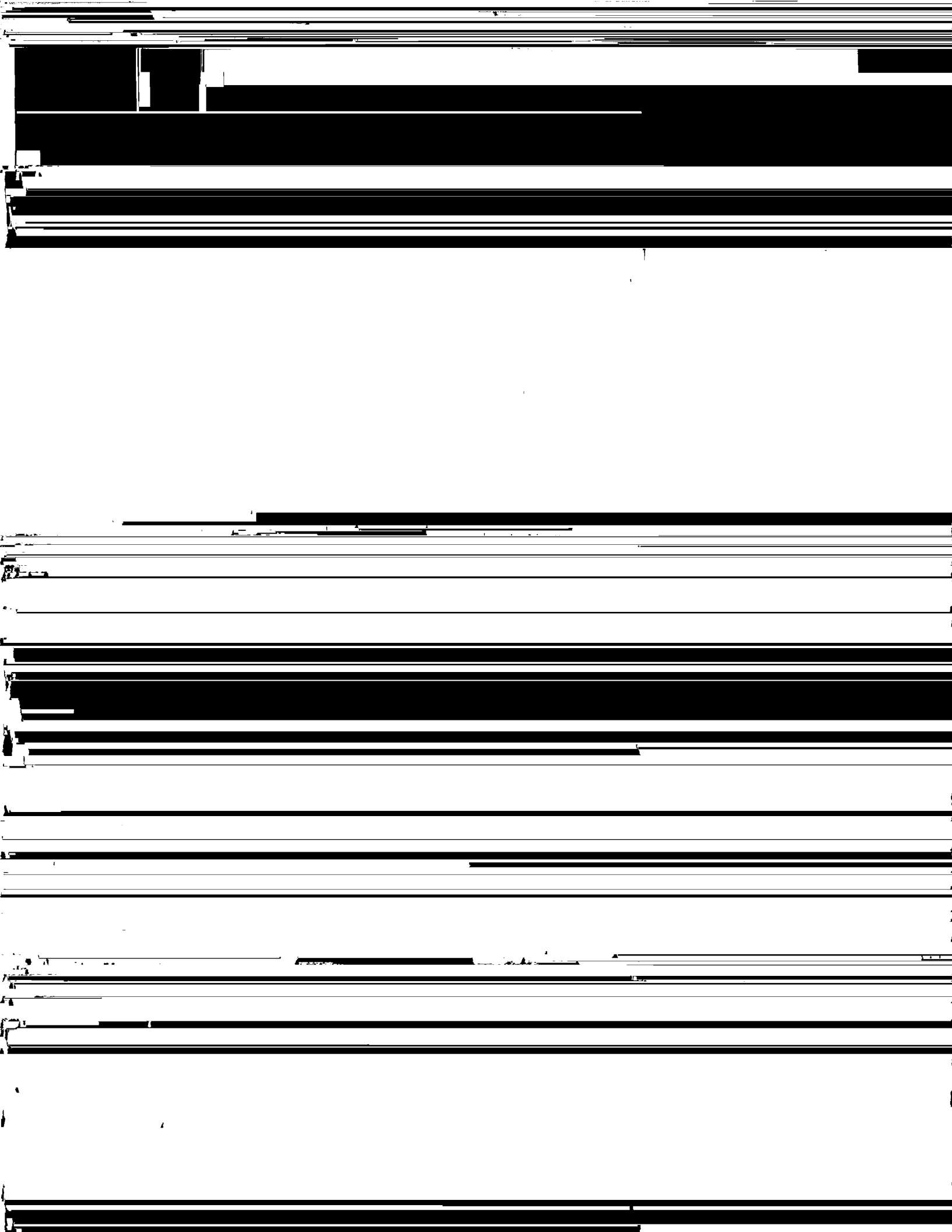
BDP 231—System Design	3	0	3
BDP 232—RPG	3	0	3
BDP 241—COBOL II	3	2	4
BDP 244—Computer Business Applications	1	6	4
Electives †	<u>3</u>	<u>0</u>	<u>3</u>
	13	8	17

**Fourth Semester**

BDP 243—Advanced FORTRAN	3	2	4
BDP 242—Operating Systems	3	2	4
BDP 235—Seminar	3	0	3
Electives †	<u>6</u>	<u>0</u>	<u>6</u>
	15	4	17

\*Students who enroll in CS courses will need to take an additional elective to meet the required number of semester hours.

†By approval



76 TECHNICAL

# DRAFTING TECHNOLOGY

Instructor: Ralph V. Mack, M.A.S., M.S., P.E., C.D., C.E., C.S.

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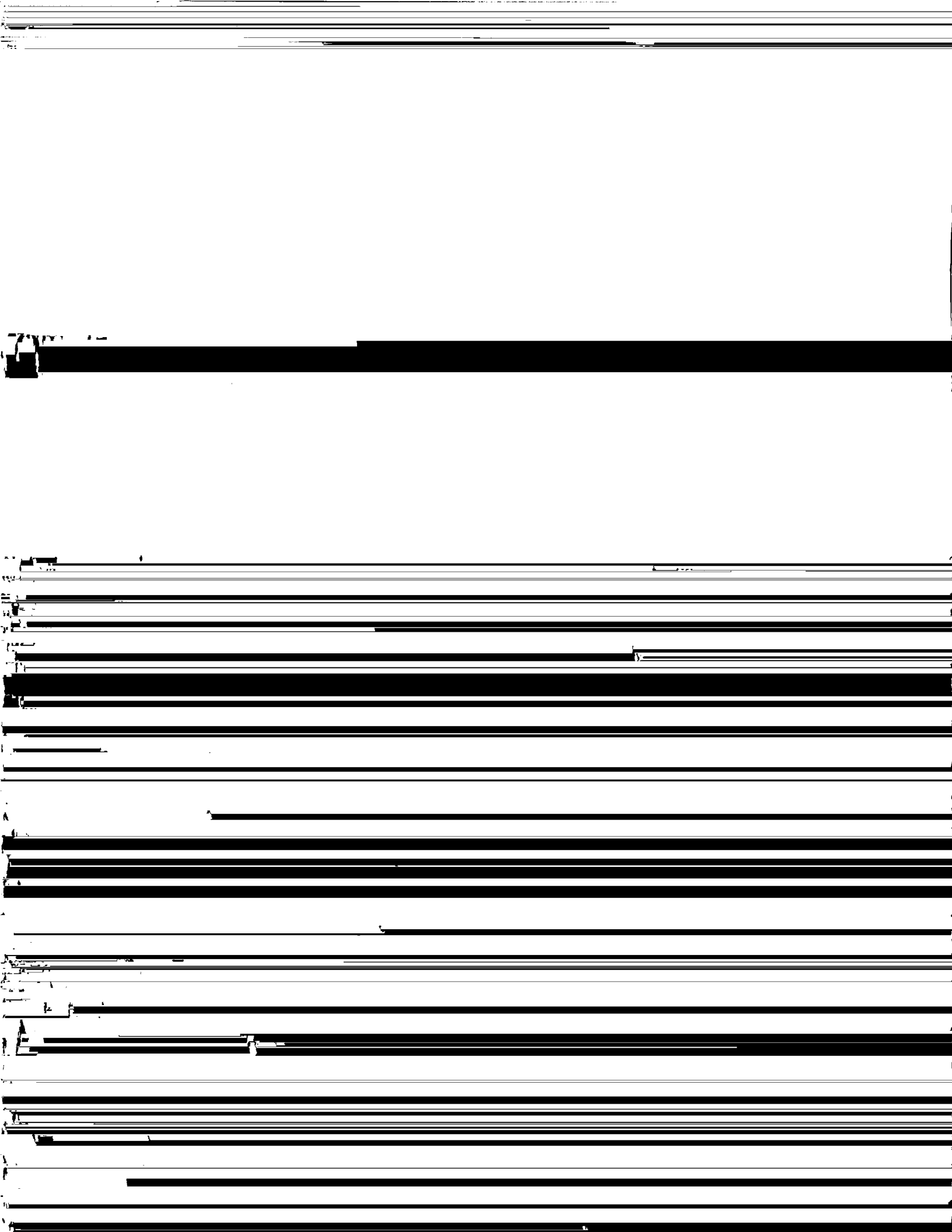
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TECHNICAL 79

**337—Machine Tools Design Laboratory.** The actual drawings of machine parts and the use of drawing instruments that are used by machine design draftsmen. Laboratory: 6 hours. Credit: 3 semester hours.

**431—Advanced Reproductive Drafting Techniques.** Reproduction techniques, such as microfilming, blueprinting, directo-printing, photo-copying, and other methods, will be studied. Class: 3 hours. Credit: 3 semester hours.

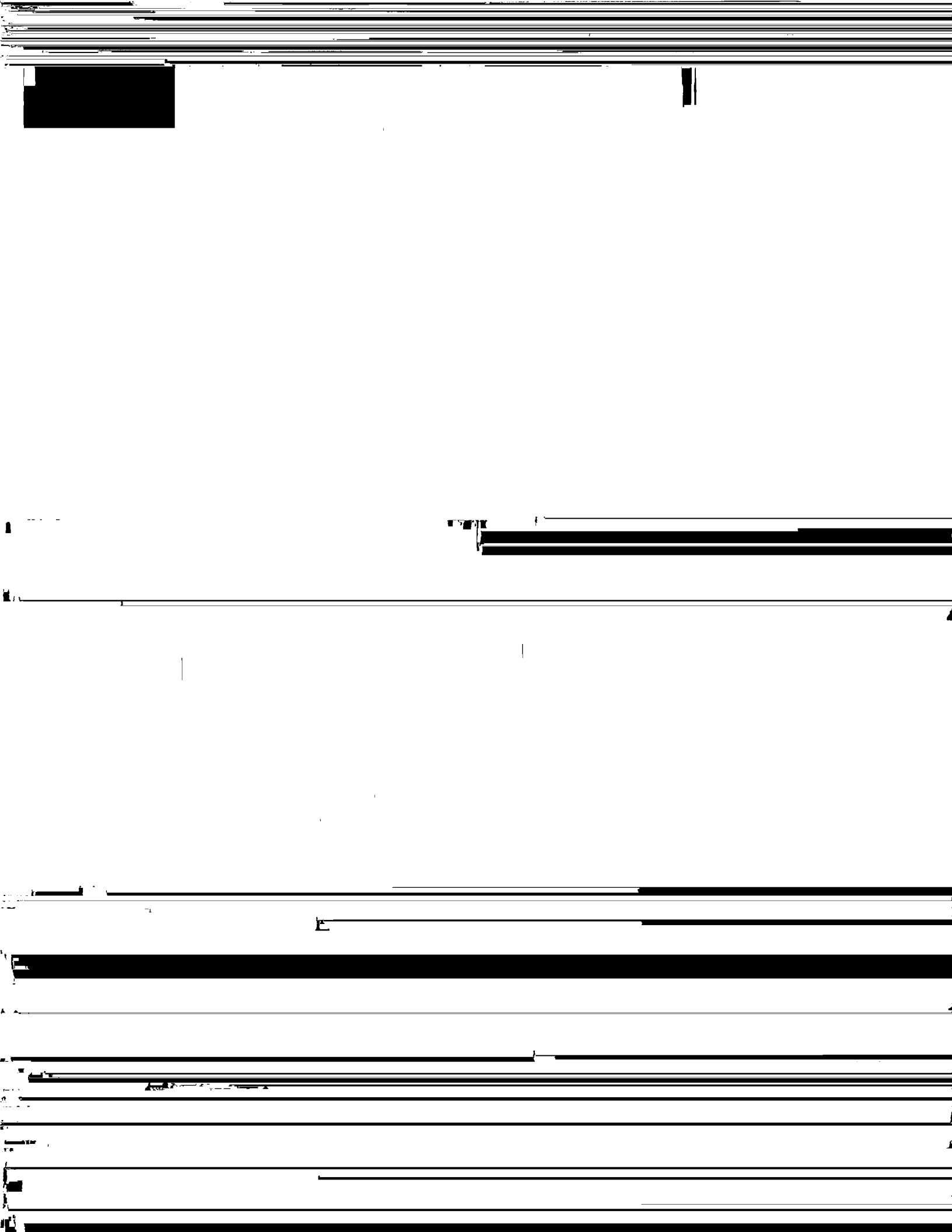
**437—Individual Project Laboratory.** A seminar project laboratory in which the student makes a scale or full-size model complete with working drawing of a design project selected by the student and approved by the instructor. Class: 3 hours. Credit: 3 semester hours.



80 TECHNICAL

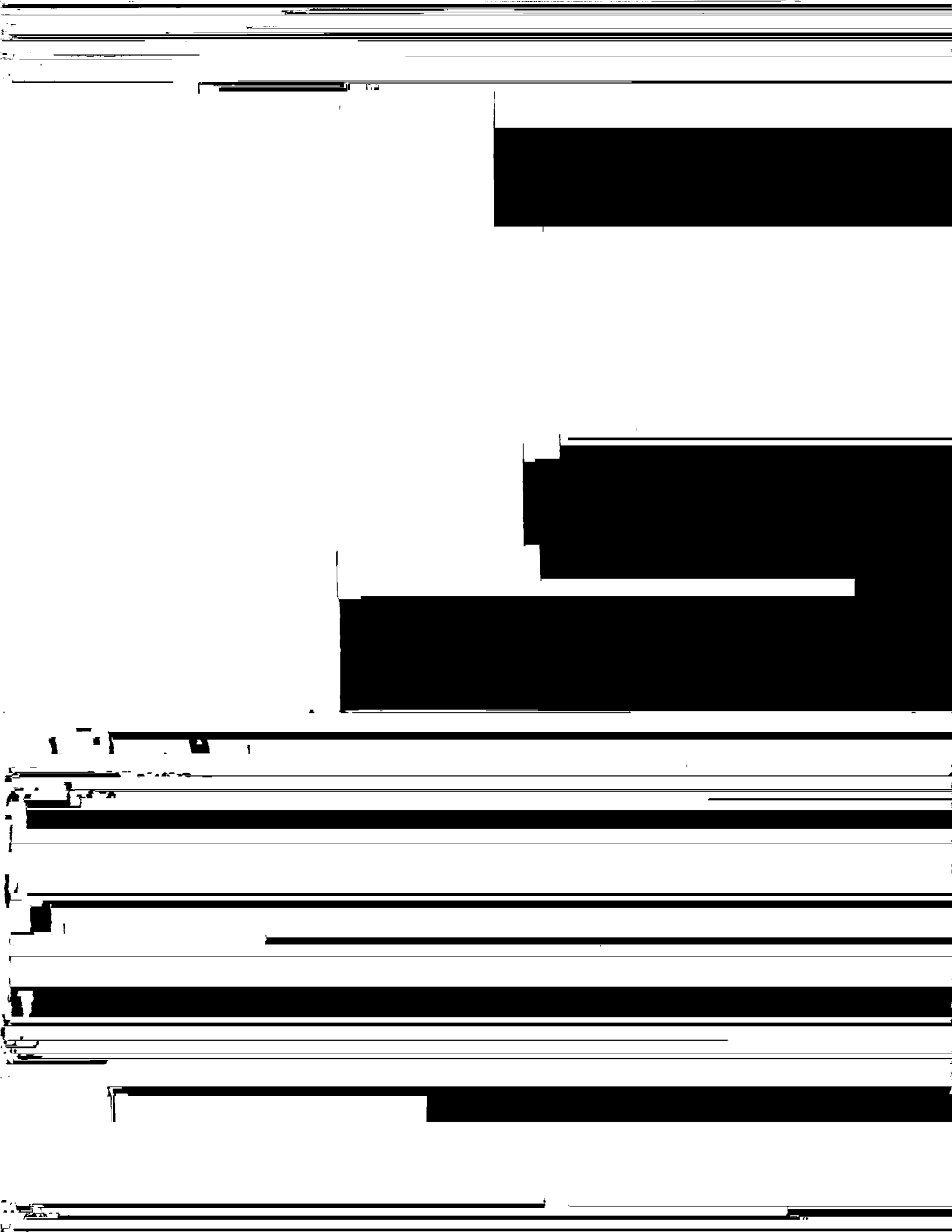
**INDUSTRIAL ELECTRICITY AND ELECTRONICS  
TECHNOLOGY**

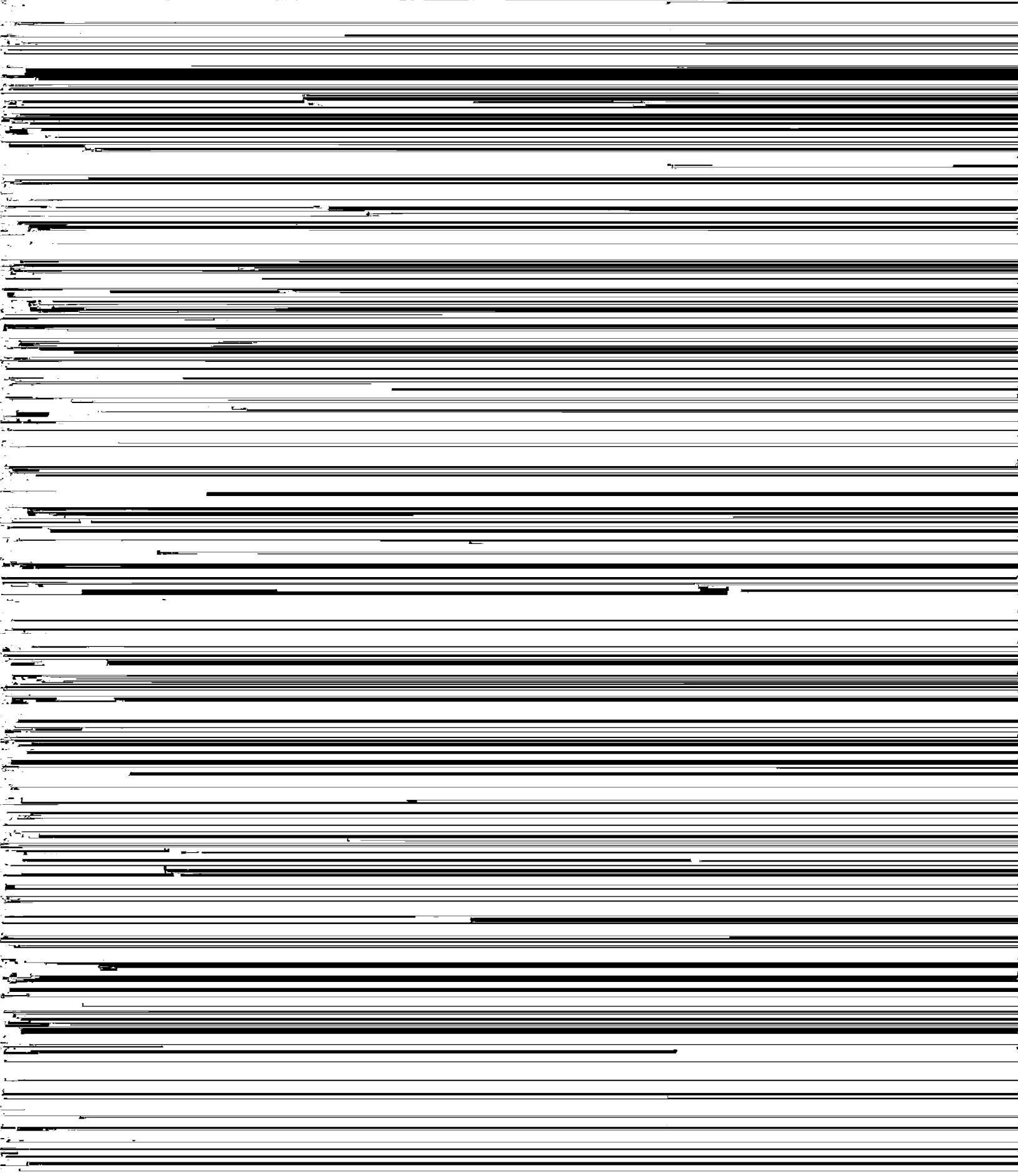
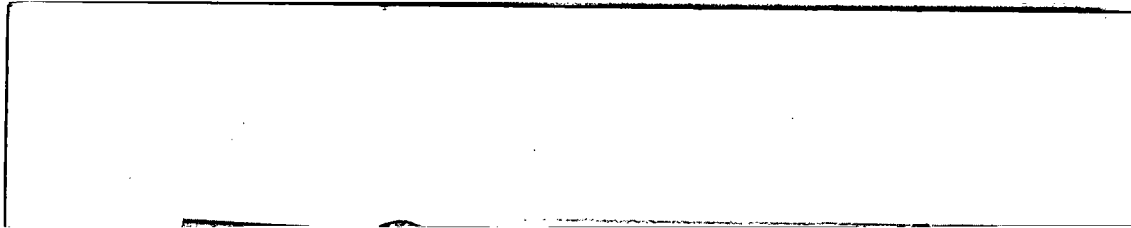
*Instructor:* Robert J. Lawson



82 TECHNICAL

232—The Theory and Operation of Transmitters and Receivers. Transmitter circuits, antennas, transmission lines, TRF and superheterodyne receivers, mixer and detector circuits. Prerequisite: IEE 124 and 125. Class 2. 1. 6. 11. 5.





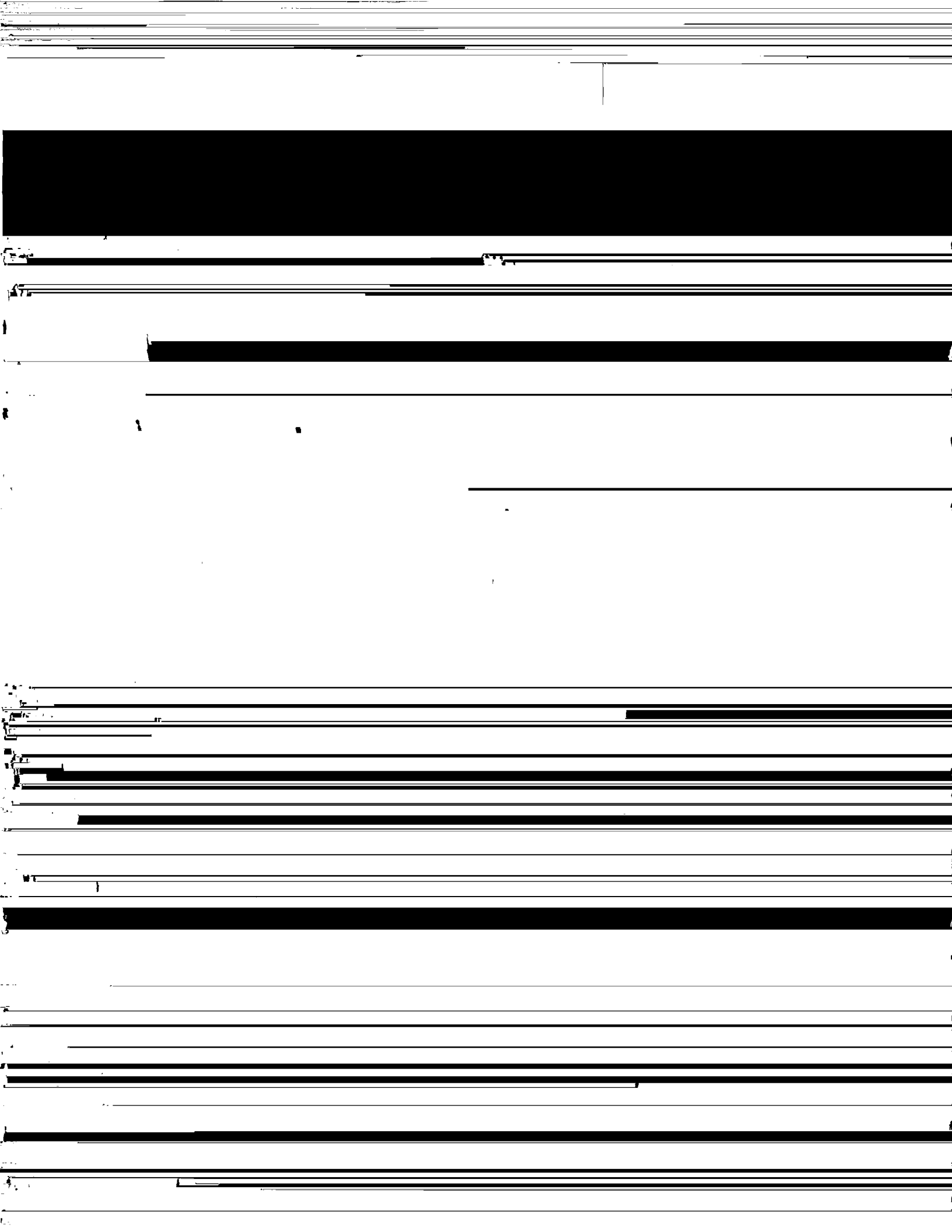
# Adult Training Programs

**Certificates of Completion:**  
Industrial Supervision, Law  
Enforcement Training, Nurse  
Assistant, Plant Maintenance  
and Operations, Real Estate

Norman E. Lowrey, Supervisor

## INDUSTRIAL SUPERVISION

This series of courses is planned for business and industry supervisory personnel. Employment in business or industry in a supervisory or leadership position is a prerequisite to registration in supervisory courses. The content of the program





## LAW ENFORCEMENT TRAINING

*Instructor*—Edward L. Parker.

The objective of this program is to provide basic law enforcement training to meet the certification requirements for police officers as set by the Texas Commission on Law Enforcement Officer's Standards and Education. The program is offered four times each

88 ADULT TRAINING PROGRAMS

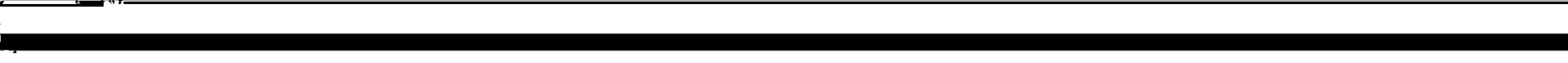
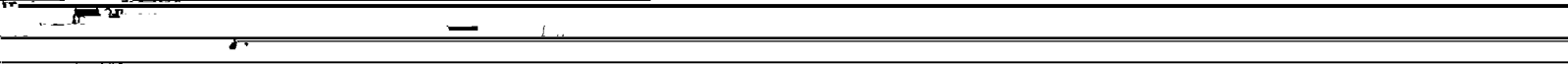
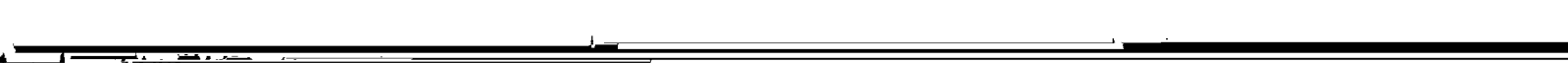
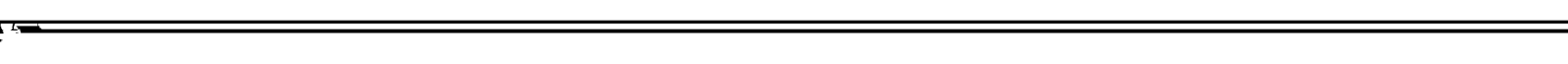
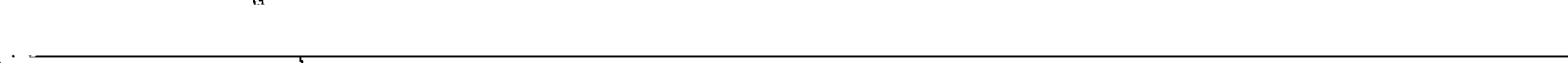
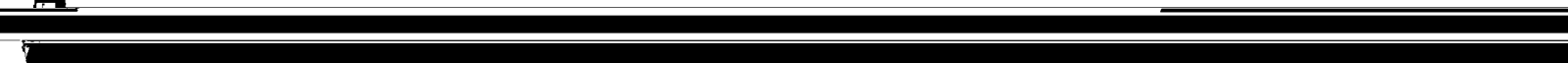
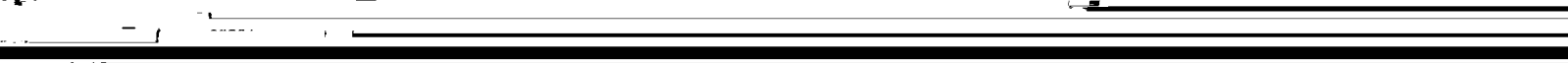
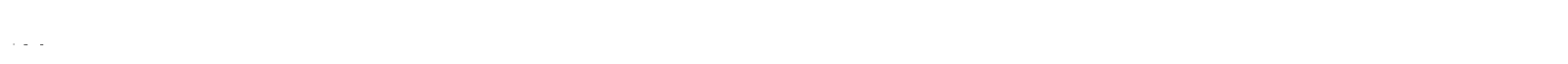
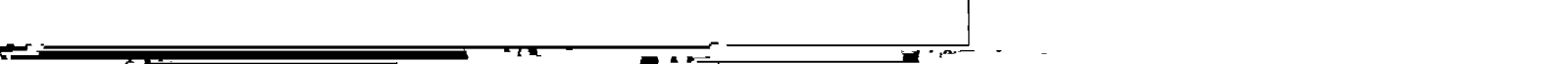
**NURSE ASSISTANT**

*Instructor*—Betty F. Jordan.

The objective of this program is to prepare the student for the first level of bedside nursing in hospitals and nursing homes under the direction of nursing and medical staff.

Acceptance in the program is dependent upon available space.

NA 1311 and 1312 will be offered in the extended day program for students who are unable to attend day classes and will be taught on a semester basis (16 weeks). NA 1711 will be conducted on a four week basis with assistance from the





# Continuing Education

**Programs:** Conferences and  
Workshops, Short Courses,  
Special Training Activities

Joseph Reho, Director  
James D. Spencer  
Jack Hill, Coordinators  
of Continuing Education

## CONTINUING EDUCATION

Continuing Education has specific reference to education and training programs designed to serve interests and needs of an adult population. The program accepts adults of all levels of academic achievement. It seeks to provide participants with information and experiences that are useful in helping them solve their problems and achieve their educational and occupational objectives.

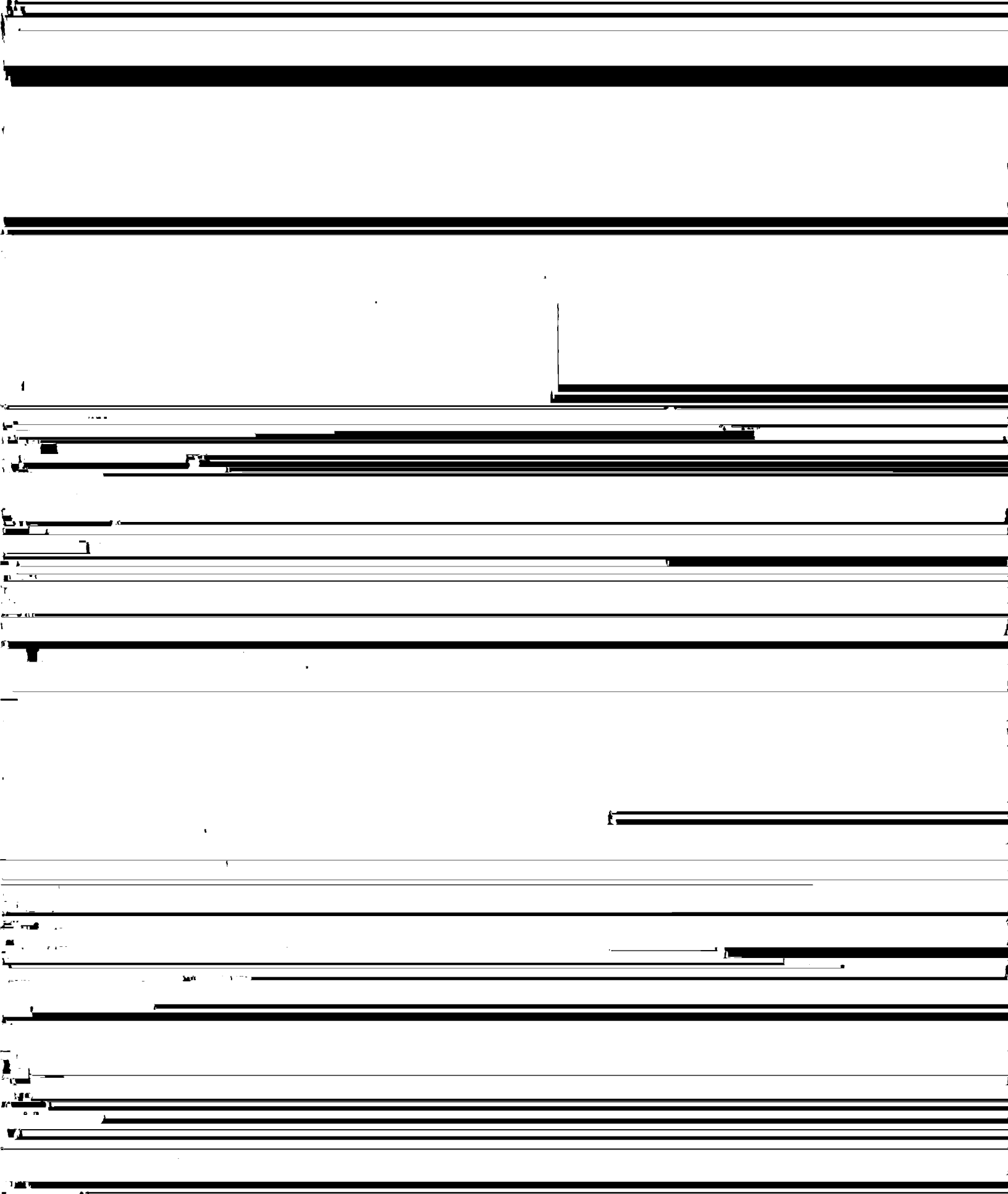
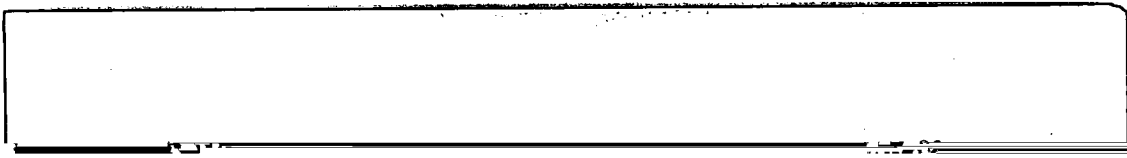
Lamar University offers informal non-credit courses for adults in a variety of subjects designed to meet educational needs not readily met by conventional

92 CONTINUING EDUCATION

University and the Sabine-Neches Chiefs' Association to train firemen, employed by municipal and industrial fire departments, in the latest techniques of fire fighting.

**Lunchroom Workshop.** A four-day workshop for lunchroom and cafeteria workers, usually conducted in late Summer, designed to improve these workers' performance.

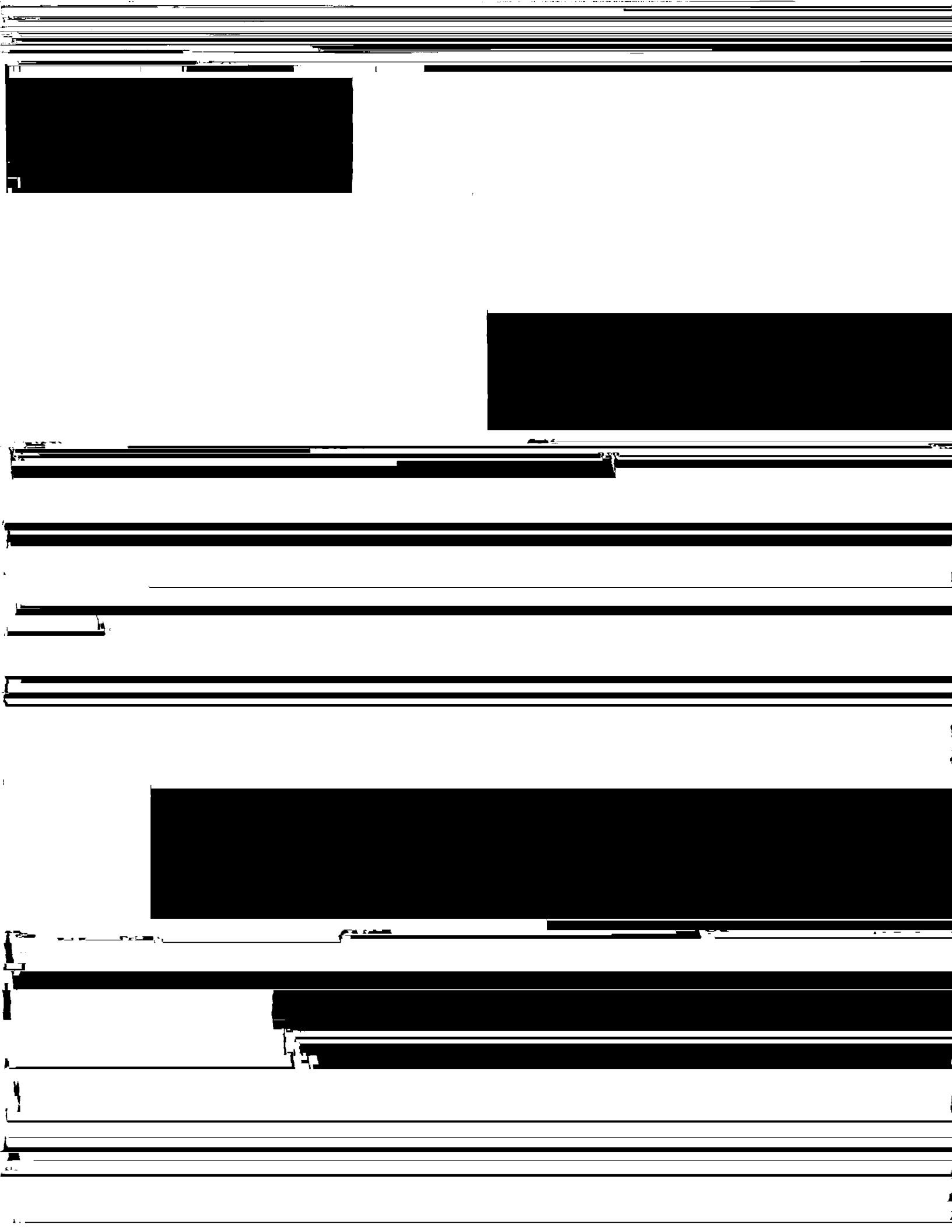
**Cummins Diesel Engine Workshop.** Representatives of the Cummins Diesel Company conduct this workshop for fire departments.

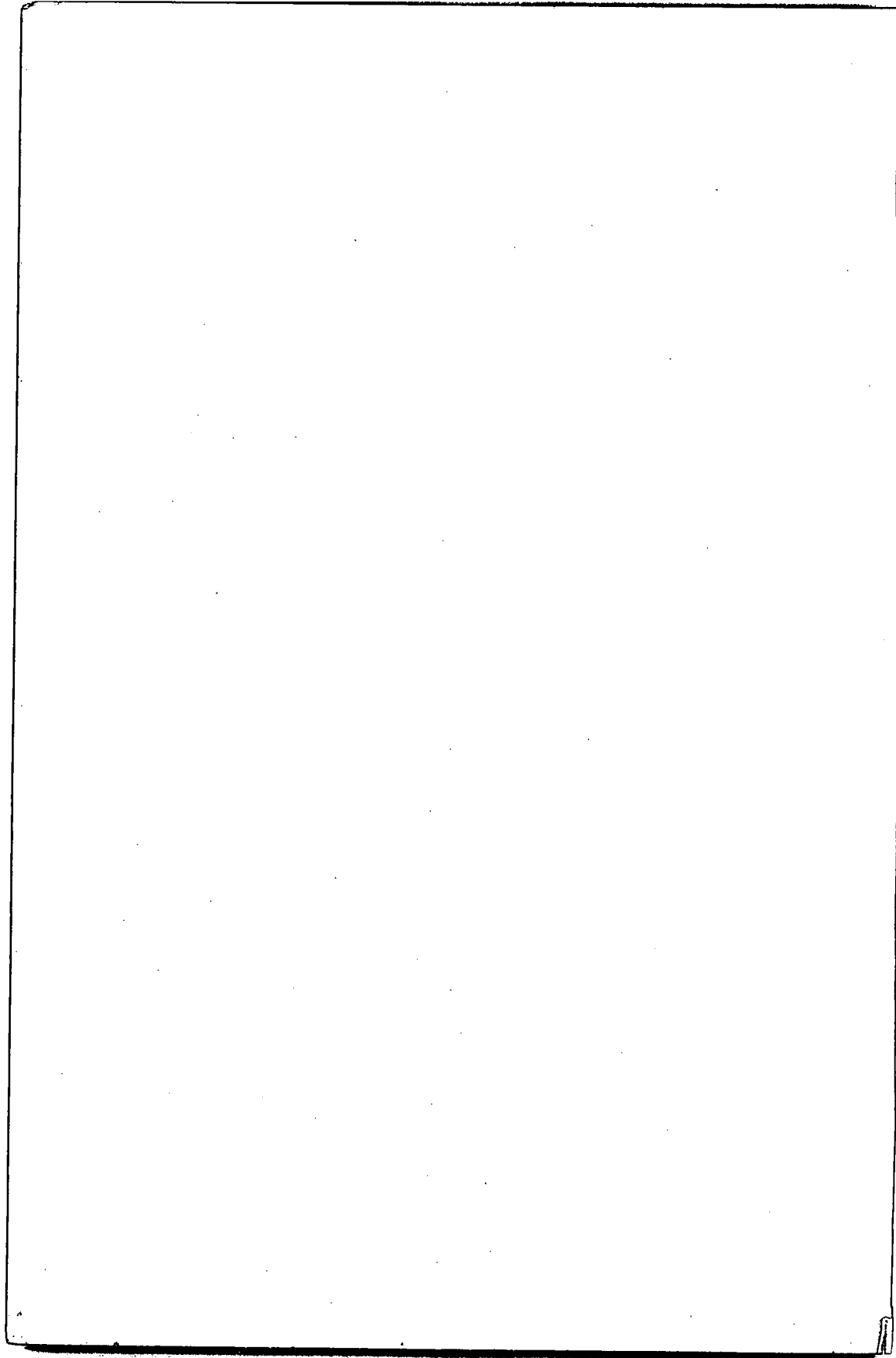


### What Is a Technician?

“Technicians who work with engineers and scientists are among the fastest growing occupational groups in the United States. In recent years, the needs of the Nation’s defense program, added to those of the expanding civilian economy have greatly intensified the demand for technicians.”







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