The document presents a syllabus which would serve as a guideline for health occupations educators in establishing a course of study for training medical assistants which would meet New York State requirements and be acceptable for State credit. The syllabus is arranged in three columns: (1) minimum acceptable content of study which requires 80 percent of the course time in instruction, (2) instructional objectives based on student performance, and (3) teaching suggestions. The course of study is divided into six sections: general orientation (2 areas), the medical assistant (4 areas), body structure and function (15 areas), administrative duties (4 areas), clinical duties (5 areas), and technical duties (3 areas). A discussion on the relationship of clinical experience, a sample clinical experience agreement, procedures for obtaining certification, a resource list of instructional materials, and source directory of suppliers are appended. (EC)
FOREWORD

The ever-increasing ratio of patients to physicians has created a need for assistants educated to perform those functions of a practice which are not reserved, by law or ethics, to the licensed physician or registered physician's associate.

In response, a statewide advisory committee was convened in August 1972, to set objectives and parameters for instruction in medical assisting. Sitting as the committee, were:

- Marjorie Barscz, Coordinator of Health Occupations Education, Herkimer BOCES
- Ina Conley, Associate in Health Occupations Education, The State Education Department
- Dominick Eanello, Assistant Dean of Physical and Health Sciences, Hudson Valley Community College
- Helen Elbert, Teacher of Medical Assisting, Nassau BOCES
- Dorothy Fisk, Coordinator of Health Occupations Education, Oswego BOCES
- Marilyn Goldman, Teacher of Medical Assisting, Nassau BOCES
- R. Winifred Johnson, Associate in Health Occupations Education, The State Education Department
- Joseph J. Messier, Associate in Vocational Curriculum, Nassau BOCES
- Karl S. Wittman, Coordinator in Vocational Education, the State Education Department
- Thelma Pottruck, Teacher of Medical Assisting, Suffolk BOCES
- Donald Walker, M.D., The State Health Department
- Karl S. Wittman, Associate in Vocational Education, the State Education Department
- Arthur Side, Supervisor of Occupational Education, The State Education Department
- V. Frank Blasio, MRI, Nassau BOCES

Subsequent evaluation of the committee's product led to the decision to select this project as a first experiment in local agency development of State curriculum, under Department management. In January 1973, G. Earl Hay, then Supervisor of Vocational Curriculum, Karl S. Wittman, and Mr. Wittman met with Mr. Messier to form a project team. During the following spring, Mr. Messier and Mr. Wittman, with Mr. Messier as the team leader, worked with the team of Nassau BOCES and Mr. Wittman to develop a curriculum development agreement. During the following summer, Mr. Messier and Mr. Wittman met with Mr. Messier to discuss the development of the curriculum. In September 1973, Mr. Messier presented desired revisions to V. Frank Blasio, Mr. Lash's successor as Curriculum Coordinator, and Edith Tobin, Program Assistant for Health Occupations and Program Development. In January 1973, G. Earl Hay, then Supervisor of Vocational Curriculum, the State Education Department, met with the development team to discuss the production of a first draft of content and performance objectives.

Gordon E. Van Hooft, Director of Curriculum Development, the State Education Department, and G. Earl Hay, Chief, Bureau of Occupational and Career Curriculum, then Supervisor of Vocational Curriculum, discussed the project with the development team. The team met with Mr. Messier and Mr. Wittman to discuss the development of the curriculum. In September 1973, Mr. Messier presented desired revisions to V. Frank Blasio, Mr. Lash's successor as Curriculum Coordinator, and Edith Tobin, Program Assistant for Health Occupations and Program Development. In January 1973, G. Earl Hay, then Supervisor of Vocational Curriculum, the State Education Department, met with the development team to discuss the production of a first draft of content and performance objectives.

The ever-increasing ratio of patients to physicians has created a need for assistants educated to perform those functions of a practice which are not reserved, by law or ethics, to the licensed physician or registered physician's associate.
The Health Occupations Education Syllabus in Medical Assisting is a statement of the minimum course content acceptable for State credit. A local course of study based upon this syllabus should require 21 hours each day of 160 teaching days, in each of 2 academic years. A program of supervised work experience in the medical office should be an integral part of the second year of instruction. Where offered, a foundations or core course in Health Occupations Education may be substituted for the broad-base health occupations instruction of the Medical Assisting Program. Local courses meeting these standards of content and instructional time may grant two credits per year, for a Group II sequence of four credits, as provided in The Secondary School Curriculum of New York State: A Handbook for Administrators.

The paramount objective of instruction in Medical Assisting is that of all occupational education -- graduate employability. Only students evidencing possession of at least minimum personal abilities necessary to successful employment should be scheduled for instruction in this program. Capable students must not, however, be deprived of academic studies required for admission to postsecondary programs leading to licensing or certification in other health occupations, should such students so aspire.

The introduction to this syllabus contains recommendations regarding selection of teachers and students, suggests ancillary studies, and explains the use of the syllabus in developing a locally effective course of study. Every director of occupational education, supervisor of occupational instruction, coordinator of occupational curriculum, and coordinator of a Health Occupations Education program should be familiar with its contents. Every teacher of Medical Assisting should have a personal copy, and every guidance office scheduling students for programs of occupational education should have a reference copy.

The valuable contribution of the advisory committee members, and the Nassau County B.O.C.E.S. development and writing teams, in making this syllabus a reality is deeply appreciated. Their enthusiasm for the program, expertise in the field, and sincere effort in developing the contents in cooperation with Department personnel have made this a very practical document for local use.

Ruth-Ellen Ostler, Chief
Bureau of Health Occupations Education

Robert H. Bielefeld, Director
Division of Occupational Education Instruction
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>General Orientation</td>
</tr>
<tr>
<td>II</td>
<td>The Medical Assistant</td>
</tr>
<tr>
<td>III</td>
<td>Body Structure and Function</td>
</tr>
</tbody>
</table>

**Section I: General Orientation**
- The Health Care Industry
- Career Opportunities
- The Health Care Industry

**Section II: The Medical Assistant**
- Job Profile
- Professional Ethics and Law
- Personal and Patient Psychology
- Interprofessional Relationships

**Section III: Body Structure and Function**
- Basic Components
- Skeletal System
- Muscular System
- Circulatory System
- Respiratory System
- Digestive System
- Urinary System
- Reproductive System
- Nervous System
- Endocrine System
- Integumentary System
- Preventative Medicine
- Rehabilitative Medicine
- Postnatal Development
- Nutrition and Diet Therapy
- Postnatal Development
- Professional Medicine
- Preventative Medicine
- Immunology System
- Immune System
- Nervous System
- Reproductive System
- Circulatory System
- Muscular System
- Skeletal System
- Basic Components
SECTION IV -- ADMINISTRATIVE DUTIES

27 Reception
27 Clerical
30 Medical Economics
36 Housekeeping

SECTION V -- CLINICAL DUTIES

39 Asepsis and Sterilization
41 Examination Procedures
44 Assisting the Physician
46 Pharmacology
47 First-Aid

SECTION VI -- TECHNICAL DUTIES

49 Standard Procedures
53 Specialized Testing
55 Office Therapy
55 Specialized Testing
57 Appendix

APPENDIX

57 Source Directory
57 Resource List
60 Procedure for Obtaining Certification
60 Sample Clinical Cooperation Agreement
60 Relation of Clinical Experience
62 Relation of Clinical Experience

SECTION VI -- TECHNICAL DUTIES

65 First-Aid
64 Pharmacology
64 Assisting the Physician
64 Examination Procedures
64 Asepsis and Sterilization

SECTION V -- CLINICAL DUTIES

69 Housekeeping
60 Medical Economics
60 Clerical
67 Reception

SECTION IV -- ADMINISTRATIVE DUTIES
INTRODUCTION.

This syllabus is the product of the combined knowledge and experience of working medical assistants, and of occupational curriculum specialists and health occupations educators of both the State Education Department and several boards of cooperative educational services. Its content should, then, be of considerable assistance to established teachers as well as to novices. This introductory section is provided to aid teachers, counselors, administrators, and curriculum coordinators in the effective use of the syllabus.

The Teacher

The teacher of a course in medical assisting should be certified or eligible for certification as a teacher of Medical Assisting, and first of all, an experienced medical assistant. While the registered or licensed practical nurse who has worked as a medical assistant should prove eminently qualified to teach the course, employment of a nurse who lacks this job experience is not encouraged.

The Student

Preparing the student for employment as a medical assistant is the raison d'être of this course. A valid secondary objective is to provide entry-level instruction to students wishing to enter postsecondary study for certification or licensing in health occupations requiring additional formal education. Employment as a medical assistant requires possession of certain inherent physical, mental, and emotional attributes in addition to the skills and knowledge developed by instruction. To prevent the waste of funds, class space, teacher effort, and student effort, educators must carefully evaluate the probable employability of prospective students of this course. It is no service to the student to schedule for a course in Medical Assisting one who:

- Has health problems which prevent normal mobility.
- Has allergies which would adversely affect working with patients.
- Lacks normal vision (corrected) in either eye.
- Lacks manual and dextrous dexterity.
- Is uncontrolably overweight to the point where maneuverability in close quarters is adversely affected.
- Lacks manual and dextrous dexterity.
- Lacks normal vision (corrected) in either eye.
The syllabus is not intended to be used as a course of study. While organized in a logical progression, this syllabus is not intended to be used as a course of study. The teacher of Medical Assisting must develop a course of study based on this syllabus, but approved by local school boards. The schedule of a student who expresses the desire to enter postsecondary education in the health field, should be arranged to allow completion of any necessary course work. The home-school schedule of the student motivated toward employment as a medical assistant should provide Business Education courses in typing and bookkeeping, previous to or concurrent with Medical Assisting study. Remedial instruction should be provided to students entering the course, who do not possess at least tenth grade reading and communication skills.

The first column of the syllabus lists the minimum acceptable content, instruction in which should require approximately 80 percent of the course time, thus allowing addition of content and increased emphasis selected to meet local needs. The second column of the syllabus contains instructional objectives stated in terms of desired student performance—a recommended form which simplifies and improves both planning and evaluation. These objectives are written in a 3-column format adopted for the syllabus, for clarity and simplicity of use. Resources and a source directory were appended.

It is recommended that a class group contain no more than 24 well-qualified students per teacher, and that the clinical experience program be organized on a ratio of 10:1.

The schedule of a student who expresses the desire to enter postsecondary education in the health field, should be arranged to allow completion of any necessary course work, and that the clinical experience program be organized on a ratio of 10:1.
It is recommended that course objectives, like the syllabus objectives, be student-oriented. A method of development which may be useful is to use the generalized objectives of the syllabus as a base, writing as many objectives as possible, and rewriting them in expanded detail when part of a teacher's course of study, to more specifically define the skills and knowledge necessary to employment.

The third column contains suggestions for teaching which should help the experienced medical assistant, who is a novice teacher, to prepare lessons, and should remind the experienced teacher of the course that certain parts of the content, which seem to go without saying, must be fully covered for benefit of the far-from-experienced students. All teachers should find this column useful, per se, and as a stimulant to each teacher's ingenuity and resourcefulness.

The appendix lists books, periodicals, catalogs, and specific audiovisuals which are of proven value. The list is neither exclusive nor static. It is only one of many sources of information regarding instructional materials to which the teacher should be constantly attuned. Addresses of suppliers are included for the teacher's convenience, as is a sample clinical experience agreement, and the procedure for obtaining certification as a Medical Assistant from the American Association of Medical Assistants Inc.

The course of study, whether nonconforming or based on this syllabus, should be developed in cooperation with the local advisory committee. On this syllabus should be developed a course of study, which serves as a model for nonconforming or based on this syllabus. The course of study, whether nonconforming or based on this syllabus, should be developed in cooperation with the local advisory committee. The teacher, preparing to write a course of study, should first become familiar with the syllabus' content column, adding any items needed for local effectiveness. The next step should be the realignment of content items into a teaching progression.

In certain circumstances, with a class group demonstrating appropriate characteristics, the first lesson may coincide with the first content item of the syllabus, a discussion of the "Health Care Industry." Where a well-equipped facility already exists, the first lesson may be "Routine Preliminary Data" — Height, Weight. The units of content of the syllabus need not remain instructional entities that is, "General Orientation," for example, need not be taught in a succession of lessons on this topic. Instead, a well-equipped facility already exists, so the health care industry, in "Section 1: General Orientation," may be introduced with the first content item of the syllabus, a discussion of the health care industry. The teacher, preparing to write a course of study, should first become familiar with the syllabus' content column.

The teacher should develop a course of study for a course of study which serves as a model for nonconforming or based on this syllabus. The course of study, whether nonconforming or based on this syllabus, should be developed in cooperation with the local advisory committee. On this syllabus should be developed a course of study, which serves as a model for nonconforming or based on this syllabus. The course of study, whether nonconforming or based on this syllabus, should be developed in cooperation with the local advisory committee. The teacher, preparing to write a course of study, should first become familiar with the syllabus' content column.

The course of study should be developed in cooperation with the local advisory committee. On this syllabus should be developed a course of study, which serves as a model for nonconforming or based on this syllabus. The course of study, whether nonconforming or based on this syllabus, should be developed in cooperation with the local advisory committee. The teacher, preparing to write a course of study, should first become familiar with the syllabus' content column.
truly performance objectives are necessary to adequately define exactly what the student can do, under what conditions, and to what level of proficiency as a result of the instruction.

In the section on "Body Structure and Function," for example, instruction regarding "Fractures." The syllabus objective states that, "The student should be able to:

1. Describe the characteristics which categorize fractures, as simple, compound, or greenstick.

When developing this unit for the local course of study, the teacher will need to write several more specific objectives defining this skill, such as:

- Define the general term, "fracture."
- Describe the characteristics and symptoms of a greenstick fracture.
- Describe the characteristics and symptoms of a compound fracture.
- Describe the characteristics and symptoms of a simple fracture.

Student attainment of these enabling objectives would lead to the culminating objective of this instruction, as stated in the syllabus.

THE LAW

The broad field of health care is carefully regulated by law for the protection of the general public, the individual patient, and the practitioner. The various "Practice Acts," like all statutes, are intermittently revised to accommodate changes in technology and health care needs. As a State Education Department syllabus, this publication reflects the regulations in effect during its development. The teacher's ever-revised course of study developed in this manner serves not only to state the breadth of instruction but also the depth, to clearly define what the instruction is expected to accomplish, and to provide built-in criteria for evaluation of both the instruction and the instructor.

A local course of study developed in this manner serves not only to state the breadth of instruction but also the depth, to clearly define what the instruction is expected to accomplish, and to provide built-in criteria for evaluation of both the instruction and the instructor. The teacher must ensure that the student is able to:

- Define the general term, "fracture."
- Describe the characteristics and symptoms of a greenstick fracture.
- Describe the characteristics and symptoms of a compound fracture.
- Describe the characteristics and symptoms of a simple fracture.

Completion of objectives for each unit of content will produce an acceptable course of study, whereas attainment of these enabling objectives would lead to the culminating objective of this instruction.
becomes familiar with the concept, equipment, and procedures involved in any such presently restricted techniques, but development of performance skills is not part of the course of study. Instruction should, therefore, include not only that which is currently the duties of the medical assistant, but also that which is likely to have been included by the time the student seeks employment. It is imperative, however, that the student be fully informed of the then current legal restrictions on the performance of specific procedures by a medical assistant; that instruction in these restricted skills and knowledge is future-oriented.
The Health Team

SECTION I — GENERAL ORIENTATION

OBJECTIVES

The student should be able to:

- Describe major phases of the development of the health care industry.
- Associate important contributors with each major phase.
- List the major health care agencies and describe the services offered by each.
- Describe the composition of the health care team.
- Differentiate among health team members by title, job description, and interrelationship.
- Describe the current health care employment market.
- Differentiate among health team employment opportunities.

TEACHING SUGGESTIONS

- Have students research the history of the health care industry, then prepare an outline of its development, relating each facet to patient benefit.
- Conduct field trips to various health care centers. Present the data to the class, having each student research in the area, and present the findings. CAREER OPPORTUNITIES

Describe the composition of the health care team.
The student should be able to:

- Describe the personal, educational, and experiential requirements of any teacher-specified major health care occupation.
- Describe the general qualifications required for employment in specific health care jobs.
- Have students chart the requirements for each of the common health care positions.
SECTION II — THE MEDICAL ASSISTANT

OBJECTIVES

The student should be able to:

1. List the major duties and responsibilities of a medical assistant.
2. Describe the qualifications which an individual must possess in order to become a medical assistant.
3. Describe current, local conditions experienced by practicing medical assistants.
4. Discuss the qualifications which an individual must possess in order to become a medical assistant.

TEACHING SUGGESTIONS

1. Show the film "First Contact," or its equivalent.
2. Using a medical office mockup, describe and role-play a medical assistant’s typical day.
3. Have students research local employment conditions, then prepare a composite medical assistant position.
4. Have local practicing medical assistants and a representative of AAMA discuss with students the job factors and personal qualifications of a medical assistant.
5. At various times during the course distribute a list of medical assistant qualifications.
6. Have selected students violate specific standards of appearance, temperament, education, and physical competence, and have the remaining students return an evaluation of their performance.
The student should be able to:

- Demonstrate by day-to-day behavior a commitment to good interpersonal relationships.
- Demonstrate in role-playing situations professionally proper behavior toward temperamental patients, persistent sales representatives, and self-centered co-workers.
- Acquaint oneself with the stages of emotional development and their relationship to behavior.
- Recognize behavior patterns which are indicative of emotional problems.
- Introduce students to the principles of normal human behavior.
- Relate anecdotes from personal experience to emphasize the importance of good-on-the-job interpersonal relationships.
- Encourage students to analyze behavior, responding to underlying causes rather than reacting to the behavior itself.
- Have students develop and use scripts which illustrate good and poor relationships. Have students suggest means to avert better resolve difficult situations.
- Present the stages of emotional development by means of "case study." A film, such as "Case in Point," should be useful.
- Have students develop and use scripts which illustrate good and poor relationships. Have students suggest means to avert better resolve difficult situations.

Caution! Students must not be allowed to diagnose the behavior of individuals as being caused by specific emotional problems.
The student should be:

1. Acquainted with those sections of the laws which define and limit the duties, authority, and responsibilities of various licensed professionals, and of nonlicensed support personnel.

2. Aware of the application of the Acts to the position of Medical Assistant.

The student should be able to:

1. Describe the legal requirements for licensing of professionals, and the limitations placed on the activities of a medical assistant.

2. Describe the required procedure in preparing reports to governmental agencies, such as birth and death certificates, narcotics control, and communicable diseases.

3. Enumerate the principles of professional ethics as applicable to the physician/medical assistant/patient relationship.

4. Identify those situations which require confidentiality, stating reasons why it is necessary.

5. Discuss the "Practice Acts," emphasizing the applicability to the medical assistant and how the assistant's conduct affects the physician's legal standing as well as his own.

6. Have students discuss the "Golden Rule" as applied to the medical assistant's conduct.

7. Note that confidentiality is required for legal as well as ethical reasons.

8. Give students "situation" sheets outlining on-the-job problems of confidentiality.

9. Have students write solutions.

10. Discuss the solutions.
The student should be able to:

- Assist the patient in completing consent forms by explaining their purpose and answering questions.
- Differentiate between negligence and malpractice.
- Describe the actions and inactions of the medical assistant which can help avert a malpractice suit.
- Describe those actions of the medical assistant which could result in a malpractice suit.
- Specify sample cases.
- Define, spell, and apply medico-legal terminology.
- Emphasize the critical importance of obtaining properly executed consent forms. The pamphlet "Medicolegal Forms with Legal Analysis" should be useful.
- Emphasize the legal importance of keeping clear, complete records, since they may be subpoenaed. The film "The Doctor Defendant" and the pamphlet "Physician's Liability" should be useful.

The student should be able to:

- Define, spell, and apply medico-legal terminology.
- Differentiate between negligence and malpractice.
- Specify sample cases.
- Describe the actions and inactions of the medical assistant which can help avert a malpractice suit.
- Describe those actions of the medical assistant which could result in a malpractice suit.
- Specify sample cases.
Basic Components

Cells

Tissues

Organs

Skeletal System

Bones

Fractures

SECTION III
BODY STRUCTURE AND FUNCTION

OBJECTIVES

The student should be able to:

- Identify and describe the types, structures, and characteristics of teacher-supplied cells, tissues, and organs, or graphic representations thereof.
- Describe the functioning of cells, tissues, and organs.
- Identify the functions of bone as tissue.
- Name and describe the various types of fracture.
- Identify teacher-supplied visuals of fractures as either simple, compound, or greenstick.

TEACHING SUGGESTIONS

1. Teach the technique of focusing a slide in a microscope.

2. Project transparencies depicting characteristics of cells, tissues, and organs, and provide prepared slides for students to use in identifying characteristic features.

3. Use a model skeleton to teach the classification of bones as long, short, flat, irregular, and state the functions of each.

4. Using a prepared bone, describe its composition, and show internal and external views of the bone.

5. Obtain a long bone which has been halved longitudinally.

6. Define the term "fracture." Have students use a medical dictionary to define each type of fracture, and state the functions of any teacher-specified human bone.

7. Project transparencies of the various types of fractures.
The student should be able to:

- Immobilize an injured part in which a fracture may be present.
- Safely remove bandages, slings, and casts from an injured part, which a fracture may be present.
- Demonstrate immobilization of various parts of the body.
- Define the terms and describe the various types of diarthrosis, amphiartrosis, and synarthrosis joints.
- Define the terms and describe the symptoms of such disorders as arthritis, discosarcoma, osteoarthritis, osteoporosis, scoliosis, gout, and degenerative joint disease.
- Locate and describe the function of cartilage and describe the function of cartilage of various joints.
- Locate the causes, symptoms, and standard preventative procedures used for each major disorder and disease.
- Use a skeleton model to show various joints.
- Demonstrate immobilization of various parts of the body through use of sling, splints, and casts, and the proper techniques of removal, emphasis on the importance of support, and recognition of removal."
Muscular System

Muscles
Tendons
Ligaments

The student should be able to:

- State the cause of any teacher-specified disorder of the joints.
- Demonstrate the use of elastic bandages on sprains of the ankle or wrist. Explain the use of elastic bandages on sprains of the ankle. Use medical assistant role-play to demonstrate the use of elastic bandages on sprains of the ankle.
- Describe how muscles are attached to the bones.
- Locate and describe the three principle muscle types.
- Identify on a visual representation the three principle muscle types.
- Prepare microscope slides of different animal muscle fibers. Have students view the slides and describe how the fibers differ.
- Prepare microscope slides of different animal muscle fibers. Have students view the slides and describe how the fibers differ.
- Practice applying elastic bandages on sprains of the ankle. Demonstrate the use of elastic bandages on sprains of the ankle.
- Have students role-play the medical assistant applying elastic bandages on sprains of the ankle.
- Emphasize care in not applying too tightly.
- Have students work in pairs to study the action of muscles.
- Use manikins, charts, and such films as "The Human Body Muscular System" and "Facts About Muscles".
- Have students role-play the medical assistant applying elastic bandages to the physician-diagnosed sprain. Emphasize care in not applying too tightly.

Instruction should extend from such simple disorders as fatigue and "stiffness" through such simple disorders as muscle pains and certain diseases which affect the functioning of the muscles. Students should be able to name and define the major disorders and diseases which affect the functioning of the muscles.

- Discusses disorders that involve the joint system and how they differ. Discusses how muscles are attached to the bones. Discusses the three principle muscle types.
- Discusses the function of the muscles.
- Discusses the causes of joint disorders.
- Discusses the care of joints in the body.
The student should be able to:

Locate the position of the heart within the human body, and describe its appearance and functioning.

Identify and classify the parts of the heart, and describe the structure and functions of each.

Visuals are extremely important in this instruction. A carefully selected variety of charts, models, and transparencies or slides should be used.

Have the students dissect a calf or sheep heart and identify the parts.

Have students use the stethoscope to listen to each other's heart and identify sounds.

Identify arteries, veins, and capillaries, and describe their function.

Describe the flow of blood through both general and pulmonary circulation.

Accurately determine pulse rate and blood pressure, and record the readings.

Have students take each other's pulse and blood pressure in standard positions, both at rest and after exercise.

Useful films include:
- The Heart and How It Works;
- High Blood Pressure; Pulse of Life; Circulation of the Blood; and Hemo, the Magnificent.

Identify plasma, erythrocytes, leukocytes, and thrombocytes.

Demonstrate the preparation of hematocrits to show the components of blood.
The student should be able to:

1. Explain ABO blood types and the RH factor.
2. Explain the mechanisms of blood clotting.
3. Describe the relationship between the blood and the spleen.
4. Name and describe the characteristic symptoms of common disorders of the circulatory system.
5. List the standard methods of prevention of circulatory disorders.
6. Describe the relationship between the blood and the spleen.
7. Explain the mechanisms of blood clotting.
8. Name and describe the characteristic symptoms of common disorders of the circulatory system.
9. Explain the principles involved in external respiration, including the exchange of gases.
10. Trace the path of air from the external respiration to the lungs.

Instruction should include proper nutrition, adequate rest, regular exercise, prevention and treatment of infections, and periodic evaluation of physical condition. Use transparencies, charts, and manikins to trace inhalation and exhalation.
The student should be able to:

1. Name and define the major disorders affecting respiration.
2. Describe methods used to prevent infection and contamination.
3. Acquaint with the various public and private-nonprofit agencies devoted to the containment/elimination of respiratory disorders.
4. Name, locate, and describe the function of each organ of the digestive system.
5. Recognize the importance of public and private-nonprofit agencies devoted to the containment/elimination of respiratory disorders.
6. Describe first-aid methods used to prevent noninfectious and contaminated transmission.
7. Have a "working knowledge" of public health laws and their enforcement.
8. Be aware of the effects of smoking on the smoker, and on others, and the role of the medical assistant in advising patients on smoking cessation.
9. Be familiar with intranasal and extraoral cardiac arrest measures, such as mouth-to-mouth resuscitation.
10. Be familiar with emergency first-aid measures, life support, and resuscitation techniques associated with the various disorders affecting respiration.
11. Have a "working knowledge" of public health laws and their enforcement.

Instruction should include:

- Bronchitis, cancer, emphysema, laryngitis, tonsillitis, and tuberculosis.
- Emergency first-aid measures, such as mouth-to-mouth resuscitation.

Caution! Emphasize the legal and professional inability of the medical assistant to diagnose or prescribe!
The student should be able to:

- Name, locate, and describe the function of each gland which provides juices or enzymes to the digestive process.
- Trace the path of food from the mouth to the anus, explaining the principles of digestion and absorption.
- Describe the part which the blood plays in the digestive system.
- Name, and describe the symptoms of, the common disorders of the digestive systems.
- Describe the readily-observable symptoms which indicate that caustics, heavy metals, or destructive compounds have been ingested, or that an overdose of drugs has been taken.

Instruction should include such disorders as appendicitis, carcinoma, gallstones, gastritis, hemorrhoids, hay fever, peptic ulcers, and symptoms such as constipation, diarrhea, and nausea.

The medical assistant should be alert to such symptoms as unusual odors from the mouth of a person suffering severe gastric disturbance, an indication that perhaps gasoline has been swallowed. The assistant should immediately alert the physician to the possibility of poisoning.

The medical assistant should be able to:

- Distribute diagrams of the gastrointestinal tract.
- Have students trace the path of food, labeling the organs and glands.
- Distribute a diagram of the small intestines, and have students label the parts and glands.
- Trace the path of food from the mouth to the anus, explaining the principles of digestion and absorption.
- Distribute the readily-observable symptoms which indicate that caustics, heavy metals, or destructive compounds have been ingested, or that an overdose of drugs has been taken.
- Describe the readily-observable symptoms which indicate that caustics, heavy metals, or destructive compounds have been ingested, or that an overdose of drugs has been taken.
- Describe the readily-observable symptoms which indicate that caustics, heavy metals, or destructive compounds have been ingested, or that an overdose of drugs has been taken.

Three useful films are:

- The Digestive System
- Human Gastric Function
- The Human Body - Digestive System

The medical assistant should be alert to such symptoms as unusual odors from the mouth of a person suffering severe gastric disturbance, an indication that perhaps gasoline has been swallowed. The assistant should immediately alert the physician to the possibility of poisoning.

Three useful films are:

- The Digestive System
- Human Gastric Function
- The Human Body - Digestive System
The student should be able to:

- Name, locate, and describe the function of each organ of the urinary system.
- Trace on a chart the flow of urine through the system.
- Name, locate, and describe the common disorders of each organ of the urinary system.
- Name the common disorders of the male reproductive system, and describe the symptoms of each.
- Name, locate, and describe the function of each organ of the male reproductive system.
- Name, locate, and describe the common disorders of each organ of the male reproductive system.

Instruction should include:

- Calculi, cystitis, nephritis, pyelitis, nephrosis, ptosis of ureters, tumors.
- Transparencies and diagrams should be used to show the position, function, and functioning of testes, tubes, seminal vesicles, prostate and Cowper's glands, and Cowper's glands, urethra and bladder.
- Have students label diagrams of a simplified nephron unit, and a vertical cross-section of a kidney.
- An overhead projector with polatron attachment can be used to show the filtration process in the nephron unit. Have students label diagrams with an overhead projector.

- Instruction should include calculi, cystitis, nephritis, pyelitis, nephrosis, ptosis of ureters, tumors, and urethra.
- Transparencies and diagrams should be used to show the position, function, and functioning of testes, tubes, seminal vesicles, prostate and Cowper's glands, and Cowper's glands, urethra and bladder.
- Have students label diagrams of a simplified nephron unit, and a vertical cross-section of a kidney.
- An overhead projector with polatron attachment can be used to show the filtration process in the nephron unit. Have students label diagrams with an overhead projector.

- Instruction should include calculi, cystitis, nephritis, pyelitis, nephrosis, ptosis of ureters, tumors, and urethra.
- Transparencies and diagrams should be used to show the position, function, and functioning of testes, tubes, seminal vesicles, prostate and Cowper's glands, and Cowper's glands, urethra and bladder.
- Have students label diagrams of a simplified nephron unit, and a vertical cross-section of a kidney.
- An overhead projector with polatron attachment can be used to show the filtration process in the nephron unit. Have students label diagrams with an overhead projector.

- Instruction should include calculi, cystitis, nephritis, pyelitis, nephrosis, ptosis of ureters, tumors, and urethra.
- Transparencies and diagrams should be used to show the position, function, and functioning of testes, tubes, seminal vesicles, prostate and Cowper's glands, and Cowper's glands, urethra and bladder.
- Have students label diagrams of a simplified nephron unit, and a vertical cross-section of a kidney.
- An overhead projector with polatron attachment can be used to show the filtration process in the nephron unit. Have students label diagrams with an overhead projector.

- Instruction should include calculi, cystitis, nephritis, pyelitis, nephrosis, ptosis of ureters, tumors, and urethra.
- Transparencies and diagrams should be used to show the position, function, and functioning of testes, tubes, seminal vesicles, prostate and Cowper's glands, and Cowper's glands, urethra and bladder.
- Have students label diagrams of a simplified nephron unit, and a vertical cross-section of a kidney.
- An overhead projector with polatron attachment can be used to show the filtration process in the nephron unit. Have students label diagrams with an overhead projector.

- Instruction should include calculi, cystitis, nephritis, pyelitis, nephrosis, ptosis of ureters, tumors, and urethra.
- Transparencies and diagrams should be used to show the position, function, and functioning of testes, tubes, seminal vesicles, prostate and Cowper's glands, and Cowper's glands, urethra and bladder.
- Have students label diagrams of a simplified nephron unit, and a vertical cross-section of a kidney.
- An overhead projector with polatron attachment can be used to show the filtration process in the nephron unit. Have students label diagrams with an overhead projector.
The student should be able to:

- Name, locate, and describe the function of each organ of the female reproductive system.
- Name the common Disorders of the female reproductive system, and describe the symptoms of each.
- List and describe the signs and symptoms of pregnancy.
- List and describe the signs and symptoms of labor.
- List common Disorders of pregnancy and the symptoms of each, and state the usual causes of each disorder.
- Define the term and describe the physical and psychological effects.

Instruction should include salpingitis, tumors (malignant and benign), sterility, and menstrual disorders.

Show the film, "Breast Self-Examination."
The student should be able to:

- List the parts of the nervous system, from neuron to brain.
- Label the parts of the nervous system as shown on teacher-supplied drawings.
- Identify, classify, and describe the function of the Central Nervous System.
- Identify, classify, and describe the function of the Peripheral Nervous System.
- List the characteristic symptoms of such disorders as cerebral palsy, CVA, encephalitis, epilepsy, meningitis, neuritis, neuralgia, and poliomyelitis.
- Identify the structure of the eye, ear, nose, and tongue and describe the function of the various parts of the special organs.
- Describe the function of the peripheral nervous system.
- Identify readily observable symptoms of such disorders as cataracts, conjunctivitis, deafness, glaucoma, hyperopia, myopia, osteomyelitis, otitis media, and poliomyelitis.
- Identify the characteristic symptoms of such disorders as cerebral palsy, CVA, encephalitis, epilepsy, meningitis, neuritis, neuralgia, and poliomyelitis.
- Use transparencies and anatomical charts of the brain, spinal cord, and neuron in explaining their functions.
- Label the parts of the nervous system as shown on teacher-supplied drawings.
- Use transparents and anatomical charts of the brain, spinal cord, and neuron in explaining their functions.
- Have students dissect a sheep brain, locating such structures as the cerebellum, cerebrum, medulla, convolutions, and hemispheres.
- Explain how and why the human body - the tissues, the waterways to the brain, the special organs - work.

Instruction should include:

- Discussion of the senses.
- Field trips to treatment and rehabilitation facilities, such as cerebral palsy centers.
- Use models to identify the structure of the organs.
- Use transparencies and anatomical charts of the brain, spinal cord, and neuron in explaining their functions.
- Have students dissect a sheep brain, locating such structures as the cerebellum, cerebrum, medulla, convolutions, and hemispheres.
- Explain how and why the human body - the tissues, the waterways to the brain, the special organs - work.

Disorders - Nervous System.

- Identify, classify, and describe the function of the peripheral nervous system.
- Identity, classify, and describe the function of the central nervous system.
- Label the parts of the nervous system as shown on teacher-supplied drawings.
- Use transparencies and anatomical charts of the brain, spinal cord, and neuron in explaining their functions.
- Have students dissect a sheep brain, locating such structures as the cerebellum, cerebrum, medulla, convolutions, and hemispheres.
- Explain how and why the human body - the tissues, the waterways to the brain, the special organs - work.

Instruction should include:

- Discussion of the senses.
- Field trips to treatment and rehabilitation facilities, such as cerebral palsy centers.
- Use models to identify the structure of the organs.
- Use transparencies and anatomical charts of the brain, spinal cord, and neuron in explaining their functions.
- Have students dissect a sheep brain, locating such structures as the cerebellum, cerebrum, medulla, convolutions, and hemispheres.
- Explain how and why the human body - the tissues, the waterways to the brain, the special organs - work.

Disorders - Nervous System.

- Identify, classify, and describe the function of the peripheral nervous system.
- Identity, classify, and describe the function of the central nervous system.
- Label the parts of the nervous system as shown on teacher-supplied drawings.
- Use transparencies and anatomical charts of the brain, spinal cord, and neuron in explaining their functions.
- Have students dissect a sheep brain, locating such structures as the cerebellum, cerebrum, medulla, convolutions, and hemispheres.
- Explain how and why the human body - the tissues, the waterways to the brain, the special organs - work.

Instruction should include:

- Discussion of the senses.
- Field trips to treatment and rehabilitation facilities, such as cerebral palsy centers.
- Use models to identify the structure of the organs.
- Use transparencies and anatomical charts of the brain, spinal cord, and neuron in explaining their functions.
- Have students dissect a sheep brain, locating such structures as the cerebellum, cerebrum, medulla, convolutions, and hemispheres.
- Explain how and why the human body - the tissues, the waterways to the brain, the special organs - work.
The student should be able to:

- Name, describe, and locate the glands of the endocrine system, and describe the effects on body activities.
- Describe the characteristic symptoms and state the causes of Addison's Disease, diabetes mellitus, dwarfism, gigantism, hyperthyroidism, hypothyroidism, and tetany.
- Identify the parts of the skin, including the accessory organs, and describe their functions.
- Describe the characteristic symptoms and state the causes of acne, alopecia, carbuncles, dermatitis, impetigo, psoriasis, ringworm, and scabies.
- Explain the classification of glands as exocrine or endocrine.
- Explain the difference between external and internal secretion.
- Explain the classification of glands as exocrine or endocrine.
- Explain the difference between body activities and describe the effects of each gland of the endocrine system.
- Name, describe, and locate the glands, and describe the importance of

Integumentary System

- Skin
- Glands
- Hair
- Nails
- Disorders

Endocrine System

- Glands
- Disorders
The student should be able to:

- Identify and describe the general measures used to prevent disease.
- List and describe the general methods of occupational and physical therapy prescribed for geriatrics, paraplegia, arthritis, and muscular disorders.
- List the essentials of normal nutrition, and state their uses by the body.
- Describe a normal diet incorporating the "Basic Four." Describe, by identifying included and excluded substances, such special diets as diabetic, reduced and excluded substances, dietetic, high and low calorie, high and low cholesterol, high and low sodium, cholesterol, and dietary inclusions.
- Define food metabolism.
- Relate special diets to the disorders necessitating their use. Include anemia, cholelithiasis, colitis, diabetes, heart disease, hypertension, and peptic ulcer.
- Explain the application of such methods as arts and crafts, diathermy, passive exercise, ultrasonics, and whirlpool baths.

Field trips to rehabilitation facilities should be informative. The films, "Immunization Against Infectious Diseases," and "The Human Body—Nutrition and Metabolism" should prove helpful. And "Your Diet: Balance Your Diet," and "Balance Your Diet for Health and Appearance" should present diet and diet therapy.

Preventative Medicine

Rehabilitation Medicine

Nutrition and Diet Therapy
Postnatal Development

Infancy

Childhood

Adolescence

Adulthood

Old Age

The student should be able to:

List the important changes in body systems and organs during the human lifespan.

Describe body changes involved in the aging process.

Discuss intellectual, emotional, and behavioral development of child.

Make field trips to nursery, day care, and extended care facilities for observation of various age groups, their problems, and responses.

Make a survey of social service facilities for the elderly.

Make field trips to nursery, to day care, and extended care facilities, and observe children so that they can obtain skills in identifying key stages in emotional and intellectual development.
SECTION IV
ADMINISTRATIVE DUTIES

OBJECTIVES
The student should be able to:

- Conduct business via telephone, transmitting and receiving, and recording all information accurately and to field standards of manner and procedure.
- Demonstrate the acceptable manner of meeting visitors to the office.
- Determine the needs of visitors through a personal-verbap approach.
- Emphasize the importance of understanding the importance of patience, sympathy, and tact.

TEACHING SUGGESTIONS

- Describe the various techniques and manners proper for calls from patients, hospitals and pharmacies, laboratories, pharmacies, laboratories, insurance and pharmaceutical agents, telephone services, and other physicians.
- Dramatize the discharge of telephone responsibilities.
- Have students dramatize the telephone responsibilities.
- Emphasize the importance of good grammar and diction.
- The teletrainer is an excellent aid.
- The film, "A Manner of Speaking," and the pamphlet, "Winning Ways with Patients," should be useful.
- Emphasize the importance of blending efficiency with empathy, sympathy, and tact.
- Emphasize the recognition and accommodation of the psychological and physical needs of the patient.

- The student should be able to:
  - Telephone
  - Reception
  - Made

TEACHING SUGGESTIONS

- Objective
- Administrate Duties
The student should be able to:

- Verify appointments and enter patients' names and times of arrival in a sign-in book.
- Maintain a daily appointment book, which efficiently uses the physician's time while allowing for emergency and unscheduled high-priority visits.
- Reschedule persons who must delay appointments, filling the openings with patients who wish to see the physician sooner.
- Schedule future appointments for routine follow up of treatments, hospital admissions or discharge, or diagnostic tests and X-rays.
- Obtain the information required to complete patient-history forms, and record the data in proper medical terminology.
- Emphasize the importance of the sign-in book as a record of who actually visited the office, and at what time. The patient should be able to:
Communicable Diseases

The student should be able to:

- Describe the readily observable symptoms of common communicable diseases.
- Describe appropriate action upon receiving a patient suffering a communicable disease.
- Describe the readily observable symptoms indicating need for immediate medical treatment.
- Describe appropriate reactions to common emergency situations.
- Describe the temperature, humidity, and air-exchange levels necessary for patient comfort.
- Prepare and use a check-list of physical conditions in the office which affect patient comfort.
- Discuss common emergency situations.

Emphasize that first-aid is necessary for patient comfort.

Caution! The medical assistant is not a junior diagnostician. Recognition here is limited to such evident symptoms as swollen glands, skin eruptions, and chronic cough.

Demonstrate tactful removal of person with probably communicable disease, from common waiting room. The files, "Communicable Diseases" and "Infectious Diseases and Natural Body Defenses" should be helpful.

Discuss the readily observable symptoms of common communicable diseases.

Immediate medical treatment.

The medical assistant is not a junior diagnostician. Recognition here is limited to such evident symptoms as swollen glands, skin eruptions, and chronic cough.

Discuss the readily observable symptoms of common communicable diseases.

The medical assistant is not a junior diagnostician. Recognition here is limited to such evident symptoms as swollen glands, skin eruptions, and chronic cough.

Discuss the readily observable symptoms of common communicable diseases.

The medical assistant is not a junior diagnostician. Recognition here is limited to such evident symptoms as swollen glands, skin eruptions, and chronic cough.

Discuss the readily observable symptoms of common communicable diseases.

The medical assistant is not a junior diagnostician. Recognition here is limited to such evident symptoms as swollen glands, skin eruptions, and chronic cough.
The student should be able to:

- Maintain an efficient system of filing patient records.
- File new records in appropriate places.
- Locate specific records, extract needed information, and return the records to their place.
- Maintain an efficient system of filing bills, charts, correspondence, and professional publications.
- Record services rendered and fees due.
- Record fees received, and post them to the ledger.
- Record payment of bills in the proper column of a disbursement sheet.
- Record charges, record credits, and balance the ledger or log for the day.

Instruction should include all systems of alphabetical filing commonly used in medical offices.

Specific "patient" reports from the records include names, medications, and test results. Have students practice extracting names, and using the State syllabus for a course in Recordkeeping.

Have students separate an assortment of items into appropriate categories, then file each group, with cross-referencing where applicable. Have students build a dummy file system of alphabetical filing.

Financial Recordkeeping

Demonstrate various techniques common to medical offices and financial recordkeeping.

Emphasize proper placement of names prefaced by D', de, and Di, and Mac and Mc; Le, La, and von. Do, and D'H, and Mac, le, de. Emphasize proper place.

The teacher should be familiar with the State syllabus for a course in Recordkeeping.
The student should be able to:

- Calculate and record deductions from employee salaries.
- Obtain and enter medical data on the patient's chart.
- Demonstrate in a simulated practice, an ongoing inventory routine for maintaining office, medical, and laboratory supplies.

Instruction should include use of tables for deducting Federal and State income taxes, F.I.C.A., and insurance premiums according to salary levels and dependents claimed.

Emphasize the critical importance of accuracy and use of correct medical terminology.

Demonstrate how a patient's chart is set up, and how to enter medical and laboratory supplies, including proper inventory and record sheets.

Discuss the responsibility of the medical assistant in safely and efficiently restocking supplies and ordering replacements; safeguarding and monitoring use of controlled drugs; disposing of overage medications; and following strict drug and narcotic laws.

Have students practice maintaining a simulated medicine cabinet and related inventory and record sheets.

Students should have completed a Business Education Program one-year course in typewriting at the time of completion of Medical Assistant study.

Business Correspondence

- Business Letters

Describe how business letters differ from professional and courteous business letters. Compose, type in current format, and type in current date. Business Letters

- Correspondence

31
Discuss the various types of correspondence, Manuscripts, Business Machines and Calculators.

The student should be able to:
- Compose and type in current format, a clear, concise, and properly phrased professional letter.
- Explain the difference between business and professional correspondence.
- Type a final version of a draft manuscript, the finished copy conforming to all applicable professional and literary standards.
- Obtain and type in all data necessary to complete common forms.
- Perform standard daily procedures on any common type mechanical or electronic mathematics machine.
- Change paper tapes and perform other simple maintenance which the manufacturer states is within the capabilities of the operator.
- Operate common types of dictating machines.
- Transcribe recorded material into acceptable typing copy.
- Discuss the role of the medical assistant as research assistant.
- Have students practice the medical assistant's typing duties, preferably through cooperative planning with teachers of courses in typing, and medical assistants' typing.
- Discuss the difference between business and professional correspondence.
- Explain the difference between proper and professional form, a clear, concise, and properly phrased professional letter in contrast to a draft or working copy, the finished copy in contrast to a working draft.
The student should be able to:

- Set up and operate common types of copy machines.
- Make adjustments necessary to produce sharp, clear copies.
- Perform routine maintenance procedures.
- Categorize mailable items into standard postal classifications, and identify items which cannot be mailed.
- Complete necessary forms for Registered or Certified Mail.
- Conform to regulations in preparing and addressing a package for Parcel Post.
- Open, sort, and direct mail through proper channels.
- Keep files current. Checking return addresses to emphasize the importance of samples, and "junk mail." Separate mail into correspondent mail, and handling incoming X-rays. Students should be able to mail in the physician's absence.
- Have students classify each as First, Second, Third, or Fourth Class Mail; Registered, or Certified Mail; Air Mail; Special Delivery; Parcel Post. Information booklets can be obtained from the postmaster.
- Differentiate between business appointments (attorneys, insurance agents, pharmaceutical and laboratory representatives) and non-patient appointments. Separate from but coordinated with the patient appointment book.
- Perform routine maintenance procedures. Instruction should include loading of paper and fluids, and performance of any maintenance steps within the capabilities of the manufacturer. Include the maintenance and performance of any machine, and loading of paper and fluids.
- Provide a list of mailable items.
- Have students classify each as First, Second, Third, or Fourth Class Mail; Registered, or Certified Mail; Air Mail; Special Delivery; Parcel Post. Information booklets can be obtained from the postmaster.
- Instruction should include methods of opening, sorting, and screening mail; handling mail in the physician's absence; and handling incoming X-rays.
- Students should be able to separate mail into correspondence, magazines, journals, samples, and "junk mail."
The student should be able to:

- Confirm all dates and list any follow-up action to be taken.
- Complete the details of a planned trip.
- Arrange for air and surface transportation, lodging, and communication while away.
- Prepare a trip itinerary.
- Describe collection techniques appropriate to the specific circumstances.
- Describe collection techniques of fees.

- Write a receipt for payment received.
- Explain to the patient the fee.
- Prepare and present formal accounts.
- Recognize and for co-surgery, medical care, and house calls.
- Fees for office visits, house calls.
- Explain the importance of entering all appointments in both the patient and nonpatient books, in order to prevent overlap and conflict.

- Describe the importance of keeping the medical records.
- Provide an overview of the patient and nonpatient appointments in attending all appointments in time.
- Define such terms as itinerary, lodging, and accommodations.
- Describe various techniques for handling cash payments.
- Demonstrate various techniques for handling cash payments.

- Emphasize the importance of entering all appointments in time.
- Describe the importance of keeping the medical records.
- Provide an overview of the patient and nonpatient appointments in attending all appointments in time.
- Define such terms as itinerary, lodging, and accommodations.
- Describe various techniques for handling cash payments.
- Demonstrate various techniques for handling cash payments.
The student should be able to:

- Write a check, complete the check record, and maintain a running balance.
- Enter deposits in the check record.
- Reconcile a deposit slip, enter the amount in the check record, and maintain a running balance.
- Enter disbursements in a petty cash record book.
- Balance a petty cash ledger.

- Discuss the major types of medical insurance and a distinguishing feature of each.
- Describe when delinquents should be referred to government or charitable agencies to determine eligibility for inclusion in health service payments, when small installments should be suggested, and when tactful firmness should be displayed.
- Discuss the medical assistant's responsibility for maintaining a neat and legible, as well as accurate and balanced check book.
- Distribute simulated checking account forms and a list of bills and deposits.
- Have students write checks and deposit slips, enter deposits in the check record, and maintain a running balance.
- Have students balance their checking accounts, complete the check record, and maintain a running balance.
- Have students balance a petty cash ledger.
- Discuss the various uses of a petty cash fund.
- Enter disbursements in a petty cash record book.
- Balance a petty cash ledger.
- Enter disbursements in a petty cash record book.
- Discuss the medical assistant's responsibility for maintaining a neat and legible, as well as accurate and balanced check book.
- Distribute simulated checking account forms and a list of bills and deposits.
- Have students write checks and deposit slips, enter deposits in the check record, and maintain a running balance.
- Have students balance their checking accounts, complete the check record, and maintain a running balance.
- Have students balance a petty cash ledger.
- Discuss the various uses of a petty cash fund.
- Enter disbursements in a petty cash record book.
- Balance a petty cash ledger.
- Enter disbursements in a petty cash record book.
- Discuss the medical assistant's responsibility for maintaining a neat and legible, as well as accurate and balanced check book.
- Distribute simulated checking account forms and a list of bills and deposits.
- Have students write checks and deposit slips, enter deposits in the check record, and maintain a running balance.
- Have students balance their checking accounts, complete the check record, and maintain a running balance.
- Have students balance a petty cash ledger.
- Discuss the various uses of a petty cash fund.
- Enter disbursements in a petty cash record book.
- Balance a petty cash ledger.
- Enter disbursements in a petty cash record book.
- Discuss the medical assistant's responsibility for maintaining a neat and legible, as well as accurate and balanced check book.
- Distribute simulated checking account forms and a list of bills and deposits.
- Have students write checks and deposit slips, enter deposits in the check record, and maintain a running balance.
- Have students balance their checking accounts, complete the check record, and maintain a running balance.
- Have students balance a petty cash ledger.
- Discuss the various uses of a petty cash fund.
The student should be able to:

- Obtain and type in all information necessary to complete any standard medical insurance form.
- Describe the facilities and equipment therein, necessary for efficient discharge of specific physician's-office procedures.
- Inspect the facilities and equipment for conformance with regulations and standards of cleanliness, safety, comfort, and readiness for use.
- Restock supplies and equipment.
- Inspect the facilities and equipment.
- Prepare a checklist for a housekeeping routine.
- Describe a typical housekeeping routine.

- Procedures
  - Store rooms
  - Laundered
  - Business office
  - X-ray room
  - Lab rooms
  - Examining rooms
  - Consultation room
  - Reception room
  - Procedures
  - Facilities
  - Housekeeping
The student should be able to:

- Clean and check the physician's bag each day, noting expiration dates on medicines, recording narcotics used, removing expired medication. Have each student list the items carried, their disposition in the bag, and necessary maintenance.

- Show the items usually carried in the physician's bag, not in use, and how the bag is stored when not in use. Demonstrate how they are packed.

- Replenish standard supplies, means for processing, and cleaning and check the physician's bag. The student should be able to:
TEACHING SUGGESTIONS

- Emphasize the contributions of each specified person.
- Have students research the work of such scientists as Holmes, Koch, and Pasteur.
- Koch, Leeuwenhoek, Lister, and Pasteur.
- Provide a list of scientists and their contributions to the study of microorganisms.
- Have students match the lists.
- microorganisms. Have the students identify microorganisms, view a list of microorganisms, and discuss their effects upon a human host.
- microscopes. Project microscope views of various organisms.
- Effects upon a human host.
- Discuss the circumstances when handwashing is necessary. Explain its value.
- Demonstrate handwashing techniques.
- Wash hands for routine control of contamination.
- Discuss the circumstances when handwashing is necessary. Explain its value.

OBJECTIVES

- The student should be able to:
  - Identify the important contributions of each specified person.
  - Microbiology or microbiology of the skin and of important advances in the field. The student should be able to:
  - Identify the important contributions of each specified person.

CONTENT

SECTION A — CLINICAL DUTIES

- Asepsis and sterilization
- Pathogens and nonpathogens
- Means of transmission
- Microbiology
- History
- Medical asepsis
Surgical Sterilization Agents and Procedures

The student should be able to:

- Complete the surgical scrub necessary to assist in office surgery.
- Dispose of contaminated materials.
- Clean equipment in preparation for sterilizing.
- Define the terms: antiseptic, disinfectant, fungicide, germicide.
- Classify any specific agent.
- Select the proper agent for a specific sterilization.
- Sterilize instruments, glassware, and rubber goods, towels and other fabrics, and solutions.
- Handle, set up, and use sterile equipment according to aseptic procedure.
- Demonstrate the surgical scrub.
- Have students practice scrubbing.
- Demonstrate proper methods of disposing of contaminated materials.
- Demonstrate the unsterilized surgical tray.
- Have students practice setting up and using sterile equipment.

Instruction should include the use of soap and water, and of alcohol as control agents, and of particular procedures for use of autoclave and other equipment. The importance of temperature and time in the sterilization process should be emphasized.

Instruction should include the use of alcohol as control agents, and of particular procedures for use of autoclave and other equipment. The importance of temperature and time in the sterilization process should be emphasized.

Instruction should include the use of alcohol as control agents, and of particular procedures for use of autoclave and other equipment. The importance of temperature and time in the sterilization process should be emphasized.
The student should be able to:

- Set up for a complete physical examination.
- Maintain proper temperature and humidity.
- Demonstrate in a simulation, the duties of the medical assistant during a physical examination.
- Prepare routine and aseptic procedures necessary between patients.
- Obtain correct weight on the physician's balance-beam scales.
- Perform routine and aseptic procedures necessary between patients.
- Have students list the routine equipment in a set up for complete physical examination.
- Have students prepare a sterile tray, using transfer forceps, and obeying the sterile tray, using transfer forceps, and obeying the rules for setting up a sterile field.
- Have students prepare a sterile tray, using transfer forceps, and obeying the rules for setting up a sterile field.
- Use the balance-beam scales.
- Emphasize the importance of proper climate to the health as well as the comfort of the patient.
- Understand the principle of the balance-beam scales.
- Set up for a complete physical examination.
- The student should be able to:

Climate control

Room Preparation

Examination Procedures

Preliminary data

Assisting

Maintaining readiness

Weight

Preliminary data
The Medical Assistant will need to measure the patient's height and weight. The student should be able to:

- Obtain correct height with the physician's scales slides.
- Demonstrate correct procedure for measuring infants.
- Record data on the patient's chart.
- Identify the different types of thermometers.
- Obtain oral, rectal, and axillary body temperatures.
- Record temperature on the patient's chart.
- Prepare the thermometer for subsequent use.
- Preheat the thermometer for patient's chart.
- Record temperature on the patient's chart.
- Identify the different type of thermometers.
- State the range of "normal" temperatures.
- Explain the significance of body temperatures.
- Demonstrate how to hold and insert the thermometer, how to find the mercury column, how to determine the indicated temperature, and how to "shake down" the mercury.
- Demonstrate how to hold and insert the thermometer, how to find the mercury column, how to determine the indicated temperature, and how to "shake down" the mercury.
- Emphasize the importance of adhering to safety procedures.
- Begin using metric units for this instruction. The English system units will persist throughout this curriculum. However, the metric system should be used. Measurements should be taken to the nearest inch. Students should be reminded to guard the patient's privacy when obtaining rectal temperature.
- Show location of pulse-taking arteries. The Medical Assistant will take the patient's pulse.
Preparing the Patient

Physically

- Observe the patient's respiration, chest movement, pulse, and body temperature. Prepare the patient
  - Before treatment, the patient should be comfortable and prepare for examination
  - The medical assistant will assemble the equipment, greet the patient, and explain the procedure
  - Obtain, describe, and record the patient's blood pressure while the patient is sitting and lying down, both before and after exercise
  - Project transparencies of the calibrations of the sphygmomanometer
  - Have students role-play medical assistant
  - Explain in everyday language, how each position is assumed
  - Using a student model, demonstrate the functions of the medical assistant
  - Have students play medical assistant
  - Each student will assume the various patient positions for examination, describe each, and state the type of exam for each position. Describe the physiology of the blood, including the factors which affect pressure
  - Demonstrate the use of the sphygmomanometer on a student model
  - Have students play medical assistant
  - The medical assistant will assemble the equipment, greet the patient, and explain the procedure and obtain and record the blood pressure while the patient is sitting and lying down, both before and after exercise
  - Instruction should include Sims, lithotomy, knee-chest, dorsal, and other exercises
  - After running, and count the pulse while the patient is standing, sitting, and after running
  - Have students role-play medical assistant
  - The student will count, describe, and record the patient's pulse.


Emotionally

Assisting the Physician

Tray Set-ups

Diagnostic

Medication

Minor Surgery

List and identify instruments and supplies commonly used in office surgery, and prepare tray set-ups.

Prepare the patient for minor surgery, and prepare and set up equipment for standard tests performed by various medical specialists.

Which equipment is used, and how to use it.

The student should be able to:

Position and drape a patient to assume any of the commonly used positions.

Emphasize sensitivity.

Describe types of anesthesia used. Clean, sterilize, and dispose of all materials used.

Prevent the patient from discomfort and embarrassment. Treatments performed by medical personnel become emotionally stressful.

Have students practice applying triangular, and tubular bandages, and various types of dressings.

Discuss the patient's emotional state. The patient's body is being examined, while the patient whose body is being examined is emotionally detached.

Instruction should include the preparation and function of equipment on trays for such specialties as ear, nose, and throat; sigmoidoscopy; and for such specialties as allergy, ophthalmology, dermatology, gastroenterology, orthopedics, and pediatrics, as well as other specialties.

Discuss the patient's emotional state. The patient whose body is being examined seldom is emotionally detached.

Instruction should include the preparation and function of equipment on trays for such specialties as ear, nose, and throat; sigmoidoscopy; and for such specialties as allergy, ophthalmology, dermatology, gastroenterology, orthopedics, and pediatrics, as well as other specialties.

Discuss the patient's emotional state. The patient whose body is being examined seldom is emotionally detached.

Instruction should include the preparation and function of equipment on trays for such specialties as ear, nose, and throat; sigmoidoscopy; and for such specialties as allergy, ophthalmology, dermatology, gastroenterology, orthopedics, and pediatrics, as well as other specialties.

Discuss the patient's emotional state. The patient whose body is being examined seldom is emotionally detached.

Instruction should include the preparation and function of equipment on trays for such specialties as ear, nose, and throat; sigmoidoscopy; and for such specialties as allergy, ophthalmology, dermatology, gastroenterology, orthopedics, and pediatrics, as well as other specialties.

Discuss the patient's emotional state. The patient whose body is being examined seldom is emotionally detached.
The student should be able to:

- Remove adhesive tape, dressings, and bandages, disposing of contaminated materials in accordance with accepted procedure.
- Assemble and prepare materials for the application of splints to any designated specific injury.
- Prepare the patient for application or removal of a cast.
- Assemble and prepare the materials needed for casts.
- Select equipment and medicines necessary for any specific injection or collection.
- Prepare a tray for any specific injection or collection.
- Care for equipment after use, and secure it according to State regulations between uses.
- Emphasize caution in not bandaging too tightly.
- Demonstrate the use of various splints, their application and removal.
- Have students practice application and removal of splints.
- Select equipment and medicines necessary for any specific injection or collection.
- Prepare a tray for any specific injection or collection.
- Care for equipment after use, and secure it according to State regulations between uses.
- Emphasize caution in not bandaging too tightly.
- Prevent injury to any designated specific part.
- Demonstrate the use of various types and sizes of syringes.

Procedure:

- Emphasize safety and sterile technique. Have students properly remove simulated fractures of other patients, then properly remove simulated fractures of other patients to better understand the procedure. Have students practice applying and removing casts.
- Assemble and prepare the patient for any specific injection or collection.
- Prepare the patient for any specific injection or collection.
- Demonstrate the use of various splints, their application and removal.
- Have students practice application and removal of splints.
- Select equipment and medicines necessary for any specific injection or collection.
- Prepare a tray for any specific injection or collection.
- Care for equipment after use, and secure it according to State regulations between uses.
- Emphasize caution in not bandaging too tightly.
- Demonstrate the use of various splints, their application and removal.
- Have students practice application and removal of splints.
- Select equipment and medicines necessary for any specific injection or collection.
- Prepare a tray for any specific injection or collection.
- Care for equipment after use, and secure it according to State regulations between uses.
- Emphasize caution in not bandaging too tightly.
- Demonstrate application and removal of a cast on a simulated fracture.
- Emphasize safety and sterile technique. Have students practice applying and removing casts to better understand removal procedures to simulate fractures of other students, then properly remove simulated fractures of other patients to better understand the procedure. Have students practice applying and removing casts.
- Assemble and prepare the patient for any specific injection or collection.
- Prepare the patient for any specific injection or collection.
- Demonstrate the use of various splints, their application and removal.
- Have students practice application and removal of splints.
- Select equipment and medicines necessary for any specific injection or collection.
- Prepare a tray for any specific injection or collection.
- Care for equipment after use, and secure it according to State regulations between uses.
- Emphasize caution in not bandaging too tightly.
- Demonstrate the use of various splints, their application and removal.
- Have students practice application and removal of splints.
- Select equipment and medicines necessary for any specific injection or collection.
- Prepare a tray for any specific injection or collection.
- Care for equipment after use, and secure it according to State regulations between uses.
- Emphasize caution in not bandaging too tightly.
Harmacology

Controlled Substances:
- Narcotics
- Sedatives
- Stimulants
- Depressants
- Analgesics

Prescriptions

The student should be able to:
- Prepare and label samples for laboratory testing.
- Locate in a P.D.R., and transcribe on index cards, the type of medication, dosages, method of administering, and contraindications for any specific commonly used drug.
- Enter narcotics into a record book in compliance with regulations of the Bureau of Narcotic Dangerous Drugs.
- Write common prescription abbreviations.
- Caution!
  - Emphasize the requirement of law that only the licensed professional will fill the syringe and immediately inject the medication, or will obtain blood or culture samples, and that injection equipment must be registered, secured, and accounted for in compliance with State regulations.
- Have the students prepare a chart filling-in under the following column headings: Type of Injection; Site; Purpose; Size of Syringe; Length of Needle.
- The film, "Technique of Parenteral Medication," should be useful.
- Have the students prepare a chart filling-in under the following column headings: Type of Injection; Site; Purpose; Size of Syringe; Length of Needle.

Narcotics used drugs
- Indications for any specific condition: method of medication, dosage, method of administration, and contra-indications.
- Enter narcotics into a record book in compliance with regulations of the Bureau of Narcotic Dangerous Drugs.
- Write common prescription abbreviations.
The student should be able to:

- Translate prescriptions into everyday language in instructing the patient.
- Store drugs according to classification.
- Maintain supplies by label expiration dates.
- Refrigerate drugs as required.
- Maintain a drug inventory.
- Retire drugs as required.
- Maintain supplies by label expiration.
- Fiction:
  - Store drugs according to class.
- "First-aid" tray.
  - Have "first-aid" supplies set up and ready.
  - Assist the physician.
- Short defective tray.
  - Maintain a "snaps-ready" tray.
  - Give simulated prescriptions into the physician's verification and use.
  - Measure, pour, or count out doses.
  - Have students practice maintaining a drug inventory.
  - Have a chart of simulated drugs.
  - Have students practice maintaining a "snaps-ready" tray.
  - Have students practice instructing the "patient" in everyday language.
  - Give simulated prescriptions into the classroom.
  - Have the students learn from each other.
  - Emphasize the need for correct measurement even in an emergency, and for the physician to check prescription and use.
The student should be able to:

Administer first-aid as defined and prescribed by the American Red Cross, or physician's standing orders.

Contact the physician, or the designated covering physician in accordance with the physician's standing instructions.

It is recommended that all students be American Red Cross certified in first-aid.

An 8-hour multimedia course of instruction is available through most local Red Cross chapters. Have students provide first-aid in sudden emergency simulations. It is recommended that all students provide first-aid in sudden emergency simulations.

Standing instructions:

In accordance with the physician's standing instructions, contact the physician or the designated covering physician in accordance with the physician's standing instructions. Have students provide first-aid in sudden emergency simulations. It is recommended that all students provide first-aid in sudden emergency simulations.
TECHNICAL DUTIES

OBJECTIVES

The student should be able to:

- Perform a routine urinalysis for physical properties.
- Perform a routine urinalysis for chemical properties.
- Perform a microscopic urinalysis.

TEACHING SUGGESTIONS

- Describe the patient conditions which would require that a physical properties urinalysis be performed.
- Define the meniscus as related to the specific gravity.
- Explain what pH indicates.
- Have students perform and record their personal urinalysis.

- Describe the patient conditions which would require that a chemical properties urinalysis be performed.
- Demonstrate the use of commercial test substances such as Lab Stix, Clinitest Tablets, and Acetest Tablets.
- Have students select the necessary test materials and equipment.

- Describe the conditions which would require performance of a microscopic urinalysis.
- Project a diagram of red and white blood cells, casts, and other cellular components.

TEACHING SUGGESTIONS

- Standard Procedures
- Content
- Objectives
- Teaching Suggestions

SECTION VI — TECHNICAL DUTIES
Hematology

The student should be able to:

- Perform a hemoglobin determination.
- Perform a hematocrit determination.
- State normal hemoglobin values.
- State normal hematocrit values.
- Explain the relationship of hematocrit to anemia.
- Explain the relationship of hemoglobin to anemia.
- Obtain capillary blood.
- Prepare and test a specimen in the hemoglobinometer.
- Prepare a sediment slide, examine the slide, and chart the results.
- Prepare a sediment for examination, and demonstrate the techniques of centrifuging and of "spinning down" to obtain a sediment.
- Provide students with blood specimens.
- Have them test for hemoglobin and record the results.
- Have them centrifuge a specimen and prepare a sediment.
- Have them examine the slide, identifying components and charting the results.
- Demonstrate the techniques of preparing a sediment for examination, and indicate the characteristics of each cell and crystal.
The student should be able to:

- Calculate and record a red cell count.
- Calculate and record a white cell count.
- Prepare a stained slide.
- Classify the white blood cells on a stained slide.
- Describe the morphology of RBC for a differentiated count.
- Prepare a stained slide.
- Classify the white blood cells.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Project microscope view of WBC and RBC.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
- Have students draw a specimen for a white cell count.
- State the normal white and red cell counts for men and women.
- Have students classify WBC and describe the morphology of RBC.
- Demonstrate the morphology of RBC on a stained slide.
- Emphasize the invalidating effects of an improper slide on test results and, ultimately, on the patient.
- Demonstrate use of Wright's stain, buffer, and timers.
- Demonstrate how RBC and WBC are classified, and how hemocytometer determination, titrugs, II, and a practice model can be used.
The student should be able to:

- Set up a sedimentation rate.
- Read and record an erythrocyte sedimentation rate.
- Perform plastic strip test for glucose and blood urea nitrogen levels.
- Demonstrate the use of Gram's stain, staining rack, and tray.
- Prepare slides containing smear, stain, fixation, and record.
- Prepare a slide, examine it for identification of organisms, and record the findings.
- Explain what data obtained from an erythrocyte sedimentation rate signifies.
- Demonstrate the process.
- Have students practice pipetting water and setting up a sedimentation rate.
- Explain the difference in viscosity and its effects.
- When the technique is mastered, have students set up and record a sedimentation rate for provided blood.
- State the normal level of glucose and BUN for men and women.
- Obtain capillary blood.
- Perform plastic strip test for glucose and blood urea nitrogen levels.
- Emphasize the importance of accuracy in timing the tests.
- Have students test provided samples and chart the results.

Blood Chemistry

Blood Chemistry - Bacteriology
The student should be able to:

- Select and prepare the media appropriate for obtaining a specified culture.
- Set up the electrocardiograph.
- Prepare the patient for testing.
- Perform an ECG.
- Cut and mount a completed ECG.
- Assist the licensed person in performing a hearing test.
- Chart the results.
- Perform a visual acuity test.
- Record the results.
- Chart the results.

Describe the different types of media and cultures. Have students prepare a chart listing the various types of media used to obtain each culture. Provide a list of cultures, and have students prepare an appropriate media for each. Describe the different types of cultures and media. Perform a visual acuity test.

Visual acuity -

Audiometry -

Electrocardiography -

Specialized Testing -
The student should be able to:

- State the nature and purpose of commonly prescribed X-ray series.
- State which series are to be N.P.O. (nothing by mouth), and which require dyes.
- Instruct patients in at-home preparation for any common X-ray series.
- Prepare the patient for X-ray.
- Assist the patient into position on the X-ray table.
- Maintain an X-ray name imprint card file in both the alphabetical and numerical systems.
- Prepare and file X-ray envelopes using both the alphabetical and numerical systems.
- Emphasize the importance of correct preparation.
- Role-play a medical assistant instructing a patient in undressing, removing jewelry, and donning the gown.
- Emphasize the importance of removing a pendant or necklace to prevent causing injury to the patient or equipment.
- Show an X-ray of a patient who failed to remove a pendant or necklace.
- Explain the various X-ray marking systems: such as lead, tape, and cards.
- Have students set up a card and file card system - and practice filing and preparing cards.
- Have students set up an X-ray envelope file system and practice preparing and filing X-ray envelopes.

Instruction should include such series as barium enema, gall bladder, G.I., and IVP. State the nature and purpose of commonly prescribed X-ray series. The student should be able to:
Exposure Developing

Office Therapy

Safety

The student should be able to:

- Develop X-ray exposures.

- Demonstrate the procedure for developing X-ray exposures.

- Emphasize the importance of adhering to proper procedures in order to prevent streaking or finger spotting the exposure.

- Demonstrate the procedure for reloading the cassette.

- Have students practice developing and reloading.

- Discuss the dangers inherent in radiologic procedures.

Instruction should include:

- Intradermal allergy, Mantoux, P.P.D., and tine tests.

- Demonstrate intradermal injection in a training arm.

- Have students prepare a chart of hazards and attendant precautions which must be taken.

- Describe the safety precautions necessary for any specified skin test.

- Choose or list the equipment necessary for any specified skin test.

- List the various types of skin tests.

- List the items of therapy equipment commonly found in the physician's office, describing each.

- Have students prepare a chart of hazards and attendant precautions for any specified skin test.

- Discuss the dangers inherent in radiologic procedures.

- Have students practice the procedures for developing and reloading.

- Safety

- Equipment

- Office Therapy
Procedures

the purpose, operation, and safety precautions of each.

Describe the duties of the medical assistant in aiding the licensed person in therapy procedures.

Instruction in this area should be limited to that necessary to enable the graduated student to respond instantly and properly to the licensed person's directives.

Procedure of assisting the physician, physician's associate, physical therapist, or other persons licensed to perform and supervise therapy procedures. Describe the duties of the physician, physician's associate, physical therapist, and the purposes, operations, and safety precautions of each.
Clinical experience is a vital part of the education of the medical assistant. The experience not only helps the student relate classroom instruction to actual situations, it also provides new knowledge, teaches new skills, and forms desirable attitudes. Most important, the clinical experience helps the student to accept professional responsibilities.

To be effective, the clinical experience must be planned on the basis of desired student outcomes, and continually evaluated for best use of available facilities, resources, and teaching talent of the school and clinic staffs. Ideally, the clinical experience should be based on the prevailing standards for entry into employment as a medical assistant.

Regardless of the number of students involved, it is important that the clinical experience be governed by a written agreement between the educational and clinical institutions. The agreement should be cooperative and mutually acceptable. Legal assistance in drafting the agreement is recommended.

The following list suggests those items which should be considered when an agreement is being developed:

1. Purpose and Objectives of the Cooperative Affiliation.
3. Rotations, number of students.
   - Schedules
   - Equipment exchanges
   - School calendar
   - Meetings
   - Uniforms
   - Visits of clinic center staff
   - Visits of educational staff
   - Noneducational matters.

A sample agreement is also provided as a model for development of local agreements, which must be tailored to local conditions.

RELATIONSHIP OF CLINICAL EXPERIENCE TO EDUCATION OF THE MEDICAL ASSISTANT.

Clinical experience is a vital part of the education of the medical assistant.
staff changes
health
immunizations and physical examinations if needed
care of a student who becomes ill or is injured
insurance requirements
volunteer coverage
provision of learning experiences
provision for supervision when a teacher is not available
autonomy

3. Educational Institution’s Rights, Responsibilities, and Obligations

- educational autonomy
- planning of educational program
- records and reports
- evaluation forms
- withdrawal of student from clinical area
- planning
- coordination
- discipline
- evaluation of students and the program
- provision of coordinator of clinical education or other liaison person
- costs, if any
- insurance, if any
- transportation
- legal responsibility
- costs, if any
- withdrawal of student from clinical area
- evaluation forms
- records and reports
- planning of educational program
- autonomy

4. Clinical Center’s Rights, Responsibilities, and Obligations

- transportation
- insurance, if any
- costs, if any
- withdrawal of student from clinical area
- evaluation forms
- records and reports
- planning of educational program
- autonomy

for feedback
5. Mechanisms for continued cooperation, regulation, review, or termination

- Termination
- Reassignment
- Reevaluation
- Arbitration of disputes
- Liaison
- Time period covered

6. Signatures and dates

Two persons from each agency should sign the completed agreement.

- Termination
- Reassignment
- Reevaluation
- Arbitration of disputes
- Liaison
- Time period covered
The purpose of this affiliation is to provide the Medical Assisting student a continuing learning experience through the application of knowledge and skills in actual situations.

The (Educational Agency) and the (Name & Address of Clinical Agency) agree to:

1. Send to the clinical area only those students who are in good health and have had a tuberculosis test (tine).
2. Provide adequate basic instruction for the student in Medical Assisting principles.
3. Provide adequate basic instruction for the student in Medical Assisting principles.

The (Educational Agency) agrees to:

1. Educate students who give promise of having adequate mental and physical ability and emotional stability, and of being responsible, conscientious, and emotionally stable, as participants in the Medical Assisting Program.
2. Provide adequate basic instruction for the student in Medical Assisting principles.
3. Send to the clinical area only those students who are in good health and have had a tuberculosis test (tine).

The (Clinical Agency) agrees to:

1. To help the student develop as an individual, and to foster interest in his/her field.
2. To help the student assume responsibility for growth in his/her field.
3. To help the student assume responsibility for growth in his/her field.
4. Provide a program coordinator, instructor, and such additional staff members as necessary for the purpose of evaluation of program, and of students while engaged in clinical practice in accordance with standards set forth in the course of study.

5. Send a mutually agreed upon number of students for clinical experience as established by participating agencies.

6. Confer with the clinical personnel periodically to evaluate the progress of the student as well as the total program.

The (Clinical Agency) agrees to:

1. Accept Medical Assisting students who have satisfactorily completed basic instruction.

2. Provide adequate practice and supervision for students while assigned for clinical experience.

3. Accept a mutually agreed number of students, and provide practice for them as established by the participating agencies, according to standards set forth in the course of study.

4. Confer with (The Educational Agency) Advisory Committee on Health Programs in relation to the program necessary to accomplish the objectives of the school.

5. Cooperate with (The Educational Agency) Advisory Committee on Health Programs in relation to the program necessary to accomplish the objectives of the school.

6. Provide only such first aid and treatment as may be necessary. Further care will be the responsibility of the individual or the parent or guardian.

The (Educational Agency) reserves the right to terminate the affiliation of any student who does not conform to the clinical agency standards for Medical Assisting students.

The (Educational Agency) reserves the right to terminate the affiliation of any student who does not conform to the clinical agency standards for Medical Assisting students.

The (Educational Agency) reserves the right to terminate the affiliation of any student who does not conform to the clinical agency standards for Medical Assisting students.
The (Educational Agency) reserves the right to make the final decision concerning the withdrawal of the student from the Medical Assistant Program.

The (Clinical Agency) reserves the right to request that a student be withdrawn, if in their opinion the student is not conforming to the policies of the agency.

This agreement may be terminated by either party upon notifying the other in writing, 60 days in advance, that the agreement be terminated. Such termination will not, however, affect students then enrolled, such students continuing until completion of their clinical experience. This agreement will be effective for a period of time to be mutually agreed upon.

This agreement reserves the right of the Medical Assistant Program to request that a student be withdrawn, if in their opinion the student is not conforming to the policies of the agency. The (Clinical Agency) reserves the right to make the final decision concerning the withdrawal of the student from the Medical Assistant Program.

(Title of Educational Agency Official)
(Educational Director)
(Date of Signing)

(Title of Clinical Agency Official)
(Clinical Director)
PROCEDURE FOR OBTAINING CERTIFICATION

The American Association of Medical Assistants provides certification in two classifications: Administrative Medical Assistant, and Clinical Medical Assistant. Dual certification is also extended.

The purposes of such certification are to establish professional standards and goals for medical assistants; to help physicians identify competent medical assistants; and to assist in the educational programs of schools of medical assisting.

Eligibility requirements have been established. See below for details.

Applications are submitted to the American Association of Medical Assistants. 

An applicant holding a secondary school diploma, or equivalent, and three years work experience as a medical assistant will be admitted to examination as either Administrative Medical Assistant or Clinical Medical Assistant. For certification as either Administrative or Clinical Medical Assistant, one additional year of experience is required.

An applicant who is enrolled in a one-year AMA/AAMA accredited program may apply for examination for the dual certification before the February preceding the fourth Friday in June, each year. Applications must be received by the Board before February 1st preceding the year of examination. Applicants must be accepted, and who pass the examination, will be granted certification on the following Friday in June of each year. Those who are accepted, and who pass the administration before the fourth Friday in June, each year, will be granted certification on the following Friday in June of each year. Those who are accepted, and who pass the examination, will be granted certification on the following Friday in June of each year.

Applications are obtained from:

The American Association of Medical Assistants

1 East Wacker Drive; Suite 151

Eligibility requirements have been established.

An applicant holding a secondary school diploma, or equivalent, and three years work experience as a medical assistant will be admitted to examination as either Administrative Medical Assistant or Clinical Medical Assistant. One additional year of experience is required for examination for dual certification.

Eligibility requirements have been established.

Applications are submitted to the American Association of Medical Assistants. 

An applicant holding a secondary school diploma, or equivalent, and three years work experience as a medical assistant will be admitted to examination as either Administrative Medical Assistant or Clinical Medical Assistant. For certification as either Administrative or Clinical Medical Assistant, one additional year of experience is required.

An applicant who is enrolled in a one-year AMA/AAMA accredited program may apply for examination for the dual certification before the February preceding the fourth Friday in June, each year. Applications must be received by the Board before February 1st preceding the year of examination. Those who are accepted, and who pass the examination, will be granted certification on the following Friday in June of each year. Those who are accepted, and who pass the examination, will be granted certification on the following Friday in June of each year. Those who are accepted, and who pass the examination, will be granted certification on the following Friday in June of each year. Those who are accepted, and who pass the examination, will be granted certification on the following Friday in June of each year.

Applications are obtained from:

The American Association of Medical Assistants

1 East Wacker Drive; Suite 151
RESOURCE LIST

BOOKS


PAMPHLETS


Films


A half million teenagers. New York State Department of Health. 16 mm. sound. 16 minutes. Color.

A manner of speaking. New York Telephone Company Film Library. 16 mm. sound. 20 minutes. Color.

Balance your diet for health and appearance. Coronet Films. 16 mm. sound. Color.

Case in point. Wyeth Film Library. 16 mm. sound. 20 minutes. Color.


Chicago. New York Telephone Company Film Library. 16 mm. sound. 20 minutes. Color.


Circulation of the blood. American Heart Association. 16 mm. sound. 8 minutes. Color.

Communicable and degenerative diseases. New York State Department of Health. Albany, New York. 16 mm. sound. 8 1/2 minutes. Color.

Digestive system. Encyclopedia Britannica Films. 16 mm. sound. 17 minutes. Color.

Disorders of the heart beat. Wyeth Film Library. Sterling Films. 16 mm. sound. 20 minutes. Color.

Embattled ceZZ. American Cancer Society. 16 mm. sound. 21 1/2 minutes. Color.

Emergency 77. Association Films, Inc. 16 mm. sound. 14 minutes. Color.

Embattled cell. American Cancer Society. 16 mm. sound. 21 1/2 minutes. Color.

First-aid. American Red Cross. 16 mm. sound. 30 minutes. Color.

First-aid, Treatment of Fractures. Bailey. 16 mm. sound. 6 minutes. Color.

Gateways to the mind. New York Telephone Company Film Library. 16 mm. sound. 60 minutes. Color.

High blood pressure. American Heart Association. 16 mm. sound. 7 minutes. Color.

Human gastric function. American Medical Association. 16 mm. sound. 18 minutes. Color.

Immunizations against infectious diseases. Lederle. 16 mm. sound. 30 minutes. Color.

Infectious diseases and natural body defenses. New York Telephone Company Film Library. 16 mm. sound. 60 minutes. Color.

Intestinales of the nervous system. Encyclopedia Britannica Films. 16 mm. sound. 17 minutes. Color.

Fundamentals of the nervous system. Encyclopedia Britannica Films. 16 mm. sound. 17 minutes. Color.

Hemo, the magnificent. New York Telephone Company Film Library. 16 mm. sound. 60 minutes. Color.

First-aid. American Red Cross. 16 mm. sound. 30 minutes. Color.

First contact. Wyeth Film Library. 16 mm. sound. 25 minutes. Color.

First-aid. American Red Cross. 16 mm. sound. 30 minutes. Color.


Fundamentals of the neurological examination. American Medical Association Film Library. 16 mm. sound. 6 minutes. Color.

Emergency Rooms. Association Films, Inc. 16 mm. sound. 14 minutes. Color.

Emotional anatomy. New York State Department of Health, Albany, New York. 16 mm. sound. 30 minutes. Color.

Fundamentals of the blood. American Heart Association. 16 mm. sound. 8 1/2 minutes. Color.

Fundamentals of the nervous system. Encyclopedia Britannica Films. 16 mm. sound. 17 minutes. Color.

First-aid. American Red Cross. 16 mm. sound. 30 minutes. Color.

First-aid. American Red Cross. 16 mm. sound. 30 minutes. Color.

First-aid. American Red Cross. 16 mm. sound. 30 minutes. Color.

First-aid. American Red Cross. 16 mm. sound. 30 minutes. Color.