

DOCUMENT RESUME

ED 289 034

CE 049 200

TITLE Health Occupations Education. Vocational Education Program Courses Standards.

INSTITUTION Florida State Dept. of Education, Tallahassee. Div. of Vocational, Adult, and Community Education.

PUB DATE Jul 87

NOTE 306p.; For related documents, see CE 049 198 and CE 049 202.

PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC13 Plus Postage.

DESCRIPTORS *Allied Health Occupations Education; *Allied Health Personnel; Behavioral Objectives; *Career Exploration; *Course Content; Learning Activities; Nursing Education; Performance; Postsecondary Education; Prevocational Education; Secondary Education; State Curriculum Guides; *State Standards; *Therapy

ABSTRACT

This document contains vocational education program courses standards for exploratory courses, practical arts courses, and job preparatory programs offered at the secondary or postsecondary level. Each program standard is composed of two parts: a curriculum framework and student performance standards. The curriculum framework includes four major sections: major concepts/content, laboratory activities, special notes, and intended outcomes. Student performance standards are listed for each intended outcome. For secondary job preparatory programs, courses have been designated with student performance standards listed for each course. Standards are provided for 61 courses. Representative titles are orientation, exploration, x-ray machine operator, cardiopulmonary technology, central service technology, cytotechnology, dental assisting, diagnostic medical sonography, electrocardiograph aide, emergency medical technology, funeral services, health care management, health unit coordinator, hearing aid dispensing, histologic technology, home health aide, massage, medical assisting, medical records technology, nuclear medical technology, nursing assisting, nursing, occupational therapy assistant, ophthalmic dispensing, optometric assisting, pharmacy assisting, physical therapy aide, practical nursing, radiation therapy technology, respiratory therapy, veterinarianian technology, and vision care assisting. (YLB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

CE

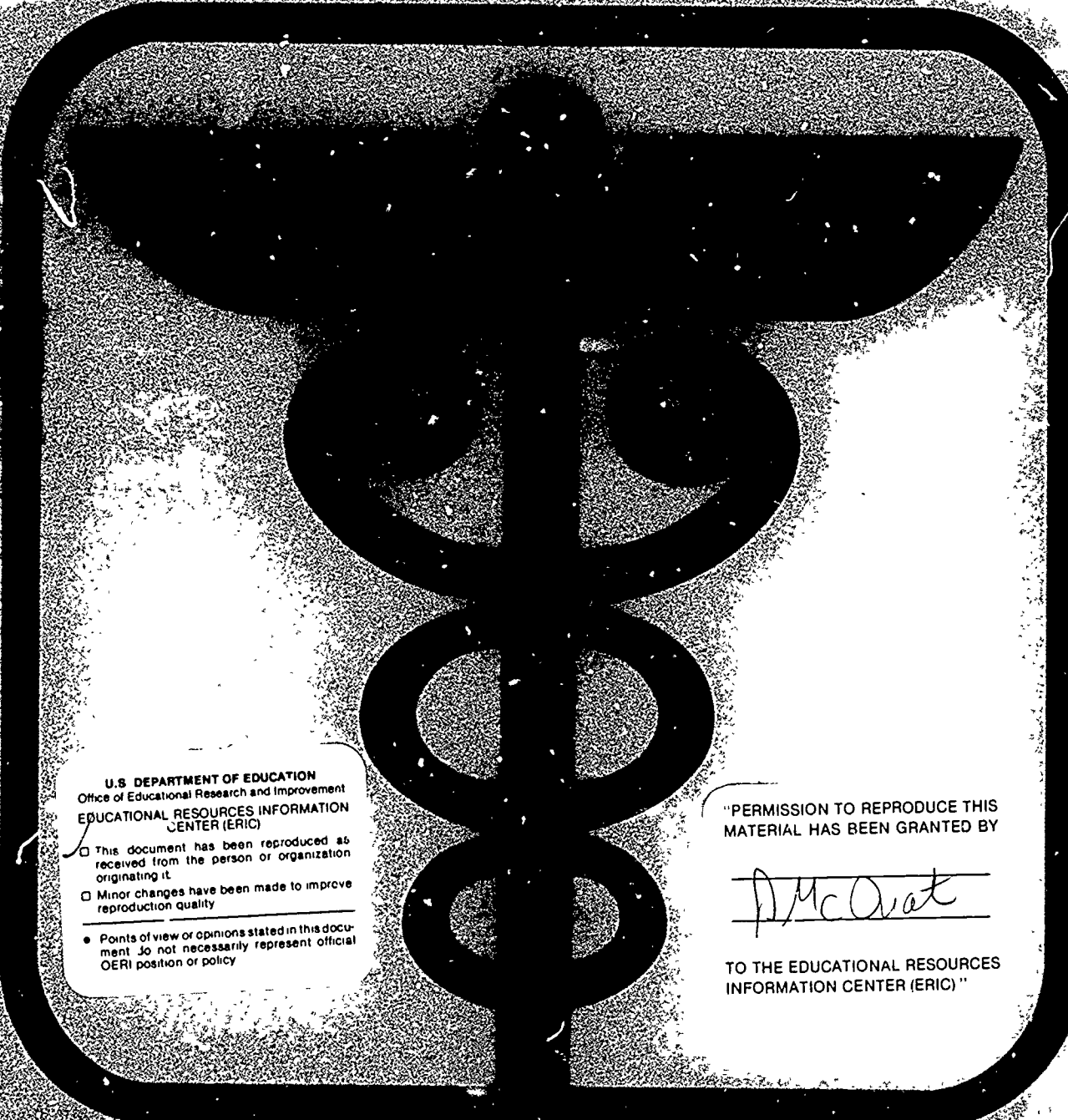
VOCATIONAL EDUCATION PROGRAM COURSES STANDARDS

July, 1987

Health Occupations Education

ED289034

0049200



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. McAuliffe

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "

INTERNATIONAL SYMPOSIUM ON HEALTH OCCUPATIONS EDUCATION

July, 1987

Health Occupations Education

ment
ATION
ed as
ization
mprove
educu-
official

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

D. McQuat

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

VOCATIONAL EDUCATION
PROGRAM COURSES STANDARDS

HEALTH OCCUPATIONS EDUCATION

July, 1987

FLORIDA DEPARTMENT OF EDUCATION
Division of Vocational, Adult, and Community Education
Bureau of Vocational Program and Staff Development
Program and Staff Development Section
Tallahassee, Florida 32399

(904) 488-7019

FOREWORD

Section 228.041 Florida Statutes defines vocational education as consisting of four categories or types of instruction:

1. Exploratory courses designed to give students initial exposure to skills and attitudes associated with a broad range of occupations in order to assist them in making informed decisions regarding their future academic and occupational goals;
2. Practical arts courses designed to teach students practical generic skills which, though applicable to some occupations, are not designed to prepare students for entry into a specific occupation;
3. Job preparatory programs designed to provide students with the competencies necessary for effective entry into an occupation;
4. Supplemental courses designed to enable persons who are or have been employed in a specific occupation to upgrade their competencies in order to re-enter or maintain stability or advance within their occupations.

This document contains vocational education program courses standards (curriculum frameworks and student performance standards) for exploratory courses, practical arts courses and job preparatory programs offered at the secondary or postsecondary level as a part of Florida's comprehensive vocational education program. Vocational education program courses standards are established pursuant to Section 233.0682, Section 240.355, Section 233.011, and Section 232.2454, Florida Statutes, for school districts and community colleges. State Board of Education Rule 6A-6.571, Criteria for Qualification for Special Vocational-Technical Education Program Courses, provides the basis for the development and dissemination of this document.

Each program courses standard is composed of two parts: a curriculum framework and student performance standards. The curriculum framework includes our major sections: major concepts/content, laboratory activities, special notes, and intended outcomes. Student performance standards are listed for each intended outcome. For secondary job preparatory programs, courses have been designated with student performance standards listed for each course.

The standards do not prescribe how instruction should be delivered since decisions relative to the delivery of instruction must be made by school districts and community colleges within the context of local conditions. The Division of Vocational, Adult, and Community Education, Florida Department of Education, supports the belief that competency-based vocational education is the most effective means of providing programs and courses that conform to these established standards.

Program and course standards are based upon competencies required for entry, advancement, and upgrading in occupations in the vocational program areas of Agriculture, Business, Diversified, Health Occupations, Home Economics, Industrial Arts, Industrial, Marketing, and Public Service Education. Standards or courses designed for handicapped, disadvantaged, and other special needs persons are also provided. The standards are reviewed annually and revised as needed based upon changes in occupations utilizing input from business and industry employers, licensing and credentialing agencies, professional associations, state technical committees, and other representatives of the private sector.

TABLE OF CONTENTS

	PAGE
FOREWORD	i
INTRODUCTION	v
Orientation to Health and Public Service Occupations	1
Exploration of Health Occupations	5
Practical Health Skills I	9
Practical Health Skills II	13
Principles of Wellness	17
Basic X-Ray Machine Operator	21
Cardiopulmonary Technology	27
Central Service Technology	33
Cytotechnology	37
Dental Assisting	41
Dental Hygiene	47
Dental Laboratory Assisting	53
Dental Laboratory Technology	61
Diagnostic Medical Sonography	65
Electrocardiograph Aide	71
Electrocardiograph Technology	75
Electroencephalograph Technology	79
Emergency Medical Technology - EMT	85
Emergency Medical Technology - Paramedic	91
Funeral Services	97
Health Care Management	109
Health Occupations Cooperative Education - OJT	113
Health Service Occupations	117
Health Unit Coordinator	127
Hearing Aid Dispensing	135
Histologic Technology	139
Home Health Aide	143
Hospital Admitting Officer	147
Hospital Housekeeping Management	151
Massage	157
Medical Assisting	161
Medical Laboratory Assisting	167
Medical Laboratory Technology (Associate Degree)	175
Medical Laboratory Technology (Certificate)	183
Medical Records Technology	189
Medical Records Transcribing	195
Mental Health/Human Services Technology	199
Nuclear Medical Technology	205
Nursing Assisting	209
Nursing (Associate Degree) R.N.	217
Occupational Therapy Assistant	225
Ophthalmic Dispensing	229
Ophthalmic Laboratory Dispensing Technology	233
Optometric Assisting	237
Optometric Technology	241
Perfusionist	247
Pharmacy Assisting	251
Phlebotomy Technician	255
Physical Therapy Aide	261
Physical Therapy Assisting	265
Practical Nursing	271
Psychiatric Technician	281
Radiation Protection Technology	287
Radiation Therapy Technology	293
Radiographer	299
Respiratory Therapy	305
Respiratory Therapy Technician	311
Surgical Technology	317
Unit Treatment and Rehabilitation	321
Veterinarian Technology	325
Vision Care Assisting	335

INTRODUCTION

HEALTH OCCUPATIONS EDUCATION

Health Occupations Education comprises the body of subject matter and planned learning experiences designed to prepare persons with competencies required to assist qualified health professionals in providing diagnostic, therapeutic, preventive, restorative, and rehabilitative services to patients in health care facilities, in the home, and in the community. The educational programs offered in Florida may be grouped into the following occupational cluster areas: Dental, Environmental Health, Medical Laboratory, Human Services/Mental Health, Nursing, Ophthalmic, Radiologic, Rehabilitation, and Miscellaneous Health Occupations.

Clinical affiliations or agreements between educational institutions and health care agencies are an integral and critical component of health occupations education programs. There is an effective integration of didactic experience and clinical experience formalized by written contracts of agreement between the two parties. The programs are designed not only to develop clinical or technical skills but also to teach roles, relationships, and responsibilities in the practice setting.

Techniques for the regulation of workers in the health occupations have been developed and administered as a means of safeguarding the public against unqualified workers. Therefore, regulatory procedures involving licensure, certification, or registration in certain of the health occupations have been established that affect program operation. In Florida, graduates from 15 of the programs must be licensed by the State as a requirement for employment. In addition, graduates from an additional 10 programs should be eligible for certification by various certifying agencies at the national level.

Health Occupations Education programs include instruction relating to the free enterprise system and to consumer education. This instruction is designed to make the students aware that the free enterprise or competitive economic system exists as the prevailing economic system in the United States. Also, in regard to consumer education, instruction is provided to help students become more knowledgeable in acquiring goods, services, and credit in the most economical and effective manner. Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice.

The cooperative education method of instruction is appropriate for many of the health occupations education programs. However, listed below are those programs for which the cooperative method may not be used:

- Dental Hygiene
- Emergency Medical Technology - EMT
- Emergency Medical Technology - Paramedic
- Practical Nursing
- Nursing (Associate Degree) R. N.
- Radiologic Technology
- Radiation Therapy

The vocational student organization, Health Occupations Students of America, is an appropriate method for providing leadership training experiences and for reinforcing specific knowledge and skills in the Health Occupations Education programs. The activities of the organization, when provided, must be an integral part of the specific program and must complement the objectives of the program. Many professional associations have provided for student membership in their respective societies. Students should be encouraged to participate in these professional societies particularly if the society provides leadership experiences or reinforces role relationships.

Student performance standards are presented for each curriculum framework outcome. These are the minimum standards on which program completers will be evaluated. School districts may add to these minimum standards as the particular area needs or employer requirements are considered.

In order for revisions to be incorporated in these program standards, comments must have been received by the Occupational Program Director prior to November 1 of each year. It must be realized that not all changes suggested may be realistic within the confines of the regulatory agency concerned.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

COURSE TITLE: Orientation to Health and Public Service Occupations

CODE NUMBER: Secondary 8400110

Postsecondary _____

Florida CIP H017.9999OR

SECONDARY

SCHOOL CREDITS 0.50

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): x 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other 21

CERTIFICATION COVERAGE: HEALTH ED 4 VOC HME EC 4
Any Health and Public Service Occupations Education
Certification listed in this area.

- I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to acquaint students with career opportunities and job requirements in health and public service occupations which will enable students to consider career objectives and interests.

The students will be provided with basic information about the kinds of jobs and workers involved, the various career paths, financial rewards, occupational hazards, and educational requirements. Information concerning the practices for promoting good health and public service is included.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Special projects that are related to occupational clusters are provided, including making dental molds, designing eye glasses, fingerprinting, role playing activities of daily living as a handicapped individual, developing an emergency evacuation plan for their own home, menu planning, and visualizing X-rays.
- III. SPECIAL NOTE: Guest speakers from industry make an important contribution to the effectiveness of this program/course.
- This course may be offered for varying lengths of time in combination with other orientation courses or for a maximum of .5 credit.
- IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Discuss the advantages/disadvantages of selected health and public service occupations.
02. Identify own personal characteristics, study habits, and needs.
03. List the educational preparation for each occupation presented.
04. Identify practices to promote good health.
05. Name persons who have made important contributions in the field of health and public service occupations.

- 01.0 DISCUSS THE ADVANTAGES/DISADVANTAGES OF SELECTED HEALTH AND PUBLIC SERVICE OCCUPATIONS--The student will be able to:
- 01.01 List at least three occupations for each of the clusters presented
 - 01.02 State the advantages and disadvantages of one occupation in each cluster including the following factors: number of job opportunities, salary range, fringe benefits, working conditions, occupational hazards.
 - 01.03 Identify factors which should be considered in making a career choice.
- 02.0 IDENTIFY OWN PERSONAL CHARACTERISTICS, STUDY HABITS, AND NEEDS--The student will be able to:
- 02.01 Complete a self inventory to include interests, abilities, and activity preference.
 - 02.02 Explain how the choice of an occupation can effect lifestyle.
 - 02.03 List the characteristics of a good employee.
- 03.0 LIST THE EDUCATIONAL PREPARATION FOR EACH OCCUPATION PRESENTED--The student will be able to:
- 03.01 Complete an educational requirement worksheet for each occupation presented.
 - 03.02 Define and give an example of the following terms:
on-the-job training
unskilled labor
semi-skilled labor
vocational education
technical education
professional education
apprenticeship education
 - 03.03 Interpret the following abbreviations:

AS degree	AA degree	
BS degree	BA degree	
MS degree	MA degree	
Ph.D	Ed.D	MD
DVM	OD	DDS
D.O.	DDM	J.D.
- 04.0 IDENTIFY PRACTICES TO PROMOTE GOOD HEALTH--The student will be able to:
- 04.01 List six positive health habits.
 - 04.02 Name at least one health habit essential for a productive worker and explain your choice.
 - 04.03 Explain the health benefits of handwashing.
- 05.0 NAME PERSONS WHO HAVE MADE IMPORTANT CONTRIBUTIONS IN THE FIELD OF HEALTH AND PUBLIC SERVICE OCCUPATIONS--The student will be able to:
- 05.01 Name the Father of Medicine.
 - 05.02 List the contributions of Joseph Lister, Louis Pasteur, Pierre and Marie Curie, Jonas Salk, Alexander Fleming, Anthony Von Leewenhook, and Florence Nightingale.
 - 05.03 Name the person who received the first artificial heart.
 - 05.04 Name the first woman to serve on the Supreme Court.
 - 05.05 Identify the contributions of J. Edgar Hoover and F. Lee Bailey.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

COURSE TITLE: Exploration of Health Occupations

CODE NUMBER: Secondary 8400210

Postsecondary _____

Florida CIP HO17.9999EX

SECONDARY
SCHOOL CREDITS 0.5

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): x 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational x Other 21

CERTIFICATION COVERAGE:	NURSING ED @5	DENTL ASST 7	LAB TECH 7
	MED RECTEC 7	LAB ASST 7	RESP TEC 7
	MED ASST 7	VOC HME EC 4	DENTAL HYG @5
	TEC X RAY 7	PRAC NURSE 7	RESP THER 7
	PH THERTEC 7	MENT HEAL 7	PARAMEDIC 7

I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to give students initial exposure to the skills and attitudes associated with a broad range of occupations relating to careers in health, including job requirements and tasks performed, to assist students in making informed decisions regarding their future academic and occupational goals.

The content includes, exploratory activities relating to all health occupational clusters. The program also includes an introduction to medical ethics, consumerism, characteristics of health care workers, community health agencies and basic computer literacy.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. LABORATORY ACTIVITIES: Special projects that are related to each occupational cluster are provided, including role playing activities related to specific careers, visualizing x-rays and crutch-walking, operating the microscope, making orthopedic casts, and specific lab procedures.

III. SPECIAL NOTE: Guest speakers from industry make an important contribution to the effectiveness of this course.

IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

01. Discuss the advantages/disadvantages of occupational clusters.
02. Describe the legal and ethical responsibilities of the health care worker.
03. List selected guidelines on how to be a better health care consumer.
04. Evaluate personal characteristics of health care workers.
05. Identify health agencies and services they provide.
06. Demonstrate computer literacy.

- 01.0 DISCUSS THE ADVANTAGES/DISADVANTAGES OF OCCUPATIONAL CLUSTERS--The student will be able to:
- 01.01 List at least three occupations for each of the clusters presented.
 - 01.02 State the advantages/disadvantages of one occupation in each cluster including the following factors: employment outlook, salary benefits, fringe benefits, working conditions, occupational hazards, career advancement ladder, educational requirements, and licensure/certification requirements.
- 2.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE HEALTH CARE WORKER--The student will be able to:
- 02.01 Define the following terms: malpractice, negligence, assault, invasion of privacy, quackery, ethics and law.
 - 02.02 Identify five legal and ethical responsibilities of health care workers.
 - 02.03 Create a simulated situation, such as role playing, making posters, T.V. commercials, etc., that depicts ethical and unethical conduct.
- 3.0 LIST SELECTED GUIDELINES ON HOW TO BE A BETTER HEALTH CARE CONSUMER--The student will be able to:
- 03.01 Define the following terms: consumerism and quackery.
 - 03.02 Name two factors which should be considered in selecting a family physician.
 - 03.03 Develop rational criteria for purchasing health care products and services.
- 4.0 EVALUATE PERSONAL CHARACTERISTICS OF HEALTH CARE WORKERS--The student will be able to:
- 04.01 Describe the characteristics of selected health care workers.
 - 04.02 Describe own personal characteristics.
 - 04.03 Compare own personal characteristics to those of selected health care workers.
- 05.0 IDENTIFY HEALTH AGENCIES AND SERVICES THEY PROVIDE--The student will be able to:
- 05.01 Define the term "health agency".
 - 05.02 List the classifications of health agencies.
 - 05.03 Distinguish between public and private hospitals.
 - 05.04 List at least three departments within a hospital, the persons who work there and the kind of services they provide.
 - 05.05 Define the term "H.M.O.".
 - 05.06 Identify at least three community health agencies, such as American Cancer Society, Easter Seal, Hospice, Public Health Department, Home Health Agencies and describe the services they provide.
 - 05.07 Discuss costs of health care.
- 06.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:
- 06.01 Define the following terms: computer; data; input; output; hardware; software; language; processing - word, data; memory - ROM, RAM; program; terminal; peripheral devices and keyboard characters and control.
 - 06.02 Operate a computer by performing the following steps: turn the equipment on and off; load a program; run and use a program; store a program; display a program and enter an execute a simple program.
 - 06.03 Identify the safety precautions that must be observed in using equipment.
 - 06.04 Describe the general use of computer technology in health care.
 - 06.05 Discuss the advantages and disadvantages in the use of different computers.
 - 06.06 Use the computer to explore selected occupations.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

COURSE TITLE: Practical Health Skills I

CODE NUMBER: Secondary 8400310

Postsecondary _____

Florida CIP H017.9999PA

SECONDARY
SCHOOL CREDITS .5

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 x 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational x Other 21

CERTIFICATION COVERAGE:

NURSING ED @5	DENTAL HYG @5	TEC MED @7
TEC X-RAY 7	DENTL ASST 7	PRAC NURSE 7
LAB TEC 7	RESP THER 7	MED RECTEC 7
PH THERTEC 7	LAB ASST 7	MENT HEAL 7
RESP TEC 7	PARAMEDIC 7	MED ASST 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide students with practical generic skills in health occupations which, though applicable to some health occupations, are not designed to prepare students for entry into a specific occupation.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this course to enhance learning.

- III. SPECIAL NOTE:

- IV. INTENDED OUTCOMES After successfully completing this course, the student will be able to:

01. Perform first aid and cardiopulmonary resuscitation.
02. Distinguish between mental health and mental illness.
03. Perform basic health skills.
04. Identify medical specialities.
05. Identify factors relating to consumer health.
06. Recognize the importance of personal health.
07. Identify the needs of the terminally ill.

- 01.0 PERFORM FIRST AID AND CARDIOPULMONARY RESUSCITATION--The student will be able to:
- 01.01 Recognize air obstruction and take proper action.
 - 01.02 Administer cardiopulmonary resuscitation (CPR).
 - 01.03 Describe wounds and their treatment.
 - 01.04 Identify shock and treatment.
 - 01.05 Recognize types of poisoning and treatment.
 - 01.06 Identify classifications of burns and their appropriate treatment.
 - 01.07 Describe ill effects of heat and cold.
 - 01.08 Demonstrate treatment for head injury and internal injury.
 - 01.09 Describe treatment for infection, tetanus, and animal bites.
 - 01.10 Demonstrate immobilization for suspected fractures and spinal cord injuries.
 - 01.11 Administer first aid for heart attack, apoplexy, fainting and epilepsy, and diabetic reactions.
 - 01.12 Describe first aid of foreign objects-in the eye, ear, air passages, and food passages.
 - 01.13 Perform rescue and transfer of victim.
 - 01.14 Determine when a doctor's care is necessary.
 - 01.15 Report an accident.
 - 01.16 Identify modes of transmissions of disease.
 - 01.17 Explain medical asepsis.
 - 01.18 Recognize pallor and cyanosis and take appropriate action.
- 02.0 DISTINGUISH BETWEEN MENTAL HEALTH AND MENTAL ILLNESS--The student will be able to:
- 02.01 Recognize deviant behavior and take appropriate action.
 - 02.02 Define the concept of good health.
- 03.0 PERFORM BASIC HEALTH SKILLS--The student will be able to:
- 03.03 Perform proper handwashing.
 - 03.02 Demonstrate vital signs procedure and recognize deviation from normal.
 - 03.03 Demonstrate use of a weight scale.
 - 03.04 Measure and record weight in metric and apothecary systems.
 - 03.05 Measure and record height in apothecary and metric systems.
- 04.0 IDENTIFY WITH MEDICAL SPECIALITIES--The student will be able to:
- 04.01 Identify physician specialists and their titles.
 - 04.02 Choose a physician, dentist, hospitals, and a pharmacy according to individual needs.
 - 04.03 Define Gerontology.
- 05.0 IDENTIFY FACTORS RELATING TO CONSUMER HEALTH--The student will be able to:
- 05.01 Define "Medical Consumerism."
 - 05.02 Define "Medical Quackery."
 - 05.03 Define "Old Wives Tales."
 - 05.04 Define "Generic Drugs."
 - 05.05 Select insurance policy and health maintenance organization.
 - 05.06 Select funeral home/service.
- 06.0 RECOGNIZE THE IMPORTANCE OF PERSONAL HEALTH--The student will be able to:
- 06.01 Identify the hazards of smoking, drug abuse, and alcohol.
 - 06.02 Describe risk factors which predispose one to illness.
 - 06.03 Define mental retardation and causes.
 - 06.04 Describe five growth stages.
 - 06.05 Identify the components of good nutrition.
 - 06.06 Define rest and the need of adequate rest.
 - 06.07 List the seven warning signs of cancer.

07.0 IDENTIFY THE NEEDS OF THE TERMINALLY ILL--The student will be able to:

- 07.01 Discuss death and dying.
- 07.02 Define stages of grief.
- 07.03 Describe mortuary science.
- 07.04 Describe services provided by funeral directors/funeral homes.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
COURSE TITLE: Practical Health Skills II
CODE NUMBER: Secondary 8400330 Postsecondary _____
Florida CIP H017.9998PA

SECONDARY SCHOOL CREDITS .5 COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ x 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x Other 21

CERTIFICATION COVERAGE: NURSING ED @5 DENTAL HYG @5 TEC MED @7
TEC X RAY 7 DENTL ASST 7 PRAC NURSE 7
LAB TEC 7 RESP THER 7 MED RECTEC 7
PH THERTEC 7 LAB ASST 7 MENT HEAL 7
RESP TEC 7 PARAMEDIC 7 MED ASST 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide students with practical life and health management skills.
- Students would be introduced to concepts that promote understanding of one's responsibility for decision making in their emotional development and physical well-being.
- II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this course to enhance learning.
- III. SPECIAL NOTE:
- IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:
01. Perform basic communication skills.
 02. Recognize the importance of employability skills related to health occupations.
 03. Demonstrate the application of principles of nutrition.
 04. Identify factors that affect emotional development.
 05. Recognize the importance of family dynamics.
 06. Demonstrate responsible consumer decision making regarding health screening and health care management.
 07. Demonstrate responsible consumer decisions in the use of alcohol, drugs and tobacco.
 08. Perform the Heimlich Maneuver and CPR.

- 01.0 PERFORM BASIC COMMUNICATION SKILLS--The student will be able to:
- 01.01 Demonstrate examples of verbal and non-verbal communication.
 - 01.02 Discuss negative and positive values of defense mechanisms.
 - 01.03 Demonstrate ability to follow written and oral directions.
 - 01.04 Demonstrate proper telephone techniques.
- 02.0 RECOGNIZE THE IMPORTANCE OF EMPLOYABILITY SKILLS RELATED TO HEALTH OCCUPATIONS--The student will be able to:
- 02.01 Discuss the demanding time schedule expected of the health care worker (24 hrs/day, 7 days/week, 52 weeks/year).
 - 02.02 Identify factors that explain why health occupations are emotionally and physically demanding.
 - 02.03 Discuss the need for good attendance and punctuality for the health care worker.
 - 02.04 Discuss the difference between constructive and non-constructive criticism.
- 03.0 DEMONSTRATE THE APPLICATION OF PRINCIPLES OF NUTRITION--The student will be able to:
- 03.01 Plan a balanced diet for a toddler, an adolescent, an adult and a geriatric adult.
 - 03.02 Discuss the special needs of a person with high blood pressure.
 - 03.03 Discuss the special needs of a diabetic.
 - 03.04 Define the following terms: a) anorexia, b) bulimia, c) obesity, d) malnutrition.
- 04.0 IDENTIFY FACTORS THAT AFFECT EMOTIONAL DEVELOPMENT--The student will be able to:
- 04.01 Discuss how physical factors influence emotional behavior.
 - 04.02 Discuss how personal values and goals can be influenced by socio-economic conditions.
 - 04.03 Discuss the origin and management of stress.
 - 04.04 Discuss the relationship of suicide to depression.
- 05.0 RECOGNIZE THE IMPORTANCE OF FAMILY DYNAMICS--The student will be able to:
- 05.01 Define the term, "Family", as it relates to each student.
 - 05.02 Discuss the 1) Ideal Family (ex: Cosby Show), 2) Single Parent Family, 3) Teenage Parent.
 - 05.03 Discuss 1) Child abuse and 2) Spouse Abuse.
- 06.0 DEMONSTRATE RESPONSIBLE CONSUMER DECISION MAKING REGARDING HEALTH SCREENING AND HEALTH CARE MANAGEMENT--The student will be able to:
- 06.01 List five or more ways one can obtain health screening/physical exams.
 - 06.02 Demonstrate Vision Screening using Snellen Chart.
 - 06.03 Demonstrate ability to test for hearing using tuning fork or aullemeter.
 - 06.04 Demonstrate ability to test reflexes.
 - 06.05 Demonstrate ability to perform dental screening.
- 07.0 DEMONSTRATE RESPONSIBLE CONSUMER TECHNIQUES REGARDING ALCOHOL, DRUGS, AND TOBACCO--The student will be able to:
- 07.01 Discuss use versus abuse of alcohol.
 - 07.02 List five or more signs of drug dependency/abuse.
 - 07.03 Discuss misuse of over the counter drugs.
 - 07.04 Identify methods used in Stop Smoking Programs.

PRACTICAL HEALTH SKILLS II - continued

08.0 PERFORM THE HEIMLICH MANEUVER AND CPR--The student will be able to:

- 08.01 Recognize airway obstruction.
- 08.02 Successfully palpitate carotid pulse.
- 08.03 Administer CPR.
- 08.04 Recognize signs of choking.
- 08.05 Administer Heimlich Maneuver.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

COURSE TITLE: Principles of Wellness

CODE NUMBER: Secondary 8400320

Postsecondary _____

Florida CIP HO17.9997PA

SECONDARY

SCHOOL CREDITS 1

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): 7-9 x 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational x Other 21

CERTIFICATION COVERAGE:

NURSING ED @ 5	PRAC NURSE 7	TEC MED @7
TEC X RAY 7	DENTL ASST 7	MED RECTEC 7
LAB TEC 7	RESP THER 7	MENT HEAL 7
PH THEKTEC 7	LAB ASST 7	MED ASST 7
RESP TEC 7	PARAMEDIC 7	
DENTAL P'G @5		

- I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide students with practical generic competencies related to health decisions all individuals will make during their lifetime.

The content includes, but is not limited to communication, adaptations of health principles to homes, identification of rights and responsibilities of individuals in health and disease, safety in carrying out medical instructions, identification of important wellness principles, control of hazards in the home, community health services provided, legal aspects for the health consumer, stress, and the role of the computer in the health care industry.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory activities contribute to the development of skills. Demonstrations and return demonstrations provide students with an understanding of correct procedure methods and enhance learning. Special project assignments are utilized.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction is not appropriate for this course.

- IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

1. Describe the services provided by health occupations career clusters.
2. Demonstrate by written, oral or performance evaluations common health skills.
3. Explain your personal role in Disease Prevention and Maintenance of Health.
4. Explain the varied aspects of safety, related to the home environment.
5. Discuss legal aspects for the health consumer.
6. Develop a personal conditioning plan for fitness and sports.
7. Recognize the role of the computer in the health care industry.
8. Discuss stress and its effect on the individual.

- 01.0 DESCRIBE THE SERVICES PROVIDED BY HEALTH OCCUPATIONS CAREER CLUSTERS--The student will be able to:
- 01.01 Identify the basic components of the health care delivery system.
 - 01.02 List at least 3 types of services provided by the following career clusters:
 - a. Health Care Planning and delivery system.
 - b. Dental services.
 - c. Diagnostic services.
 - d. Mental Health services.
 - e. Nursing and Nursing related services.
 - f. Ophthalmic services.
 - g. Rehabilitation services.
 - h. Therapeutic services.
 - i. Emergency Medical Services.
 - j. Health Information and communication.
 - k. Physicians and medically related services.
 - l. Medical instrumentation.
 - m. Environmental services.
 - n. Animal Health Services.
 - 01.03 List at least two occupations for each cluster.
 - 01.04 Identify services provided by other health care agencies.
- 02.0 DEMONSTRATE BY WRITTEN, ORAL OR PERFORMANCE EVALUATIONS COMMON HEALTH SKILLS--The student will be able to:
- 02.01 Perform handwashing techniques.
 - 02.02 Take and record temperature, pulse, respiration and blood pressure.
 - 02.03 Take and record height and weight.
 - 02.04 Convert common weights, measures and volumes to metric.
 - 02.05 Demonstrate standard first aid procedures.
 - 02.06 Demonstrate CPR and choking maneuver.
 - 02.07 Demonstrate effective communication skills.
 - 02.08 Recognize verbal and non-verbal barriers to communication.
 - 02.09 Demonstrate safe transport and transfer techniques in the home and in emergency situations.
 - 02.10 Define, pronounce and spell those common medical terms and abbreviations necessary to safely carry out medical instructions.
 - 02.11 Demonstrate the use of good body mechanics.
- 03.0 EXPLAIN YOUR PERSONAL ROLE IN DISEASE PREVENTION AND MAINTENANCE OF HEALTH--The student will be able to:
- 03.01 Identify his/her rights and responsibilities as a patient.
 - 03.02 Identify criteria useful in choosing health care products or services.
 - 03.03 Describe the body's lines of defense against disease.
 - 03.04 Describe practices to promote good health.
 - 03.05 Identify required immunizations for children, adults and pets.
 - 03.06 Recognize the direct relationship between environmental problems and community health.
- 04.0 EXPLAIN THE VARIED ASPECTS OF SAFETY, RELATED TO THE HOME ENVIRONMENT--The student will be able to:
- 04.01 Assemble a first aid kit using materials and supplies commonly found in the home.
 - 04.02 Adapt basic medical asepsis procedures to the home situation to control the spread of disease.
 - 04.03 Explain the importance of following medical instructions.
 - 04.04 Discuss control of poisons and hazardous materials commonly found in the home.
 - 04.05 Develop a plan for fire safety in the home, including prevention and evacuation.

PRINCIPLES OF WELLNESS - Continued

- 05.0 DISCUSS LEGAL ASPECTS FOR THE HEALTH CONSUMER--The student will be able to:
- 05.01 Explain how the Good Samaritan Law protects the first responder in emergency situations.
 - 05.02 Define the "Living Will."
 - 05.03 Discuss legal procedures for donating organs.
 - 05.04 List identification techniques used in forensic science.
- 06.0 DEVELOP A PERSONAL CONDITIONING PLAN FOR FITNESS AND SPORTS--The student will be able to:
- 06.01 Describe the benefits of exercise and weight control.
 - 06.02 Define conditioning.
 - 06.03 Identify factors to be considered in the selection of exercise and/or sports.
 - 06.04 Identify warm-up and cool-down techniques used to prevent injuries.
 - 06.05 Distinguish between fact and fallacy in selecting a diet for fitness and sports competition.
- 07.0 RECOGNIZE THE ROLE OF THE COMPUTER IN THE HEALTH CARE INDUSTRY--The student will be able to:
- 07.01 List the vital statistics data stored in the public health computer system.
 - 07.02 Discuss how the computer is used for other types of health record-keeping.
 - 07.03 Discuss modern uses of the computer in diagnosis and treatment.
 - 07.04 List pharmaceutical uses of the computer.
- 08.0 DISCUSS STRESS AND ITS EFFECT ON THE INDIVIDUAL--The student will be able to:
- 08.01 Define stress.
 - 08.02 Discuss individual differences in reacting to stressors.
 - 08.03 Identify manifestations of negative reactions to stress.
 - 08.04 Discuss various crises intervention services available in the local community.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Basic X-Ray Machine Operator

CODE NUMBER: Secondary _____

Postsecondary RTE0095

Florida CIP HO17.020902

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC X-RAY 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as basic x-ray machine operators or to provide supplemental training for persons previously or currently employed in this occupational area.

The content includes, but is not limited to, patient care, radiation protection, patient positioning, radiographic equipment and accessories, image production and evaluation, administrative and personal competence, and communication and employability skills. Legal and ethical responsibilities, health-illness-health concepts, emergency procedures including CPR, first aid, safety and security procedures, medical terminology, and anatomy and physiology are basic to all health occupation programs.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation exercises and laboratory activities should be provided using energized radiographic equipment and facilities. Special emphasis should be placed on radiation protection and patient positioning. Clinical learning experiences in a radiographic room and related accessories should be an integral part of this program.
- III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this instructional program.

The program sponsor should be familiar with the guidelines and requirements of the American College of Radiology to that program completers will be eligible to take the Florida certification examination administered by the Florida Department of Health and Rehabilitative Services. Florida requires licensing of graduates by the DHRS. Articulation into the Radiographer program should be considered in planning this program.

The cooperative method on instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 240.149 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 450 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Provide patient care.
02. Provide radiation protection to patients and staff.
03. Position patient.
04. Operate and maintain radiographic equipment/accessories.
05. Process radiographic film.
06. Evaluate x-ray film quality.
07. Perform administrative activities.
08. Develop personal competence.
09. Demonstrate communication skills.
10. Demonstrate employability skills.

- 01.0 PROVIDE PATIENT CARE--The student will be able to:
- 01.01 Confirm patients' identification.
 - 01.02 Explain radiographic procedure to patient.
 - 01.03 Interview patients for possible sensitivity to contrast media.
 - 01.04 Provide for patients' comfort.
 - 01.05 Preserve patients' dignity.
 - 01.06 Move patient from a wheel chair to the radiographic table and back.
 - 01.07 Move patient from a stretcher to the radiographic table and back.
 - 01.08 Move patient from a chair to the radiographic table and back.
 - 01.09 Check integrity of all equipment attached to patients.
 - 01.10 Use sterile techniques.
 - 01.11 Prepare patients for radiograph/contrast media examinations.
 - 01.12 Select contrast media equipment.
 - 01.13 Prepare contrast media.
 - 01.14 Administer contrast media under direct supervision of a licensed physician.
 - 01.15 Identify and report patient reaction to contrast media.
 - 01.16 Address the needs of elderly patients.
 - 01.17 Address the needs of pediatric patients.
 - 01.18 Address the needs of trauma patients.
 - 01.19 Address the needs of handicapped patients.
 - 01.20 Take and record patient's vital signs.
 - 01.21 Use aseptic techniques.
 - 01.22 Attend to post-examination needs of patients.
 - 01.23 Identify emergency situations.
 - 01.24 Perform basic first aid procedures.
- 02.0 PROVIDE RADIATION PROTECTION TO PATIENTS AND STAFF--The student will be able to:
- 02.01 Explain biological effects of ionizing radiation.
 - 02.02 Determine feasibility of pregnancy.
 - 02.03 Identify and select gonadal shielding.
 - 02.04 Select fastest film/screen combination.
 - 02.05 Determine shortest possible exposure time.
 - 02.06 Identify and use personnel radiation monitoring devices.
 - 02.07 Identify and select protective lead clothing.
 - 02.08 Stand behind protective barrier during exposure.
 - 02.09 Secure the area during exposure.
 - 02.10 Minimize repeat radiographs.
 - 02.11 Identify and use the principles of time, distance, and shielding.
- 03.0 POSITION PATIENT--The student will be able to:
- 03.01 Identify the anatomical part to be radiographed.
 - 03.02 Locate the anatomical landmarks.
 - 03.03 Apply immobilization devices.
 - 03.04 Apply positioning aids.
 - 03.05 Apply lead blockers/strips.
 - 03.06 Position patients for upper and lower extremities radiographs.
 - 03.07 Position patients for abdominal area radiographs.
 - 03.08 Position patients for spine radiographs.
 - 03.09 Position patients for skull radiographs.
 - 03.10 Position patients for contrast media radiographs.
 - 03.11 Position patients for foreign body localization.
 - 03.12 Position patients for chest radiographs.
- 04.0 OPERATE AND MAINTAIN RADIOGRAPHIC EQUIPMENT/ACCESSORIES--The student will be able to:
- 04.01 Activate equipment.
 - 04.02 Select film/screen combinations.
 - 04.03 Select film holder size.
 - 04.04 Apply lead markers.
 - 04.05 Install cassette in upright film holder.
 - 04.06 Install cassette in bucky tray.
 - 04.07 Place film holder on table top.

BASIC X-RAY MACHINE OPERATOR - Continued

- 04.08 Adjust radiographic tables.
 - 04.09 Set radiographic tube distance.
 - 04.10 Set collimator.
 - 04.11 Consult technique chart.
 - 04.12 Select bucky/non-bucky control.
 - 04.13 Set kV control.
 - 04.14 Set mA control.
 - 04.15 Set timer control.
 - 04.16 Take radiographs.
 - 04.17 Remove exposed film holder to protected area.
 - 04.18 Clean radiographic tables.
 - 04.19 Store unexposed film.
 - 04.20 Clean film holders, including screens.
 - 04.21 Replace light bulbs.
 - 04.22 Replace safe light filters.
 - 04.23 Identify and report radiographic equipment malfunctions.
- 05.0 PROCESS RADIOGRAPHIC FILM--The student will be able to:
- 05.01 Clean tanks.
 - 05.02 Mix chemicals.
 - 05.03 Check and set developer temperature.
 - 05.04 Select developing time.
 - 05.05 Secure developing room.
 - 05.06 Remove film from film holder.
 - 05.07 Place patient identification on film.
 - 05.08 Place film on hanger.
 - 05.09 Insert film in processing chemicals in correct sequence.
 - 05.10 Dry film.
 - 05.11 Perform daily maintenance for automatic processor.
 - 05.12 Start up automatic processor.
 - 05.13 Insert exposed film into automatic processor.
 - 05.14 Reload and store film holders.
 - 05.15 Remove dry film.
- 06.0 EVALUATE X-RAY FILM QUALITY--The student will be able to:
- 06.01 Place film on view box.
 - 06.02 Determine image sharpness.
 - 06.03 Determine proper contrast.
 - 06.04 Determine proper density.
 - 06.05 Evaluate anatomical positioning.
 - 06.06 Identify artifacts of film and their possible causes.
 - 06.07 Confirm patient identification on film.
 - 06.08 Confirm anatomical areas with markers.
 - 06.09 Review film with supervisor.
 - 06.10 Identify possible causes of radiographic errors.
- 07.0 PERFORM ADMINISTRATIVE ACTIVITIES--The student will be able to:
- 07.01 Order radiographic supplies.
 - 07.02 Order office/clerical supplies.
 - 07.03 Transcribe and file radiographic reports.
 - 07.04 Maintain radiographic film files.
 - 07.05 Maintain patient confidentiality.
 - 07.06 Schedule patients' examinations.
 - 07.07 Prepare and process incident reports.
- 08.0 DEVELOP PERSONAL COMPETENCE--The student will be able to:
- 08.01 Maintain CPR certification.
 - 08.02 Identify ways to keep current in technological developments.
 - 08.03 Interpret and comply with standard operating procedures.
 - 08.04 Reflect a positive attitude.
 - 08.05 Comply with ethical standards in medical practice.
 - 08.06 Comply with legal standards.
 - 08.07 Comply with state regulations.
 - 08.08 Determine personal liability needs.
 - 08.09 Maintain professional standards.
 - 08.10 Select and apply body mechanics.

09.0 DEMONSTRATE COMMUNICATION SKILLS--The student will be able to:

- 09.01 Establish patient rapport.
- 09.02 Maintain interpersonal communications with co-workers.
- 09.03 Confirm doctor's verbal orders.
- 09.04 Confirm doctor's written orders.
- 09.05 Apply telephone etiquette.
- 09.06 Use radiographic terminology.
- 09.07 Use appropriate body language.
- 09.08 Apply instruction for non-English speaking patients.
- 09.09 Use lay terminology with patients.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 10.01 Conduct a job search.
- 10.02 Secure information about a job.
- 10.03 Identify documents that may be required when applying for a job.
- 10.04 Complete a job application.
- 10.05 Demonstrate competence in job interview techniques.
- 10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 10.07 Identify acceptable work habits.
- 10.08 Demonstrate knowledge of how to make job changes appropriately.
- 10.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1967

PROGRAM TITLE: Cardiopulmonary Technology

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP H017.020100

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS x _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
x Postsecondary Vocational _____ Other _____

CERTIFICATION COVERAGE:

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as cardiovascular technologists and cardiopulmonary technologists.

The instruction includes, but is not limited to, performing examinations leading to diagnosis and treatment of patients with cardiac, pulmonary, and peripheral vascular disease, excluding exposure of patients to ionizing radiation. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation exercises using standard equipment is provided. Clinical laboratory experiences are integrated with the didactic portion of this program.
- III. SPECIAL NOTE: The program should meet the requirements of the American Medical Association, Committee on Allied Health Education and Accreditation (CAHEA), and or the National Society of Cardiopulmonary Technologists. Graduates should be prepared to take the appropriate national certification registry and/or state licensure examinations.

Students should be encouraged to become members of Health Occupations Students of America, Inc., and/or their appropriate professional organization, the National Society for Cardiopulmonary Technologists.

The typical length of this program for the average achieving student is an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Identify the anatomic structure and function of body systems in relation to disease states and services performed by the cardiopulmonary technologists.
02. Practice quality assurance and safety.
03. Adhere to legal, ethical and professional principles related to the practice of cardiopulmonary technology.
04. Assist in all aspects of invasive cardiovascular techniques with emphasis on cardiac catheterization.
05. Perform noninvasive cardiovascular techniques with emphasis on echocardiography and electrocardiography.
06. Perform noninvasive peripheral vascular studies.
07. Demonstrate knowledge of basic medical electronics and medical instrumentation.
08. Demonstrate knowledge of catastrophic event management.
09. Demonstrate knowledge of pharmacology related to cardiopulmonary drugs.
10. Perform patient care, record patient history, and practice acceptable communication skills.

Cardiopulmonary Technology - Continued

11. Perform pulmonary function testing.
12. Identify the relationship between pulmonary pathology and pulmonary function tests.
13. Perform and interpret blood gas analyses.
14. Demonstrate employability skills.

- 01.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DISEASE STATES AND SERVICES PERFORMED BY THE CARDIOPULMONARY TECHNOLOGISTS--The student will be able to:
- 01.01 Demonstrate knowledge of human anatomy and physiology with particular emphasis on the cardiovascular and pulmonary systems.
 - 01.02 Demonstrate knowledge of principles and methods of disease transmission and prevention.
 - 01.03 Recognize and identify the normal and abnormal data obtained from the various tests.
 - 01.04 Demonstrate knowledge of the vasculature structure of the upper and lower extremities as well as that of the head and neck.
 - 01.05 Demonstrate knowledge of basic pathological conditions of the cardiac and pulmonary systems.
 - 01.06 Demonstrate knowledge of obstructive and restrictive pulmonary disease.
- 02.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:
- 02.01 Demonstrate knowledge of institutional safety policy and procedures.
 - 02.02 Demonstrate knowledge of quality control techniques in blood gas analyses.
 - 02.03 Demonstrate knowledge of acceptable safety practices in cardiopulmonary instrumentation and radiation.
 - 02.04 Demonstrate knowledge of radiation safety precautions.
- 03.0 ADHERE TO LEGAL, ETHICAL AND PROFESSIONAL PRINCIPLES RELATED TO THE PRACTICE OF CARDIOPULMONARY TECHNOLOGY--The student will be able to:
- 03.01 Discuss the major dilemmas facing the American health care system.
 - 03.02 Describe the cardiopulmonary technology profession.
 - 03.03 Describe the sub-specialties of non-invasive cardiology, pulmonary, invasive cardiology and vascular technology.
 - 03.04 Identify the cardiopulmonary professional organizations and discuss their roles.
 - 03.05 Discuss the importance of certification, licensure and registration for the cardiopulmonary technologist (CPT).
 - 03.06 Develop the attitudes and work habits needed by a successful CPT.
 - 03.07 List the rights to which all hospitalized persons are entitled.
 - 03.08 Identify the duties and responsibilities of the Cardiopulmonary Technologists.
- 04.0 ASSIST IN ALL ASPECTS OF INVASIVE CARDIOVASCULAR TECHNIQUES WITH EMPHASIS ON CARDIAC CATHETERIZATION--The student will be able to:
- 04.01 Perform patient identification procedures per department policy.
 - 04.02 Demonstrate knowledge of cardiac angiographic and catheter insertion techniques.
 - 04.03 Demonstrate knowledge of routine and special procedures performed in the catheterization laboratory.
 - 04.04 Demonstrate knowledge of the interpretation of cardiac catheterization data.
 - 04.05 Calculate cardiac output by the Fick and green dye methods.
 - 04.06 Perform thermodilution cardiac outputs.
 - 04.07 Perform shunt calculations and recognize shunts from dye curves.
 - 04.08 Calculate resistances.
 - 04.09 Calculate valve areas by planimetry.
 - 04.10 Describe basic pacing studies.
 - 04.11 Correlate and calculate a complete right and left heart catheterization and assess the cardiac status from the calculated data.
 - 04.12 Recognize all right and left heart pressures on the monitor; record and measure these pressures.
 - 04.13 Identify arrhythmias during heart catheterization.
- 05.0 PERFORM NONINVASIVE CARDIOVASCULAR TECHNIQUES WITH EMPHASIS ON ECHOCARDIOGRAPHY AND ELECTROCARDIOGRAPHY--The student will be able to:

CARDIOPULMONARY TECHNOLOGY - Continued

- 05.01 Recognize abnormal heart sounds and murmurs and relate these findings to specific pathological conditions of the heart.
 - 05.02 Perform, measure and recognize normal/abnormal electrocardiograms and vectorcardiograms.
 - 05.03 Perform and recognize normal and abnormal phonocardiograms.
 - 05.04 Perform, measure, and recognize normal and abnormal M-Mode and 2-dimensional echocardiograms.
 - 05.05 Demonstrate knowledge of instruments used to perform noninvasive cardiovascular techniques.
- 06.0 PERFORM NONINVASIVE PERIPHERAL VASCULAR STUDIES--The student will be able to:
- 06.01 Demonstrate knowledge of the Doppler effect, and normal and abnormal peripheral vascular data.
 - 06.02 Demonstrate knowledge of selected Doppler equipment, its uses, and correlation to the Doppler effect.
 - 06.03 Demonstrate knowledge of venous, arterial and cerebrovascular studies performed by non-invasive Doppler techniques.
- 07.0 DEMONSTRATE KNOWLEDGE OF BASIC MEDICAL ELECTRONICS AND MEDICAL INSTRUMENTATION--The student will be able to:
- 07.01 Demonstrate knowledge of catheters used in the measurements of pressures.
 - 07.02 Operate the equipment used in diagnostic testing and physiological monitoring of a patient's condition.
 - 07.03 Identify the duties requiring patient care as related to electronic monitoring and diagnostic testing.
 - 07.04 Describe basic catheterization laboratory set-up and techniques.
 - 07.05 Describe the basic operating principles of catheterization laboratory recording equipment.
 - 07.06 Set up a basic manifold system and properly operate stopcocks.
 - 07.07 Calibrate a transducer.
 - 07.08 Set up, calibrate, and operate selected equipment in the catheterization laboratory.
- 08.0 DEMONSTRATE KNOWLEDGE OF CATASTROPHIC EVENT MANAGEMENT--The student will be able to:
- 08.01 Demonstrate knowledge of institutional protocol.
 - 08.02 Respond to simulated emergency care situations which may be encountered in a cardiopulmonary department.
 - 08.03 Become certified in cardiopulmonary resuscitation by the American Heart Association or the American Red Cross.
 - 08.04 Cite the indications for cardiac defibrillation and cardioversion.
 - 08.05 Identify the components of the defibrillator.
 - 08.06 Perform the procedure to defibrillate an electrocardiographic simulator.
- 09.0 DEMONSTRATE KNOWLEDGE OF PHARMACOLOGY RELATED TO CARDIOPULMONARY DRUGS--The student will be able to:
- 09.01 Demonstrate knowledge of cardiopulmonary drugs.
 - 09.02 Identify and describe uses of items on a "crash" cart.
 - 09.03 Calculate drug dosages and mixtures.
 - 09.04 Practice proper methods of handling syringes and needles in preparing medications for administration.
 - 09.05 Discuss drug administration routes.
 - 09.06 Describe preparation and administration of intradermal, subcutaneous, and intramuscular injection.
 - 09.07 Perform for the instructor the proper administration of an intramuscular injection.
 - 09.08 Perform venipunctures to collect venous blood samples.
 - 09.09 Perform venipunctures to initiate intravenous fluid therapy.
 - 09.10 Prepare fluids for intravenous fluid therapy.
 - 09.11 Outline the steps involved in collecting an arterial blood sample.
- 10.0 PERFORM PATIENT CARE, RECORD PATIENT HISTORY, AND PRACTICE ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:
- 10.01 Perform a patient history.
 - 10.02 Practice the basic nursing techniques with particular emphasis on patient privacy, body mechanics, patient positioning, and patient transportation.

CARDIOPULMONARY TECHNOLOGY - Continued

- 10.03 Practice techniques of determining vital signs and differentiate between normal and abnormal values.
 - 10.04 Cite the indications for and name the routes of oxygen administration.
 - 10.05 Perform the attachment of a regulator to and regulate the flow of gas from an oxygen cylinder.
 - 10.06 Perform suctioning technique in a laboratory setting.
 - 10.07 Recognize human behaviors indicative of anxiety.
 - 10.08 Identify and develop effective communication and interpersonal relations skills.
 - 10.09 Demonstrate knowledge of approaches used in dealing with a variety of hospitalized persons.
 - 10.10 Demonstrate knowledge of specific socio-cultural traits which may effect a persons hospital care.
- 11.0 PERFORM PULMONARY FUNCTION TESTING--The student will be able to:
- 11.01 Demonstrate knowledge of performance, calculation and interpretation of pulmonary function tests.
 - 11.02 Demonstrate knowledge of basic spirometry.
 - 11.03 Demonstrate knowledge of pulmonary physiology, mechanics and gas distribution.
 - 11.04 Demonstrate knowledge of the selection of appropriate tests for specific patients.
 - 11.05 Demonstrate knowledge of the theory and operation of pulmonary function equipment and gas analyzers.
- 12.0 IDENTIFY THE RELATIONSHIP BETWEEN PULMONARY PATHOLOGY AND PULMONARY FUNCTION TESTS--The student will be able to:
- 12.01 Compare and contrast test results depicting lung disease.
 - 12.02 Interpret pulmonary function tests.
 - 12.03 Demonstrate knowledge of normal and abnormal pulmonary test values.
 - 12.04 Demonstrate knowledge of obstructive and restrictive and vascular diseases as they relate to the pathophysiology of the pulmonary system.
- 13.0 PERFORM AND INTERPRET BLOOD GAS ANALYSES--The student will be able to:
- 13.01 Demonstrate knowledge of blood gas and acid-base physiology.
 - 13.02 Identify normal and abnormal blood gas values.
 - 13.03 Interpret blood gas and acid-base data.
 - 13.04 Demonstrate knowledge of blood gas instrumentation and perform related analysis.
- 14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 14.01 Conduct a job search.
 - 14.02 Secure information about a job.
 - 14.03 Identify documents that may be required when applying for a job.
 - 14.04 Complete a job application form correctly.
 - 14.05 Demonstrate competence in job interview techniques.
 - 14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 14.07 Identify acceptable work habits.
 - 14.08 Demonstrate knowledge of how to make job changes appropriately.
 - 14.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
PROGRAM TITLE: Central Service Technology
CODE NUMBER: Secondary _____ Postsecondary CSR0990
Florida CIP H017.050200

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15 _____

CERTIFICATION COVERAGE: NURSING ED @5 TEC MED @7 PRACT NURSE 7

- I. **MAJOR CONCEPTS/CONTENT:** This program is designed to prepare students for employment as supervisors, central supply (079.164-010), central supply workers (381.687-010), sterilizers (599.585-010), central service technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, central services departmental organization and function; basic anatomy, physiology, microbiology and chemistry related to central service activities; quality assurance; infection control and isolation techniques, principles of safety; principles, methods and controls of sterilization processes; cleaning, processing, packaging, distributing, storing, and inventory control of sterile goods, instruments, trays, and equipment; medical terminology; basic computer skills, interpersonal and job seeking skills, fundamentals of communication, and procurement of supplies and equipment.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Skills and competencies are achieved through laboratory practice using supplies, instruments and equipment as found in central service departments. Instrumentation, sterilization processing, decontamination, inventory control and distribution is also presented. A working knowledge of computers should be achieved. Students should be rotated through the decontamination, preparation, sterilization, storage, and distribution areas. Clinical learning experiences are an integral part of this program.
- III. **SPECIAL NOTE:** Health Occupations Students of America is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Upon successful completion of this program the graduate will become eligible to write the Registered Central Service Examination and be maintained on the International Association of Hospital Central Service Management's Registry and/or the American Society for Hospital Central Service Personnel.

The cooperative method of instruction may be used for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 300 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student should be able to:

01. Recognize basic principles of microbiology.
02. Receive, decontaminate, clean, prepare, disinfect and sterilize reusable items.
03. Demonstrate the use of sterilization process monitors, including temperature and frequency of appropriate chemical indicators and bacterial spore tests for all sterilizers.
04. Describe how central service is involved in controlling infections in hospitals.
05. Explain the purpose of occupational safety and health act.
06. Demonstrate employability skills.
07. Describe supply distribution systems and the principles of inventory control.
08. Demonstrate the ability to recall and dispose of or reprocess outdated sterile supplies.
09. Interpret and apply medical terminology and anatomical terms as they relate to equipment and supplies issued by central service personnel.
10. Identify fundamentals of procurement skills.
11. Identify fundamentals of communication skills.

- 01.0 RECOGNIZE BASIC PRINCIPLES OF MICROBIOLOGY--The student will be able to:
- 01.01 Identify the four main categories of microorganisms.
 - 01.02 Describe three (3) life functions of bacteria.
 - 01.03 Describe conditions affecting the growth of bacteria.
 - 01.04 Describe special methods used to destroy harmful microorganisms.
 - 01.05 List the helpful microorganisms.
 - 01.06 Describe 5 ways the body controls the growth of pathogenic microorganisms.
 - 01.07 Identify pathogenic microorganisms found in central service departments.
 - 01.08 Identify terminology related to microbiology.
- 02.0 RECEIVE, DECONTAMINATE, CLEAN, PREPARE, DISINFECT AND STERILIZE REUSABLE ITEMS--The student will be able to:
- 02.01 Recognize the importance of thorough cleaning to the overall objectives of making items safe for patient use.
 - 02.02 Explain how instruments, syringes, needles, rubber goods and equipment should be cleaned.
 - 02.03 Describe how the ultrasonic machines and washer/sterilizers work.
 - 02.04 Explain the importance of following manufacturers instructions in cleaning.
 - 02.05 Explain at least three reasons why detergents are preferred over soaps.
 - 02.06 Explain the primary objectives in selecting the correct packaging materials.
 - 02.07 Demonstrate the wrapping of procedure trays, instruments and other supplies.
 - 02.08 Describe how sterile supplies should be handled.
 - 02.09 Explain the principles involved in loading different kinds of wrapped packs or packages into a sterilizer to be assured of steam or gas penetration.
 - 02.10 Recognize equipment malfunction and list corrective actions.
 - 02.11 Identify basic surgical instruments and accessories.
- 03.0 DEMONSTRATE THE USE OF STERILIZATION PROCESS MONITORS, INCLUDING TEMPERATURE AND FREQUENCY OF APPROPRIATE CHEMICAL INDICATORS AND BACTERIAL SPORE TESTS FOR ALL STERILIZERS--The student will be able to:
- 03.01 List the guidelines for the safe use of ethylene oxide sterilization.
 - 03.02 Name the two spores used for spore testing and for which types of sterilizers they are used.
 - 03.03 Explain the purpose and proper procedure for performing the residual of air test in a vacuum sterilizer and other chemical and biological indicators.
 - 03.04 Demonstrate the basic reading of temperature and pressure recordings.
 - 03.05 Explain the reasons for biological monitoring.
- 04.0 DESCRIBE HOW CENTRAL SERVICE IS INVOLVED IN CONTROLLING INFECTIONS IN HOSPITALS--The student will be able to:
- 04.01 Describe the proper dress code in the clean and soiled sections of CS and outside of CS department in hospital.
 - 04.02 Explain infection control practices in C.S. i.e. traffic control patterns, personal health, work flow and housekeeping.
 - 04.03 Explain the importance of handwashing in controlling infection, how bacteria are transmitted from one person to another.
 - 04.04 Describe nosocomial infections.
 - 04.05 Describe the types of isolation.
 - 04.06 Describe the organization and functions of C.S.
 - 04.07 Describe the organizational patterns of health care facilities.
- 05.0 EXPLAIN THE PURPOSE OF OCCUPATIONAL SAFETY AND HEALTH ACT--The student will be able to:
- 05.01 Describe how employees are protected under OSHA.

CENTRAL SERVICE TECHNOLOGY - Continued

- 05.02 Describe at least six different things that can cause accidents in C.S.
 - 05.03 Describe some of the methods of preventing the situations that can lead to accidents.
 - 05.04 Describe the role preventive maintenance plays in patient and personnel safety in the hospital.
 - 05.05 Describe some of the fire safety concerns in a modern hospital.
 - 05.06 Explain body mechanics and demonstrate proper lifting techniques.
 - 05.07 Explain the purpose of Florida's "Right to Know" law and its provisions.
 - 05.08 Recognize the importance of filling out incident reports and reports to the Emergency Room.
- 06.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 06.01 Conduct a job search.
 - 06.02 Secure information about a job.
 - 06.03 Identify documents that may be required when applying for a job.
 - 06.04 Complete a job application form correctly.
 - 06.05 Demonstrate competence in job interview techniques.
 - 06.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 06.07 Identify acceptable work habits.
 - 06.08 Demonstrate knowledge of how to make job changes appropriately.
 - 06.09 Demonstrate acceptable employee health habits.
- 07.0 DESCRIBE SUPPLY DISTRIBUTION SYSTEMS AND THE PRINCIPLES OF INVENTORY CONTROL--The student will be able to:
- 07.01 List five (5) reasons for inventory control.
 - 07.02 Compare the advantages and disadvantages of four distribution methods.
 - 07.03 Define the benefits of computer inventory.
 - 07.04 Process a requisition marked "state"-locate article, price, etc.
- 08.0 DEMONSTRATE THE ABILITY TO RECALL AND DISPOSE OF OR REPROCESS STERILE SUPPLIES--The student will be able to:
- 08.01 Explain the factors that effect how long a package can be considered safe for use.
 - 08.02 State the methods of determining expiration dates.
 - 08.03 List the steps in reprocessing outdated hospital packaged items.
 - 08.04 List four (4) conditions that would make a product unsafe for use.
 - 08.05 Describe the shelf life of stored sterile goods.
 - 08.06 Describe the methods of reprocessing.
- 09.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY AND ANATOMICAL TERMS AS THEY RELATE TO EQUIPMENT AND SUPPLIES ISSUED BY CENTRAL SERVICE PERSONNEL--The student will be able to:
- 09.01 Identify components for medical terms.
 - 09.02 Identify two (2) functions of each body system.
 - 09.03 Use acceptable medical terminology.
 - 09.04 Relate anatomical concepts to orthopedic devices and other supplies and equipment issued by the C.S. Department.
- 10.0 IDENTIFY FUNDAMENTALS OF PROCUREMENT SKILLS--The student will be able to:
- 10.01 Describe procurement system.
 - 10.02 Communicate with other hospitals for procurement of supplies and equipment.
 - 10.03 Describe several different methods of procurement of supplies.
 - 10.04 Describe basics of receiving items.
- 11.0 IDENTIFY FUNDAMENTALS OF COMMUNICATION SKILLS--The student will be able to:
- 11.01 Describe appropriate manner in which to answer phone.
 - 11.02 Describe proper intra-inter communication of employees.
 - 11.03 How to be a good listener as well as transmitter.
 - 11.04 Describe principles of human relationship.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Cytotechnology

CODE NUMBER: Secondary _____

Postsecondary MLS0992

Florida CIP HO17.030600

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC MED @7 LAB TECH 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as cytotechnologists (078.281-010) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, preparation, staining, mounting and microscopically screening cellular specimens from various body sites for the detection and diagnosis of cancer and other pathological diseases. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The graduate should be prepared to take the national registry examination offered by the American Society of Clinical Pathologist (ASCP) and/or the appropriate state licensure examination.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Identify the anatomic structure and function of body systems in relation to disease states and services performed by cytotechnologist.
 02. Practice quality assurance, safety, and acceptable communication skills.
 03. Adhere to legal and ethical principles related to the practice of cytotechnology.
 04. Select specimens and perform selected preparation techniques as indicated.
 05. Microscopically identify and discriminate significant normalities/abnormalities found in cellular samples.
 06. Prepare reports for the pathologist including a differential diagnosis based on cellular manifestations of disease corroborated by cognitive knowledge and clinical data.
 07. Demonstrate knowledge of laboratory management.
 08. Demonstrate employability skills.

01.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DISEASE STATES AND SERVICES PERFORMED BY CYTOTECHNOLOGIST--The student will be able to:

- 01.01 Demonstrate knowledge of human anatomy and physiology with particular emphasis on respiratory, urinary, gastrointestinal, and reproductive systems.
- 01.02 Demonstrate knowledge of normal cytology of body systems.
- 01.03 Interpret cytologic patterns associated with hormones, physical agents, chemical agents, infections and other conditions.
- 01.04 Discuss cytogenetics as applied to diagnostic cytology.
- 01.05 Demonstrate knowledge of the significance of symptoms and modes of treatment used in the evaluation of cellular morphology and differential diagnosis.
- 01.06 Demonstrate knowledge of basic principles of scientific research.
- 01.07 Demonstrate knowledge of various methods of obtaining cytologic specimens from patients.
- 01.08 Demonstrate knowledge of the correlation between tissue patterns of disease and cellular manifestations of disease.

02.0 PRACTICE QUALITY ASSURANCE, SAFETY, AND ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:

- 02.01 Practice quality control in the cytology laboratory as required by accrediting agencies.
- 02.02 Follow institutional policies and procedures related to safety.
- 02.03 Practice acceptable communications and interpersonal relations skills.
- 02.04 Practice acceptable laboratory safety.
- 02.05 Demonstrate knowledge of diagnostic terminology.

03.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF CYTOTECHNOLOGY--The student will be able to:

- 03.01 Practice discretion and confidentiality in regard to laboratory reports.
- 03.02 Demonstrate knowledge of the cytotechnologist's role and responsibilities in relation to the health care team.
- 03.03 Demonstrate knowledge of the legal ramifications of clinical practice.
- 03.04 Demonstrate knowledge of patient's rights.

04.0 SELECT SPECIMENS AND PERFORM SELECTED PREPARATION TECHNIQUES AS INDICATED--The student will be able to:

- 04.01 Evaluate and accept or reject cytologic specimens as indicated by acceptable clinical practice.
- 04.02 Select specimens and perform the most advantageous preparation and staining techniques.
- 04.03 Identify and label specimens.
- 04.04 Solve problems in staining and preparation procedures.
- 04.05 Evaluate and implement new preparation and staining procedures.
- 04.06 Distinguish between well-prepared and stained, and poorly-prepared and stained cytologic specimens.

05.0 MICROSCOPICALLY IDENTIFY AND DISCRIMINATE SIGNIFICANT NORMALITIES/ABNORMALITIES FOUND IN CELLULAR SAMPLES--The student will be able to:

- 05.01 Identify normal cellular constituents.
- 05.02 Identify inflammatory cells.
- 05.03 Identify microorganisms and their effects on normal cells.
- 05.04 Identify and demonstrate knowledge of the manifestation of cellular degeneration.
- 05.05 Evaluate and screen gynecologic material and report negative gynecologic specimens at entry level competency.
- 05.06 Identify benign and neoplastic cytology.
- 05.07 Identify the x-chromatin body.
- 05.08 Evaluate cellular morphology in cell block preparations.
- 05.09 Demonstrate knowledge of cellular manifestations of premalignant processes.

- 05.10 Demonstrate knowledge of the cellular effects of radiation and chemotherapy.
 - 05.11 Demonstrate knowledge of altered cellular morphology due to collection methods.
 - 05.12 Detect, select and clearly mark the cells most representative of pathological processes.
- 06.0 PREPARE REPORTS FOR THE PATHOLOGIST INCLUDING A DIFFERENTIAL DIAGNOSIS BASED ON CELLULAR MANIFESTATIONS OF DISEASE CORROBORATED BY COGNITIVE KNOWLEDGE AND CLINICAL DATA--The student will be able to:
- 06.01 Correlate manifestations of disease, patient history and laboratory findings.
 - 06.02 Make cytologic interpretations which adhere to approved standards of terminology.
 - 06.03 Prepare a report for the pathologist based on all available information.
- 07.0 DEMONSTRATE KNOWLEDGE OF LABORATORY MANAGEMENT--The student will be able to:
- 07.01 Conduct an inventory.
 - 07.02 Prepare a budget and make an annual report.
 - 07.03 Prepare a policy and procedure manual.
 - 07.04 Demonstrate knowledge of the principles of continuing education.
- 08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 08.01 Conduct a job search.
 - 08.02 Secure information about a job.
 - 08.03 Identify documents that may be required when applying for a job.
 - 08.04 Complete a job application.
 - 08.05 Demonstrate competence in job interview techniques.
 - 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 08.07 Identify acceptable work habits.
 - 08.08 Demonstrate knowledge of how to make job changes appropriately.
 - 08.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Dental Assisting

CODE NUMBER: Secondary _____

Postsecondary DEA0700

Florida CIP HO17.010100

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: DENTAL HYG @5 DENTAL ASST 7 DENTAL TEC @7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dental assistants (10120401) and dental auxiliaries (dental assistants) or to provide supplemental training for persons previously or currently employed in this occupation and to take the National Board Examination for Dental Assistants. The program should meet the requirements of the American Dental Association and standards recommended by the Florida Board of Dentistry.

The content includes, but is not limited to, dental office and patient management, basic dental laboratory procedures, dental and general anatomy, dental terminology, nutrition, dental instrument and equipment, microbiology, dental pharmacology and anesthesia, chairside assisting and expanded functions, dental office emergencies/CPR, dental radiography, maintenance and asepsis of dental operator and instrumentation, dental specialty procedures, employability skills, leadership and human relations skills, ethics and jurisprudence, dental materials and preventive dentistry.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Students are provided with realistic clinical experiences during an externship in dental offices and clinics as a part of this program.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc. is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

Guest speakers from industry make an important contribution to the effectiveness of this program.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1200 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Perform general office procedures.
 02. Perform basic dental laboratory procedures.
 03. Identify structures and functions of dental and general anatomy.
 04. Describe basic principles of nutrition as related to oral health.
 05. Identify, describe, and maintain dental instruments and equipment.
 06. Differentiate between various microorganisms and their relationship to dentistry.

Dental Assisting - Continued

07. Establish and maintain asepsis and aseptic technique.
08. Identify the functions of pharmacology and anesthesia as they relate to dentistry.
09. Perform chairside assisting and expanded functions.
10. Assist in administering dental office emergency care and cardiopulmonary resuscitation.
11. Identify and perform dental radiographic procedures.
12. Identify properties, uses, and manipulation of dental materials which include gypsum, restorative materials, dental cements, impression materials, acrylics, and waxes.
13. Describe and perform principles of preventive dentistry and techniques.
14. Describe the legal and ethical responsibilities of the dental health care worker.
15. Demonstrate employability skills.

01.0 PERFORM GENERAL OFFICE PROCEDURES--The student will be able to:

- 01.01 Maintain appointment control.
- 01.02 Maintain an active recall system.
- 01.03 Prepare and maintain accurate patient records.
- 01.04 Prepare and maintain patient financial records, collect fees.
- 01.05 Prepare and maintain office financial records.
- 01.06 Prepare and maintain dental office inventory control and purchasing.
- 01.07 Demonstrate positive public relations responsibilities of the secretary/receptionist.
- 01.08 Demonstrate skills on the following equipment which may include: telephone, typewriter, calculator, and computer.
- 01.09 Maintain office environment.
- 01.10 Receive and dismiss patients and visitors.

02.0 PERFORM BASIC DENTAL LABORATORY PROCEDURES--The student will be able to:

- 02.01 Prepare, pour and trim gypsum casts.
- 02.02 Fabricate custom trays.
- 02.03 Fabricate temporary crowns and bridges.

03.0 IDENTIFY STRUCTURES AND FUNCTIONS OF DENTAL AND GENERAL ANATOMY--The student will be able to:

- 03.01 Identify structures and functions of head and neck anatomy including bones, muscles, sinuses, salivary glands, nerves and vessels.
- 03.02 Identify embryonic development of head, oral cavity, and each individual tooth.
- 03.03 Identify each individual tooth and its landmarks.
- 03.04 Describe the histological components of the head, oral cavity, and each element of the teeth and supporting structures.
- 03.05 Identify and define dental terminology.
- 03.06 Identify oral pathological conditions.

04.0 DESCRIBE BASIC PRINCIPLES OF NUTRITION AS RELATED TO ORAL HEALTH--The student will be able to:

- 04.01 Identify the elements of nutrition.
- 04.02 Identify the basic food groups.
- 04.03 Describe the desirable diet.
- 04.04 Identify nutritional elements that relate to dental pathology and desirable therapy.
- 04.05 Formulate and present to a specific patient a diet to address specific dental needs.

05.0 IDENTIFY, DESCRIBE, AND MAINTAIN DENTAL INSTRUMENTS AND EQUIPMENT--The student will be able to:

- 05.01 Identify various types, functions and operations of dental operator and laboratory equipment.
- 05.02 Identify types and functions of various instruments.
- 05.03 Maintain dental operator equipment and instruments.

06.0 DIFFERENTIATE BETWEEN VARIOUS MICROORGANISMS AND THEIR RELATIONSHIP TO DENTISTRY--The student will be able to:

- 06.01 Differentiate between pathogenic and non-pathogenic microorganisms.
- 06.02 Describe pathogens and modes of disease transmission.
- 06.03 Describe methods of disinfection and sterilization.

07.0 ESTABLISH AND MAINTAIN ASEPSIS AND ASEPTIC TECHNIQUE--The student will be able to:

- 07.01 Perform aseptic handwashing technique.
- 07.02 Differentiate between aseptic and non-aseptic environments.
- 07.03 Operate the different sterilization and disinfection units effectively.

DENTAL ASSISTING - Continued

- 07.04 Establish sterile/disinfected environment.
- 07.05 Maintain chain of asepsis.

- 08.0 IDENTIFY THE FUNCTIONS OF PHARMACOLOGY AND ANESTHESIA AS THEY RELATE TO DENTISTRY--The student will be able to:
 - 08.01 Identify drug requirements, agencies, and regulations.
 - 08.02 Prepare and record a drug prescription.
 - 08.03 Identify drug effects.
 - 08.04 Identify common drugs used in dentistry.
 - 08.05 Prepare and apply topical anesthetic agent.
 - 08.06 Identify properties of local and general anesthetics.
 - 08.07 Prepare local anesthetics.
 - 08.08 Monitor nitrous oxide-oxygen conscious sedation.

- 09.0 PERFORM CHAIRSIDE ASSISTING AND EXPANDED FUNCTIONS--The student will be able to:
 - 09.01 Assemble the instrumentation for selected procedures.
 - 09.02 Apply principles of four handed dentistry.
 - 09.03 Evacuate and maintain the operating field.
 - 09.04 Perform expanded functions as permitted by the Florida Board of Dentistry.
 - 09.05 Identify equipment and assist in selected dental specialty procedures.

- 10.0 ASSIST IN ADMINISTERING DENTAL OFFICE EMERGENCY CARE AND CARDIOPULMONARY RESUSCITATION--The student will be able to:
 - 10.01 Describe dental office emergencies and preparation necessary.
 - 10.02 Assist and maintain medical emergency care to include cardiopulmonary resuscitation.
 - 10.03 List symptoms of syncope and describe treatment.

- 11.0 IDENTIFY AND PERFORM DENTAL RADIOGRAPHIC PROCEDURES--The student will be able to:
 - 11.01 Describe history and physics of ionizing radiation.
 - 11.02 Identify parts of the X-ray machine including accessories.
 - 11.03 Demonstrate radiology, health safety, protection techniques and sanitizing procedures.
 - 11.04 Perform dark room/processing procedures, mix solutions.
 - 11.05 Expose radiographs utilizing intra-oral/extra-oral techniques.
 - 11.06 Identify radiographic anatomical landmarks.
 - 11.07 Mount radiographic surveys.
 - 11.08 Maintain unexposed film inventory and storage.

- 12.0 IDENTIFY PROPERTIES, USES, AND MANIPULATION OF DENTAL MATERIALS WHICH INCLUDE GYPSUM, RESTORATIVE MATERIALS, DENTAL CEMENTS, IMPRESSION MATERIALS, ACRYLICS, AND WAXES--The student will be able to:
 - 12.01 Identify properties use of gypsum.
 - 12.02 Identify properties use of restorative materials.
 - 12.03 Identify properties of dental cements.
 - 12.04 Identify properties use of impression materials.
 - 12.05 Identify properties use of acrylics.
 - 12.06 Identify properties uses of waxes.

- 13.0 DESCRIBE AND PERFORM PRINCIPLES OF PREVENTIVE DENTISTRY AND TECHNIQUES--The student will be able to:
 - 13.01 Instruct and motivate patient in oral hygiene procedures.
 - 13.02 Identify all applicable methods of preventive dentistry for each patient.
 - 13.03 Prepare set up for oral prophylaxis and anticariogenic treatments.

- 14.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER--The student will be able to:
 - 14.01 Define commonly used legal vocabulary relating to dentistry.
 - 14.02 Describe legal and ethical considerations/obligations in the dental team-patient relationship.
 - 14.03 Explain risk management.

DENTAL ASSISTING - Continued

15.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 15.01 Conduct a job search.
- 15.02 Secure information about a job.
- 15.03 Identify documents that may be required when applying for a job.
- 15.04 Complete a job application.
- 15.05 Demonstrate competence in job interview techniques.
- 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 15.07 Identify acceptable work habits.
- 15.08 Demonstrate knowledge of how to make job changes appropriately.
- 15.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Dental Hygiene

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP H017.010200

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS x _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

x Postsecondary Vocational

_____ Other _____

CERTIFICATION COVERAGE:

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dental hygienists (10120402) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, dental office and patient management, basic dental laboratory procedures, dental and general anatomy, dental terminology, nutrition, dental instrument and equipment, microbiology, dental pharmacology and anesthesia, chairside assisting, dental office emergencies/CPR, dental radiography, maintenance and asepsis of dental operator and instrumentation, dental specialty procedures, employability skills, leadership and human relations skills, ethics and jurisprudence, dental materials, preventive dentistry, performing complete oral prophylaxis, performing all identified expanded functions, and providing dental health education services to individuals and community health programs.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation activities and clinical laboratory experiences with clinical patients are integrated with the didactic portion of the program. Dental operator equipment is essential.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program. The Student American Dental Hygienist Association (SADHA) is the appropriate professional association.

The students should be prepared to take the National Board of Dental Hygiene Certification Examination and the Florida Dental Hygiene licensure examination. The program should meet the requirements of the Commission on Accreditation of the American Dental Association and approved by the Florida State Board of Dentistry.

The typical length of this program for the average achieving student is an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Perform general office procedures.
 02. Perform basic dental laboratory procedures.
 03. Identify structures and functions of dental and general anatomy.
 04. Describe basic principles of nutrition as related to oral health.
 05. Identify, describe, and maintain dental instruments and equipment.
 06. Differentiate between various microorganisms and their relationship to dentistry.
 07. Establish and maintain asepsis and aseptic technique.
 08. Identify the functions of pharmacology and anesthesia as they relate to dentistry.

Dental Hygiene - continued

09. Perform chairside assisting and expanded functions.
10. Assist in administering dental office emergency care and cardiopulmonary resuscitation.
11. Identify and perform dental radiographic procedures.
12. Identify properties, uses, and manipulation of dental materials which include gypsum, restorative materials, dental cements, impression materials, acrylics, and waxes.
13. Describe and perform principles of preventive dentistry and techniques.
14. Describe the legal and ethical responsibilities of the dental health care worker.
15. Demonstrate employability skills.
16. Perform patient assessment.
17. Perform direct patient services.
18. Educate patients in preventive measures and remedial oral hygiene procedures.
19. Participate in community health services.
20. Demonstrate knowledge of research methodology.

- 01.0 PERFORM GENERAL OFFICE PROCEDURES--The student will be able to:
- 01.01 Maintain appointment control.
 - 01.02 Maintain an active recall system.
 - 01.03 Prepare and maintain accurate patient records.
 - 01.04 Prepare and maintain patient financial records.
 - 01.05 Prepare and maintain office financial records.
 - 01.06 Prepare and maintain dental office inventory control and purchasing.
 - 01.07 Demonstrate positive public relations responsibilities of the secretary/receptionist.
 - 01.08 Demonstrate skills on the following equipment which may include: telephone, typewriter, calculator, and computer.
- 02.0 PERFORM BASIC DENTAL LABORATORY PROCEDURES--The student will be able to:
- 02.01 Prepare, pour and trim gypsum casts.
 - 02.02 Fabricate custom trays.
 - 02.03 Fabricate temporary crowns and bridges.
- 03.0 IDENTIFY STRUCTURES AND FUNCTIONS OF DENTAL AND GENERAL ANATOMY--The student will be able to:
- 03.01 Identify structures and functions of head and neck anatomy including: bones, muscles, sinuses, salivary glands, nerves and vessels.
 - 03.02 Identify embryonic development of head, oral cavity, and each individual tooth.
 - 03.03 Identify each individual tooth and its landmark.
 - 03.04 Describe the histological components of the head, oral cavity, and each element of the teeth and supporting structures.
 - 03.05 Identify and define dental terminology.
 - 03.06 Identify oral pathological conditions.
- 04.0 DESCRIBE BASIC PRINCIPLES OF NUTRITION AS RELATED TO ORAL HEALTH--The student will be able to:
- 04.01 Identify the elements of nutrition.
 - 04.02 Identify the basic food groups.
 - 04.03 Describe the desirable diet.
 - 04.04 Identify nutritional elements that relate to dental pathology and describe therapy.
 - 04.05 Formulate and present to a specific patient a diet to address specific dental needs.
- 05.0 IDENTIFY, DESCRIBE, AND MAINTAIN DENTAL INSTRUMENTS AND EQUIPMENT--The student will be able to:
- 05.01 Identify various types, functions and operations of dental operatory and laboratory equipment.
 - 05.02 Identify types and functions of various instruments.
 - 05.03 Maintain dental operatory equipment and instruments.
- 06.0 DIFFERENTIATE BETWEEN VARIOUS MICROORGANISMS AND THEIR RELATIONSHIP TO DENTISTRY--The student will be able to:
- 06.01 Differentiate between pathogenic and non-pathogenic microorganisms.
 - 06.02 Describe pathogens and modes of disease transmission.
- 07.0 ESTABLISH AND MAINTAIN ASEPSIS AND ASEPTIC TECHNIQUE--The student will be able to:
- 07.01 Perform aseptic handwashing technique.
 - 07.02 Differentiate between aseptic and non-aseptic environments.
 - 07.03 Operate the different sterilization disinfection units effectively.
 - 07.04 Establish sterile/disinfected environment.
 - 07.05 Maintain chain of asepsis.

- 08.0 IDENTIFY THE FUNCTIONS OF PHARMACOLOGY AND ANESTHESIA AS THEY RELATE TO DENTISTRY--The student will be able to:
- 08.01 Identify drug requirements, agencies, and regulations.
 - 08.02 Prepare and record a drug prescription.
 - 08.03 Identify drug effects.
 - 08.04 Identify common drugs used in dentistry.
 - 08.05 Prepare and apply topical anesthetic agent.
 - 08.06 Identify properties of local and general anesthetics.
 - 08.07 Prepare local anesthetics.
 - 08.08 Monitor nitrous oxide-oxygen conscious sedation.
- 09.0 PERFORM CHAIRSIDE ASSISTING AND EXPANDED FUNCTIONS--The student will be able to:
- 09.01 Assemble the instrumentation for selected procedures.
 - 09.02 Apply principles of four handed dentistry.
 - 09.03 Evacuate and maintain the operating field.
 - 09.04 Perform expanded functions as permitted by the Florida Board of Dentistry.
 - 09.05 Identify and assist in selected dental specialty procedures.
- 10.0 ASSIST IN ADMINISTERING DENTAL OFFICE EMERGENCY CARE AND CARDIOPULMONARY RESUSITATION--The student will be able to:
- 10.01 Describe dental office emergencies and preparation necessary.
 - 10.02 Assist and maintain medical emergency care to include cardiopulmonary resuscitation.
 - 10.03 List symptoms of syncope and describe treatment.
- 11.0 IDENTIFY AND PERFORM DENTAL RADIOGRAPHIC PROCEDURES--The student will be able to:
- 11.01 Describe history and physics of ionizing radiation.
 - 11.02 Identify parts of the X-ray machine.
 - 11.03 Demonstrate radiology, health safety, and protection techniques.
 - 11.04 Perform dark room/processing procedures.
 - 11.05 Expose radiographs utilizing intra-oral/extra-oral techniques.
 - 11.06 Identify radiographic anatomical landmarks.
 - 11.07 Mount radiographic surveys.
- 12.0 IDENTIFY PROPERTIES, USES, AND MANIPULATION OF DENTAL MATERIALS WHICH INCLUDE GYPSUM, RESTORATIVE MATERIALS, DENTAL CEMENTS, IMPRESSION MATERIALS, ACRYLICS, AND WAXES--The student will be able to:
- 12.01 Identify properties use of gypsum.
 - 12.02 Identify properties use of restorative materials.
 - 12.03 Identify properties use of dental cements.
 - 12.04 Identify properties use of impression materials.
 - 12.05 Identify properties use of acrylics.
 - 12.06 Identify properties uses of waxes.
- 13.0 DESCRIBE AND PERFORM PRINCIPLES OF PREVENTIVE DENTISTRY AND TECHNIQUES--The student will be able to:
- 13.01 Instruct and motivate patient in oral hygiene procedures.
 - 13.02 Identify all applicable methods of preventive dentistry for each patient.
- 14.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER--The student will be able to:
- 14.01 Define commonly used legal vocabulary relating to dentistry.
 - 14.02 Describe legal and ethical considerations/obligations in the dental team-patient relationship.
- 15.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 15.01 Conduct a job search.
 - 15.02 Secure information about a job.
 - 15.03 Identify documents that may be required when applying for a job.
 - 15.04 Complete a job application.
 - 15.05 Demonstrate competence in job interview techniques.
 - 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

DENTAL HYGIENE - Continued

- 15.07 Identify acceptable work habits.
- 15.08 Demonstrate knowledge of how to make job changes appropriately.
- 15.09 Demonstrate acceptable employee health habits.
- 16.0 PERFORM PATIENT ASSESSMENT--The student will be able to:
 - 16.01 Take, record, and correlate medical/dental history with dental hygiene treatment plan and services to be performed.
 - 16.02 Take, record and correlate vital sign observations with treatment plan and services to be performed.
 - 16.03 Perform, record and correlate extraoral and intraoral examination with Dental Hygiene treatment plan and patient services to be performed.
 - 16.04 Conduct complete periodontal examination.
 - 16.05 Consult with physicians and/or dentists to verify dental and medical treatment plan and patient services to be performed.
 - 16.06 Observe and record existing restorations and pathologies.
 - 16.07 Interpret and correlate dental radiographs and dental charting with dental hygiene treatment plan.
 - 16.08 Assess, plan, implement and evaluate individualized dental hygiene treatment plan.
- 17.0 PERFORM DIRECT PATIENT SERVICES--The student will be able to:
 - 17.01 Detect and differentiate between dental calculus and other tooth surface irregularities with appropriate instruments.
 - 17.02 Scale teeth, removing accretions with hand instrument.
 - 17.03 Root plane smoothing roughened surfaces including altered cementum.
 - 17.04 Remove accretions with mechanical instruments.
 - 17.05 Perform soft tissue curettage with appropriate instruments.
 - 17.06 Perform dental assisting competencies and expanded functions.
- 18.0 EDUCATE PATIENTS IN PREVENTIVE MEASURES AND REMEDIAL ORAL HYGIENE PROCEDURES--The student will be able to:
 - 18.01 Assess and monitor patient diet and provide individualized nutritional counseling.
 - 18.02 Assess, develop, implement and monitor specific dental education measures for patients including those with special needs.
 - 18.03 Periodically re-assess patient needs and alter treatment plan according to current patient status.
- 19.0 PARTICIPATE IN COMMUNITY HEALTH SERVICES--The student will be able to:
 - 19.01 Demonstrate knowledge of assessment, planning, implementation and evaluation of community health projects.
 - 19.02 Develop a community health project.
 - 19.03 Participate in selected community health projects.
- 20.0 DEMONSTRATE KNOWLEDGE OF RESEARCH METHODOLOGY--The student will be able to:
 - 20.01 Describe and interpret research methods used in community health.
 - 20.02 Critically evaluate professional literature.
 - 20.03 Interpret and apply research data.
 - 20.04 Display appropriate writing skills.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Dental Laboratory Assisting

CODE NUMBER: Secondary 8403000

Postsecondary _____

Florida CIP HO17.019901

SECONDARY

SCHOOL CREDITS 6

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x _____ Other 10-12, 21

CERTIFICATION COVERAGE: DEN LABTEC 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dental laboratory technician apprentices (712.381-022) or dental laboratory assistants or to pursue further education in the dental health field.

The content includes, but is not limited to, communication skills, legal and ethical practice, leadership and employability skills, safe and efficient work practices, and entry level skills for dental laboratory practice.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8403010 Dental Laboratory Assisting 1
8403020 Dental Laboratory Assisting 2
8403030 Dental Laboratory Assisting 3
8403040 Dental Laboratory Assisting 4
8403050 Dental Laboratory Assisting 5
8403060 Dental Laboratory Assisting 6

- II. LABORATORY ACTIVITIES: Simulation laboratory experiences are integrated with the didactic portion of this program. Students perform tasks representative of dental laboratory practice.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Demonstrate ethical behavior and legal aspects in the laboratory.
 02. Identify an entry level job and advanced training program which meets career goals.

Dental Laboratory Assisting - Continued

03. Identify anatomic structure and function of body systems in relation to dental laboratory science.
04. Practice selected dental laboratory techniques.
05. Demonstrate accepted communication skills in the laboratory.
06. Recognize and practice acceptable behavior in the laboratory setting.
07. Practice accepted principles of safety in the laboratory setting.
08. Demonstrate employability skills.

- 01.0 DEMONSTRATE ETHICAL BEHAVIOR AND LEGAL ASPECTS IN THE LABORATORY--The student will be able to:
- 01.01 Recognize limits of authority and responsibility of health care workers.
 - 01.02 Identify patient rights and responsibilities.
 - 01.03 Understand legal ramifications of actions/inactions in the health field.
- 02.0 IDENTIFY AN ENTRY LEVEL JOB AND ADVANCED TRAINING PROGRAM WHICH MEETS CAREER GOALS--The student will be able to:
- 02.01 Identify appropriate employment and educational opportunities.
 - 02.02 Identify and demonstrate proper work ethic.
 - 02.03 Complete a job application.
 - 02.04 Participate in an interview.
 - 02.05 Write a follow-up letter.
- 03.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DENTAL LABORATORY SCIENCE--The student will be able to:
- 03.01 Describe the structure and function of head and neck anatomy.
 - 03.02 Apply understanding of head and neck anatomy to patient use of dental appliances.
- 04.0 PRACTICE SELECTED DENTAL LABORATORY TECHNIQUES--The student will be able to:
- 04.01 Fabricate selected dental restorations.
 - 04.02 Fabricate selected prostheses.
 - 04.03 Fabricate selected dental appliances.
- 05.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILLS IN THE LABORATORY--The student will be able to:
- 05.01 Recognize and utilize various forms of communication.
 - 05.02 Recognize barriers to communication.
 - 05.03 Use appropriate dental terminology and abbreviations.
- 06.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE LABORATORY SETTING--The student will be able to:
- 06.01 Demonstrate an understanding of positive self concepts.
 - 06.02 Identify basic human needs.
 - 06.03 Recognize atypical behavior.
- 07.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN THE LABORATORY SETTING--The student will be able to:
- 07.01 Demonstrate safe use, care and maintenance of equipment and materials.
 - 07.02 Properly identify and label models, prostheses, etc.
 - 07.03 Use good observational skills and report appropriately.
 - 07.04 Follow emergency procedures as outlined by institution.
 - 07.05 Demonstrate knowledge of sterile technique and disease prevention.
- 08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 08.01 Conduct a job search.
 - 08.02 Secure information about a job.
 - 08.03 Identify documents that may be required when applying for a job.
 - 08.04 Complete a job application.
 - 08.05 Demonstrate competence in job interview techniques.
 - 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 08.07 Identify acceptable work habits.
 - 08.08 Demonstrate knowledge of how to make job changes appropriately.
 - 08.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Dental Laboratory Assisting</u>	PROGRAM NUMBER:	<u>8403000</u>
COURSE TITLE: <u>Dental Laboratory Assisting 1</u>	COURSE NUMBER:	<u>8403010</u>

COURSE DESCRIPTION:

This course prepares the student with communication, career development, and employability skills relevant to Dental Laboratory Assisting.

02.0 IDENTIFY AN ENTRY LEVEL JOB AND ADVANCED TRAINING PROGRAM WHICH MEETS CAREER GOALS--The student will be able to:

- 02.01 Identify appropriate employment and educational opportunities.
- 02.02 Identify and demonstrate proper work ethic.
- 02.03 Complete a job application.
- 02.04 Participate in an interview.
- 02.05 Write a follow-up letter.

05.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILLS IN THE LABORATORY--The student will be able to:

- 05.01 Recognize and utilize various forms of communication.
- 05.02 Recognize barriers to communication.
- 05.03 Use appropriate dental terminology and abbreviations.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 08.01 Conduct a job search.
- 08.02 Secure information about a job.
- 08.03 Identify documents that may be required when applying for a job.
- 08.04 Complete a job application.
- 08.05 Demonstrate competence in job interview techniques.
- 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 08.07 Identify acceptable work habits.
- 08.08 Demonstrate knowledge of how to make job changes appropriately.
- 08.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Dental Laboratory Assisting</u>	PROGRAM NUMBER:	<u>8403000</u>
COURSE TITLE: <u>Dental Laboratory Assisting 2</u>	COURSE NUMBER:	<u>8403020</u>

COURSE DESCRIPTION:

This course prepares students with ethical, legal, behavioral, and scientific skills.

01.0 DEMONSTRATE ETHICAL BEHAVIOR AND LEGAL ASPECTS IN THE LABORATORY--The student will be able to:

- 01.01 Recognize limits of authority and responsibility of health care workers.
- 01.02 Identify patient rights and responsibilities.
- 01.03 Understand legal ramifications of actions/inactions in the health field.

03.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DENTAL LABORATORY SCIENCE--The student will be able to:

- 03.01 Describe the structure and function of head and neck anatomy.
- 03.02 Apply understanding of head and neck anatomy to patient use of dental appliances.

06.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE LABORATORY SETTING--The student will be able to:

- 06.01 Demonstrate an understanding of positive self concepts.
- 06.02 Identify basic human needs.
- 06.03 Recognize atypical behavior.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Dental Laboratory Assisting</u>	PROGRAM NUMBER:	<u>8403000</u>
COURSE TITLE: <u>Dental Laboratory Assisting 3</u>	COURSE NUMBER:	<u>8403030</u>

COURSE DESCRIPTION:

This course prepares students to practice dental laboratory techniques in a safe laboratory setting.

04.0 PRACTICE SELECTED DENTAL LABORATORY TECHNIQUES--The student will be able to:

- 04.01 Fabricate selected dental restorations.
- 04.02 Fabricate selected prostheses.
- 04.03 Fabricate selected dental appliances.

07.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN THE LABORATORY SETTING--The student will be able to:

- 07.01 Demonstrate safe use, care and maintenance of equipment and materials.
- 07.02 Properly identify and label models, prostheses, etc.
- 07.03 Use good observational skills and report appropriately.
- 07.04 Follow emergency procedures as outlined by institution.
- 07.05 Demonstrate knowledge of sterile technique and disease prevention.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Dental Laboratory Assisting</u>	PROGRAM NUMBER:	<u>8403000</u>
COURSE TITLE: <u>Dental Laboratory Assisting 4</u>	COURSE NUMBER:	<u>8403040</u>

COURSE DESCRIPTION:

This course is a practicum (clinical experience) which covers all aspects of Dental Laboratory Assisting. Courses #1, 2, and 3 are pre-requisite to this course.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Dental Laboratory Assisting</u>	PROGRAM NUMBER:	<u>8403000</u>
COURSE TITLE: <u>Dental Laboratory Assisting 5</u>	COURSE NUMBER:	<u>8403050</u>

COURSE DESCRIPTION:

This course is a practicum (clinical experience) which covers all aspects of Dental Laboratory Assisting. Courses #1, 2, 3, and 4 are pre-requisite to this course.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Dental Laboratory Assisting</u>	PROGRAM NUMBER:	<u>8403060</u>
COURSE TITLE: <u>Dental Laboratory Assisting 6</u>	COURSE NUMBER:	<u>8463060</u>

COURSE DESCRIPTION:

This course is a practicum (clinical experience) which covers all aspects of Dental Laboratory Assisting. Courses #1, 2, 3, 4, and 5 are pre-requisite to this course. Students should be employable at the aide level in a dental laboratory.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Dental Laboratory Technology

CODE NUMBER: Secondary _____

Postsecondary D'E0400

Florida CIP H017.010300

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: DENTAL TEC @7 DEN LABTEC 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for entry level employment as dental laboratory technicians (.0141200) or to provide supplemental training for persons previously or currently employed in this occupation.

The content of the program includes, but is not limited to, general studies, physical sciences, dental sciences, and dental laboratory techniques.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory activities are integrated with the didactic portion of this program. Students perform representative tasks in the manufacture of dental prostheses.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

The program should meet the requirements of the Commission on Accreditation of the Dental and Dental Auxiliary Educational Programs of the American Dental Association. Students should be prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Identify the anatomic structure and function of body systems in relation to prosthetic services performed by the dental laboratory technician.
 02. Practice quality assurance, safety and acceptable communication skills.

Dental Laboratory Technology - Continued

03. Adhere to legal and ethical principles related to the practice of dental laboratory technology.
04. Demonstrate knowledge of effective business management techniques.
05. Demonstrate knowledge of dental sciences.
06. Perform basic dental laboratory techniques consistent with current dental laboratory practice.
07. Demonstrate employability skills.

- 01.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO PROSTHETIC SERVICES PERFORMED BY THE DENTAL LABORATORY TECHNICIAN--The student will be able to:
- 01.01 Identify structures and functions of head and neck anatomy.
 - 01.02 Identify embryonic development of head, oral cavity and individual teeth.
 - 01.03 Identify each tooth and its landmarks.
 - 01.04 Demonstrate knowledge, principles, and methods of disease transmission and prevention as related to dental prostheses.
- 02.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:
- 02.01 Practice safety in accordance with institutional policy.
 - 02.02 Identify documentation procedures necessary to comply with state laws.
 - 02.03 Demonstrate knowledge of the dental laboratory technicians role in providing quality assurance in laboratory procedures, reporting, use and maintenance of equipment.
 - 02.04 Communicate appropriately.
 - 02.05 Use appropriate medical terminology and abbreviations.
 - 02.06 Follow approved procedures for labeling and identifying prostheses.
- 03.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF DENTAL LABORATORY TECHNOLOGY--The student will be able to:
- 03.01 Demonstrate knowledge of patient and worker rights and responsibilities.
 - 03.02 Demonstrate knowledge of the importance of observing the doctor/technician relationship.
 - 03.03 Demonstrate knowledge of state law governing the practice of Dental Laboratory Technology.
- 04.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE BUSINESS MANAGEMENT TECHNIQUES--The student will be able to:
- 04.01 Develop an office/laboratory procedure manual.
 - 04.02 Demonstrate knowledge of business finance and operating expenses.
 - 04.03 Set up a pay scale and benefit program for employees and a bookkeeping system.
 - 04.04 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
 - 04.05 Demonstrate knowledge of employee hiring orientation.
- 05.0 DEMONSTRATE KNOWLEDGE OF DENTAL SCIENCES--The student will be able to:
- 05.01 Demonstrate knowledge of physical properties, use and manipulation of dental materials.
 - 05.02 Demonstrate knowledge of the dynamics of occlusion.
- 06.0 PERFORM BASIC DENTAL LABORATORY TECHNIQUES CONSISTENT WITH CURRENT DENTAL LABORATORY PRACTICE--The student will be able to:
- 06.01 Fabricate complete denture prosthodontics.
 - 06.02 Fabricate removable partial denture prosthodontics.
 - 06.03 Fabricate fixed prosthodontics.
 - 06.04 Fabricate fixed porcelain and/or porcelain to metal restorations.
 - 06.05 Fabricate, finish, and polish pedodontic, orthodontic and preventive appliances.
- 07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 07.01 Conduct a job search.
 - 07.02 Secure information about a job.
 - 07.03 Identify documents that may be required when applying for a job.
 - 07.04 Complete a job application.

DENTAL LABORATORY TECHNOLOGY - Continued

- 07.05 Demonstrate competence in job interview techniques.
- 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 07.07 Identify acceptable work habits.
- 07.08 Demonstrate knowledge of how to make job changes appropriately.
- 07.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Diagnostic Medical Sonography

CODE NUMBER: Secondary _____

Postsecondary SON0990

Florida CIP HO17.021200

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC X-RAY 7

- I. **MAJOR CONCEPTS/CONTENT:** The program is designed to prepare students for employment as diagnostic medical sonographers or to provide supplemental training for persons previously or currently employed in this occupation. The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA) so that graduates may take the national registry examination.

The content includes, but is not limited to, anatomy, physiology, and pathology of the abdominal, pelvic, and urogenital structures; physics; instrumentation; equipment standards; biological effect of ultrasound; patient care; clinical medicine; applications and limitations of ultrasound; related diagnostic procedures; image evaluation; administration; first aid and cardiopulmonary resuscitation; employability skills; leadership and human relations skills; health and safety.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Supervised clinical learning experiences must be included according to American Medical Association guidelines, of sufficient volume and variety to assure competence.

Written clinical affiliation agreements must be maintained with each health care facility. Health care facilities must be accredited by the Joint Commission on Accreditation of Hospitals.

- III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Prerequisites: Students must have completed postsecondary education including biological sciences, introductory physics and mathematics before being admitted to the Diagnostic Medical Sonography program. Courses in physics, biology, algebra and geometry are strongly recommended at the high school level.

Students applying for the certificate program should contact the American Registry of Diagnostic Medical Sonographers (ARDMS), 2810 Burnet Avenue, Suite N-2, Cincinnati, Ohio 45219, (513) 281-8860. Only ARDMS can determine if an individual qualifies for the examinations.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate an awareness of the uses of ultrasound imaging, types of presentations, orientation, and relationships to other imaging modalities.
02. Demonstrate an awareness of the basic principles of ultrasound physics, emphasizing practical and "everday" relationships of physics to proper diagnosis.
03. Demonstrate an awareness of ultrasound physics by exploring the various aspects of the field through individual experimentation.
04. Apply knowledge of the anatomy and scanning techniques related to the upper abdominal organs and systems.
05. Demonstrate an awareness of the basic principles of instrumentation common to the field of ultrasound.
06. Apply knowledge gained in instrumentation lecture and work with actual ultrasound scanners similar to those found in local hospitals.
07. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
08. Apply knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
09. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography of the genitourinary system.
10. Continue to develop a more in-depth awareness of the disease processes common to allied health.
11. Apply accumulated knowledge to the process of creating diagnostic sonograms.
12. Apply skills needed to complete diagnostic images of high quality from a variety of scanning units.
13. Demonstrate awareness of the application of computers in medical technology.
14. Demonstrate employability skills.

- 01.0 DEMONSTRATE AN AWARENESS OF THE USES OF ULTRASOUND IMAGING, TYPES OF PRESENTATIONS, ORIENTATION, AND RELATIONSHIPS TO OTHER IMAGING MODALITIES--The student will be able to:
- 01.01 Describe the relationship of ultrasound to other imaging fields.
 - 01.02 Explain the role of the sonographer.
 - 01.03 Describe and explain the proper uses of orientation and standard labeling of ultrasound images.
 - 01.04 Describe/Explain protocol for a sonogram from the time the exam is ordered to the time your patient is ready to be scanned.
 - 01.05 Explain the basic concepts of ultrasound equipment available and demonstrate safety in their use and basic techniques of scanning.
 - 01.06 Explain and use the criteria for film evaluation and specifically of special sonographic parameters.
 - 01.07 Describe special problems encountered and methods to improve medical ethics in sonography.
 - 01.08 Describe the organizational structure common to most hospitals with special emphasis placed on the role of the ultrasound department.
 - 01.09 Describe the relationship of the sonographer to the patients and their special needs.
- 02.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF ULTRASOUND PHYSICS, EMPHASIZING PRACTICAL AND "EVERYDAY" RELATIONSHIPS OF PHYSICS TO PROPER DIAGNOSIS--The student will be able to:
- 02.01 Explain what sound is and its characteristics.
 - 02.02 Compare the difference between pulsed and continuous wave sound.
 - 02.03 Explain amplitude and intensity of sound as it applies to the field of ultrasound.
 - 02.04 Describe the causes and effects of attenuation and impedance on ultrasound.
 - 02.05 Identify the causes and effects of incidence, scattering and refraction of ultrasound.
 - 02.06 Explain the Doppler effect and its use in medicine.
 - 02.07 Describe the factors of attenuation versus depth penetration of ultrasound in human tissue.
 - 02.08 Identify resolution and controlling factors of resolution as applied to the field of ultrasound.
- 03.0 DEMONSTRATE AN AWARENESS OF ULTRASOUND PHYSICS BY EXPLORING THE VARIOUS ASPECTS OF THE FIELD THROUGH INDIVIDUAL EXPERIMENTATION--The student will be able to:
- 03.01 Discuss and demonstrate the basic principles governing sound and sound interaction in various types of tissue.
 - 03.02 Describe and demonstrate the conditions affecting sound transmission such as the attenuation factors.
 - 03.03 Relate mathematical formulas to the action of sound at interfaces of various qualities.
 - 03.04 Describe resolution and its effect on the final image.
 - 03.05 Describe and demonstrate the factors that control and determine both axial and lateral resolution.
- 04.0 APPLY KNOWLEDGE OF THE ANATOMY AND SCANNING TECHNIQUES RELATED TO THE UPPER ABDOMINAL ORGANS AND SYSTEMS--The student will be able to:
- 04.01 Draw and label the gross upper abdominal organs in both longitudinal and transverse dimensions.
 - 04.02 Identify the gross upper abdominal anatomy as demonstrated by sonography, and common anatomic drawings.
 - 04.03 Explain the physiology of the upper abdominal organs and the related lab examinations.
 - 04.04 Explain the normal preparations for the sonographic demonstration of the upper abdominal organs.
 - 04.05 Explain the protocol for (actual) scanning sonographically the upper abdominal organs.

DIAGNOSTIC MEDICAL SONOGRAPHY - Continued

- 04.06 Explain the common pathology related to the upper abdomen and correlate with special scanning techniques.
 - 04.07 Demonstrate the normal anatomy of the upper abdomen with both real-time and static imaging devices.
 - 04.08 Explain the various types of equipment and their selection in performing an ultrasound exam.
 - 04.09 Explain and use the various techniques of instrumentation required to create a diagnostic sonogram.
 - 04.10 Explain and use the methods of patient preparation and care before and during a sonogram.
 - 04.11 Present a sonographic exam in completed form.
 - 04.12 Perform a complete ultrasound examination of the upper abdomen with little if any assistance (from patient preparation to final reading).
 - 04.13 Demonstrate skills to develop and maintain the special relationship of the sonographer to the patient and to other persons in medicine.
 - 04.14 Demonstrate laboratory safety techniques as related to sonographic imaging units in the patient examination situation.
 - 04.15 Use basic techniques for orientation and labeling of sonographic images.
 - 04.16 Describe the preparations and over-all procedures for a typical ultrasound examination of the upper abdomen.
 - 04.17 Identify gross abdominal structures as demonstrated by ultrasound such as the liver, gall bladder, aorta, inferior vena cava, stomach, pancreas, bowel and spleen.
- 05.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF INSTRUMENTATION COMMON TO THE FIELD OF ULTRASOUND--The student will be able to:
- 05.01 Describe piezoelectric effects.
 - 05.02 Describe both static and realtime transducer construction.
 - 05.03 Discuss historical perspective of scanner development.
 - 05.04 Explain and describe signal processing and how it effects image presentations.
 - 05.05 Discuss basic unit construction in the form of block diagrams static, realtime and doppler.
 - 05.06 Describe the purpose and use of typical controls located on static, realtime and doppler ultrasound scanners.
 - 05.07 Identify methods of determining and assuring quality control both sonographically and photographically.
 - 05.08 Demonstrate communication skills required on a daily basis in the typical sonography setting.
 - 05.09 Discuss causes, detection and control of factors that may create biologic effects in human tissue with insonation at the diagnostic medical exposure level.
- 06.0 APPLY KNOWLEDGE GAINED IN INSTRUMENTATION LECTURE AND WORK WITH ACTUAL ULTRASOUND SCANNERS SIMILAR TO THOSE FOUND IN LOCAL HOSPITALS--The student will be able to:
- 06.01 Develop and use patient information systems and impressions.
 - 06.02 Explain the various types of transducers available on the market, their construction and selection for sonographic imaging.
 - 06.03 Explain and use amplification in all its forms to produce a diagnostic quality sonogram.
 - 06.04 Explain and use power to produce a diagnostic quality sonogram.
 - 06.05 Explain and use the various forms of processing to produce a diagnostic quality sonogram.
 - 06.06 Explain and use the various types of scanning movements required to produce diagnostic quality sonograms.
 - 06.07 To explain and recognize typical artifacts as found in sonographic imaging and photography.
 - 06.08 Explain and use the 100mm AIUM test object.
- 07.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTRETRICS AND GYNOCOLGY--The student will be able to:
- 07.01 Describe the basic stages of embryology and sonographic relationships.
 - 07.02 Describe events occurring in the first trimester and their relationship to ultrasound.

DIAGNOSTIC MEDICAL SONOGRAPHY - Continued

- 07.03 Discuss anatomy, physiology and pathology of the various stages of fetal development as related to ultrasound.
 - 07.04 Discuss anatomy, physiology and pathology of the placenta at all stages of development.
 - 07.05 Describe methods for determining gestational and fetal growth by ultrasound and physical examination methods.
 - 07.06 Identify specific diseases common to the gestational period.
 - 07.07 Describe normal anatomy of the female pelvis and its relationship to ultrasound.
 - 07.08 Explain sonographic evaluation of the female pelvis in the pathologic state.
 - 07.09 Discuss anatomy, physiology and pathology of the female reproductive organs.
- 08.0 APPLY KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTETRICS AND GYNECOLOGY--The student will be able to:
- 08.01 Compare normal and abnormal states of embryology in the human as demonstrated by ultrasound.
 - 08.02 Explain the normal anatomy of the pregnant uterus and dating techniques of the fetus and placenta.
 - 08.03 Compare the normal and pathologic appearance of the fetus.
 - 08.04 Demonstrate special techniques of ultrasound scanning and collateral processes during pregnancy.
 - 08.05 Describe the normal anatomy and scanning techniques used to demonstrate the female and male pelvis.
 - 08.06 Describe pathology common to the human pelvis and special techniques for demonstrating sonographically.
 - 08.07 Explain the process used to develop pelvic mass charts and their use.
 - 08.08 Compare the normal and pathologic anatomy of the human renal system to include adrenals.
 - 08.09 Describe the scanning techniques common to sonographic imaging of the renals and the adrenals.
- 09.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY OF THE GENITOURINARY SYSTEM--The student will be able to:
- 09.01 Identify anatomy of renals.
 - 09.02 Describe physiology of renals.
 - 09.03 Discuss pathology of renals.
 - 09.04 Explain scanning techniques of renals.
 - 09.05 Discuss anatomy, physiology, pathology and scanning techniques of adrenals.
 - 09.06 Discuss gross anatomy, pathology and scanning techniques of the ureters, urinary bladder, prostate, testicles.
- 10.0 CONTINUE TO DEVELOP A MORE IN DEPTH AWARENESS OF THE DISEASE PROCESSES COMMON TO ALLIED HEALTH--The student will be able to:
- 10.01 Discuss basic concepts of the causes of disease.
 - 10.02 Discuss urogenital pathology common to allied health.
 - 10.03 Discuss gastrointestinal diseases.
 - 10.04 Discuss common pathology found in Obstetrics and Gynecology.
 - 10.05 Discuss common pathology found in the cardiovascular system.
 - 10.06 Discuss common pathology found in the eye and orbit.
 - 10.07 Demonstrate communication skills required to be an effective participant in the health care system.
- 11.0 APPLY ACCUMULATED KNOWLEDGE TO THE PROCESS OF CREATING DIAGNOSTIC SONOGRAMS--The student will be able to:
- 11.01 Complete in all aspects a diagnostic sonogram with emphasis on -
 - patient identification
 - patient interaction
 - general attitude
 - creation of sonogram
 - safety
 - recognition of anatomy, both normal and pathologic.
 - 11.02 Complete routine documentation associated with a typical ultrasound department.

12.0 APPLY SKILLS NEEDED TO COMPLETE DIAGNOSTIC IMAGES OF HIGH QUALITY FROM A VARIETY OF SCANNING UNITS--The student will be able to:

- 12.01 Perform complete and diagnostic examinations of the abdomen, pelvis and obstetrical patient using realtime and/or static devices.
- 12.02 Present completed examinations in detail with justification of all techniques, methods or procedures used to obtain data.
- 12.03 Identify gross pathology of the abdomen, pelvis and obstetrical patient, both on sonograms and related imaging modalities.
- 12.04 Perform all preliminary procedures leading to actual examination by sonography and all procedures necessary post examination.
- 12.05 Demonstrate skills needed to relate with tact and diplomacy with patients, physicians, nurses, other imaging personnel and the general hospital population.
- 12.06 Demonstrate those characteristics that reflect the high degree of professionalism associated with the field of ultrasound.

13.0 DEMONSTRATE AWARENESS OF THE APPLICATION OF COMPUTERS IN MEDICAL TECHNOLOGY--The student will be able to:

- 13.01 Discuss history, types of computers and applications in medicine.
- 13.02 Discuss word processing and basic programming in BASIC language.
- 13.03 Create a working program in BASIC language related to their field/interest.
- 13.03 Demonstrate the use of a micro-computer for word processing.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 14.01 Conduct a job search.
- 14.02 Secure information about a job.
- 14.03 Identify documents that may be required when applying for a job.
- 14.04 Complete a job application.
- 14.05 Demonstrate competence in job interview techniques.
- 14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 14.07 Identify acceptable work habits.
- 14.08 Demonstrate knowledge of how to make job changes appropriately.
- 14.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Electrocardiograph Aide

CODE NUMBER: Secondary 8415000

Postsecondary _____

Florida CIP H017.020301

SECONDARY

SCHOOL CREDITS 1

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other 12, 21

CERTIFICATION COVERAGE: NURSING ED #5 PRAC NURSE 7
LAB TECH 7 LAB ASST 7
EKG 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as an electrocardiograph aide or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, communication and interpersonal skills, human anatomy and physiology with emphasis on cardiac and vascular systems, medical terminology and transcription, patient care techniques in the health care facility, medical instrumentation, safe and efficient work practices, CPR, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: The laboratory competencies are achieved through simulated practice using standard equipment and supplies found in electrocardiography departments of health care facilities.

Clinical learning experiences are an integral part of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate the ability to use communication and interpersonal skills effectively.
02. Demonstrate knowledge of human anatomy and physiology with emphasis on the cardiovascular system.
03. Interpret, apply and transcribe medical terminology.
04. Perform patient care techniques in the health care facility.
05. Demonstrate knowledge of, apply and use medical instrumentation modalities.

Electrocardiograph Aide - Continued

06. Describe cardiovascular drugs, their actions, use and adverse effects.
07. Interpret electrocardiograph rhythms.
08. Identify legal and ethical responsibilities.
09. Demonstrate employability skills.

01.01 DEMONSTRATE THE ABILITY TO USE COMMUNICATION AND INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 01.01 Accept and place telephone calls and relay messages.
- 01.02 Greet and direct professionals and patients.
- 01.03 Use courtesy, tact, patience and assertiveness techniques.
- 01.04 Describe different methods of communicating.
- 01.05 Identify chain of command in an institutional setting.

02.0 DEMONSTRATE KNOWLEDGE OF HUMAN ANATOMY AND PHYSIOLOGY WITH EMPHASIS ON THE CARDIOVASCULAR SYSTEM--The student will be able to:

- 02.01 List body systems and identify two (2) functions of each.
- 02.02 Identify the structure and function of the heart.
- 02.03 Describe the circulatory system.
- 02.04 State the purpose of the coronary arteries.

03.0 INTERPRET, APPLY AND TRANSCRIBE MEDICAL TERMINOLOGY--The student will be able to:

- 03.01 Identify components of medical terms.
- 03.02 Define, spell and pronounce medical terms.
- 03.03 List and define standard abbreviations and medical symbols.
- 03.04 Type 35 correct words per minute.
- 03.05 Interpret and transcribe terminology related to cardiovascular testing.

04.0 PERFORM PATIENT CARE TECHNIQUES IN THE HEALTH CARE FACILITY--The student will be able to:

- 04.01 Describe the physical and mental preparation of the patient for cardiovascular testing.
- 04.02 Identify patient and verify the requisition order.
- 04.03 Prepare patient for cardiovascular diagnostic testing.
- 04.04 Measure and record patients vital signs.
- 04.05 Demonstrate isolation techniques.
- 04.06 Assist with CPR.
- 04.07 State precautions required when performing diagnostic procedures.
- 04.08 Perform skills relative to moving, positioning and transporting patients.

05.0 DEMONSTRATE KNOWLEDGE OF, APPLY AND USE MEDICAL INSTRUMENTATION MODALITIES--The student will be able to:

- 05.01 Define ECG.
- 05.02 Calibrate and standardize the cardiograph instrument.
- 05.03 Identify and place chest and limb leads.
- 05.04 Identify artifacts and mechanical problems.
- 05.05 State einthoven's triangle.
- 05.06 Perform and assess a 12 lead ECG.
- 05.07 Describe other modalities of cardiovascular diagnosis and interpretation.
- 05.08 Identify and respond to cardiac emergency.

06.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE AND ADVERSE EFFECTS--The student will be able to:

- 06.01 Describe mechanisms by which cardiovascular drugs work.
- 06.02 List common cardiovascular drugs.
- 06.03 State actions and adverse effects, of commonly used drugs.
- 06.04 Differentiate between normal and abnormal ECG changes due to drugs.

07.0 INTERPRET ELECTROCARDIOGRAPH RHYTHMS--The student will be able to:

- 07.01 Recognize and describe sinus rhythms.
- 07.02 Recognize and describe atrial rhythms.
- 07.03 Recognize and describe AV junctional rhythms.
- 07.04 Recognize and describe extrasystoles.

ELECTROCARDIOGRAPH AIDE - Continued

- 07.05 Recognize and describe ventricular rhythms.
- 07.06 Recognize and describe AV Block.
- 07.07 List purposes of pacemakers and indications for insertion.

- 08.0 IDENTIFY LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:
 - 08.01 Follow policies and procedures designed to assure confidentiality of health information.
 - 08.02 Maintain a safe and efficient work environment.
 - 08.03 Maintain equipment so it will be safe and accurate.

- 09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 09.01 Conduct a job search.
 - 09.02 Secure information about a job.
 - 09.03 Identify documents that may be required when applying for a job.
 - 09.04 Complete a job application.
 - 09.05 Demonstrate competence in job interview techniques.
 - 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 09.07 Identify acceptable work habits.
 - 09.08 Demonstrate knowledge of how to make job changes appropriately.
 - 09.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Electrocardiograph Technology

CODE NUMBER: Secondary _____

Postsecondary CPT0994

Florida CIP H017.020300

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational

_____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED #5 PRAC NURSE 7
LAB TECH 7 LAB ASST 7
EKG 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as electrocardiograph technicians (078.362-018), EKG Technicians (10121006), or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes but is not limited to, communication and interpersonal skills, overview of human anatomy and physiology with emphasis on cardiac and vascular systems, medical terminology and transcription, patient care techniques, medical instrumentation, cardiovascular drugs, interpretation of monitoring and testing results, medical ethics, cardiac wellness and rehabilitation, safe and efficient work practices, CPR, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: The laboratory competencies are achieved through simulated practice using standard equipment and supplies found in electrocardiography departments of health care facilities.

Clinical learning experiences are an integral part of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1080 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Discuss human anatomy and physiology.
02. Describe the cardiovascular system.
03. Interpret, apply, and transcribe medical terminology.

Electrocardiograph Technology - Continued

04. Perform patient care techniques in a health care facility.
05. Use medical instrument modalities.
06. Describe cardiovascular drugs, their action, use, and adverse effects.
07. Interpret monitoring and testing results.
08. Demonstrate legal and ethical behaviors.
09. Describe and demonstrate cardiac wellness and rehabilitation.
10. Use communication and interpersonal skills effectively.
11. Demonstrate employability skills.

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Electrocardiograph
TechnologyPOSTSECONDARY NUMBER: CPT0994

- 01.0 DISCUSS HUMAN ANATOMY AND PHYSIOLOGY--The student will be able to:
- 01.01 Identify functions of the human cell and state its relationship to body function.
 - 01.02 Diagram and label a cell.
 - 01.03 Identify and describe body planes.
 - 01.04 Identify and describe body systems and their functions.
- 02.0 DESCRIBE THE CARDIOVASCULAR SYSTEM--The student will be able to:
- 02.01 Locate the heart and surrounding structures.
 - 02.02 Diagram and label the parts of the heart and list the functions of each labeled part.
 - 02.03 Trace the flow of blood through the cardiopulmonary system.
 - 02.04 Identify and describe the electrical conduction system.
- 03.0 INTERPRET, APPLY, AND TRANSCRIBE MEDICAL TERMINOLOGY--The student will be able to:
- 03.01 Identify components of medical terms.
 - 03.02 Pronounce, spell, and define medical terms.
 - 03.03 List and define standard abbreviations and medical symbols.
 - 03.04 Interpret and transcribe terminology related to cardiovascular testing.
 - 03.05 Type 35 medical terminologies per minute.
- 04.0 PERFORM PATIENT CARE TECHNIQUES IN A HEALTH CARE FACILITY--The student will be able to:
- 04.01 Perform cardiopulmonary resuscitation (CPR).
 - 04.02 Identify fire and safety rules and regulations.
 - 04.03 Prepare the patient physically and mentally for cardiovascular testing.
 - 04.04 State identification methods and precautions required when performing diagnostic procedures.
 - 04.05 Perform skills relative to moving, positioning, and transporting patients.
 - 04.06 Measure and record patients' vital signs.
 - 04.07 Demonstrate isolation techniques.
- 05.0 USE MEDICAL INSTRUMENT MODALITIES--The student will be able to:
- 05.01 Calibrate and standardize the cardiograph instrument.
 - 05.02 Identify three types of lead systems.
 - 05.03 Demonstrate proper lead placement.
 - 05.04 Identify artifacts and mechanical problems.
 - 05.05 Perform a 12 lead ECG.
 - 05.06 Understand the Holter monitoring and scanning exercise treatment.
 - 05.07 Describe other modalities of cardiovascular diagnosis and interpretation.
 - 05.08 Identify and respond to cardiac emergency.
- 06.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE, AND ADVERSE EFFECTS--The student will be able to:
- 06.01 Describe mechanisms by which cardiovascular drugs work.
 - 06.02 List common cardiovascular drugs.
 - 06.03 State actions and adverse effects of commonly used drugs.
 - 06.04 Differentiate between normal and abnormal ECG changes due to drugs.
- 07.0 INTERPRET MONITORING AND TESTING RESULTS--The student will be able to:
- 07.01 Interpret and measure waves, segments, complexes, rates, and intervals.
 - 07.02 Know electrical axis.
 - 07.03 Recognize and interpret sinus rhythms.
 - 07.04 Recognize and interpret atrial rhythms.
 - 07.05 Recognize and interpret atrio-ventricular rhythms.

ELECTROCARDIOGRAPH TECHNOLOGY - Continued

- 07.06 Recognize and interpret ventricular rhythms.
 - 07.07 Recognize and interpret types of heart blocks.
 - 07.08 Recognize and interpret pacemaker rhythms.
 - 07.09 Recognize and interpret types of myocardial ischemia and infarction.
 - 07.10 Recognize and interpret atrial and ventricular hypertrophies.
 - 07.11 Recognize and interpret extrasystoles and other rare phenomena.
 - 07.12 Interpret 12 lead ECG.
- 08.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIORS--The student will be able to:
- 08.01 Follow policies and procedures designed to assure confidentiality of health information.
 - 08.02 Maintain a safe and efficient work environment.
 - 08.03 Maintain equipment so it will be safe and accurate.
- 09.0 DESCRIBE AND DEMONSTRATE CARDIAC WELLNESS AND REHABILITATION--The student will be able to:
- 09.01 Identify predisposing factors to heart disease.
 - 09.02 Describe the American Heart Association diet.
 - 09.03 Explain behavior modification and stress management.
 - 09.04 Describe principles of physical fitness and exercise.
 - 09.05 Perform physical exercise and demonstrate physical fitness.
- 10.0 USE COMMUNICATION AND INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:
- 10.01 Accept, write, and relay telephone calls and verbal messages.
 - 10.02 Communicate with patients, peers, and authority figures using verbal and non-verbal communication skills.
 - 10.03 Identify the factors that influence communication.
 - 10.04 Use charting and documentation skills.
 - 10.05 Identify organizational structure and chain of command in school and health care facilities.
- 11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 11.01 Conduct a job search.
 - 11.02 Secure information about a job.
 - 11.03 Identify documents that may be required when applying for a job.
 - 11.04 Complete a job application form correctly.
 - 11.05 Demonstrate competence in job interview techniques.
 - 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 11.07 Identify acceptable work habits.
 - 11.08 Demonstrate knowledge of how to make job changes appropriately.
 - 11.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Electroencephalograph Technology

CODE NUMBER: Secondary _____

Postsecondary ETN0990

Florida CIP H017.020400

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: ENCEPHALGH 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as EEG technicians (10121007), electroencephalographic technologists or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, recording and measurement procedures, EEG patterns, patient safety, communication, medical terminology, ethical and legal considerations, equipment use, care and troubleshooting, neuroanatomy and neurophysiology, effects of medications on tracings, neurology and neuropathology, basic electronics for biomedical instrumentation, patient history taking and neonatal studies, using portable equipment, neurodiagnostic procedures, clinical responses, corticography, laboratory management, interpersonal relationships, employability skills, and health and safety including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory activities are essential for this program, with clinical experiences accounting for nearly one-half of the required time. Clinical experience must be obtained in accredited institutions with which the school has written contractual agreements, including safe student-teacher ratios. Faculty must be responsible for the selection of activities assigned to students in the clinical setting.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. The American Society of Electroencephalographic Technologists, Inc., also has student membership available.

The program should be approved by the Committee on Allied Health Education and Accreditation (CAHEA). Program graduates should be eligible to take the registry examination of the American Board of Registration of Electroencephalographic Technologists for designation as R. EEG T..

In accordance with Section 240.149 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 12.0, Language 12.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Manage and brief patients.
02. Take and abstract patient histories.
03. Apply recording electrodes.
04. Operate EEG equipment.

Electroencephalograph Technology - Continued

05. Perform personal, patient, and equipment electrical safety procedures.
06. Select and perform patient-specific EEG techniques.
07. Recognize and categorize the EEG activity displayed.
08. Recognize, identify and/or correct artifacts.
09. Manage medical emergencies.
10. Correct instrument faults.
11. Debrief patients.
12. Demonstrate knowledge of cortical and depth recording procedures.
13. Demonstrate knowledge and ability to perform electrocerebral silence recording.
14. Prepare descriptive reports of recordings for the use of the electroencephalographer.
15. Manage the laboratory.
16. Keep laboratory records.
17. Schedule appointments.
18. Order supplies.
19. Supervise technicians.
20. Demonstrate employability skills.

01.0 MANAGE AND BRIEF PATIENTS--The student will be able to:

- 01.01 Explain EEG procedure to patient.
- 01.02 Provide attendant nursing skills for handling severely ill patients and apply emergency procedures.
- 01.03 Observe patient for stability or changes in respiration, circulation, color, skin moisture, and consciousness level.
- 01.04 Demonstrate social skills and attitudes appropriate to employment in a health care facility.
- 01.05 Display respect for patients regardless of race, religion, color, creed, sex, age, or diagnosis.
- 01.06 Display a professional and positive attitude in dealing with patients.
- 01.07 Maintain confidentiality of all patient records and information.
- 01.08 Discuss with the patient only that information already known by the patient.
- 01.09 Discuss the patients condition only when out of audible range of the patient/family and only with appropriate supervisors.

02.0 TAKE AND ABSTRACT PATIENT HISTORIES--The student will be able to:

- 02.01 Introduce self to patient, identify patient.
- 02.02 Explain necessity for obtaining information to patient to elicit patient's cooperation within the limits of his/her physical and mental status.
- 02.03 Review chart for physicians orders, admission notes, test results, surgical procedures, nurses notes, physical examination, progress notes and medications administered.
- 02.04 Question patient for chief complaint, description and sequence of symptoms, past history, family history and note any physical defects.
- 02.05 List all medications and pertinent information in appropriate places.
- 02.06 Observe patient and note behavior.
- 02.07 Abstract these data obtained above.

03.0 APPLY RECORDING ELECTRODES--The student will be able to:

- 03.01 Perform head measurements.
- 03.02 Apply electrodes according to the specifications of International 10-20 Electrode placement.
- 03.03 Describe electrode application, montages, and protocol for neonate recordings and electrocerebral silence study.
- 03.04 Apply non cerebral monitors for EKG - EOG - EMG and/or reference recording.
- 03.05 Describe and perform various methods of applications such as electrode paste, collodian, and needle electrode insertion.

04.0 OPERATE EEG EQUIPMENT--The student will be able to:

- 04.01 Calibrate the EEG instrument in preparation for a procedure by aligning the time axis on one grid, measuring the pen deflection at 7mm, listing the electrode impedances under 5 kilohms, and selecting the Bio Cal montage, labeling the parameters of sensitivity, high linear frequency control and low linear frequency control.
- 04.02 Calibrate the impedance meter.
- 04.03 Adjust and identify instrumentation settings used during the recording of electrocerebral potentials.
- 04.04 Evaluate adequate functioning of equipment and identify different features of various commercial EEG instrumentation.
- 04.05 Adjust and identify instrumentation settings used during the recording of electrocerebral potentials: HLF, LLF, 60Hz, sensitivity, fast and slow paper speeds.
- 04.06 Select and label routine montages by memory.
- 04.07 Make specific adjustments of calibration and impedances.
- 04.08 Note behavior of patient on EEG: position, consciousness level, movement, clinical correlation.
- 04.09 Draw and describe frequency response curves and the EEG convention of polarity.

ELECTROENCEPHALOGRAPH TECHNOLOGY - Continued

05.0 PERFORM PERSONAL, PATIENT, AND EQUIPMENT ELECTRICAL SAFETY PROCEDURES--The student will be able to:

- 05.01 Direct the activities of the patient, insuring safety and comfort while maintaining a controlled environment.
- 05.02 Protect equipment from harm due to cardiac defibrillation procedures, etc.
- 05.03 Protect self as directed in many situations avoiding contact with live electrical wires or outlets, wear protective gear.

06.0 SELECT AND APPLY PATIENT SPECIFIC EEG TECHNIQUES--The student will be able to:

- 06.01 Identify and describe invasive and non-invasive neurological diagnostic procedures.
- 06.02 Describe the criteria and procedure for insertion of naso-pharyngeals and assist with sphenoidals.
- 06.03 Perform photic stimulation and describe/recognize photic evoked response, photomyoclonus and photo convulsive response.
- 06.04 Monitor hyperventilation and post hyperventilation, then note accumulating 10 second intervals as pluses during hyperventilation and minuses for post hyperventilation. Describe hyperventilation findings and contraindications.
- 06.05 Determine polarity of cerebral potentials and eye movements.
- 06.06 Select or design montages to determine electrical field distribution of generalized and/or localized EEG abnormalities.
- 06.07 Recognize the diagnostic limitations of special related procedures and the criteria for their selection.
- 06.08 Calculate dosage and administer oral medication under minimal supervision.
- 06.09 Perform noxious stimulation of the patient with decreased consciousness when indicated with assistance as available.
- 06.10 Perform a neonatal recording and a nasopharyngeal recording.

07.0 RECOGNIZE AND CATEGORIZE THE EEG ACTIVITY DISPLAYED--The student will be able to:

- 07.01 Identify normal activity in adults and variants of age correlates.
- 07.02 Describe/recognize five stages of sleep: I, II, III, IV, and REM.
- 07.03 Identify sedatives, tranquilizers, anticonvulsants, and medications for activation procedures that correlate with EEG changes.
- 07.04 Recognize abnormal electrocerebral potentials and interpret significance during recording procedure.
- 07.05 Recognize abnormal electrocerebral potential: focal, paroxysmal, lateralized, and generalized.
- 07.06 Recognize and categorize normal and abnormal EEG patterns and artifacts and correlate these phenomena with the patient's neurological examination and diagnosis and environment, respectively.
- 07.07 Review, describe, and critique tracings with clinical supervisor, EEG instructor and electroencephalographer.
- 07.08 Prepare a descriptive analysis of the EEG tracing.
- 07.09 Identify space occupying lesions and gross neuropathology and discuss EEG pattern correlation.

08.0 RECOGNIZE, IDENTIFY AND/OR CORRECT ARTIFACTS--The student will be able to:

- 08.01 Recognize, monitor and/or eliminate all physiological artifacts such as EKG, EMG, EOG, pulse and sweat.
- 08.02 Recognize and eliminate instrumental artifacts such as pops and 60Hz, and equipment malfunction.
- 08.03 Recognize, eliminate and/or monitor external environmental artifacts such as electrostatic interference.

09.0 MANAGE MEDICAL EMERGENCIES--The student will be able to:

- 09.01 Assist with CPR/emergency codes as directed.
- 09.02 Perform restraining techniques on a patient who presents a danger to self or others as directed.
- 09.03 Report immediately any changes in patient's level of consciousness, respiration, circulation, or color.

ELECTROENCEPHALOGRAPH TECHNOLOGY - Continued

- 10.0 CORRECT INSTRUMENT FAULTS--The student will be able to:
- 10.01 Report and malfunctioning equipment.
 - 10.02 Perform routine care/maintenance on equipment.
 - 10.03 Troubleshoot identify and correct malfunctions as described in the equipment manual.
- 11.0 DEBRIEF PATIENTS--The student will be able to:
- 11.01 Make certain that the patient has been informed about the activity/procedure performed.
 - 11.02 Protect/return all personal items belonging to patient that were removed in the lab, e.g., glasses, dentures, earrings, wig, toupee, barrettes and make certain that the patient has been informed.
 - 11.03 Insure patient safety by using bed rails, wheel locks and safety belts.
- 12.0 DEMONSTRATE KNOWLEDGE OF CORTICAL AND DEPTH RECORDING PROCEDURES--The student will be able to:
- 12.01 Design montages to determine electrical field distribution of generalized and/or localized EEG abnormalities.
 - 12.02 State the criteria for corticography and describe the EEG technologist's role during surgery.
 - 12.03 Describe the mechanism of neuronal function, synaptic transmission, volume conduction, cortico-thalamic projection system and neuronal basis of electrocerebral potential.
- 13.0 DEMONSTRATE KNOWLEDGE AND ABILITY FOR ELECTROCEREBRAL SILENCE RECORDING--The student will be able to:
- 13.01 List the criteria for minimal technical standards of an electrocerebral silence (ECS) recording.
 - 13.02 Perform an ECS recording.
 - 13.03 Describe the three types of clinical evoked potentials and diagnostic function.
- 14.0 PREPARE DESCRIPTIVE REPORTS OF RECORDINGS FOR THE USE OF THE ELECTROENCEPHALOPHYSIOLOGIST--The student will be able to:
- 14.01 Communicate effectively/appropriately with department personnel, hospital staff and physicians.
 - 14.02 Design visual aids and compile educational materials for reference.
 - 14.03 Prepare report of each recording.
 - 14.04 Mount tracings with descriptive records.
 - 14.05 Record all information accurately.
 - 14.06 Discuss patient information only with other appropriate medical personnel.
 - 14.07 Display patient anonymity when preparing visual aids.
- 15.0 MANAGE THE LABORATORY--The student will be able to:
- 15.01 Process billing/computer.
 - 15.02 Identify and refer to procedure manual.
 - 15.03 Process reports for patient charts.
 - 15.04 Clean, maintain, and stock the instrument, linen supply, pedigo cart, and cabinets of the EEG laboratory every day.
 - 15.05 Sanitize all parts of equipment utilized: electrodes, stethoscope ear pieces - etc.
 - 15.06 Develop and monitor infection control policies.
 - 16.07 Obtain new equipment/repairs as needed.
- 16.0 KEEP LABORATORY RECORDS--The student will be able to:
- 16.01 File records.
 - 16.02 Prepare daily lab activity records.
 - 16.03 Monitor DRG records.
 - 16.04 File maintenance reports and records of equipment inspections.
- 17.0 SCHEDULE APPOINTMENTS--The student will be able to:
- 17.01 Schedule patient appointments according to agency policies and patient requirements.

ELECTROENCEPHALOGRAPH TECHNOLOGY - Continued

- 17.02 Recognize urgency of requests for services and respond appropriately.
- 17.03 Respond to STATS.
- 18.0 ORDER SUPPLIES--The student will be able to:
 - 18.01 Prepare and update inventory.
 - 18.02 Assess needs and monitor supplies.
 - 18.03 Prepare requisition, being mindful of product deterioration, storage space, and institutional policies.
- 19.0 SUPERVISE TECHNICIANS--The student will be able to:
 - 19.01 Monitor infection control procedures/records.
 - 19.02 Prepare incident reports.
 - 19.03 Make assignments, follow through.
 - 19.04 Perform employee evaluations.
 - 19.05 Advise employees.
 - 19.06 Monitor waste/loss of supplies.
- 20.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 20.01 Conduct a job search.
 - 20.02 Secure information about a job.
 - 20.03 Identify documents that may be required when applying for a job.
 - 20.04 Complete a job application.
 - 20.05 Demonstrate competence in job interview techniques.
 - 20.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 20.07 Identify acceptable work habits.
 - 20.08 Demonstrate knowledge of how to make job changes appropriately.
 - 20.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
 FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
 PROGRAM TITLE: Emergency Medical Technology - EMT
 CODE NUMBER: Secondary _____ Postsecondary EMS0119
 Florida CIP H017.020500

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
 _____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE 7 PARAMEDIC 7
 TEC MED @7 EMR MED TE 7

I. **MAJOR CONCEPTS/CONTENT:** This is an instructional program that prepares students for employment as ambulance drivers/ambulance attendants (62002001), or emergency medical technicians to function at the basic pre-hospital emergency medical technician level and treat various medical/trauma conditions using appropriate equipment and materials. The program prepares students for certification as EMT's in accordance with Chapter 10D-66 of the Florida Administrative Code. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services and the curriculum must adhere to the U.S. Department of Transportation National Training Course. This is the initial level for a career in emergency medical systems and the primary prerequisite for paramedic training and certification. In addition, the program provides supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, patient assessment, airway problems, cardiac arrest, external and internal bleeding, injuries to all body parts, fractures, dislocations, sprains, poisons, heart attack, stroke, diabetes, acute abdomen, communicable diseases, patients with abnormal behavior, alcohol and drug abuse, the unconscious state, emergency childbirth, burns, environmental hazards, communications, reporting, extrication and transportation of patient. The student must be proficient in the use of suctioning devices, airways, resuscitation devices, oxygen equipment, sphygmomanometer and stethoscope, splints of all types, pneumatic counterpressure devices, extrication tools, dressings and bandages.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES:** Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor. Special emphasis should be placed on extrication and cardiopulmonary resuscitation. Ten hours of supervised clinical experience in a hospital emergency room is required.

Hospital and field/rescue riding must be included in clinical activities.

III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

American Heart Association or Red Cross certification in basic CPR is required of all graduates. A student physical requirement must be met in accordance with HRS guidelines.

During the EVOC course, the student-teacher ratio in the 8 hours of classroom instruction is 1:20. During the 8 hour driving (clinical experience) the ratio is 1:6. During the driving performances the teacher is to have 3 students in the ambulance rotating the driving so each one has the experience of driving and riding in various spots. Three other students are observing the motion of the ambulance, the various configurations of the wheels and cab. There should be a second instructor with the observing students.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 200 hours in accordance with HRS guidelines.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Describe the role and responsibilities of the EMT.
02. Conduct patient assessment for illness/injuries.
03. Recognize and treat airway obstruction.
04. Recognize and treat cardiac arrest.
05. Recognize and treat bleeding and shock.
06. Recognize and treat soft tissue injuries.
07. Recognize and treat musculo-skeletal injuries.
08. Recognize and treat injuries of the head, neck, face, eye and spine.
09. Recognize and treat injuries to the chest, abdomen and genitalia.
10. Recognize and treat medical emergencies.
11. Demonstrate ability to assist with emergency childbirth.
12. Demonstrate appropriate care of burns and hazardous materials.
13. Demonstrate knowledge of environmental emergencies.
14. Identify psychological aspects of emergency care including the organ and tissue donor program.
15. Demonstrate principles of extrication.
16. Demonstrate oral and written communication.
17. Demonstrate knowledge of safe driving and operation of an emergency vehicle.
18. Demonstrate care of the pediatric patient.
19. Demonstrate appropriate transportation of patients.
20. Demonstrate employability skills.

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Emergency Medical
Technology - EMTPOSTSECONDARY NUMBER: EMS0119

- 01.0 DESCRIBE THE ROLE AND RESPONSIBILITIES OF THE EMERGENCY MEDICAL TECHNICIAN, (EMT)--The student will be able to:
- 01.01 Identify the role of the EMT in relation to other medical personnel.
 - 01.02 Describe the importance of emergency care.
 - 01.03 List three legal aspects of emergency care.
- 02.0 CONDUCT PATIENT ASSESSMENT FOR ILLNESS/INJURIES--The student will be able to:
- 02.01 Count and record pulse and respiration rate.
 - 02.02 Measure and record blood pressure.
 - 02.03 Identify level of consciousness.
 - 02.04 Assess pupillary size and reaction.
 - 02.05 Assess and record skin color and temperature.
 - 02.06 Assess and record ability to move.
 - 02.07 Assess and record reaction to pain.
 - 02.08 Perform an examination for life threatening problems.
 - 02.09 Identify and describe signs and symptoms presented.
 - 02.10 Describe the probable cause of the condition presented.
- 03.0 RECOGNIZE AND TREAT AIRWAY OBSTRUCTION--The student will be able to:
- 03.01 Describe the basic mechanics of respiration.
 - 03.02 Maintain an open airway.
 - 03.03 Perform cardiopulmonary resuscitation.
 - 03.04 Provide oxygen therapy.
 - 03.05 Perform mechanical suctioning of airway.
- 04.0 RECOGNIZE AND TREAT CARDIAC ARREST--The student will be able to:
- 04.01 Describe the basic mechanics of circulation.
 - 04.02 List signs of cardiac arrest.
 - 04.03 Perform cardiopulmonary resuscitation by a lone rescuer and by a team of rescuers.
 - 04.04 Describe the variations for infants and children.
- 05.0 RECOGNIZE AND TREAT BLEEDING AND SHOCK--The student will be able to:
- 05.01 Describe the basic mechanics of circulation.
 - 05.02 Take vital signs.
 - 05.03 Recall the signs of shock.
 - 05.04 Recall the signs of external and internal bleeding.
 - 05.05 Treat shock and control bleeding.
 - 05.06 Perform an examination for life threatening problems.
 - 05.07 Use pneumatic counter pressure devices appropriately.
- 06.0 RECOGNIZE AND TREAT SOFT TISSUE INJURIES--The student will be able to:
- 06.01 Describe the anatomy and physiology of the skin.
 - 06.02 Identify signs and significance of various wound types.
 - 06.03 Give basic care of wounds.
 - 06.04 Apply dressings and bandages to wounds.
- 07.0 RECOGNIZE AND TREAT MUSCULO-SKELETAL INJURIES--The student will be able to:
- 07.01 Describe the anatomy and physiology of the musculoskeletal system.
 - 07.02 Recall signs and symptoms of fractures, sprains and dislocations.
 - 07.03 Demonstrate examination of a patient for injuries.
 - 07.04 Identify techniques of immobilizing fractures and dislocations of the upper extremity.
 - 07.05 Identify techniques of immobilizing fractures and dislocations of pelvis, hips and lower extremity.

EMERGENCY MEDICAL TECHNOLOGY - EMT - Continued

- 08.0 RECOGNIZE AND TREAT INJURIES OF THE HEAD, NECK, FACE, EYE AND SPINE--The student will be able to:
- 08.01 Describe the anatomy and physiology of the central nervous system.
 - 08.02 List signs and symptoms of spine injuries.
 - 08.03 Demonstrate care of patients with injuries to skull, brain, face, eye and neck.
 - 08.04 Demonstrate ability to immobilizing patients on short and long backboards.
- 09.0 RECOGNIZE AND TREAT INJURIES TO THE CHEST, ABDOMEN AND GENITALIA--The student will be able to:
- 09.01 Describe parts and functions of the abdomen, and genitourinary systems.
 - 09.02 Demonstrate techniques of dressing and bandaging the chest and abdomen.
 - 09.03 Cover sucking chest wound with occlusive dressing.
 - 09.04 Place wet sterile dressing on wound which has exposed internal organ.
- 10.0 RECOGNIZE AND TREAT MEDICAL EMERGENCIES--The student will be able to:
- 10.01 Describe techniques of care for poison victims.
 - 10.02 Describe techniques of care for victims of bites and stings.
 - 10.03 Describe techniques of care for heart attack victims.
 - 10.04 Describe techniques of care for stroke victims.
 - 10.05 Describe techniques of care for diabetic patients.
 - 10.06 Describe techniques of care for patients with communicable disease.
 - 10.07 Describe techniques of care for patients having seizures.
 - 10.08 Describe techniques of care for patients suffering from acute abdominal problems.
- 11.0 DEMONSTRATE ABILITY TO ASSIST WITH EMERGENCY CHILDBIRTH--The student will be able to:
- 11.01 Describe relevant anatomy and physiology of childbirth.
 - 11.02 Assist mother in delivery of baby.
 - 11.03 Perform assessment and care of infant.
 - 11.04 Clear newborn baby's airway passage and maintain airway.
 - 11.05 Resuscitate the newborn if necessary.
 - 11.06 Give care to premature infant as appropriate.
 - 11.07 Massage mother's fundus.
 - 11.08 Note amount of vaginal bleeding.
 - 11.09 Clamp umbilical cord in two places.
 - 11.10 Transport placenta if delivered.
 - 11.11 Document time of birth of child, birth of placenta and vital signs of mother pre and post delivery.
- 12.0 DEMONSTRATE APPROPRIATE CARE OF BURNS AND HAZARDOUS MATERIALS--The student will be able to:
- 12.01 Estimate the degree and size of a burn.
 - 12.02 Give emergency care to the burned victim.
 - 12.03 Identify dangers of different type burns (heat, chemical, electrical, radiation).
 - 12.04 Recognize a hazardous materials situation and follow appropriate precautionary procedures.
- 13.0 DEMONSTRATE KNOWLEDGE OF ENVIRONMENTAL EMERGENCIES--The student will be able to:
- 13.01 Describe techniques of care for patients suffering from heat exhaustion, heat stroke, hypothermia and frostbite.
 - 13.02 Describe techniques of care for the patient exposed to water related emergencies.
 - 13.03 Describe techniques used in a mass casualty incident and appropriate triage.
- 14.0 IDENTIFY PSYCHOLOGICAL ASPECTS OF EMERGENCY CARE INCLUDING THE ORGAN AND TISSUE DONOR PROGRAM--The student will be able to:

EMERGENCY MEDICAL TECHNOLOGY - EMT - Continued

- 14.01 List considerations when dealing with infants, children, elderly, handicapped and psychologically disturbed.
 - 14.02 Describe emergency care of substance abuse patients.
 - 14.03 List aspects of dealing with death and dying.
 - 14.04 Recognize potential tissue and organ donors.
- 15.0 DEMONSTRATE THE PRINCIPLES OF EXTRICATION--The student will be able to:
- 15.01 Describe methods used to extricate persons from inaccessible situations.
 - 15.02 Immobilize and remove patients with suspected spine injuries.
 - 15.03 Remove patients from motor vehicles.
 - 15.04 List extrication tools and equipment.
- 16.0 DEMONSTRATE ORAL AND WRITTEN COMMUNICATION--The student will be able to:
- 16.01 Keep records using forms and reporting systems.
 - 16.02 Use radio communications appropriately.
 - 16.03 Maintain communication equipment.
- 17.0 DEMONSTRATE KNOWLEDGE OF SAFE DRIVING AND OPERATION OF AN EMERGENCY VEHICLE--The student will be able to:
- 17.01 Identify regulations and recommendations pertaining to driving an emergency vehicle.
 - 17.02 Direct vehicle and equipment maintenance.
 - 17.03 Describe proper use of radio communications.
- 18.0 DEMONSTRATE CARE OF THE PEDIATRIC PATIENT--The student will be able to:
- 18.01 Describe stages of normal growth and development.
 - 18.02 Assess pediatric patient's condition.
 - 18.03 Initiate appropriate interventions.
- 19.0 DEMONSTRATE APPROPRIATE TRANSPORTATION OF PATIENTS--The student will be able to:
- 19.01 Continually assess patient condition.
 - 19.02 Report significant changes.
 - 19.03 Maintain appropriate treatment.
 - 19.04 Initiate additional treatment as necessary.
 - 19.05 Secure patient in transportation vehicle.
- 20.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 20.01 Conduct a job search.
 - 20.02 Secure information about a job.
 - 20.03 Identify documents that may be required when applying for a job.
 - 20.04 Complete a job application.
 - 20.05 Demonstrate competence in job interview techniques.
 - 20.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 20.07 Identify acceptable work habits.
 - 20.08 Demonstrate knowledge of how to make job changes appropriately.
 - 20.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
PROGRAM TITLE: Emergency Medical Technology - Paramedic
CODE NUMBER: Secondary _____ Postsecondary EMS0219
Florida CIP H017.020600

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE 7
EMR MED TE 7 PARAMEDIC 7

I. MAJOR CONCEPTS/CONTENT: This program is designed to prepare students for employment as ambulance drivers/ambulance attendants (62002001), or EMT-Paramedics, or to provide supplemental training for persons previously or currently employed in these occupations. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services; and the curriculum must adhere to the U.S. Department of Transportation National Training Course.

The content includes, but is not limited to, the recognition, assessment and management of medical, trauma, psychological and behavioral, and obstetrical emergencies under the direction of a physician. The EMT-Paramedic (EMT-P) primarily provides pre-hospital emergency care to acutely ill or injured patients by mobile advanced life support units under medical command authority, and secondarily, in other appropriate settings which are under physician control.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program prepares students for certification as an EMT-Paramedic in accordance with standards given in Chapter 10D-66 of the Florida Administrative Code.

II. LABORATORY ACTIVITIES: Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor. Special emphasis should be placed on patient assessment, administration of drugs and IV fluids, and EKG monitor interpretation.

III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

Emergency Medical Technician (EMT) certification is required for admittance into the program.

The procedures performed by an EMT-Paramedic must be performed under the direction of a licensed physician with appropriate emergency experience.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a stated designated basic skills examination.

The National Council of State EMS Coordinators, in cooperation with the Joint Review Committee on Educational Programs for the EMT - Paramedic Program Accreditation, recommends approximately 232 hours supervised clinical experience during which time the student-teacher ratio is 1:2.

The American Heart Association ACLS course requires nine teachers for a maximum of 48 students. Each teacher mans a station through which all students must pass. If there are only 25 students the same number of teachers must be present.

The typical length of this program for the average achieving student is 600 hours or an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Identify the role of the paramedic.
02. Use interpersonal skills.
03. Recognize a medical emergency; assess the situation.
04. Manage emergency care.
05. Demonstrate ability to treat shock.
06. Demonstrate general knowledge of pharmacology.
07. Assess airway function and treat airway obstruction.
08. Assess cardiac function and treat basic arrhythmias.
09. Assess central nervous system function and treat patients with nervous system disorder.
10. Assess and manage soft tissue injuries.
11. Assess and manage musculo/skeletal injuries.
12. Identify and manage medical emergencies.
13. Identify and manage obstetric/gynecologic emergencies.
14. Assess pediatric patients and transport neonatal infants.
15. Identify and manage the emotionally disturbed patient.
16. Apply techniques of extrication and rescue.
17. Use telemetry and other communications equipment.
18. Demonstrate employability skills.

- 01.0 IDENTIFY THE ROLE OF THE PARAMEDIC--The student will be able to:
- 01.01 List the responsibilities of the paramedic.
 - 01.02 State the laws under which the paramedic is permitted to function.
 - 01.03 Describe career pathways in emergency medical services.
 - 01.04 List interprofessional responsibilities.
- 02.0 USE INTERPERSONAL SKILLS--The student will be able to:
- 02.01 Accept direction.
 - 02.02 Be aware of impact on others.
 - 02.03 Communicate with others.
 - 02.04 Function as a team member.
 - 02.05 Accept patients as they present without passing judgment.
 - 02.06 Involve others significant to patient.
 - 02.07 Respond to patient's sense of crisis.
 - 02.08 Describe reactions to death and dying.
- 03.0 RECOGNIZE A MEDICAL EMERGENCY; ASSESS THE SITUATION--The student will be able to:
- 03.01 Obtain information from observation of the environment and interviewing others.
 - 03.02 Identify the major body structures and the primary function of each.
 - 03.03 Describe the procedure for eliciting a medical history.
 - 03.04 Demonstrate procedure for conducting a physical examination.
 - 03.05 Demonstrate ability to organize and interpret data rapidly.
 - 03.06 Demonstrate ability to communicate concisely and accurately.
 - 03.07 Identify pertinent anatomy, physiology, pharmacology, microbiology and psychology.
 - 03.08 Define common medical terms.
- 04.0 MANAGE EMERGENCY CARE--The student will be able to:
- 04.01 Perform extrication if necessary.
 - 04.02 Coordinate efforts with those of other agencies.
 - 04.03 Assign priorities of emergency treatment.
 - 04.04 Record and communicate data to designated medical command authority.
 - 04.05 Initiate appropriate invasive and non-invasive treatments under direction of a physician or other authorized personnel.
 - 04.06 Exercise personal judgment in case of interruption in medical direction or immediate life threatening conditions using procedures specifically authorized in advance.
 - 04.07 Direct transportation of patient(s).
- 05.0 DEMONSTRATE ABILITY TO TREAT SHOCK--The student will be able to:
- 05.01 Describe the manifestation of fluid and electrolyte imbalance.
 - 05.02 List the causes, signs and symptoms of shock.
 - 05.03 Demonstrate procedure for administration of intravenous electrolyte or glucose solutions.
 - 05.04 Demonstrate aseptic technique of peripheral venipuncture.
 - 05.05 Describe calculation of rates of IV fluid administration by drops-per-minute technique.
 - 05.06 Demonstrate the application, inflation and deflation of the MAST or other pneumatic counter pressure devices.
- 06.0 DEMONSTRATE GENERAL KNOWLEDGE OF PHARMACOLOGY--The student will be able to:
- 06.01 Define the action of a drug given the general class to which it belongs.
 - 06.02 State the procedure for verifying medication orders received over the radio from a physician.
 - 06.03 Calculate the volume fluid to be administered given the dosage required and the concentration of the drug.
 - 06.04 Define the units of measure used in the metric system.

EMERGENCY MEDICAL TECHNOLOGY - PARAMEDIC - Continued

- 06.05 Demonstrate the technique for drawing up the designated volume of fluid in a syringe from an ampule and a vial.
- 06.06 Demonstrate the technique for subcutaneous and intramuscular injection.
- 06.07 Demonstrate the techniques for the administration of drugs into an IV bottle or through an IV insertion site.
- 07.0 ASSESS AIRWAY FUNCTION AND TREAT AIRWAY OBSTRUCTION--The student will be able to:
 - 07.01 Identify each structure in the respiratory system and list at least one function of each.
 - 07.02 Demonstrate the procedure for evaluation of a patient with suspected respiratory distress.
 - 07.03 Describe probable cause, signs, symptoms and treatment of problems involving the respiratory system.
 - 07.04 Demonstrate the procedure for administration of oxygen.
 - 07.05 Demonstrate the use of oropharyngeal and nasopharyngeal airways.
 - 07.06 Demonstrate the procedure for endotracheal and esophageal intubation.
 - 07.07 Demonstrate the technique of nasogastric tube insertion.
 - 07.08 Demonstrate the technique of direct laryngoscopy.
 - 07.09 Identify and describe the adjunctive equipment utilized for respiratory assistance.
 - 07.10 Demonstrate the technique for proper assembly, cleaning, functioning and testing of the above equipment.
- 08.0 ASSESS CARDIAC FUNCTION AND TREAT BASIC ARRHYTHMIAS--The student will be able to:
 - 08.01 Identify and/or describe each structure of the cardiovascular system and list the functions of each.
 - 08.02 Identify and describe the structure of the heart itself and the function of each component.
 - 08.03 Identify and/or describe the causes, signs, symptoms and treatment of emergency cardiac conditions.
 - 08.04 Identify and describe each component of the electrical conduction system of the heart.
 - 08.05 Identify the components of an electrocardiograph and describe their relationship to the physiological functions of the heart.
 - 08.06 Identify electrocardiographic findings and their causes, signs, symptoms and treatment.
 - 08.07 Demonstrate the technique of cardiopulmonary resuscitation (CPR) for adult and infant patients.
 - 08.08 Demonstrate the application of electrodes and monitoring of electrocardiograms.
 - 08.09 Demonstrate the technique of defibrillation and cardioversion.
 - 08.10 Demonstrate the techniques of carotid sinus massage and valsalva maneuver.
 - 08.11 Demonstrate the application and use of rotating tourniquets.
 - 08.12 Demonstrate the application and use of mechanical cardiopulmonary resuscitators.
- 09.0 ASSESS CENTRAL NERVOUS SYSTEM FUNCTION AND TREAT PATIENTS WITH NERVOUS SYSTEM DISORDER--The student will be able to:
 - 09.01 Identify each structure of the central and peripheral nervous systems and list the functions of each.
 - 09.02 Describe the techniques of assessment and management of neurologic dysfunction and traumatic neurologic injuries.
 - 09.03 Describe the Glasgow Coma Scale and its applications.
 - 09.04 Describe the Champion Trauma Scale and its applications.
- 10.0 ASSESS AND MANAGE SOFT TISSUE INJURIES--The student will be able to:
 - 10.01 Identify and describe types and degrees of burns and specific methods of burn management.
 - 10.02 Identify and describe causes, signs, symptoms, assessment and treatment of soft tissue injuries.
 - 10.03 Demonstrate the techniques of dressing and bandaging any and all injuries as presented in the knowledge objectives of the program.

- 11.0 ASSESS AND MANAGE MUSCULO/SKELETAL INJURIES--The student will be able to:
- 11.01 Identify the major bones and muscle groups of the human body and their primary characteristics.
 - 11.02 Describe the causes, signs, symptoms, and clinical manifestations of sprains, strains, fractures and dislocations.
 - 11.03 Demonstrate the procedures for application and use of short and long spine boards, cervical collars, board splints, wire-ladder splints, orthopedic stretchers, stair-chairs, portable and wheeled stretchers, traction splints and the care and maintenance of all the above.
- 12.0 IDENTIFY AND MANAGE MEDICAL EMERGENCIES--The student will be able to:
- 12.01 Identify and/or describe the causes, signs, symptoms, clinical manifestations and treatment of each of the following medical problems: hyperglycemia; hypoglycemia; anaphylactic reactions; stroke; heat exhaustion; heat cramps; frostbite; hypothermia; poisoning by injection, inhalation, ingestion, absorption; alcoholism; acute abdomen; genitourinary problems.
 - 12.02 Identify psychological aspects of emergency care including the organ and tissue donor program.
- 13.0 IDENTIFY AND MANAGE OBSTETRIC/GYNECOLOGIC EMERGENCIES--The student will be able to:
- 13.01 Identify and/or describe the components of the female reproductive system and the function of each component.
 - 13.02 Identify and describe the signs, symptoms, causes, clinical manifestations and emergency treatment for each of the following: normal vaginal child birth; breech presentation; premature birth; abortion, accidental, natural and intentional; multiple infant births; arm or leg presentation; prolonged delivery; prolapsed cord; abruptio placenta; placenta previa; postpartum hemorrhage; ruptured uterus; birth of non-breathing infant; third-trimester bleeding; eclampsia and preeclampsia; rape; supine hypotension syndrome.
 - 13.03 Demonstrate the technique of vaginal delivery.
- 14.0 ASSESS PEDIATRIC PATIENTS AND TRANSPORT NEONATAL INFANTS--The student will be able to:
- 14.01 Identify and describe the causes, signs, symptoms, clinical manifestations and emergency treatment of pediatric respiratory problems, seizures and child abuse.
 - 14.02 Describe aspects of resuscitation unique to the pediatric patient.
 - 14.03 Describe the techniques of neonatal transport and the specialized equipment necessary for neonatal transport.
- 15.0 IDENTIFY AND MANAGE THE EMOTIONALLY DISTURBED PATIENT--The student will be able to:
- 15.01 Identify a patient's behavior pattern from observation of his/her activities and specific situation.
 - 15.02 Identify local resources available to assist the EMT-Paramedic in the management of the emotionally disturbed patient.
 - 15.03 Identify the laws governing the handling and legal commitment of emotionally disturbed patients and how they pertain to the functions of EMT-Paramedic in the field.
 - 15.04 Describe the techniques the EMT-Paramedic would use for communication and interview of the emotionally disturbed patient.
 - 15.05 Demonstrate techniques the EMT-Paramedic would use for violence containment.
- 16.0 APPLY TECHNIQUES OF EXTRICATION AND RESCUE--The student will be able to:
- 16.01 Identify possible hazards when given a description of a scene and describe the procedures for handling the hazards.
 - 16.02 Identify and/or describe the equipment used and the techniques necessary for gaining access to, packaging, extricating and transporting patients trapped within a vehicle or other confinement.

EMERGENCY MEDICAL TECHNOLOGY - PARAMEDIC - Continued

- 16.03 Demonstrate the procedures and operation of equipment used for gaining access to, packaging, extricating, and transporting patients trapped or confined in a vehicle or other type of entrapment.
- 16.04 Demonstrate the techniques for lifting and moving patients with and without spine injuries and/or other special injury problems.
- 17.0 USE TELEMETRY AND OTHER COMMUNICATION EQUIPMENT--The student will be able to:
 - 17.01 Identify and describe radio systems and frequencies utilized for emergency medical systems communications.
 - 17.02 Identify possible situations hampering the transmission and/or reception of radio communications and means by which the EMT-Paramedic can correct such problems.
 - 17.03 Identify techniques by which the EMT-Paramedic communicates information to the radio physician.
 - 17.04 Demonstrate the operation and use of radio transmission and bio-telemetry equipment.
- 18.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 18.01 Conduct a job search.
 - 18.02 Secure information about a job.
 - 18.03 Identify documents that may be required when applying for a job.
 - 18.04 Complete a job application.
 - 18.05 Demonstrate competence in job interview techniques.
 - 18.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 18.07 Identify acceptable work habits.
 - 18.08 Demonstrate knowledge of how to make job changes appropriately.
 - 18.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Funeral Services

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP HO12.030100

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS x _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
x Postsecondary Vocational _____ Other _____

CERTIFICATION COVERAGE:

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as embalmers (10140600), funeral attendants (70080607), or funeral directors or to provide supplemental training for persons previously or currently employed in these occupations. The program must be approved by the Florida Board of Funeral Directors and Embalmers so that the graduate may take the state licensing examination practice as a licensed embalmer or funeral director, according to Chapter 470.006 FS.

The content includes, but is not limited to, techniques of embalming and restorative art, mortuary administration, funeral law, public health and sanitation, human anatomy and physiology, microbiology, pathology, mortuary social science, stress management, employability skills, leadership and human relations skills, and health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The intended outcomes are the same as the adopted curricular objectives of the American Board of Funeral Service Education which must be endorsed by accredited programs as curricular standards.

- II. LABORATORY ACTIVITIES: The embalming, cosmetology and restorative art laboratories provide practical experience in the techniques of embalming, restorative art and cosmetology. The pathology lab provides the students with experience in identifying pathological destruction of body elements. A practicum experience in embalming and funeral directing, funeral home operations and management in the funeral home setting is provided.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

Upon completion of either the associate in science or certificate program in funeral service education program, graduates are qualified to write the National Funeral Service Board Examination.

One year of internship is required in the State of Florida for the embalmer or the funeral director license. These internships may be served concurrently.

Upon completion of the internship, students are eligible to write the Florida state examination for the embalmer and funeral director license.

The typical length of this program for the average achieving student is an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Satisfactorily perform the basic techniques of embalming, restorative art, and cosmetology.

Funeral Services - continued

02. Give evidence of an understanding of the sociological, psychological, spiritual, physical, and legal needs of the family and community, and how to meet those needs in the treatment, handling, and disposition of the dead human body.
03. Explain the concepts of death, disinfection, preservation, and restoration of a dead human body.
04. Identify fundamental principles of personal and public health protection measures, and define the embalmer's obligation to this function.
05. Identify, define, and employ the necessary technical terminology to facilitate communication and cooperation with members of allied professions and the public.
06. Give evidence of personal manifestations of continued professional growth through education and research.
07. Identify those common conditions surrounding death which may prove of potential concern to the forensic pathologist.
08. Take care of the dead in a manner which recognizes the inherent dignity of man.
09. Identify the privileges of and be able to, through professional practices, fulfill the responsibilities of licensure.
10. Interpret and communicate the purposes, procedures, and values of funeral service.
11. Counsel people regarding funeralization.
12. Plan, implement, and direct a funeral according to the sociological, psychological, and theological needs of the person being served.
13. Identify and comply with the laws pertaining to funeral service practice and public health.
14. Manage personnel, facilities, and other resources.
15. Apply business principles and practices to funeral service.
16. Recognize the importance of inter-professional and intra-professional relationship and responsibilities.
17. Recognize the procedures for becoming an active member of the community and participating in community affairs.
18. Demonstrate employability skills.

- 01.0 SATISFACTORILY PERFORM THE BASIC TECHNIQUES OF EMBALMING AND RESTORATIVE ART AND COSMETOLOGY--The student will be able to:
- 01.01 Demonstrate a knowledge of the body systems, with special emphasis on the circulatory system, to the degree needed to give him a working basis for studies in such related subjects as Embalming, Pathology, Public Health, and Restorative Art.
 - 01.02 Specify representative chemicals in embalming fluids (arterial, cavity and accessory) and give their respective functions.
 - 01.03 Describe the basic theories and laws of chemistry and relate their importance to both the living and deceased.
 - 01.04 Identify and demonstrate the use of standard embalming instruments, machines and accessories.
 - 01.05 Describe prior to, and during the procedure of embalming, the problems presented by disease processes and etiological factors.
 - 01.06 Identify potentially harmful chemicals used in the preparation room, and the precautions to be taken with each.
 - 01.07 Relate specified types of restoration to the correct embalming procedures.
 - 01.08 Select, from a specified cosmetic medium, the correct colorants (compounds) to achieve a natural appearance under various conditions.
 - 01.09 Exhibit a skill in modeling which reflects his ability to restore a problem case.
 - 01.10 Interpret a photograph by evaluating the highlights and shadows, equal and unequal facial proportions, the specific form of the head, and the chief characteristics of each feature.
 - 01.11 Identify and describe the norms of the head and face (direct and profile views), and each of the four facial features - identify four variations of these norms.
 - 01.12 Classify and explain the principles of pigmentary (color) mixtures, and relate their application to cosmetic compounds and the influence of adjacent colors on one another in the funeral setting.
 - 01.13 Name and locate three external body structures of the skull and explain how each influences surface form.
 - 01.14 Identify and describe the use of various cosmetic and restorative materials and equipment.
- 02.0 GIVE EVIDENCE OF AN UNDERSTANDING OF THE SOCIOLOGICAL, PSYCHOLOGICAL, SPIRITUAL, PHYSICAL, AND LEGAL NEEDS OF THE FAMILY AND COMMUNITY, AND HOW TO MEET THOSE NEEDS IN THE TREATMENT, HANDLING, AND DISPOSITION OF THE DEAD HUMAN BODY--The student will be able to:
- 02.01 Describe the varieties of funeralization seen in major religious and ethnic sub-cultures and in fraternal and military groups in America.
 - 02.02 Relate contemporary sociological, theological, and philosophical thought to the matter of death, dying, bereavement and mourning in America.
 - 02.03 Discuss and illustrate the interplay in society of custom and contemporary funeralization practices.
 - 02.04 Distinguish among taboos, mores, folkways, customs, habits, laws, rites, rituals and ceremonies as sociological terms applied to American funerals.
 - 02.05 State significant changes in funeralization and embalming methods during the last half century.
 - 02.06 Describe the nature and meaning of death in different civilizations and cultures.
- 03.0 EXPLAIN THE CONCEPTS OF DEATH, DISINFECTION, PRESERVATION AND RESTORATION OF A DEAD HUMAN BODY--The student will be able to:
- 03.01 Explain the common types of death.
 - 03.02 Identify the physical states of matter and differentiate between physical and chemical changes.
 - 03.03 Identify essential characteristics of autolysis, hydrolysis fermentation, and putrefaction in the area of the chemistry of decomposition.
 - 03.04 Identify the essential characteristics of carbohydrates, lipids, and proteins in the area of basic biochemistry.

FUNERAL SERVICES - Continued

- 03.05 Define organic chemistry and describe the characteristic features of aliphatic and cyclic compounds, hydrocarbons, alcohols, aldehydes, ketones, acids, esters, ethers, and amines.
- 03.06 Identify and describe the prerequisites for specified restorative and cosmetic treatments.
- 04.0 IDENTIFY FUNDAMENTAL PRINCIPLES OF PERSONAL AND PUBLIC HEALTH PROTECTION MEASURES, AND DEFINE THE EMBALMER'S OBLIGATION TO THIS FUNCTION--The student will be able to:
- 04.01 Explain the embalming-disinfection process as a public health procedure.
- 04.02 Describe infectious processes and explain the methods of transmission and control of common infectious diseases, with special emphasis upon their applications to the environment of the embalmer, the funeral director, and the public.
- 04.03 Identify and explain special treatments for cases involving common infections, traumatic and pathological conditions.
- 04.04 Recognize the pathological conditions which require special procedures in the removal, handling, preparation and disposition of human remains.
- 04.05 Document the relationship between his understanding of normal structure and functions of the human body and his development of healthful living habits.
- 04.06 Describe and demonstrate personal and environmental disinfection and decontamination procedures; explain proper use of major chemical disinfectants.
- 05.0 IDENTIFY, DEFINE, AND EMPLOY THE NECESSARY TECHNICAL TERMINOLOGY TO FACILITATE COMMUNICATION AND COOPERATION WITH MEMBERS OF ALLIED PROFESSIONS AND THE PUBLIC--The student will be able to:
- 05.01 Demonstrate his acquisition and understanding of anatomical terminology at a level that will enable him to communicate effectively with members of allied professions and the lay public.
- 05.02 Identify common laboratory procedures and the common units of scientific measurement.
- 05.03 Identify the characteristic features of solutions, suspensions, and emulsions, and the processes of diffusion including osmosis, dialysis and hydrolysis.
- 05.04 Identify a list of elements and their valences, radicals, ions, compounds and reactions related to problems faced by the embalmer and funeral director, and give their symbols, formulas, and equations.
- 05.05 Differentiate between the beneficial micro-organisms and the actual pathogens and opportunists commonly associated with both the living human host and dead human remains.
- 05.06 Demonstrate an understanding of host parasite relations and interactions, and the requirements for successful parasitism.
- 05.07 Identify host defense mechanisms and demonstrate general knowledge of innate, natural and active immunologic responses.
- 05.08 Identify basic bacterial and fungal morphology and physiology.
- 05.09 Advise the layman of the medical benefits of post-mortem examination.
- 06.0 GIVE EVIDENCE OF PERSONAL MANIFESTATIONS OF CONTINUED PROFESSIONAL GROWTH THROUGH EDUCATION AND RESEARCH--The student will be able to:
- 06.01 Identify the reasons one should cooperate in community programs for controlling disease and promoting medical research.
- 06.02 Give evidence of his appreciation of, and interest in, the human body as a subject for independent study and continuing intellectual growth.
- 07.0 IDENTIFY THOSE COMMON CONDITIONS SURROUNDING DEATH WHICH MAY PROVE OF POTENTIAL CONCERN TO THE FORENSIC PATHOLOGIST--The student will be able to:
- 07.01 Identify and explain those special conditions attending a death whereby notification of the death is required to be given to the proper official (such as Coroner, Public Health Officer, Veterans Administration, etc.).
- 07.02 Identify the technical manifestations of death which may be of medico-legal significance.

FUNERAL SERVICES - Continued

- 08.0 TAKE CARE OF THE DEAD IN A MANNER WHICH RECOGNIZES THE INHERENT DIGNITY OF MAN--The student will be able to:
- 08.01 Give evidence of respect for human remains.
- 09.0 IDENTIFY THE PRIVILEGES OF AND BE ABLE TO, THROUGH PROFESSIONAL PRACTICES, FULFILL THE RESPONSIBILITIES OF LICENSURE--The student will be able to:
- 09.01 Identify the privileges and their limitations accorded the licensee with regard to caring for the dead, and serving the living.
 - 09.02 Identify the responsibilities of the funeral director to those who have called him with regard to:
 - a. Providing services and merchandise as selected.
 - b. Explaining the financial aspects of the funeral, and pricing method used.
 - c. Explaining death benefits and/or burial allowances.
 - d. Notifying the clergy of the death, if appropriate.
 - e. Coordinating with the clergy on religious aspects of the funeral.
 - f. Explaining merchandise and related representations regarding final description.
 - g. Preparing a financial memorandum pertaining to services, selected merchandise, supplemental items and cash advances.
 - h. Explaining applicable laws, rules and regulations.
 - i. Referring for professional counseling where family needs so indicate.
 - 09.03 Identify the responsibilities of the funeral director to his profession with regard to:
 - a. Costs and procedures instituted where the services of two funeral directors are required.
 - b. Public education regarding funeralization.
 - 09.04 Identify the responsibilities of the funeral director to the clergy in the matter of the policies, rules and regulations of churches.
 - 09.05 Perform the following tasks APPLICABLE TO THE STATE IN WHICH HE INTENDS TO GAIN A LICENSE:
 - a. State the limitations placed upon the practice of the funeral director/embalmer.
 - b. Summarize the law, rules and regulations pertaining to:
 - a) The transportation of the dead.
 - b) Requirements and specifications of the funeral home, including the preparation room.
 - c. Define terms specified in the license laws, rules and regulations.
 - d. Identify the qualifications required of applicants for funeral director/mortician license.
 - e. Identify the grounds for issuance, revocation, suspension or refusal to renew or issue licenses.
 - f. Identify requirements for the conducting of funerals.
 - g. Identify the procedures for filing a complaint concerning a violation of the licensing law.
 - h. Identify provisions regarding reciprocity/courtesy cards.

FUNERAL SERVICES - Continued

10.0 INTERPRET AND COMMUNICATE THE PURPOSES, PROCEDURES, AND VALUES OF FUNERAL SERVICES--The student will be able to:

- 10.01 Identify the purposes which the funeral serves for the family, friends, church, occupational associates, and community of the deceased.
- 10.02 Identify the values of the funeral.
- 10.03 Define common terms used in funeral service.
- 10.04 Identify the psychological purposes and values of the funeral.
- 10.05 Identify the sociological purposes and values of the funeral.
- 10.06 Organize and be prepared to deliver a speech on the purposes and values of the funeral.
- 10.07 Identify the philosophical purposes and values of funeral service.

11.0 COUNSEL PEOPLE REGARDING FUNERALIZATION--The student will be able to:

- 11.01 Identify the major financial considerations that confront a bereaved family.
- 11.02 Identify the times or situations during which a funeral director will make use of counseling.
- 11.03 State the areas of counseling normally covered during funeralizations.
- 11.04 Describe the process of funeralization.
- 11.05 Describe contemporary opinions regarding psychology of death, grief, and bereavement.
- 11.06 Describe how the manner and cause of death affects the psychological needs of the bereaved.
- 11.07 List the information of importance to obtain during each type of counseling situation.
- 11.08 Identify and appraise the basic personal and personality problems that may appear during counseling situations.
- 11.09 Classify and analyze the various forms of funeral rites.
- 11.10 Describe contemporary opinions regarding sociology of death, grief, and bereavement.
- 11.11 Describe three or more types of counseling techniques applicable to funeral service, and give reasons for the use of each in individual circumstances.
- 11.12 Describe recent developments pertaining to the theologies of death, grief and bereavement.
- 11.13 Describe the effects of the Uniform Anatomical Gift Act on funeralization.
- 11.14 Identify and describe stages of dying.

12.0 PLAN, IMPLEMENT, AND DIRECT A FUNERAL ACCORDING TO THE SOCIOLOGICAL, PSYCHOLOGICAL AND THEOLOGICAL NEEDS OF THE PERSON BEING SERVED--The student will be able to:

- 12.01 Develop a warm, friendly and tactful attitude towards the family at the first meeting.
- 12.02 Identify the items of information which are necessary to complete the following forms:
 - 1) Obituary
 - 2) Death certificate
 - 3) Social Security forms (SSA, 719, SSA 721)
 - 4) Veteran's forms (Marker, Flag, Burial Allowance)
 - 5) Burial/Transportation permits
 - 6) Release/Authorization forms
- 12.03 Identify the person(s) who are qualified to give permission for release of the deceased from a hospital, or to sign the hospital death record, if required.
- 12.04 Identify the information to be secured from, and given to, the family upon initial family contact.
- 12.05 Describe the multiple steps required between initial notification of death and removal of the deceased.
- 12.06 Identify person(s) who qualify to authorize autopsy and embalming, and to approve the purpose and disclosure statement.
- 12.07 Identify the items and considerations usually included in the arrangement conference.
- 12.08 Identify the purpose of the death certificate.
- 12.09 Identify the appropriate times usually considered necessary to meet the funeral needs of those being served.

FUNERAL SERVICES - Continued

- 12.10 Identify the consideration normally involved in setting the order for the processional and recessional of a funeral service when the following are involved: 1. Casket, 2. Casket Bearer, 3. Children, 4. Clergy, 5. Friends, 6. Fraternal Orders, 7. Funeral Directors, 8. Honorary Bearers, 9. Next of kin, 10. Relatives, 11. Service Organization
- 12.11 Describe the multiple steps required between initial notification of death and removal of the deceased when the bereaved are not present at the time of death, regardless of the place or manner of death - including, but not limited to, the funeral director's determination of the need for a personal conference and/or counseling of the bereaved prior to the funeral arrangement conference.
- 12.12 Identify the items of clothing ordinarily required for the deceased.
- 12.13 Describe the proper techniques and equipment employed in the dignified removal of remains under diverse conditions.
- 12.14 Identify the reasons which require a discussion involving the family, the officiating clergyman, and the funeral director regarding visitation hours, time of funeral, and other aspects of the service.
- 12.15 Identify the purpose of the Burial-Transit Permit.
- 12.16 Write obituary and death notices.
- 12.17 Identify the purpose and content of preselection counseling.
- 12.18 Identify the participants functioning in funeral service and explain their duties.
- 12.19 Describe considerations involved in the dignified movement of casketed remains.
- 12.20 State considerations for determining the order of the funeral procession.
- 12.21 Coordinate a variety of committal rites when these are a part of one funeral.
- 12.22 Identify the psychological and sociological value of the funeral arrangement conference.
- 12.23 Identify methods of dealing with inter-personal conflicts among family members.
- 12.24 Discuss dismissal procedures for leaving the grave site.
- 12.25 Explain the problems involved in harmonizing the colors of caskets in the funeral setting.
- 12.26 Describe the various types of floral arrangements and the considerations involved in their placement.
- 12.27 Identify requirement/procedure pertaining to cremation, calcination and burial at sea.

13.0 IDENTIFY AND COMPLY WITH THE LAWS PERTAINING TO FUNERAL SERVICE PRACTICE AND PUBLIC HEALTH--The student will be able to:

- 13.01 Identify legally:
 - 1) The nature of the right of the funeral director to take custody of a dead body, and the length of time such custody may be exercised.
 - 2) The procedures for recovering the body.
 - 3) The theory governing the right to recover for mutilation of a body, and the reasons for recovery of damages when mutilation results from negligence.
 - 4) The duty of the funeral director regarding the personal effects of a decedent.
 - 5) The basis of a funeral director's liability for the negligence of a volunteer driver in a funeral procession.
 - 6) The legal duty of a funeral director regarding permits required by law.
 - 7) The reasons for legal limitation on a funeral bill charged against an estate where creditor's claims exceed the assets of the estate.
 - 8) How a testator may provide in his will for the payment of funeral expenses.

FUNERAL SERVICES - Continued

- 9) The duty of the funeral director for compliance with the Federal Trade Commission Funeral Rules.
 - 10) The duty of the funeral director for compliance with the Magnuson-Moss Warranty Act (1975).
 - 11) The duty of the funeral director for compliance with the provisions of Federal Wage and Hour Laws.
- 13.02 Describe status of a funeral bill as a charge against the estate.
- 13.03 Identify:
- 1) The conditions under which a funeral director must have permission before permitting an autopsy in his establishment, and state whether that permission may be qualified, restricted or revoked.
 - 2) The liability of an embalmer for shaving a beard, cutting hair or otherwise altering the appearance of a body.
 - 3) The legal duty of the funeral director regarding the personal effects of a decedent.
 - 4) The extent of control a funeral director has over a funeral, and his legal duties to those attending a funeral or viewing a body at his funeral home.
 - 5) The general rule in the determination of the validity of funeral expenses.
 - 6) Which items are allowable in a funeral bill and which items are not allowable.
 - 7) The legal basis for the modifications of the common law rule imposing liability upon the husband for the wife's funeral expenses.
 - 8) Under what legal basis a widow may be required to pay the funeral expense of her deceased indigent husband.
- 13.04 Identify:
- 1) The liability of a volunteer who individually contracts to pay a funeral bill.
 - 2) The liability of an executor or administrator for funeral expenses.
 - 3) Why a funeral director should be familiar with the law of disinterment.
 - 4) The circumstances under which exhumation is permitted in criminal cases, and in civil cases.
 - 5) The usual procedure for obtaining a disinterment authorization, and the legal principles under which disinterment statutes are upheld.
 - 6) Who has the primary right to disinter a body, and the nature of the crime of disinterment without proper authorization.
 - 7) The grounds upon a funeral home can be enjoined from further operation in a residential district.
 - 8) Whether a funeral home may be excluded from a sub-division by agreement of the property owners.
 - 9) The conditions under which a funeral home or cemetery may be considered a nuisance per se.
 - 10) Why the power of eminent domain may be invoked to acquire land for a public cemetery.
 - 11) The power under which cemeteries may be regulated by the state, and what specific action must be taken to convert land to cemetery use.

FUNERAL SERVICES - Continued

- 12) The authority under which a private cemetery may enforce rules which control burial in it.
- 13) Why the owner of a cemetery lot may not use it for purposes other than burial, and whether or not he has the right to decorate and mark the grave.
- 14) Under what authority cemeteries are required to provide admittance to graves.
- 15) What kind of offense the grave desecration is.

13.05 Identify:

- 1) The essentials of a valid contract.
- 2) The reasons for maintaining death certificates.
- 3) How the remains may be transported by common carrier.
- 4) The legal consideration where persons die without medical attention.
- 5) The general order of nearest of kin including all relatives.
- 6) The legal implications of the concept of a "Decent Christian Burial."
- 7) Two reasons for filing an embalming report for each body prepared by the funeral home.
- 8) The function of a court of equity.
- 9) Two classes of bodies legally available for dissection.
- 10) The legal doctrine regarding the photographing of a dead body.
- 11) The privileges and limitations of one holding the power of attorney.
- 12) The liability of the funeral director for the custody of the remains.

13.06 Describe the legal basis for funeral service licensure stating the legal obligation of funeral and its purpose.

13.07 Identify:

- 1) The doctrine of Stare Decesis.
- 2) Whether a person may dispose of his body by will, whether a dead body may be insured, and whether it may be bought and sold.
- 3) Whether a dead body may be the subject of an action of replevin.
- 4) The authority of a ship over dead bodies.
- 5) The restrictions on burials of those dying of a communicable disease.
- 6) The conditions under which a dead body must be embalmed.
- 7) The effect of the decedent's wishes with respect to exercising the right and duty of disposition.
- 8) The proper position the funeral director should take when survivors of a decedent disputes the exercise of the right of disposition.

13.08 Define cremation and list the circumstances under which it be illegal.

13.09 Describe the rights of a party in controlling a funeral, and the rights of a party to attend a funeral.

13.10 Define "funeral contract", and state the legality of funeral contracts made by a decedent prior to death.

13.11 Describe the rights of the decedent in pre-arranging his own funeral.

13.12 Describe the legal limitation imposed in pre-arrangement agreements.

13.13 Describe the legal status of a dead body.

13.14 Identify the legal theory governing the right to recover from mutilation of a body, and the reasons for recovery of damages when mutilation results from negligence.

13.15 Identify the circumstances under which the state or one of its subdivisions is liable for funeral expenses.

13.16 Define and give the purpose of a Coroner's/Medical investigator's inquest and inquiry.

13.17 Identify the rules and regulations governing burial in a National Cemetery.

FUNERAL SERVICES - Continued

- 13.18 Distinguish between the property and no-property theories of dead human bodies.
 - 13.19 Identify two sources from which the rights and duties of a funeral director are derived.
 - 13.20 Identify those steps a funeral director should take before building or purchasing a funeral home.
 - 13.21 Distinguish between a cooperation, a partnership, and a proprietorship, and state the advantages and disadvantages of each.
 - 13.22 Identify two forms of legally binding sales contracts.
 - 13.23 Identify the conditions under which a note would be considered void.
 - 13.24 Identify the preferred persons in the granting of letters of administration.
 - 13.25 Distinguish between a stock and a bond.
- 14.0 MANAGE PERSONNEL, FACILITIES, AND OTHER RESOURCES--The student will be able to:
- 14.01 Answer the telephone properly.
 - 14.02 Receive initial contact information accurately and appropriately.
 - 14.03 Identify importance of:
 - 1) The appearance and cleanliness of the funeral home, preparaticn room, funeral coach, limousine, and parking lot.
 - 2) The need for confidentiality of funeral home records, family records and financial data.
 - 3) Maintaining staff communications.
 - 14.04 Identify the procedure for filing the death certificate at the proper agency and obtaining related permits if required.
 - 14.05 Identify equipment necessary for the removal of an adult, child or infant from a hospital, residence or other place of death.
 - 14.06 Identify all equipment appropriate for any funeral service.
 - 14.07 Identify the procedure for properly receiving those who make a visitation to the funeral home.
 - 14.08 Identify the procedures for dressing and casketing the remains.
 - 14.09 Identify the procedures for placing the deceased in a visitation room.
 - 14.10 Identify equipment needed to accomplish interment, inurnment, and entombment.
 - 14.11 Identify the procedures for the completion of insurance forms.
 - 14.12 Complete the recording of information in a register book.
- 15.0 APPLY BUSINESS PRINCIPLES AND PRACTICES TO FUNERAL SERVICE--The student will be able to:
- 15.01 Prepare a financial memorandum pertaining to services provided, merchandise selected, cash advances, and supplemental items.
 - 15.02 Define and properly use the terminology associated with funeral merchandise, merchandise display, and funeral supplies.
 - 15.03 Identify, define, and describe the various types of outer enclosures.
 - 15.04 Differentiate between Functional, Unit, B-Unit and Itemization methods of quoting the price(s) of funeral service.
 - 15.05 Apply basic accounting principles in keeping mortuary records.
 - 15.06 Identify the major items of income and expenses which should be included in the budget of a funeral home.
 - 15.07 Define basic accounting terms.
 - 15.08 Analyze financial data, make financial decisions, and recognize the effects of economies on existing funeral services.
 - 15.09 Identify the dual role of the funeral director, and list the major responsibilities of each role.
 - 15.10 Distinguish between the direct and indirect approaches in helping clients to select merchandise, and list the advantages and disadvantages of each method.
 - 15.11 Identify the insurance needs of a funeral director, and funeral service practice.
 - 15.12 Identify the application of the Federal Truth in Lending Act to funeral service.
 - 15.13 Identify the importance of purchase disclosures.
 - 15.14 Identify the applications of the Federal Wage and Hour Act to funeral service.
 - 15.15 Distinguish a cognovit from a promissory note.

FUNERAL SERVICES - Continued

16.0 RECOGNIZE THE IMPORTANCE OF INTER PROFESSIONAL AND INTRA PROFESSIONAL RELATIONSHIP AND RESPONSIBILITIES--The student will be able to:

- 16.01 Identify common interest areas existing between funeral directors and: 1. Florists; 2. Cemeterians; 3. Monument dealers; 4. News media; 5. The legal profession; 6. The judiciary; 7. Hospital administrators; 8. Governmental agencies; 9. Local police.
- 16.02 Identify the aims and purposes of a funeral director-clergy relations committee.
- 16.03 Identify common concerns inherent in physician-funeral director relationships.
- 16.04 Name the major funeral director associations.
- 16.05 Identify the aims and purposes of a funeral director-pathologist autopsy committee.
- 16.06 Describe the structure and function of the Conference of Funeral Service Examining Boards, Inc.
- 16.07 Describe the structure of "multi-unit" funeral home organizations (public stock corporations).
- 16.08 Describe the structure and function of the Commission of Schools of the American Board of Funeral Service Education.
- 16.09 Describe the structure and function of the American Board of Funeral Service Education.
- 16.10 Describe the membership structure of the National Funeral Directors Association and other professional associations in the industry.

17.0 RECOGNIZE THE PROCEDURES FOR BECOMING AN ACTIVE MEMBER OF THE COMMUNITY AND PARTICIPATING IN COMMUNITY AFFAIRS--The student will be able to:

- 17.01 Identify the necessary items to be considered in establishing a funeral home-public relations program.
- 17.02 Distinguish between institutional and funeral home advertising and state the primary purpose of each.

18.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 18.01 Conduct a job search.
- 18.02 Secure information about a job.
- 18.03 Identify documents that may be required when applying for a job.
- 18.04 Complete a job application.
- 18.05 Demonstrate competence in job interview techniques.
- 18.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 18.07 Identify acceptable work habits.
- 18.08 Demonstrate knowledge of how to make job changes appropriately.
- 18.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Health Care Management

CODE NUMBER: Secondary _____

Postsecondary HSA0990

Florida CIP H018.070100

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED @5 TEC MED @7 PRAC NURSE 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as managers, other (20061699), or health care administrators or to provide supplemental training for persons previously or currently employed in these occupations.

The program describes the principles and procedures of planning, organizing, and controlling a hospital health care facility.

The content includes, but is not limited to, leadership and administrative skills, laws and regulations affecting health care facilities, operational and organizational structures common to health care facilities, departmental budgeting, legal reimbursement, accreditation standards, health and safety including CPR and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

According to Rule 21Z-11.07 of the Board of Nursing Home Administrators, the curriculum content must include, courses in management, accounting and bookkeeping, personnel relations and management, governmental standards and regulation of long-term health care, and long term health care administration (including nursing administration and patient care).

The theory base is built upon supportive courses available to students in the community college setting. Such courses shall include, but not be limited to, communication, social science, business mathematics and computer application. These supportive course requirements may be met by a Baccalaureate level entry.

- II. LABORATORY ACTIVITIES: Clinical learning shall be provided in the health care facility that will meet the learning objectives and will be most comparable to the students' future area of employment.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

Programs must be approved by the Florida Board of Examiners of Nursing Home Administrators for graduates to be eligible to take the state licensure examination to become a nursing home administrator.

Graduates are eligible to take the National Administrators Board examination and the State Board licensing examination for licensure as a nursing home administrator in the State of Florida.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

Health Care Management - Continued

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

In accordance with Section 240.321 F.S. the Health Care Management Degree Program requires an entry level of High School graduate or GED equivalency for generic students.

The Health Care Management Certificate Program requires an entry level of a Baccalaureate Degree, which meets the requirements as recommended by the State Board of Nursing Home Administrators.

The Health Care Management Program, with emphasis on long-term care administration, is a complex program requiring current knowledge in both health care and legislation affecting the health care delivery system. Because of its ever growing complexity, it requires instructors who have a Master's Degree or higher. Their disciplines can come from a variety of fields, ie: social sciences, nursing, business administration or education.

To augment the program areas, community leaders possessing expertise in specific health care areas may be utilized.

Programs may apply for accreditation by the Association of University Programs in Health Administration.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate leadership and administrative skills basic to management in any health care facility.
02. Interpret federal, state and local laws as they apply to health care facilities.
03. Demonstrate knowledge of operational and organizational structures of health care facilities.
04. Demonstrate employability skills.
05. Demonstrate knowledge of psychological problems among residents of long term care facilities and find acceptable solution.
06. Demonstrate knowledge of materials and supplies needed to care for residents of long term care facilities and how to obtain them for staff.
07. Demonstrate knowledge of occupational safety and health for residents and employees.
08. Demonstrate knowledge of appropriate work-loads for each employee and knowledge of the amount of care each resident requires.

- 01.0 DEMONSTRATE LEADERSHIP AND ADMINISTRATIVE SKILLS BASIC TO MANAGEMENT IN ANY HEALTH CARE FACILITY--The student will be able to:
- 01.01 Describe the American Health Care Delivery System, its scope and the organizational climate that serves as the setting and framework for managing health care organizations.
 - 01.02 Identify current trends and perspectives related to the management of health care organizations and the means by which the application of sound management principles and behavior can facilitate change.
 - 01.03 Interpret managerial principles, practices and processes to the delivery of health care.
 - 01.04 Identify the role, responsibilities and parameters for the various levels of management within the health care organizations.
 - 01.05 State the control processes and techniques used to ensure that the objectives, strategies and policies of health care delivery are achieved effectively and efficiently.
 - 01.06 Relate the various aspects of organizational dynamics (decision making, motivations, leadership, and communication) to the needs and problems of health care organizations.
 - 01.07 Relate personnel administration practices to the total scope of labor relations, including manpower acquisition, maintenance, and utilization.
- 02.0 INTERPRET FEDERAL, STATE AND LOCAL LAWS AS THEY APPLY TO HEALTH CARE FACILITIES--The student will be able to:
- 02.01 Cite Federal, State and local institutional requirements.
 - 02.02 List required standards and procedures for facility and staff.
 - 02.03 Identify mandatory requirements regarding environmental health and safety standards.
 - 02.04 Discuss the impact of legislative changes on health care facilities.
 - 02.05 Identify the Florida Statutes as applied to health care facilities.
- 03.0 DEMONSTRATE KNOWLEDGE OF OPERATIONAL AND ORGANIZATIONAL STRUCTURES OF HEALTH CARE FACILITIES--The student will be able to:
- 03.01 Describe the functions and standards of departments in health care facilities.
 - 03.02 Contrast administrative roles and responsibilities in different types of health care agencies.
 - 03.03 Describe principles and philosophies of health care agencies delivering long-term, acute and other types of health care services.
 - 03.04 Identify several basic principles of medical care.
 - 03.05 State communication techniques within the health care system.
 - 03.06 Utilize the state of the art language when delivering health care services to the ill and/or elderly.
- 04.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 04.01 Conduct a job search.
 - 04.02 Secure information about a job.
 - 04.03 Identify documents that may be required when applying for a job.
 - 04.04 Complete a job application.
 - 04.05 Demonstrate competence in job interview techniques.
 - 04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 04.07 Identify acceptable work habits.
 - 04.08 Demonstrate knowledge of how to make job changes appropriately.
 - 04.09 Demonstrate acceptable employee health habits.
- 05.0 DEMONSTRATE KNOWLEDGE OF PSYCHOLOGICAL PROBLEMS AMONG RESIDENTS OF LONG TERM CARE FACILITIES AND FIND ACCEPTABLE SOLUTION--The student will be able to:

HEALTH CARE MANAGEMENT - Continued

- 05.01 Recognize the worth and dignity of each resident.
 - 05.02 Accomodate individual differences, characteristics, and behaviors.
 - 05.03 Adjust room assignments, personnel assignments, etc., to satisfy residents.
- 06.0 DEMONSTRATE KNOWLEDGE OF MATERIALS AND SUPPLIES NEEDED TO CARE FOR RESIDENTS OF LONG TERM CARE FACILITIES AND HOW TO OBTAIN THEM FOR STAFF--The student will be able to:
- 06.01 Evaluate current inventory.
 - 06.02 Prepare purchase order, being mindful of current financial status of institution.
 - 06.03 Shop for quality, price, and quantity.
- 07.0 DEMONSTRATE KNOWLEDGE OF OCCUPATIONAL SAFETY AND HEALTH FOR RESIDENTS AND EMPLOYEES--The student will be able to:
- 07.01 Prepare an evacuation plan.
 - 07.02 Plan and conduct fire drills making sure that every person on duty is aware of their individual responsibility.
 - 07.03 Inspect labels on hazardous substances including poison labels.
 - 07.04 Make certain that all substances have appropriate storage areas.
 - 07.05 Conduct inservice for employees.
 - 07.06 Respond to workers inquiries and post notices.
- 08.0 DEMONSTRATE KNOWLEDGE OF APPROPRIATE WORK-LOADS FOR EACH EMPLOYEE AND KNOWLEDGE OF THE AMOUNT OF CARE EACH RESIDENT REQUIRES--The student will be able to:
- 08.01 Prepare job descriptions.
 - 08.02 Prepare care plans for each resident.
 - 08.03 Figure man-hours required for total care on one unit using available statistics.
 - 08.04 Identify factors which alter the amount of care needed and the number of man-hours required for different diagnoses.
- 09.0 REVIEW, APPROVE AND MONITOR DEPARTMENTAL CAPITAL AND OPERATIONAL BUDGETS--The student will be able to:
- 09.01 Develop a capital budget justification format.
 - 09.02 Delegate capital budget preparation to key managers.
 - 09.03 Analyze and approve appropriate capital budget items.
 - 09.04 Develop an operational budget format.
 - 09.05 Analyze and approve appropriate financial levels in each operational budget.
- 10.0 IDENTIFY AND APPLY LEGAL REIMBURSEMENT SYSTEMS--The student will be able to:
- 10.01 Establish a patient classification system within a health care facility.
 - 10.02 Establish a mechanism for utilization review.
 - 10.03 Develop an accounts receivable system which monitors and optimizes reimbursement.
- 11.0 COMPLY WITH ACCREDITATION STANDARDS OF GOVERNMENTAL OR GOVERNMENTAL APPOINTED AGENCIES/ORGANIZATION--The student will be able to:
- 11.01 List and implement procedures to meet required standards for health care facilities.
 - 11.02 Identify the required standards for health care personnel.
 - 11.03 Develop policies and operational procedures to meet required standards.
 - 11.04 Establish liason mechanisms with appropriate accrediting organizations.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

COURSE TITLE: Health Occupations Cooperative Education - OJT

CODE NUMBER: Secondary 8400410

Postsecondary HOC0940

Florida CIP H017.9999CP

SECONDARY

SCHOOL CREDITS Multiple

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational

_____ Other 10-12, 13-14, 21

CERTIFICATION COVERAGE: Any HOE Certification

- I. MAJOR CONCEPTS/CONTENT: The purpose of this course is to provide the on-the-job training component when the cooperative method of instruction is used to prepare students for employment in health occupations. On-the-job experiences are provided as a part of a job preparatory program which will develop occupational competencies required for employment in the occupation chosen by the student as a career choice or to provide experiences that further develop the competencies acquired by the student in an in-school job preparatory program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: A work station is provided as required to support the on-the-job training activities of the student.
- III. SPECIAL NOTE: The Health Occupations Students of America is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional course.

For the on-the-job training component, the following is required for each student: a training plan, signed by the student, teacher and employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed. The teacher/coordinator must visit each job site a minimum of once during each grading period for the purpose of evaluating the student's progress in attaining the competencies listed in the training plan.

The Cooperative - OJT course may be taken by a student for one or more semesters. A student may earn multiple credits in this course. The specific student performance standards which the student must achieve to earn credit must be specified in the OJT training plan.

- IV. INTENDED OUTCOMES: After successfully completing this course, the student will be able to:
01. Perform designated job skills.
 02. Demonstrate work ethics.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: 8400410

COURSE TITLE: Health Occupations
Cooperative Education-OJT

POSTSECONDARY NUMBER: HOC0940

01.0 PERFORM DESIGNATED JOB SKILLS--The student will be able to:

- 01.01 Perform tasks as outlined in the training plan.
- 01.02 Demonstrate job performance skills.
- 01.03 Demonstrate safety procedures on the job.
- 01.04 Maintain appropriate records.
- 01.05 Attain an acceptable level of productivity.
- 01.06 Demonstrate appropriate dress and grooming habits.
- 01.07 Recognize limits of authority and responsibility.
- 01.08 Identify patient's rights and responsibilities.
- 01.09 Identify legal ramifications of actions/inactions in the job area.
- 01.10 Recognize and value time.
- 01.11 Recognize and value accuracy.

02.0 DEMONSTRATE WORK ETHICS--The student will be able to:

- 02.01 Follow directions.
- 02.02 Demonstrate good human relations skills on the job.
- 02.03 Demonstrate good work habits.
- 02.04 Demonstrate acceptable business ethics.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Health Service Occupations

CODE NUMBER: Secondary 8415100

Postsecondary HCP0999

Florida CIP H017.069901

SECONDARY

SCHOOL CREDITS 3

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other 10-12, 13-15, 21

CERTIFICATION COVERAGE:	NURSING ED @5	PH THERAPH 46	MENTAL HEALTH 7
	TEC MED @7	TEC X RAY 7	LAB ASST 7
	PRAC NURSE 7	LAB TECH 7	RESP THER 7
	PH THERTEC 7	MED ASST 7	MED RECTEC 7
	Paramedic 7	DENTAL ASST 7	RESP TEC 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as health aides (70060400), nurse aides/orderlys (70061010), or health service aides or to provide supplemental training for persons previously or currently employed in these occupations, or to pursue further education in the health field, medicine, dentistry, etc.

The content includes, but is not limited to, communication skills; legal and ethical practice; leadership and employability skills; safe and efficient work practices; and a logical integration of scientific principles based on anatomy and physiology, attendant medical terminology, disease control, conditions of illness and common therapy, and representative skills performed by major health care workers.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8415110 Health Service Occupations 1
8415120 Health Service Occupations 2
8415130 Health Service Occupations 3

- II. LABORATORY ACTIVITIES: Students will perform skills representative of major areas of health care in the laboratory setting. Clinical learning experiences are required and must correlate with didactic and laboratory experiences.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the teacher, and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 6.0, Language 7.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

Health Service Occupations - Continued

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Identify anatomic structure and function of body systems in relation to the effect of diseases and services performed by health care workers.
02. Successfully complete clinical learning experiences by demonstrating competency of selected occupational skills representative of major areas of health care.
03. Identify at least one health career which meets personal goals.
04. Select health care services in keeping with accepted consumer practices.
05. Demonstrate accepted communication skills in both clinical and classroom activities.
06. Recognize and practice acceptable behavior in the clinical settings.
07. Practice accepted principles of safety in clinical settings.
08. Demonstrate knowledge of ethical behavior and legal aspects of health care in clinical settings.
09. Using prescribed employability skills, identify an aide level job and advanced training program which meet his/her career goals.
10. Demonstrate employability skills.
11. Explain the characteristics and components of the health care delivery system.

01.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS--The student will be able to:

- 01.01A Identify factors relating to transmission of disease.
- 01.01 Demonstrate medical and surgical asepsis.
- 01.02 Identify cells and tissue microscopically and macroscopically.
- 01.03 Perform skills related to the integumentary system.
- 01.04 Identify health careers related to the integumentary system.
- 01.05 Identify conditions and diseases related to the integumentary system.
- 01.06 Identify health factors which affect optimal function of the integumentary system.
- 01.07 Perform first aid.
- 01.08 Identify conditions and diseases related to the muscular/skeletal systems.
- 01.09 Perform skills related to the muscular/skeletal systems.
- 01.10 Identify health factors which affect optimal function of the muscular/skeletal system.
- 01.11 Identify careers related to the muscular/skeletal systems.
- 01.12 Use proper body mechanics to prevent injury to one's self.
- 01.13 Assist with therapeutic exercises so as to prevent injury, and facilitate rehabilitation of the muscular/skeletal systems.
- 01.14 Demonstrate ability to perform Heimlich Maneuver and CPR.
- 01.15 Perform skills related to the respiratory system.
- 01.16 Identify conditions and diseases related to the respiratory system.
- 01.17 Identify factors which affect optimal function of the respiratory system such as: hazards of smoking, environmental pollution and spread of communicable diseases.
- 01.18 Identify health careers related to the respiratory system.
- 01.19 Identify conditions and diseases related to the nervous system and sensory organs.
- 01.20 Perform skills related to the nervous system and sensory organs.
- 01.21 Identify health factors which affect optimal functions of the nervous system and sensory organs such as proper use of prescription drugs, hazards of illicit drugs/alcohol, and noise pollution.
- 01.22 Identify health careers related to the nervous system and sensory organs.
- 01.23 Practice reality orientation.
- 01.24 Identify conditions and diseases related to the urinary system.
- 01.25 Perform skills related to the urinary system.
- 01.26 Identify health factors which affect optimal function of the urinary system such as adequate fluid intake, and bladder control.
- 01.27 Identify health careers related to the urinary system.
- 01.28 Identify conditions and diseases related to the reproductive system.
- 01.29 Perform skills related to the reproductive systems.
- 01.30 Identify health factors which affect optimal function of the reproductive systems such as sexually transmitted diseases
- 01.31 Identify health careers related to the reproductive systems.
- 01.32 Identify conditions and diseases related to the digestive system.
- 01.33 Perform skills related to the digestive system.
- 01.34 Identify health factors which affect optimal function of the digestive system such as dietary and nutritional factors.
- 01.35 Identify health careers related to the digestive system, including dental and dietetic occupations.
- 01.36 Identify conditions and diseases related to the circulatory system.
- 01.37 Perform skills related to the circulatory system
- 01.38 Identify health factors which affect optimal function of the circulatory system such as cardiovascular exercise, and weight control and stress management.
- 01.39 Identify health careers related to the circulatory system.

HEALTH SERVICE OCCUPATIONS - Continued

- 01.40 Identify conditions and diseases related to the endocrine system.
- 01.41 Perform skills related to the endocrine system.
- 01.42 Identify health factors that will affect optimal functioning of the endocrine system.
- 01.43 Identify Health Careers related to the endocrine system.

- 02.0 SUCCESSFULLY COMPLETE CLINICAL LEARNING EXPERIENCES BY DEMONSTRATING COMPETENCY OF SELECTED OCCUPATIONAL SKILLS REPRESENTATIVE OF MAJOR AREAS OF HEALTH CARE--The student will be able to:
 - 02.01 Master skills outlined in outcome 01.0.
 - 02.02 Complete clinical rotations representing selected health career clusters using skills learned in outcome 01.0.
 - 02.03 Define: interpersonal relationship, self discipline, dependability.

- 03.0 IDENTIFY AT LEAST ONE HEALTH CAREER WHICH MEETS PERSONAL GOALS--The student will be able to:
 - 03.01 Examine the requirements of workers in the major health career clusters.
 - 03.02 Compare personal qualities and aptitudes with requirements of selected careers.
 - 03.03 Investigate health careers not related to body systems such as pharmacy, hospital administration, and biomedical technologies.
 - 03.04 Decide which health career, if any, meets his/her personal career goals.

- 04.0 SELECT HEALTH CARE SERVICES IN KEEPING WITH ACCEPTED CONSUMER PRACTICES--The student will be able to:
 - 04.01 Demonstrate ability to investigate and select qualified health care practitioners.
 - 04.02 Identify components of an appropriate health insurance plan.
 - 04.03 Demonstrate knowledge of uses and misuses of over the counter drugs.
 - 04.04 Identify and recognize services of available community agencies.

- 05.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILLS IN BOTH CLINICAL AND CLASSROOM ACTIVITIES--The student will be able to:
 - 05.01 Recognize and utilize various forms of communication.
 - 05.02 Recognize barriers to communication.
 - 05.03 Use appropriate medical terminology and abbreviations.

- 06.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE CLINICAL SETTINGS--The student will be able to:
 - 06.01 Demonstrate an understanding of positive self concepts.
 - 06.02 Identify basic human needs.
 - 06.03 Recognize atypical behavior.

- 07.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN CLINICAL SETTINGS--The student will be able to:
 - 07.01 Demonstrate safe use, care and maintenance of equipment and materials.
 - 07.02 Practice safe transport and transfer of patients.
 - 07.03 Properly identify patients.
 - 07.04 Follow approved clinical procedures for labeling.
 - 07.05 Use good observational skills and report appropriately.
 - 07.06 Follow emergency procedures as outlined by instruction.
 - 07.07 Recognize and report any potential hazards.

- 08.0 DEMONSTRATE KNOWLEDGE OF ETHICAL BEHAVIOR AND LEGAL ASPECTS OF HEALTH CARE IN CLINICAL SETTINGS--The student will be able to:
 - 08.01 Recognize limits of authority and responsibility of health care workers.
 - 08.02 Identify patient rights and responsibilities.
 - 08.03 Identify content and use of legal documents.
 - 08.04 Understand legal ramifications of actions/inactions in the clinical settings.
 - 08.05 Recognize multicultural behaviors.

HEALTH SERVICE OCCUPATIONS - Continued

09.0 USING PRESCRIBED EMPLOYABILITY SKILLS, IDENTIFY AN AIDE LEVEL JOB AND ADVANCED TRAINING PROGRAM WHICH MEET HIS/HER CAREER GOALS--The student will be able to:

- 09.01 Identify appropriate employment and educational opportunities.
- 09.02 Identify and demonstrate proper work habits, grooming and appearance.
- 09.03 Complete a job application.
- 09.04 Participate in an interview.
- 09.05 Write a follow-up letter.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 10.01 Conduct a job search.
- 10.02 Secure information about a job.
- 10.03 Identify documents that may be required when applying for a job.
- 10.04 Complete a job application form correctly.
- 10.05 Demonstrate competence in job interview techniques.
- 10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 10.07 Identify acceptable work habits.
- 10.08 Demonstrate knowledge of how to make job changes appropriately.
- 10.09 Demonstrate acceptable employee health habits.

11.0 EXPLAIN THE CHARACTERISTICS AND COMPONENTS OF THE HEALTH CARE DELIVERY SYSTEMS, USING ACCEPTABLE TERMINOLOGY--The student will be able to:

- 11.01 Define health.
- 11.02 Describe the intent of Public Law 93-641.
- 11.03 Identify the basic components of the health care delivery system.
- 11.04 Describe the types of health care and identify the major types of health care facilities.
- 11.05 List health care planning agencies and services available at local, state, national and international levels.
- 11.06 List the major advances that transformed health care in the 19th and 20th centuries.
- 11.07 List new developments which will affect future health care.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Health Service Occupations</u>	PROGRAM NUMBER: <u>8415100</u>
COURSE TITLE: <u>Health Service Occupations 1</u>	COURSE NUMBER: <u>8415110</u>

COURSE DESCRIPTION:

This course includes a logical integration of scientific concepts relating to health care. These concepts are based on anatomy and physiology, microbiology, chemistry, physics, nutrition, psychology and sociology.

Laboratory activities are coorelated with theory content.

This course is a prerequisite or corequisite to Health Service Occupations 2 and Health Service Occupations 3.

01.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS--The student will be able to:

- 01.01A Identify factors relating to the transmission of disease.
- 01.02 Identify cells and tissue microscopically and macroscopically.
- 01.05 Identify conditions and diseases related to the integumentary system.
- 01.06 Identify health factors which affect optimal function of the integumentary system.
- 01.08 Identify conditions and diseases related to the muscular/skeletal systems.
- 01.10 Identify health factors which affect optimal functions of the muscular/skeletal system.
- 01.16 Identify conditions and diseases related to the respiratory system.
- 01.17 Identify factors which affect optimal function of the respiratory system such as: hazards of smoking, environmental pollution and spread of communicable diseases.
- 01.19 Identify conditions and diseases related to the nervous system and sensory organs.
- 01.21 Identify health factors which affect optimal functions of the nervous system and sensory organs such as proper use of prescription drugs, hazards of illicit drugs/alcohol, and noise pollution.
- 01.24 Identify conditions and diseases related to the urinary system.
- 01.26 Identify health factors which affect optimal function of the urinary system such as adequate fluid intake, and bladder control.
- 01.28 Identify conditions and diseases related to the reproductive system.
- 01.30 Identify health factors which affect optimal function of the reproductive systems such as sexually transmitted diseases.
- 01.32 Identify conditions and diseases related to the digestive system.
- 01.34 Identify health factors which affect optimal function of the digestive system such as dietary and nutritional factors.
- 01.36 Identify conditions and diseases related to the circulatory system.
- 01.38 Identify health factors which affect optimal function of the circulatory system such as cardiovascular exercise, and weight control and stress management.
- 01.40 Identify conditions and diseases related to the endocrine system.
- 01.42 Identify health factors that will affect optimal functioning of the endocrine system.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Health Service Occupations</u>	PROGRAM NUMBER: <u>8415100</u>
COURSE TITLE: <u>Health Service Occupations 2</u>	COURSE NUMBER: <u>8415120</u>

COURSE DESCRIPTION:

This course provides common skills performed by the majority of health care workers in hospitals, nursing homes and other health care agencies.

Practical classroom/laboratory and clinical experiences are correlated with the theory of this course. Students will perform health care skills in the clinical setting under the supervision of a qualified Health Occupations teacher and/or qualified health professional.

This course is a corequisite to Health Service Occupations 3.

01.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS--The student will be able to:

- 01.01 Demonstrate medical and surgical asepsis.
- 01.03 Perform skills related to the integumentary system.
- 01.07 Perform first aid.
- 01.09 Perform skills related to the muscular/skeletal systems.
- 01.12 Use proper body mechanics to prevent injury to one's self.
- 01.13 Assist with therapeutic exercises so as to prevent injury, facilitate rehabilitation of the muscular/skeletal systems.
- 01.14 Demonstrate ability to perform Heimlich Maneuver and CPR.
- 01.15 Perform skills related to the respiratory system.
- 01.20 Perform skills related to the nervous system and sensory organs.
- 01.25 Perform skills related to the urinary system.
- 01.29 Perform skills related to the reproductive systems.
- 01.33 Perform skills related to the digestive system.
- 01.37 Perform skills related to the circulatory system.
- 01.41 Perform skills related to the endocrine system.

05.0 DEMONSTRATE ACCEPTED COMMUNICATION SKILLS IN BOTH CLINICAL AND CLASSROOM ACTIVITIES--The student will be able to:

- 05.01 Recognize and utilize various forms of communication.
- 05.02 Recognize barriers to communication.
- 05.03 Use appropriate medical terminology and abbreviations.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Health Service Occupations</u>	PROGRAM NUMBER:	<u>8415100</u>
COURSE TITLE: <u>Health Service Occupations 3</u>	COURSE NUMBER:	<u>8415130</u>

COURSE DESCRIPTION:

This course provides the opportunity to study the characteristics of workers in the major health career clusters in order to identify a personal career goal. The content includes, but is not limited to, communication skills; legal and ethical practice; leadership and employability skills; safe and efficient work practices. It provides for continued development of skills in speciality areas.

Clinical learning experiences are required and most correlate with didactic and laboratory activities.

This course is a corequisite to Health Service Occupations 2.

01.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY HEALTH CARE WORKERS--The student will be able to:

- 01.04 Identify health careers related to the integumentary system.
- 01.11 Identify careers related to the muscular/skeletal systems.
- 01.18 Identify health careers related to the respiratory system.
- 01.22 Identify health careers related to the nervous system and sensory organs.
- 01.23 Practice reality orientation.
- 01.27 Identify health careers related to the urinary system.

- 01.31 Identify health careers related to the reproductive systems.
 - 01.35 Identify health careers related to the digestive system, including dental and dietetic occupations.
 - 01.39 Identify health careers related to the circulatory system.
 - 01.43 Identify Health Careers related to the endocrine system.
- 02.0 SUCCESSFULLY COMPLETE CLINICAL LEARNING EXPERIENCES BY DEMONSTRATING COMPETENCY OF SELECTED OCCUPATIONAL SKILLS REPRESENTATIVE OF MAJOR AREAS OF HEALTH CARE--The student will be able to:
- 02.01 Master skills outlined in outcome 01.0.
 - 02.02 Complete clinical rotations representing selected health career clusters using skills learned in outcome 01.0.
 - 02.03 Define: interpersonal relationship, self discipline, dependability.
- 03.0 IDENTIFY AT LEAST ONE HEALTH CAREER WHICH MEETS PERSONAL GOALS--The student will be able to:
- 03.01 Examine the requirements of workers in the major health career clusters.
 - 03.02 Compare personal qualities and aptitudes with requirements of selected careers.
 - 03.03 Investigate health careers not related in body systems such as pharmacy, hospital administration, and biomedical technologies.
 - 03.04 Decide which health career, if any, meets his/her personal career goals.
- 04.0 SELECT HEALTH CARE SERVICES IN KEEPING WITH ACCEPTED CONSUMER PRACTICES--The student will be able to:
- 04.01 Demonstrate ability to investigate and select qualified health care practitioners.
 - 04.02 Identify components of an appropriate health insurance plan.
 - 04.03 Demonstrate knowledge of uses and misuses of over the counter drugs.
 - 04.04 Identify and recognize services of available community agencies.
- 06.0 RECOGNIZE AND PRACTICE ACCEPTABLE BEHAVIOR IN THE CLINICAL SETTINGS--The student will be able to:
- 06.01 Demonstrate an understanding of positive self concepts.
 - 06.02 Identify basic human needs.
 - 06.03 Recognize atypical behavior.
- 07.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN CLINICAL SETTINGS--The student will be able to:
- 07.01 Demonstrate safe use, care and maintenance of equipment and materials.
 - 07.02 Practice safe transport and transfer of patients.
 - 07.03 Properly identify patients.
 - 07.04 Follow approved clinical procedures for labeling.
 - 07.05 Use good observational skills and report appropriately.
 - 07.06 Follow emergency procedures as outlined by instruction.
- 08.0 DEMONSTRATE KNOWLEDGE OF ETHICAL BEHAVIOR AND LEGAL ASPECTS OF HEALTH CARE IN CLINICAL SETTINGS--The student will be able to:
- 08.01 Recognize limits of authority and responsibility of health care workers.
 - 08.02 Identify patient rights and responsibilities.
 - 08.03 Identify content and use of legal documents.
 - 08.04 Understand legal ramifications of actions/inactions in the clinical settings.
- 09.0 USING PRESCRIBED EMPLOYABILITY SKILLS, IDENTIFY AN AIDE LEVEL JOB AND ADVANCED TRAINING PROGRAM WHICH MEET HIS/HER CAREER GOALS--The student will be able to:
- 09.01 Identify appropriate employment and educational opportunities.
 - 09.02 Identify and demonstrate proper work habits, grooming and appearance.

- 09.03 Complete a job application.
- 09.04 Participate in an interview.
- 09.05 Write a follow-up letter.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 10.01 Conduct a job search.
- 10.02 Secure information about a job.
- 10.03 Identify documents that may be required when applying for a job.
- 10.04 Complete a job application form correctly.
- 10.05 Demonstrate competence in job interview techniques.
- 10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 10.07 Identify acceptable work habits.
- 10.08 Demonstrate knowledge of how to make job changes appropriately.
- 10.09 Demonstrate acceptable employee health habits.

11.0 EXPLAIN THE CHARACTERISTICS AND COMPONENTS OF THE HEALTH CARE DELIVERY SYSTEMS, USING ACCEPTABLE TERMINOLOGY--The student will be able to:

- 11.01 Define health.
- 11.02 Describe the intent of Public Law 93-641.
- 11.03 Identify the basic components of the health care delivery system.
- 11.04 Describe the types of health care and identify the major types of health care facilities.
- 11.05 List health care planning agencies and services available at local, state, national and international levels.
- 11.06 List the major advances that transformed health care in the 19th and 20th centuries.
- 11.07 List new developments which will affect future health care.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Health Unit Coordinator

CODE NUMBER: Secondary 8415200

Postsecondary WCL0997

Florida CIP HO17.051300

SECONDARY

SCHOOL CREDITS 3

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): 7-9 9-12 Postsecondary Adult Vocational

Postsecondary Vocational x Other 12, 13-15, 21

CERTIFICATION COVERAGE: NURSING ED @5

PRAC NURSE 7

TEC MED @7

- I. **MAJOR CONCEPTS/CONTENT:** The program is designed to prepare students for employment as ward clerks (245.362-014) or health unit coordinators or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work practices, clerical skills, safety and security use of computers, interpretation and transcription of doctors' orders, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8415210 Health Unit Coordinator 1
8415220 Health Unit Coordinator 2
8415230 Health Unit Coordinator 3

- II. **LABORATORY ACTIVITIES:** Transcription of physicians' orders is an integral part of this course. This competency is achieved through simulated practice with standard equipment and supplies used in a health care facility by the health unit coordinator. An overview of anatomy and physiology serves as a foundation for medical terminology and CPR/first aid. A working knowledge of the computer is a competency achieved through actual practice. Role playing is one of the methods which can be used for developing interpersonal skills.

Clinical learning experiences are an integral part of this program.

- III. **SPECIAL NOTE:** The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

It is recommended that completers of this program voluntarily take the National Association of Health Unit Coordinators Certification examination which is offered annually.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

Health Unit Coordinator - Continued

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 450 hours.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Interpret and apply medical terminology.
02. Demonstrate legal and ethical behaviors.
03. Organize and maintain efficient work practices.
04. Perform clerical duties.
05. Practice safety/security.
06. Operate computers.
07. Read, interpret and transcribe physicians' orders.
08. Use interpersonal skills effectively.
09. Demonstrate employability skills.

- 01.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY--The student will be able to:
- 01.01 Identify components of medical terms.
 - 01.02 Spell, pronounce and define medical terms.
 - 01.03 Relate medical terminology to the body systems.
 - 01.04 Identify and define standard abbreviations and medical symbols.
 - 01.05 Identify apothecary and metric systems.
- 02.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIORS--The student will be able to:
- 02.01 Explain the patients' "Bill of Rights"
 - 02.02 Identify legal and ethical principles regarding the patients' charts, correcting errors, confidentiality, transcribing, patient contact and job description.
 - 02.03 Identify and follow hospital policies.
 - 02.04 Identify the components of the National Association of Health Unit Coordinator's "Code of Ethics."
- 03.0 ORGANIZE AND MAINTAIN EFFICIENT WORK PRACTICES--The student will be able to:
- 03.01 Arrange daily activities by priority.
 - 03.02 Prepare and post unit information lists.
 - 03.03 Maintain a supply of assembled medical/surgical admission packets.
 - 03.04 Assemble/disassemble addressograph plate.
 - 03.05 Distribute forms and articles from in-basket.
 - 03.06 Identify, store and maintain unit equipment/supplies in a neat and orderly manner.
 - 03.07 Sanitize nursing station equipment.
- 04.0 PERFORM CLERICAL DUTIES--The student will be able to:
- 04.01 Record patients allergies.
 - 04.02 Prepare and add forms to chart.
 - 04.03 Record vital signs and patient information.
 - 04.04 Prepare patients' admission chart.
 - 04.05 Record admission data on unit records.
 - 04.06 Prepare discharge chart for medical records.
 - 04.07 Obtain previous admission records/X-rays.
 - 04.08 Post all reports on charts.
 - 04.09 File and retrieve assorted forms.
 - 04.10 Perform patient admission, transfer and discharge procedures.
- 05.0 PRACTICE SAFETY/SECURITY--The student will be able to:
- 05.01 Participate in emergency or disaster plan, CPR and first aid.
 - 05.02 Initiate codes upon nurse's directions.
 - 05.03 Report safety hazards.
 - 05.04 Identify institution's security policies/procedures.
 - 05.05 Practice good body mechanics as they apply to job duties.
- 06.0 OPERATE COMPUTERS--The student will be able to:
- 06.01 Sign on to computers.
 - 06.02 Enter data/computer code.
 - 06.03 Correct mistakes.
 - 06.04 Use back-up system.
 - 06.05 Call up information stored in computer.
- 07.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS--The student will be able to:
- 07.01 Identify all types of physician's orders.
 - 07.02 Prioritize orders for transcription.
 - 07.03 Prepare and route requisitions manually or via computer.
 - 07.04 Arrange for ordered consultations.
 - 07.05 Schedule patients' treatments or therapy with other hospital departments.

HEALTH UNIT COORDINATOR - Continued

08.0 USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 08.01 Accept and place telephone calls and relay messages.
- 08.02 Greet and direct professionals and visitors.
- 08.03 Operate communication systems.
- 08.04 Maintain a professional appearance by practicing good hygiene and adhering to dress code.
- 08.05 Adapt to changing conditions.
- 08.06 Use courtesy, tact, patience and assertiveness techniques in role playing situations.
- 08.07 Explain unit activities to on-coming staff.
- 08.08 Identify and use different methods of communicating.
- 08.09 Identify and use "chain of command" in an institution/agency.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 09.01 Conduct a job search.
- 09.02 Secure information about a job.
- 09.03 Identify documents that may be required when applying for a job.
- 09.04 Complete a job application.
- 09.05 Demonstrate competence in job interview techniques.
- 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 09.07 Identify acceptable work habits.
- 09.08 Demonstrate knowledge of how to make job changes appropriately.
- 09.09 Demonstrate acceptable employee health habits.

COURSE DESCRIPTION:

This course allows the students to develop clerical skills that are necessary to function as a health unit coordinator. The content includes computer communications, preparation of various requisition forms and lists, transcription of various types of physicians orders and maintenance of the patients chart.

03.0 ORGANIZE AND MAINTAIN THE WORKING ENVIRONMENT--The student will be able to:

- 03.01 Arrange daily activities by priority.
- 03.02 Prepare and post unit information lists.
- 03.03 Maintain a supply of assembled medical/surgical admission packets.
- 03.04 Assemble/disassemble addressograph plate.
- 03.05 Distribute forms and articles from in-basket.
- 03.06 Identify, store and maintain unit equipment/supplies in a neat and orderly manner.
- 03.07 Sanitize nursing station equipment.

04.0 PERFORM CLERICAL DUTIES--The student will be able to:

- 04.01 Record patients allergies.
- 04.02 Prepare and add forms to chart.
- 04.03 Record vital signs and patient information.
- 04.04 Prepare patients' admission chart.
- 04.05 Record admission data on unit records.
- 04.06 Prepare discharge chart for medical records.
- 04.07 Obtain previous admission records/X-rays.
- 04.08 Post all reports on chart.
- 04.09 File and retrieve assorted forms.
- 04.10 Perform patient admission, transfer and discharge procedures.

07.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS--The student will be able to:

- 07.01 Identify all types of physician's orders.
- 07.02 Prioritize orders for transcription.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Health Unit Coordinator</u>	PROGRAM NUMBER: <u>8415200</u>
COURSE TITLE: <u>Health Unit Coordinator 3</u>	COURSE NUMBER: <u>8415230</u>

COURSE DESCRIPTION:

This course allows the students to practice skills in the actual clinical settings under the supervision of the teacher utilizing written contractual agreements with health care agencies.

05.0 PRACTICE SAFETY/SECURITY--The student will be able to:

- 05.01 Participate in emergency or disaster plan, CPR and first aid.
- 05.02 Initiate codes upon nurse's directions.
- 05.03 Report safety hazards.
- 05.04 Identify institution's security policies/procedures.
- 05.05 Practice good body mechanics as they apply to job duties.

06.0 USE COMPUTERS--The student will be able to:

- 06.01 Sign on to computers.
- 06.02 Enter data/computer code.
- 06.03 Correct mistakes.
- 06.04 Use back-up system.
- 06.05 Call up information stored in computer.

07. READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS--The student will be able to:

- 07.03 Prepare and route requisitions manually or via computer.
- 07.04 Arrange for ordered consultations.
- 07.05 Schedule patients' treatments or therapy with other hospital departments.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Hearing Aid Dispensing

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP H017.082000

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS x

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

x Postsecondary Vocational

_____ Other _____

CERTIFICATION COVERAGE:

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as audiometrists (10101807), hearing aid repairers (719.381-014), hearing aid technicians (276.354-010), or to provide supplemental training for persons previously or currently employed in these occupations. The program should be approved by the Florida Board of Hearing Aid Specialists so that the graduates will be able to take the state licensing examination administered by the Department of Professional Regulation under current Florida Statutes 484.0401-059.

Content should include the science of sound, normal and abnormal hearing functions, anatomy and physiology of the ear, major causes and patterns of hearing impairment, speech and audiometric testing, psychological counseling of the hearing impaired person, recordkeeping, patient audiological assessment, ethics and legal implications of hearing aid practice, office procedures, employability skills, leadership and human relations, health and safety including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this program. Clinical experience is required.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. The Board of Hearing Aid Specialists recognizes apprenticeship training programs for this occupation. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Perform audiometric testing by air and bone conduction using effective masking.
 02. Determine type and degree of hearing loss.
 03. Determine speech reception threshold, speech discrimination, sound tolerance level, best ear.
 04. Select appropriate hearing aid.
 05. Make impressions.

Hearing Aid Dispensing - Continued

06. Use appropriate techniques to fit a hearing aid.
07. Demonstrate knowledge of legal provisions and ethical behavior of health care workers.
08. Demonstrate employability skills.

123

01.0 PERFORM AUDIOMETRIC TESTING BY AIR AND BONE USING EFFECTIVE MASKING--The student will be able to:

- 01.01 Describe how often an audiometer shall be checked for calibration electro-acoustically or calibrated.
- 01.02 Maintain evidence (records) of satisfactory calibration of audiometers.
- 01.03 Describe the requirements of the audiometric testing room and list the sound-pressure levels at the specified frequencies.
- 01.04 Obtain a waiver from a client if needed.
- 01.05 List the records and charts which must be kept on each individual.
- 01.06 Perform audiometric tests using effective masking by air and bone conduction.
- 01.07 Use a pure tone audiometer which meets the specifications of the American National Standards Institute for diagnostic audiometers.
- 01.08 Describe the instruments, procedures and interpretation of test results.
- 01.09 Discuss all aspects of communication and interpersonal relationships with special interpretation for dealing with the hearing impaired.
- 01.10 Use sign language.

02.0 DETERMINE TYPE AND DEGREE OF HEARING LOSS--The student will be able to:

- 02.01 List the types of deafness.
- 02.02 Discuss the psychoacoustical and physical concepts and principles of sound and the human auditory system.
- 02.03 List the major causes and patterns of hearing impairment.
- 02.04 Explain the physiology of hearing.

03.0 DETERMINE SPEECH RECEPTION THRESHOLD, SPEECH DISCRIMINATION, SOUND TOLERANCE LEVEL, BEST EAR--The student will be able to:

- 03.01 Use a speech audiometer or a master hearing aid to determine most comfortable listening level and the most uncomfortable listening level and determine client's speech discrimination at the most comfortable loudness level.
- 03.02 Explain the following terms: intensity, loudness, frequency and pitch.
- 03.03 Define speech reception threshold and speech discrimination.

04.0 SELECT APPROPRIATE HEARING AID--The student will be able to:

- 04.01 From among a selection of hearing aid models select best hearing aid for client.
- 04.02 Determine that the selected instrument will best compensate for the degree of loss and tolerance level and provide a frequency amplification curve that will give the best speech discrimination possible.
- 04.03 Interpret manufacturer's specifications and hearing aid analysis data to determine if the hearing aid meets specifications and is appropriate for the client's loss.
- 04.04 Describe a final fitting and perform final fitting in the presence of a licensed dispenser.

05.0 MAKE IMPRESSIONS--The student will be able to:

- 05.01 Make an earmold impression and perform modifications.
- 05.02 List the materials used for earmolds.
- 05.03 Demonstrate knowledge of pressure points and their elimination.
- 05.04 Describe the anatomy of the ear and tell the function of each part.
- 05.05 Demonstrate type of earmold to be ordered in relation to hearing loss.

HEARING AID DISPENSING - Continued

06.0 USE APPROPRIATE TECHNIQUES TO FIT A HEARING AID--The student will be able to:

- 06.01 Assess the audiological workup.
- 06.02 Discuss the physical, mental, psychological, occupational and environmental motivation aspects of the hearing impaired person.
- 06.03 Using a client's earmold, modify the earmold to fit the patient's ear and/or change hearing aid response.
- 06.04 Explain the bilateral fitting of hearing aids.
- 06.05 Demonstrate use of otoscope.
- 06.06 Give a report indicating type of disorder found which must be reported to physician.

07.0 DEMONSTRATE KNOWLEDGE OF LEGAL PROVISIONS AND ETHICAL BEHAVIOR OF HEALTH CARE WORKERS--The student will be able to:

- 07.01 State the legal definition of a hearing aid specialist and list the requirements for licensure by examination.
- 07.02 Discuss unethical practices and list consequences of same.
- 07.03 Describe client conditions for which a physician must be consulted before fitting a hearing aid.
- 07.04 Counsel clients and family.
- 07.05 Describe the legislative intent of Chapter 484 F.S.
- 07.06 List the acts which constitute grounds for disciplinary proceedings of licensed hearing aid dispensers.
- 07.07 List the characteristics of an acceptable Hearing Aid specialist and describe their relationship with audiologists, speech pathologists, and physicians.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 08.01 Conduct a job search.
- 08.02 Secure information about a job.
- 08.03 Identify documents that may be required when applying for a job.
- 08.04 Complete a job application.
- 08.05 Demonstrate competence in job interview techniques.
- 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 08.07 Identify acceptable work habits.
- 08.08 Demonstrate knowledge of how to make job changes appropriately.
- 08.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Histologic Technology

CODE NUMBER: Secondary _____

Postsecondary MLS0993

Florida CIP HO17.030800

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: LAB TECH 7 TEC MED @7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as tissue technologists (078.361-030) or histotechnicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, preparation of tissue specimens of human and animal origin for research, teaching purposes, or diagnosis of body dysfunction and malignancy. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. Students should also be encouraged to belong to their professional organization.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The graduates should be prepared to take the appropriate national registry and/or state licensure examinations.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1300 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Identify the anatomic structure and function of body systems in relation to disease states and services performed by the histotechnician.
02. Practice quality assurance, safety, and acceptable communication skills.
03. Adhere to legal and ethical principles related to the practice of histotechnology.
04. Receive tissue specimens and perform preparation techniques as indicated.
05. Assist with frozen section procedures.
06. Maintain equipment.

01.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DISEASE STATES AND SERVICES PERFORMED BY THE HISTOTECHNICIAN--The student will be able to:

- 01.01 Demonstrate knowledge of human anatomy and physiology.
- 01.02 Demonstrate knowledge of normal histology of human organs.
- 01.03 Demonstrate knowledge of various methods of obtaining histological specimens from patients.
- 01.04 Identify tissue structures and cellular components; relate both to physiological functions.
- 01.05 Demonstrate knowledge of types of histological specimens usually submitted for gross and microscopic examination.
- 01.06 Demonstrate knowledge of the processing of histologic specimens especially as related to disease processes.
- 01.07 Demonstrate knowledge of tissue processing methods, especially variety of fixatives used, as each relates to a specific entity or disease process to be diagnosed.

02.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:

- 02.01 Practice quality control in the histology laboratory as required by the accrediting agency.
- 02.02 Follow institutional policies and procedures related to safety.
- 02.03 Practice acceptable laboratory safety.
- 02.04 Demonstrate knowledge of diagnostic terminology.
- 02.05 Practice appropriate communication skills.
- 02.06 Recognize errors and their sources, and take corrective action.
- 02.07 Demonstrate knowledge of chemical hazards within the histopathology laboratory.
- 02.08 Demonstrate knowledge of proper disposal methods for all chemical and biological waste within the histopathology laboratory.

03.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF HISTOTECHNOLOGY--The student will be able to:

- 03.01 Practice discretion and confidentiality in regard to laboratory reports.
- 03.02 Demonstrate knowledge of the histotechnician's role and responsibilities in relation to the health care team.
- 03.03 Demonstrate knowledge of the legal ramifications of clinical practice.
- 03.04 Demonstrate knowledge of patient's rights and responsibilities.

04.0 RECEIVE TISSUE SPECIMENS AND PERFORM PREPARATION TECHNIQUES AS INDICATED--The student will be able to:

- 04.01 Evaluate, accept, identify and label histologic specimens.
- 04.02 Perform the most advantageous preparation and staining techniques.
- 04.03 Solve problems in staining and preparation procedures.
- 04.04 Evaluate and implement new preparation and staining procedures.
- 04.05 Distinguish between well-prepared and stained and poorly-prepared and stained histologic specimens.
- 04.06 Identify tissue structures and their staining characteristics.

05.0 ASSIST WITH FROZEN SECTION PROCEDURES--The student will be able to:

- 05.01 Demonstrate cryostat cutting.
- 05.02 Demonstrate rapid hemotoxylin and eosin staining.
- 05.03 Process consultator report, slides and tissue.

06.0 MAINTAIN EQUIPMENT--The student will be able to:

- 06.01 Perform preventive and corrective maintenance of equipment and instruments within specified limits.
- 06.02 Refer to appropriate person(s) for complex repairs.
- 06.03 Demonstrate knowledge of laboratory management.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Home Health Aide

CODE NUMBER: Secondary 8418000

Postsecondary HCP0993

Florida CIP HO17.040400

SECONDARY

SCHOOL CREDITS 1

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____7-9 _____9-12 _____Postsecondary Adult Vocational

_____ Postsecondary Vocational _____x Other 12, 13-15, 21

CERTIFICATION COVERAGE: NURSING ED @5

PRAC NURSE 7

- I. MAJOR CONCEPTS/CONTENT: This program is designed to prepare students for employment as home attendant (354.377-014), or home health aide or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, instruction in those supportive services which are required to provide and maintain bodily and emotional comfort and to assist the patient toward independent living in a safe environment, as stated in Rules of the Department of Health and Rehabilitative Services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies. Additional content to be included are legal and ethical responsibilities, communication skills, basic human needs, a safe, clean and healthy home environment, the developmental process, nutritional needs, personal care, special care and rehabilitation needs of the client, household management, record keeping, pet facilitated therapy and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Basic infection control, first aid, CPR heart saver, vital signs, home care skills and client care skills are an integral part of this program. Clinical experiences are an appropriate part of this program where the student may demonstrate/perform bedside client care, including the procedures listed in Student Performance Standards.
- III. SPECIAL NOTE: This program may be taught using a team teaching plan utilizing Home Economic and Health Occupations certified teachers.

Section 10D 68.014 Home Health Aide, Administrative Rules, Department of Health and Rehabilitative Services contain much valuable information for program planning.

The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 6.0, Language 7.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical minimum length of this program for an average achieving student is 150 hours.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of legal and ethical responsibilities.
02. Demonstrate knowledge of basic human needs
03. Promote a safe, clean and healthy environment.
04. Demonstrate knowledge of developmental changes that occur during the life span.
05. Demonstrate knowledge of nutritional needs and food management.
06. Provide personal care.
07. Perform special care activities.
08. Assist the client with meeting activities of daily living needs.
09. Perform home care services essential to the clients' health.
10. Record and report observations.
11. Demonstrate employability skills.

- 01.0 DEMONSTRATE KNOWLEDGE OF LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:
- 01.01 Explain the "patient's bill of rights".
 - 01.02 Describe the role of each team member.
 - 01.03 Explain the role of the Home Health Aide in relation to other team members.
 - 01.04 Describe the responsibility of the agency to the aides and staff.
 - 01.05 Provide health care within the policies of facilities/agencies where he/she works.
 - 01.06 Provide health care within the legal framework of his/her job description.
 - 01.07 Explain the purpose and utilization of a written plan of care and/or assignment sheets.
- 02.0 DEMONSTRATE KNOWLEDGE OF BASIC HUMAN NEEDS--The student will be able to:
- 02.01 Identify ways in which people communicate with each other.
 - 02.02 Describe the importance of the family to individuals and to society.
 - 02.03 Describe behavior which may be observed when basic needs are not met.
 - 02.04 Describe the basic needs which home health aide services help to meet.
 - 02.05 Identify situations which might need Home Health Aide Services.
 - 02.06 Identify common reactions of family members to illness or stress and how they might be handled.
 - 02.07 Recognize changes or events in a family that the Home Health Aide should report to the supervisor.
- 03.0 PROMOTE A SAFE CLEAN AND HEALTHY ENVIRONMENT--The student will be able to:
- 03.01 Explain methods of infection control.
 - 03.02 Wash hands using aseptic technique.
 - 03.03 Identify fire/safety hazards and methods of control.
 - 03.04 List causes of accidents.
 - 03.05 Use protective devices.
 - 03.06 Practice good body mechanics.
- 04.0 DEMONSTRATE KNOWLEDGE OF DEVELOPMENTAL CHANGES THAT OCCUR DURING THE LIFE SPAN--The student will be able to:
- 04.01 Describe general characteristics, particular needs and problems of persons.
 - 04.02 Identify attitudes and living habits which promote positive mental and physical health.
 - 04.03 Distinguish between fact and fallacy about the aging process.
 - 04.04 Identify signs and symptoms of illness.
 - 04.05 Identify community resources and services available.
 - 04.06 Describe the feelings, reactions, and needs of the dying person, family members and the Home Health Aide.
- 05.0 DEMONSTRATE KNOWLEDGE OF NUTRITIONAL NEEDS AND FOOD MANAGEMENT--The student will be able to:
- 05.01 Explain regional, cultural, and religious food patterns.
 - 05.02 Prepare a food plan including the basic food groups.
 - 05.03 List factors which must be considered when purchasing food.
 - 05.04 Prepare a meal.
 - 05.05 Feed the client.
 - 05.06 Describe special and therapeutic diets.
- 06.0 PROVIDE PERSONAL CARE--The student will be able to:
- 06.01 Bathe the client.
 - 06.02 Give oral hygiene.
 - 06.03 Give back rub.

HOME HEALTH AIDE - Continued

- 06.04 Provide hair care.
 - 06.05 Provide nail care except toe nails of diabetics and those with neurovascular disorders.
 - 06.06 Shave the client.
 - 06.07 Dress the client.
 - 06.08 Provide simple foot care (cleanliness).
 - 06.09 Make the bed.
 - 06.10 Assist patient with elimination needs (no enemata).
- 07.0 PERFORM SPECIAL CARE ACTIVITIES--The student will be able to:
- 07.01 Measure and record vital signs.
 - 07.02 Change unsterile dressings.
 - 07.03 Apply cold applications.
 - 07.04 Apply support stockings and prosthetic devices.
 - 07.05 Give perineal care except for major surgical procedures.
 - 07.06 Assist client with a sitz bath.
 - 07.07 Collect specimens; urine, sputum, or stool.
 - 07.08 Perform sugar and acetone tests.
 - 07.09 Monitor and assist with care of catheters and tubes.
 - 07.10 Assist client with taking self-administered prescribed medication.
 - 07.11 Change a colostomy bag.
 - 07.12 Provide special skin care.
 - 07.13 Measure and record I and O.
 - 07.14 Perform CPR - HEARTSAVER.
 - 07.15 Perform first aid.
 - 07.16 Perform post-mortem care.
- 08.0 ASSIST THE CLIENT WITH MEETING ACTIVITIES OF DAILY LIVING NEEDS--The student will be able to:
- 08.01 Define rehabilitation.
 - 08.02 List the purposes of a rehabilitation program.
 - 08.03 Lift, hold, or transfer a client using good body mechanics.
 - 08.04 Perform prescribed range of motion.
 - 08.05 Assist the client in the use of ambulatory support devices.
 - 08.06 Assist the client with reality orientation.
- 09.0 PERFORM HOME CARE SERVICES ESSENTIAL TO THE CLIENTS' HEALTH--The student will be able to:
- 09.01 State the role of a Home Health Aide in maintaining a clean environment.
 - 09.02 List ways of establishing an individual work plan with the client and family.
 - 09.03 Demonstrate the correct procedures for household cleaning tasks.
 - 09.04 Identify the methods for proper food storage.
 - 09.05 Identify the methods for proper medication storage.
- 10.0 RECORD AND REPORT OBSERVATIONS--The student will be able to:
- 10.01 Describe the difference between objective and subjective reporting.
 - 10.02 Identify types of observations.
 - 10.03 Identify different methods of communicating.
 - 10.04 Maintain record of daily care and observations.
 - 10.05 Assist in completing an incident report.
 - 10.06 Record mileage and complete agency reports.
- 11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 11.01 Conduct a job search.
 - 11.02 Secure information about a job.
 - 11.03 Identify documents that may be required when applying for a job.
 - 11.04 Complete a job application.
 - 11.05 Demonstrate competence in job interview techniques.
 - 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 11.07 Identify acceptable work habits.
 - 11.08 Demonstrate knowledge of how to make job changes appropriately.
 - 11.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Hospital Admitting Officer

CODE NUMBER: Secondary _____

Postsecondary MRE0991

Florida CIP H017.059902

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED #5 PRAC NURSE 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as clerical workers, other (40066899), hospital admitting officers, hospital admitting clerks, or hospital entrance attendants, outpatient registration workers, emergency registration workers or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, hospital organization, financial aspects of illness, hospital and health insurance, admitting department activities, preparation of admission forms and patient records, securing patient valuables, obtaining general consent signatures, medical terminology, classification of patients by illnesses (DRG's), placing patients according to hospital policy, entering data into a computer, first aid and cardiopulmonary resuscitation (CPR), employability skills, leadership and human relation skills, and health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory experiences are an integral part of this program. Equipment - related operation of a CRT, a plate embosser, and a typewriter should be provided in the classroom setting.

A clinical practicum should be provided.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

Keyboarding and basic computer use skills are prerequisite or corequisite to this program.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for an average achieving student is 300 hours. Competency based principles should be used so that students need not repeat already possessed skills.

Hospital Admitting Officer - Continued

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. From among rooms available, select the best room assignment for incoming patient.
02. Prepare all forms for new patient including patient identification, chart, insurance forms, addressograph plate, etc.
03. Prepare and execute records forms.
04. Secure consent signatures.
05. Secure patient's valuables.
06. Demonstrate employability skills.
07. Demonstrate ability to enter data into computer.

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Hospital Admitting
OfficerPOSTSECONDARY NUMBER: MRE0991

- 01.0 FROM AMONG ROOMS AVAILABLE, SELECT THE BEST ROOM ASSIGNMENT FOR INCOMING PATIENT--The student will be able to:
- 01.01 Recognize special needs of incoming patient for protection against hospital acquired infections (lowered resistance to infections, more serious consequences from acquired infectious diseases).
 - 01.02 Check diagnosis of patient already in a semi-private or multiple bedroom.
 - 01.03 Determine kind of room desired by physician for incoming patient.
 - 01.04 Reconcile selection with incoming patients space requirements (traction, isolation), classification of illness, insurance.
 - 01.05 Confirm readiness of room selected.
 - 01.06 Recognize importance of first impressions.
 - 01.07 Demonstrate care, concern, acceptance of ill person/family.
 - 01.08 Demonstrate knowledge of legal aspects, medical care and hospital liability.
 - 01.09 Use appropriate communication with patients, families, coworkers.
 - 01.10 Recognize body language signals.
 - 01.11 Recognize that to this new admission, You are the hospital!
 - 01.12 Use medical terminology.
 - 01.13 Acquire assistance if patient condition warrants.
 - 01.14 Notify unit of admission, accompany patient.
- 02.0 PREPARE ALL FORMS FOR NEW PATIENT INCLUDING PATIENT IDENTIFICATION, CHART, INSURANCE FORMS, ADDRESOGRAPH PLATE, ETC.--The student will be able to:
- 02.01 Confirm admission number.
 - 02.02 Prepare patient identification card (addresograph plate or other).
 - 02.03 Prepare patient identification bracelet.
 - 02.04 Prepare chart forms.
 - 02.05 Prepare insurance forms.
 - 02.06 Prepare hospital record forms.
 - 02.07 Follow designated hospital policy for admitting patients.
 - 02.08 Obtain all needed information: name, physician's name, allergies, diagnosis.
 - 02.09 Enter patient data in all required spaces on forms.
 - 02.10 Prepare a master admission sheet.
 - 02.11 Transfer the physician's orders to the receiving unit.
- 03.0 PREPARE AND EXECUTE RECORDS FORMS--The student will be able to:
- 03.01 Prepare master admission sheet (book).
 - 03.02 Place patient name and room number in dietary record.
 - 03.03 Make certain that physician's admitting orders are transferred to receiving unit.
 - 03.04 Place new name on census record.
 - 03.05 Place name on utilization record.
- 04.0 SECURE CONSENT SIGNATURES--The student will be able to:
- 04.01 Identify criteria for the status of legal guardian.
 - 04.02 Read form to patient or guardian.
 - 04.03 Observe and witness patient signature or that of guardian.
 - 04.04 Sign your name on witness space.
 - 04.05 Recognize the kinds of consent forms in use - consent for surgery, consent for anaesthesia, consent for amputation, consent for donation of body parts, consent for autopsy, consent for blood transfusion, consent physician to treat, consent for consultation.
 - 04.06 Recognize stress and deal effectively, courteously and empathetically with patients/families/significant others.

HOSPITAL ADMITTING OFFICER - Continued

05.0 SECURE PATIENT'S VALUABLES--The student will be able to:

- 05.01 Have patient place money (counted) in envelope.
- 05.02 Have patient remove jewelry, describe, place in envelope.
- 05.03 Follow hospital policy, rules regarding valuables.
- 05.04 Record on admitting forms.
- 05.05 Send bulky valuables and fur coats home or obtain patient's or guardian signature on a "Waiver of Liability" form.

06.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 06.01 Conduct a job search.
- 06.02 Secure information about a job.
- 06.03 Identify documents that may be required when applying for a job.
- 06.04 Complete a job application.
- 06.05 Demonstrate competence in job interview techniques.
- 06.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 06.07 Identify acceptable work habits.
- 06.08 Demonstrate knowledge of how to make job changes appropriately.
- 06.09 Demonstrate acceptable employee health habits.

07.0 DEMONSTRATE ABILITY TO ENTER DATA INTO COMPUTER--The student will be able to:

- 07.01 Turn on computer.
- 07.02 Insert disk or key in mainframe code.
- 07.03 Type in data.
- 07.04 Send data electronically to X-Ray, Lab, O.R., floor, pharmacy.
- 07.05 Identify the informational requirements on an admission form.

08.0 DETERMINE IF PATIENTS MEET THE FINANCIAL REQUIREMENTS OF AN INSTITUTION--The student will be able to:

- 08.01 Identify types of insurance.
- 08.02 Calculate deposit amounts.
- 08.03 Determine if preauthorization is required for admission.

09.0 USE MEDICAL TERMINOLOGY AND RECOGNIZE MANIFESTATIONS OF DIAGNOSED CONDITIONS--The student will be able to:

- 09.01 Pronounce, spell, and define medical terminology.
- 09.02 Recognize manifestations of diagnosed conditions.
- 09.03 Identify alternate processing methods.
- 09.04 Explain the ICD 9cm coding system.

10.0 DEMONSTRATE INTERPERSONAL SKILLS--The student will be able to:

- 10.01 Communicate with patients, co-workers, and authority figures using verbal and non-verbal communication skills.
- 10.02 Demonstrate courtesy, care, concern, and acceptance of ill persons and their families.
- 10.03 Explain the importance of first impressions.
- 10.04 Identify body language signals.
- 10.05 Identify symptoms of stress.
- 10.06 Display professional, respectful behavior with authority figures.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Hospital Housekeeping Management

CODE NUMBER: Secondary _____ Postsecondary HEV0530

Florida CIP HO17.059901

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED #5 PRAC NURSE 7 TEC MED #7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as executive housekeepers (187.167-046), hospital housekeepers or hospital environmental services manager or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, maintenance of housekeeping supplies and equipment, housekeeping techniques, personnel management, purchasing and budgeting, interior design, landscaping, computer science, safety and security, occupational safety and health act, theories of supervision, theories of learning, nutrition, microbiology, economics, technical writing, english, foreign language, mathematics, sociology, psychology, speech, legal requirement skills, health and safety including CPR and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Classroom laboratory experiences are an integral part of this program. Clinical practicums/internships should be utilized.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

This program should be approved by the National Executive Housekeepers Association, Inc. This association maintains an affiliate professional organization for teachers and students and a patron club for vendors. Vendors often supply valuable new instructional materials and audio visuals for loan. The Florida Association of Hospital Housekeepers is sponsored by the Florida Hospital Association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 360 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

Hospital Housekeeping Management - Continued

01. Organize and maintain supplies and equipment.
02. Manage housekeeping equipment.
03. Care for and distribute laundry.
04. Perform housekeeping activities.
05. Care for the cleaning and maintenance of horizontal and vertical surfaces within hospital.
06. Identify chemicals and their proper use.
07. Demonstrate safety, security and sanitation skills.
08. Describe joint commission accreditation of hospitals (JCAH) requirements, Florida's Right to Know Law, Hazardous Waste Disposal and local ordinances regarding the Environmental Services Department.
09. Delegate responsibilities, direct employees and follow-up on task completion.
10. Demonstrate techniques of scheduling from gathered data, design "day off" roster, and determine necessary FTE staff level for assigned responsibilities.
11. Design training programs for all levels of employees with scheduled retraining annually, using audio-visual instruction tools that are available.
12. Design, develop and install computer programs for operational activities, cost containment data, and project for future activities.
13. Demonstrate inter-department skills.
14. Demonstrate employability skills.

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Hospital Housekeeping
ManagementPOSTSECONDARY NUMBER: HEV0530

- 01.0 ORGANIZE AND MAINTAIN SUPPLIES AND EQUIPMENT--The student will be able to:
- 01.01 Organize storage area.
 - 01.02 Stock "maintain" cart with supplies and equipment.
 - 01.03 Maintain janitorial closet.
 - 01.04 Check electrical equipment before using.
 - 01.05 Perform preventative maintenance on heavy duty cleaning equipment.
 - 01.06 Operate each piece of equipment.
 - 01.07 Clean heavy duty equipment before returning to storage area.
- 02.0 MANAGE HOUSEKEEPING EQUIPMENT--The student will be able to:
- 02.01 Develop a training program and desired outcome on each piece of equipment within the hospital.
 - 02.02 Develop retraining program, with proper recordkeeping of the employee's activities in this area.
 - 02.03 Maintain a minimum inventory of recommended spare parts on all equipment for minor repair.
 - 02.04 Develop and maintain schedule of renewals and repairs on all equipment.
 - 02.05 Identify developments of new equipment.
- 03.0 CARE FOR AND DISTRIBUTE LAUNDRY--The student will be able to:
- 03.01 Check quality control.
 - 03.02 Avoid wasteful habits.
 - 03.03 Utilize distribution systems.
 - 03.04 Prevent loss.
 - 03.05 Transport both clean and soiled laundry.
- 04.0 PERFORM HOUSEKEEPING ACTIVITIES--The student will be able to:
- 04.01 Use all carpet shampoo methods.
 - 04.02 Scrub, strip, finish and spray buff hard floor surfaces.
 - 04.03 Mix chemicals as directed on the labels.
 - 04.04 Perform all isolation techniques as instructed.
 - 04.05 Perform daily sweeping, dust mopping, and wet mopping procedures.
 - 04.06 Perform daily cleaning of patient and non-patient areas.
 - 04.07 Perform bed making on check-outs.
- 05.0 CARE FOR THE CLEANING AND MAINTENANCE OF HORIZONTAL AND VERTICAL SURFACES WITHIN HOSPITAL--The student will be able to:
- 05.01 Prepare cleaning techniques for floors, walls, and ceilings, outlining chemicals to be used, tools, and equipment usage and the desired result.
 - 05.02 Develop records as to job completion and necessary schedule to assure of proper cleaning and maintenance.
- 06.0 IDENTIFY CHEMICALS AND THEIR PROPER USE--The student will be able to:
- 06.01 Maintain par level inventory on all cleaning products to be used within the facility.
 - 06.02 Identify each chemical as to its use, dilution level, storage area and replenishment.
 - 06.03 Instruct each employee as to the use of each chemical, safety practices, and product limitations.
 - 06.04 Ensure that each employee has complete knowledge of products as outlined by Florida Right to Know law. Record training activities regarding their statutory requirements.
 - 06.05 Identify new products via information supplied by pertinent periodicals, technical bulletins, and chemical product supplies and manufacturers.
 - 06.06 Work closely with infection control coordinator within the facility as to the use of sanitizing and disinfecting agents. Serve as an active member on the Hospital Infection Control Committee.

HOSPITAL HOUSEKEEPING MANAGEMENT - Continued

- 07.0 DEMONSTRATE SAFETY, SECURITY AND SANITATION SKILLS--The student will be able to:
- 07.01 Use OSHA principles concerning proper dress, usage of electrical equipment, and proper placement of warning signs.
 - 07.02 Identify health hazard situations.
 - 07.03 Define health and wellness.
 - 07.04 Serve as an active member of the Hospital Safety OSHA Management Committee.
 - 07.05 Develop a safety program within the department and appoint a safety monitor to assure proper procedures are adopted and followed.
 - 07.06 Describe local, state, and federal requirements with regard to hazardous waste and their application to the hospital.
 - 07.07 Work closely with the Hospital Control Coordinator regarding sanitation within the facility.
 - 07.08 Ensure that all chemicals, supplies, and equipment are kept in lock and key storage at all times. (This is suggested to avoid improper use of chemicals and equipment and also to be an effective cost control tool.)
- 08.0 DESCRIBE JOINT COMMISSION ACCREDITATION OF HOSPITALS (JCAH) REQUIREMENTS, FLORIDA'S RIGHT TO KNOW LAW, HAZARDOUS WASTE DISPOSAL AND LOCAL ORDINANCES REGARDING THE ENVIRONMENTAL SERVICES DEPARTMENT--The student will be able to:
- 08.01 Obtain a copy of Joint Commission Accreditation of Hospitals (JCAH) requirements for the department and apply these requirements on day to day activities of all employees.
 - 08.02 Describe the requirements of Florida's Right to Know Law and apply these requirements to the department.
 - 08.03 Obtain information from state, local, and federal agencies regarding Hazardous Waste Disposal and apply these requirements to the department.
 - 08.04 Obtain information from peer group in other hospitals for other local requests.
- 09.0 DELEGATE RESPONSIBILITIES, DIRECT EMPLOYEES AND FOLLOW-UP ON TASK COMPLETION--The student will be able to:
- 09.01 Accomplish mission of department by working through supervisors for expectations of the hospital.
 - 09.02 Use the concept of "Tell them, show them, then tell them again."
 - 09.03 Establish scheduled inspections of all areas within the facility.
- 10.0 DEMONSTRATE TECHNIQUES OF SCHEDULING FROM GATHERED DATA, DESIGN "DAY OFF" ROSTER, AND DETERMINE NECESSARY FTE STAFF LEVEL FOR ASSIGNED RESPONSIBILITIES--The student will be able to:
- 10.01 Document physical inventory of hospital as to patient rooms, corridors, ancillary areas, support areas, offices, lights, windows, vents and vertical surfaces.
 - 10.02 Determine, by established ward units, what is necessary to complete department responsibilities.
 - 10.03 Decide frequency of cleaning for inspection and write employee schedules from gathered information.
 - 10.04 Determine number of staff necessary for desired levels.
 - 10.05 Design "day off" roster for department.
 - 10.06 Describe the administration responsibilities to perform with the results of 7.01 through 7.05.
 - 10.07 Assign job titles to positions outlined in "day off" roster as to what is to be accomplished. (Example: Floor finishers, vacuum man, mop and buff, Housekeeper I, II or III.)
- 11.0 DESIGN TRAINING PROGRAM FOR ALLELVES OF EMPLOYEES WITH SCHEDULED RETRAINING ANNUALLY, USING AUDIOVISUAL INSTRUCTIONAL TOOLS THAT ARE AVAILABLE--The student will be able to:
- 11.01 Determine levels of skills necessary for job classification noted in 7.07 above.
 - 11.02 Establish job descriptions for all positions outlined on "day off" roster.
 - 11.03 Initiate training program for each job description and job title.
 - 11.04 Maintain records of training and schedule retraining annually.

HOSPITAL HOUSEKEEPING MANAGEMENT - Continued

- 11.05 Gather training tools, audiovisual aids, question and answer exercises from sources available. (Suppliers of chemicals and equipment are an excellent source for these necessary tools.)
- 12.0 DESIGN, DEVELOP AND INSTALL COMPUTER PROGRAMS FOR OPERATIONAL ACTIVITIES, COST CONTAINMENT DATA, AND PROJECT FOR FUTURE ACTIVITIES--The student will be able to:
 - 12.01 Determine what information is needed and the time that information is wanted for operation of the department.
 - 12.02 Incorporate into initial program, bases such as room control, work schedules, staff level, days off roster and desired cleaning frequencies.
 - 12.03 Establish levels on all supplies used by departments with cost analysis indicated.
 - 12.04 Develop a project for a cleaning program.
 - 12.05 Design a program for alternative work activities, chemical and supply usage information, and a project schedule for desired results.
 - 12.06 Develop a departmental procedure manual program.
- 13.0 DEMONSTRATE INTERDEPARTMENT SKILLS--The student will be able to:
 - 13.01 Maintain daily contact with nursing as to these expectations and prospectives.
 - 13.02 Maintain weekly contact with all other department heads as to their expectations and prospectives.
 - 13.03 Purpose of 10.01 and 10.02 is to keep avenues of communication open and free at all times.
 - 13.04 Participate actively in all hospital social activities.
 - 13.05 Accept suggestions from other department heads and act on them accordingly.
- 14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 14.01 Conduct a job search.
 - 14.02 Secure information about a job.
 - 14.03 Identify documents that may be required when applying for a job.
 - 14.04 Complete a job application.
 - 14.05 Demonstrate competence in job interview techniques.
 - 14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 14.07 Identify acceptable work habits.
 - 14.08 Demonstrate knowledge of how to make job changes appropriately.
 - 14.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
PROGRAM TITLE: Massage
CODE NUMBER: Secondary _____ Postsecondary MSS0990
Florida CIP H012.040500

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: MASSEUR 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as masseurs or masseuses (70080609) or to provide supplemental training for persons previously or currently employed in this occupation. The program must be approved by the Florida Board of Massage so that the graduates may take the state examination to practice as licensed masseuses.

The content includes, but is not limited to, the theory and practice of massage, theory and practice of hydrotherapy, theory and practice of heliotherapy, hygiene, practice demonstration, anatomy and physiology, legal aspects of massage practice, allied modalities, leadership and human relations skills, health and safety, CPR, and employability skills. Colonic irrigation is optional.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: The student will develop manipulative skills through instruction by demonstration. Student practices include massage techniques, and use of hydro- and heliotherapy equipment such as steam room, sauna, treatment tables, local and full immersion baths, whirlpool bath, cabinet baths, hot and cold packs, paraffin bath, and the use of infra red and ultraviolet lamps. Students may instruct others in the use of therapeutic exercise modalities.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. These activities when provided are considered an integral part of this program.

Colonic irrigation instruction is optional. When included, the students will be able to demonstrate knowledge of the theory of internal hydrotherapy and use the colonic machine in the administration of a colonic irrigation.

After completion of this program students are eligible to take the Florida Board of Massage licensure examination.

The cooperative method of instruction may be used for this program. When the cooperative method is offered, the following is required for each student: (1) a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and (2) a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

Massage - continued

The typical length of this program for an average student is 1000 hours in accordance with Board approval.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Exhibit an understanding of the principles of the theory of massage and demonstrate the proper techniques of massage manipulations.
02. Exhibit an understanding of the principles of the theory of hydrotherapy and use hydrotherapy modalities.
03. Exhibit an understanding of the principles of heliotherapy and demonstrate the use of heliotherapy devices.
04. Demonstrate safety and health practices that are conducive to the hygiene of masseur and the patron.
05. Demonstrate knowledge of the statutes and rules of Florida Massage Practice Act.
06. Explain the use of allied modalities related to massage.
07. Demonstrate an understanding of anatomy and physiology as related to the practice of massage.
08. Explain leadership and human relation traits and ethical practices of massage.
09. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Massage

POSTSECONDARY NUMBER: MSS0990

01.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF THE THEORY OF MASSAGE AND DEMONSTRATE THE PROPER TECHNIQUES OF MASSAGE MANIPULATIONS--The student will be able to:

- 01.01 Discuss the history of massage and historical practitioners.
- 01.02 Explain the physiological effects of massage.
- 01.03 Perform the various manipulations.
- 01.04 Discuss the effects of lubricants used in massage and apply lubricants.
- 01.05 Interview the patron to ascertain his/her indications and/or contraindications for therapy.
- 01.06 Operate massage equipment i.e., rollers, brushes, vibrators.

02.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF THE THEORY OF HYDROTHERAPY AND USE HYDROTHERAPY MODALITIES--The student will be able to:

- 02.01 Discuss the history of hydro-therapy and historical practitioners.
- 02.02 Interview the patrons to ascertain their indications and/or contraindications for therapy.
- 02.03 Perform hydro-therapy services such as hydro-kinetics, hydro-thermal and hydro-static.

03.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF HELIOTHERAPY AND DEMONSTRATE THE USE OF HELIOTHERAPY DEVICES--The student will be able to:

- 03.01 Explain the physiological effects of ultra violet and infra-red radiation.
- 03.02 Interview the patron to ascertain his/her indications and/or contraindications for therapy.
- 03.03 Operate ultra violet and infra red devices in the application of these treatments.

04.0 DEMONSTRATE SAFETY AND HEALTH PRACTICES THAT ARE CONDUCTIVE TO THE HYGIENE OF MASSEUR AND THE PATRON--The student will be able to:

- 04.01 Explain the ways a facility should be planned and maintained to promote health and safety.
- 04.02 Report and/or correct any environmental hazard.
- 04.03 Practice good body mechanics.
- 04.04 Outline practices conducive to personal health, appearance and cleanliness.
- 04.05 Explain the principles and procedures of CPR.

05.0 DEMONSTRATE KNOWLEDGE OF THE STATUTES AND RULES OF FLORIDA MASSAGE PRACTICE ACT--The student will be able to:

- 05.01 State the purpose of the Massage Practice Act.
- 05.02 State the qualifications necessary for licensure and renewal of licence.
- 05.03 State the function of the Board of Massage and the Department of Professional Regulations.
- 05.04 State the conditions necessary for acceptance for examination by the Board.
- 05.05 State the requirements for massage establishments and their inspection.
- 05.06 State the fees required for testing, licensure and license renewal.
- 05.07 State the disciplinary proceedings which correspond to misdemeanors under the law.
- 05.08 Define the terms: Board, Department, Massage, Masseur, Apprentice, Establishment, Licensure.

06.0 EXPLAIN THE USE OF ALLIED MODALITIES RELATED TO MASSAGE--The student will be able to:

- 06.01 Identify the modalities.

MASSAGE - Continued

- 06.02 Instruct patrons in the use of the allied modalities such as weights, trampolines, shoulder wheel, bicycles and rowing machines.
- 07.0 DEMONSTRATE AN UNDERSTANDING OF ANATOMY AND PHYSIOLOGY AS RELATED TO THE PRACTICE OF MASSAGE--The student will be able to:
- 07.01 Explain the structure and function of all the body systems, organs, tissues and cells.
- 07.02 Explain the effects of massage, hydro-therapy, heliotherapy on the body.
- 08.0 EXPLAIN LEADERSHIP AND HUMAN RELATION TRAITS AND ETHICAL PRACTICES OF MASSAGE--The student will be able to:
- 08.01 Identify the methods of communicating.
- 08.02 Explain behaviors which could alienate or develop rapport with others.
- 08.03 Explain behavior which develops leadership qualities.
- 08.04 Demonstrate ethical practices by behaviors such as punctuality, consideration of clients, confidentially, providing for the privacy and modesty of the patron and meeting the needs of the patron.
- 09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 09.01 Conduct a job search.
- 09.02 Secure information about a job.
- 09.03 Identify documents that may be required when applying for a job.
- 09.04 Complete a job application.
- 09.05 Demonstrate competence in job interview techniques.
- 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 09.07 Identify acceptable work habits.
- 09.08 Demonstrate knowledge of how to make job changes appropriately.
- 09.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Medical Assisting

CODE NUMBER: Secondary _____

Postsecondary MEA0991

Florida CIP H017.050300

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED @ 5 MED ASST 7
PRAC NURSE 7 TEC MED @7
LAB TECH 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as medical assistants (70061013) or to provide supplemental training for persons previously or currently employed in this occupation. The program should meet the standards of the Essentials and Guidelines of an Accredited Educational Program for the Medical Assistant adopted by the American Association of Medical Assistants and the American Medical Association, 1984.

The content includes, but is not limited to, communication and interpersonal skills, legal and ethical responsibilities, health-illness-health concepts, administrative and clinical duties, emergency procedures including CPR and first aid, safety and security procedures, medical terminology, anatomy and physiology, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: The medical assistant laboratory should provide students practice in the following skills: telephone, receptionist duties, bookkeeping, processing insurance forms, filing, typing and transcribing, venipuncture, basic laboratory procedures, basic X-ray procedures, use of the microscope, EKG, and physical therapy treatment procedures.

Clinical learning experiences are a necessary part of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Program completers of an accredited program are eligible to take the American Association of Medical Assistants Certification Examination. If the program is not accredited, graduates are eligible to take the national examination after one year of employment.

The Medical Assistant graduate should be prepared to take the Basic X-Ray Machine Operator State exam.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

Medical Assisting - Continued

The typical length of this program for the average achieving student is 1300 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate the ability to communicate and use interpersonal skills effectively.
02. Demonstrate legal and ethical responsibilities.
03. Demonstrate an understanding of and apply health-illness-health concepts.
04. Perform administrative duties.
05. Demonstrate knowledge of Pharmaceutical principles and administer medications.
06. Prepare patients for, assist with, and follow-up patients after examinations and treatment.
07. Perform basic office diagnostic procedures.
08. Demonstrate knowledge of the fundamentals of microbial control and use aseptic techniques.
09. Recognize and respond to emergency situations.
10. Recognize and practice safety and security procedures.
11. Demonstrate employability skills.

01.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 01.01 Identify listening and observation skills.
- 01.02 Respond to verbal and non-verbal cues.
- 01.03 Organize and express ideas in a concise, precise and logical manner.
- 01.04 Compose written communication using correct spelling, grammar and format.
- 01.05 Use medical terminology accurately.
- 01.06 Describe and demonstrate methods of displaying courtesy and tactfulness.
- 01.07 Adapt communication skills to varied levels of understanding and cultural orientation by using appropriate communicating techniques.
- 01.08 Inform patients of office policies.
- 01.09 Instruct patients regarding health care practices.

02.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 02.01 Provide health care within the legal framework of his/her job description.
- 02.02 Distinguish between the liability of the physicians and staff members.
- 02.03 Explain the principles for preventing medical liability.
- 02.04 Explain the patients "Bill of Rights",
- 02.05 List the principles the Codes of Ethics for Medical Assistants as stated by the American Association of Medical Assistants.
- 02.06 Maintain confidentiality of information.

03.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY HEALTH-ILLNESS-HEALTH CONCEPTS--The student will be able to:

- 03.01 Identify the structure and functions of body systems.
- 03.02 Identify cause, effect and treatment of disease processes.
- 03.03 Use correct terminology related to basic body structure and function.
- 03.04 Describe personal health hygiene practices contributing to a state of wellness.
- 03.05 Describe appropriate life tasks as related to the developmental process from birth to death.

04.0 PERFORM ADMINISTRATIVE DUTIES--The student will be able to:

- 04.01 Type and transcribe accurately.
- 04.02 Develop and maintain filing systems.
- 04.03 Operate and maintain office practices.
- 04.04 Apply computer concepts to office practices.
- 04.05 Prepare and maintain medical records.
- 04.06 Screen and process mail.
- 04.07 Schedule and monitor appointments.
- 04.08 Use procedural and diagnostic coding.
- 04.09 Process insurance data and claims.
- 04.10 Adhere to current government regulations.
- 04.11 Develop and maintain billing and collection system.
- 04.12 Maintain office inventory.
- 04.13 Arrange meetings and travel.
- 04.14 Perform general housekeeping duties.
- 04.15 Plan and organize day's activities.

05.0 DEMONSTRATE KNOWLEDGE OF PHARMACEUTICAL PRINCIPLES AND ADMINISTER MEDICATIONS--The student will be able to:

- 05.01 Identify commonly administered drugs, their uses and effects.
- 05.02 Use correct pharmaceutical abbreviations and terminology.
- 05.03 Identify various methods and routes of drug administration.
- 05.04 Calculate dosage and administer pharmaceuticals to correct anatomical sites, to correct patient, by correct route of administration, at the correct time and chart correctly.

MEDICAL ASSISTING - Continued

- 05.05 Demonstrate knowledge of the legal and ethical standards related to the administration and the dispensing of drugs.
- 06.0 PREPARE PATIENTS FOR, ASSIST WITH, AND FOLLOW-UP PATIENTS AFTER EXAMINATIONS AND TREATMENTS--The student will be able to:
- 06.01 Position and drape patients.
 - 06.02 Measure and record vital signs.
 - 06.03 Record patient data.
 - 06.04 Assist the physician with examination, treatment, or minor surgery.
 - 06.05 Organize examination and treatment areas before, during, and after patient care.
 - 06.06 Perform minor treatments as directed by the physician including hot and cold therapy.
- 07.0 PERFORM BASIC OFFICE DIAGNOSTIC PROCEDURES--The student will be able to:
- 07.01 Prepare patients for diagnostic procedures.
 - 07.02 Collect blood specimens suitable for hematological, coagulation, and/or blood chemistry procedures by capillary puncture or veni puncture.
 - 07.03 Demonstrate competence in the safe use and care of the clinical laboratory equipment.
 - 07.04 Perform selected hematological urinalysis and blood chemistry procedures.
 - 07.05 Maintain a safe working environment in the clinical laboratory and radiological areas.
 - 07.06 Perform and mount electrocardiographs.
 - 07.07 Provide protection from radiation to patients and staff.
 - 07.08 Position patients for x-rays.
 - 07.09 Operate and maintain x-ray equipment/accessories.
 - 07.10 Process x-ray film and maintain film files.
 - 07.11 Evaluate x-ray film quality.
 - 07.12 Perform visual and auditory screening.
- 08.0 DEMONSTRATE KNOWLEDGE OF THE FUNDAMENTALS OF MICROBIAL CONTROL AND USE ASEPTIC TECHNIQUES--The student will be able to:
- 08.01 Demonstrate competence in sanitation, disinfection and sterilization.
 - 08.02 Practice infection control and contamination prevention.
 - 08.03 Safely handle contaminated equipment and supplies.
 - 08.04 Demonstrate competence in hand washing techniques.
 - 08.05 Create and maintain sterile fields for dressings and minor surgery.
 - 08.06 Correctly dispose of contaminated materials.
- 09.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:
- 09.01 Describe legal parameters relating to administration of emergency care.
 - 09.02 Maintain emergency equipment and supplies.
 - 09.03 Operate emergency equipment.
 - 09.04 Implement emergency procedures as indicated.
 - 09.05 Perform cardiopulmonary resuscitation.
- 10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:
- 10.01 List the principles of safe practice in providing health care.
 - 10.02 Report and/or correct safety hazards.
 - 10.03 Demonstrate and practice correct body mechanics.
 - 10.04 Identify and maintain office security policies/procedures.
 - 10.05 Use precautions in the presence of ionizing radiation.

MEDICAL ASSISTING - Continued

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required when applying for a job.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Medical Laboratory Assisting

CODE NUMBER: Secondary 8409000

Postsecondary MEA0990

Florida CIP HO17.030400

SECONDARY

SCHOOL CREDITS 3

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other 10-12, 13-15, 21

CERTIFICATION COVERAGE: TEC MED 07

LAB TECH 7

LAB ASST 7

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as medical lab assistants (10120206), or medical laboratory aides or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, communication, interpersonal and professional skills, appropriate scientific principles of microbiology, chemistry, physics, anatomy and physiology integrated into skill development and clinical learning.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8409010 Medical Laboratory Assisting 1
8409020 Medical Laboratory Assisting 2
8409030 Medical Laboratory Assisting 3

- II. **LABORATORY ACTIVITIES:** Simulation and clinical laboratory experiences are integrated with the didactic portion of this program. Clinical experience is defined as laboratory activities performed in the clinical setting under the supervision of a medical laboratory technician or technologist.
- III. **SPECIAL NOTE:** The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 450 clock hours.

Medical Laboratory Assisting - continued

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent I.E.'s. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate skills of communication, ethical behavior and safety in the clinical setting.
02. Based on knowledge of microbiology, urinalysis, clinical chemistry, and hematology, perform clinical laboratory skills in the clinical setting.
03. Based on knowledge of the heart and circulatory system, perform CPR and electrocardiograph techniques.
04. Based on knowledge of anatomy and physiology, perform venipunctures and skin punctures, prepare blood smears, label and process specimens.
05. Successfully complete learning experiences in the clinical setting.
06. Identify a health career and an aide level job which meets personal goals.
07. Demonstrate employability skills.

01.0 DEMONSTRATE SKILLS OF COMMUNICATION, ETHICAL BEHAVIOR AND SAFETY IN THE CLINICAL SETTING--The student will be able to:

- 01.01 Recognize techniques to overcome barriers to verbal and written communication.
- 01.02 Use appropriate medical terminology and abbreviations.
- 01.03 Demonstrate safe use of equipment and materials.
- 01.04 Properly identify patients.
- 01.05 Follow approved procedures for labeling.
- 01.06 Identify patient's and health workers' rights and responsibilities.
- 01.07 Behave ethically in the classroom and clinical settings.

02.0 BASED ON KNOWLEDGE OF MICROBIOLOGY, URINALYSIS, CLINICAL CHEMISTRY, AND HEMATOLOGY, PERFORM CLINICAL LABORATORY SKILLS IN THE CLINICAL SETTING--The student will be able to:

- 02.01 Perform techniques of microbiology related to disinfection techniques.
- 02.02 Perform techniques of microbiology related to isolation techniques.
- 02.03 Perform techniques of microbiology related to sterilization techniques.
- 02.04 Perform techniques of microbiology related to preparation, staining and microscopic examination of Gram stains.
- 02.05 Perform techniques of microbiology related to inoculation and transfer of cultures.
- 02.06 Perform basic techniques of microbiology
- 02.07 Perform techniques of microbiology related to preparation of artificial culture media.
- 02.08 Perform techniques of microbiology related to principles and use of the microscope.
- 02.09 Perform urinalysis techniques related to normal and abnormal components of the urine.
- 02.10 Perform urinalysis techniques related to collection and preservation of specimens.
- 02.11 Perform urinalysis techniques related to physical properties of urine and related odors, color.
- 02.12 Perform urinalysis techniques related to urine pH and describe clinical significance.
- 02.13 Perform urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometers and refractometers.
- 02.14 Perform urinalysis techniques related to performance of chemical tests.
- 02.15 Perform urinalysis techniques related to microscopic identification of significant elements.
- 02.16 Perform urinalysis techniques related to principles and use of centrifuge.
- 02.17 Perform techniques of clinical chemistry related to metric measurement.
- 02.18 Perform techniques of clinical chemistry related to laboratory glassware and equipment.
- 02.19 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.
- 02.20 Perform techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.
- 02.21 Perform techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.
- 02.22 Perform techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.
- 02.23 Perform basic techniques of clinical chemistry related to normal and abnormal physiology.
- 02.24 Perform techniques of hematology related to counting formed elements of blood.
- 02.25 Perform techniques of hematology related to preparation, staining and cell differential microscopic examination of blood films.

MEDICAL LABORATORY ASSISTING - Continued

- 02.26 Perform techniques of hematology related to hematocrit tests.
 - 02.27 Perform techniques of hematology related to bleeding and clotting times.
 - 02.28 Perform techniques of hematology related to hemoglobin tests.
 - 02.29 Perform techniques of hematology related to calculation of red blood cell indices.
 - 02.30 Perform basic techniques of hematology related to normal and abnormal physiology.
- 03.0 BASED ON KNOWLEDGE OF THE HEART AND CIRCULATORY SYSTEM, PERFORM CPR AND ELECTROCARDIOGRAPH TECHNIQUES--The student will be able to:
- 03.01 Demonstrate knowledge of anatomy and physiology of the heart.
 - 03.02 Perform the electrocardiogram test.
 - 03.03 Perform CPR and first aid.
- 04.0 BASED ON KNOWLEDGE OF ANATOMY AND PHYSIOLOGY, PERFORM VENIPUNCTURES AND SKIN PUNCTURES, PREPARE BLOOD SMEARS, LABEL AND PROCESS SPECIMENS--The student will be able to:
- 04.01 Demonstrate knowledge of established protocol for patient and specimen identification.
 - 04.02 Perform appropriate methods for decontaminating site for skin or venipuncture.
 - 04.03 Perform venipunctures by evacuated tube and syringe systems.
 - 04.04 Perform skin punctures.
 - 04.05 Prepare blood smears.
 - 04.06 Label and process specimens.
- 05.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING--The student will be able to:
- 05.01 Observe skills outlined in outcomes 1, 2, 3 and 4.
 - 05.02 Complete clinical rotations.
- 06.0 IDENTIFY A HEALTH CAREER AND AN AIDE LEVEL JOB WHICH MEETS PERSONAL GOALS--The student will be able to:
- 06.01 Examine the requirements of worker in the major health career clusters.
 - 06.02 Compare personal qualities and aptitudes with requirements of selected careers.
 - 06.03 Decide which health career, if any, meets his/her personal career goals.
 - 06.04 Decide which entry level health job meets his/her personal needs.
- 07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 07.01 Conduct a job search.
 - 07.02 Secure information about a job.
 - 07.03 Identify documents that may be required when applying for a job.
 - 07.04 Complete a job application.
 - 07.05 Demonstrate competence in job interview techniques.
 - 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 07.07 Identify acceptable work habits.
 - 07.08 Demonstrate knowledge of how to make job changes appropriately.
 - 07.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Medical Laboratory Assisting</u>	PROGRAM NUMBER: <u>8409000</u>
COURSE TITLE: <u>Medical Laboratory Assisting 1</u>	COURSE NUMBER: <u>8409010</u>

COURSE DESCRIPTION:

This course prepares students with communication, career development, safety, legal and ethical skills relevant to medical laboratory assisting. The content includes but is not limited to anatomy and physiology, general physics and chemistry.

01.0 DEMONSTRATE SKILLS OF COMMUNICATION, ETHICAL BEHAVIOR AND SAFETY IN THE CLINICAL SETTING--The student will be able to:

- 01.01 Recognize techniques to overcome barriers to verbal and written communication.
- 01.02 Use appropriate medical terminology and abbreviations.
- 01.03 Demonstrate safe use of equipment and materials.
- 01.04 Properly identify patients.
- 01.05 Follow approved procedures for labeling.
- 01.06 Identify patient's and health workers' rights and responsibilities.
- 01.07 Behave ethically in the classroom and clinical settings.

06.0 IDENTIFY A HEALTH CAREER AND AN AIDE LEVEL JOB WHICH MEETS PERSONAL GOALS--The student will be able to:

- 06.01 Examine the requirements of worker in the major health career clusters.
- 06.02 Compare personal qualities and aptitudes with requirements of selected careers.
- 06.03 Decide which health career, if any, meets his/her personal career goals.
- 06.04 Decide which entry level health job meets his/her personal needs.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 07.01 Conduct a job search.
- 07.02 Secure information about a job.
- 07.03 Identify documents that may be required when applying for a job.
- 07.04 Complete a job application.
- 07.05 Demonstrate competence in job interview techniques.
- 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 07.07 Identify acceptable work habits.
- 07.08 Demonstrate knowledge of how to make job changes appropriately.
- 07.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Medical Laboratory Assisting</u>	PROGRAM NUMBER: <u>8409000</u>
COURSE TITLE: <u>Medical Laboratory Assisting 2</u>	COURSE NUMBER: <u>8409020</u>

COURSE DESCRIPTION:

This course prepares students with basic knowledge of microbiology, urinalysis, clinical chemistry and hematology. Basic laboratory skills are practiced in the classroom. Pathological conditions of illness due to diet and lifestyle are studied. Use and care of expensive laboratory equipment are stressed.

02.0 BASED ON KNOWLEDGE OF MICROBIOLOGY, URINALYSIS, CLINICAL CHEMISTRY, AND HEMATOLOGY, PERFORM CLINICAL LABORATORY SKILLS IN THE CLINICAL SETTING--The student will be able to:

- 02.01 Perform techniques of microbiology related to disinfection techniques.
- 02.02 Perform techniques of microbiology related to isolation techniques.
- 02.03 Perform techniques of microbiology related to sterilization techniques.
- 02.04 Perform techniques of microbiology related to preparation, staining and microscopic examination of Gram stains.
- 02.05 Perform techniques of microbiology related to inoculation and transfer of cultures.
- 02.06 Perform techniques of microbiology related to identification of colonial characteristics of selected microorganisms.
- 02.07 Perform techniques of microbiology related to preparation of artificial culture media.
- 02.08 Perform techniques of microbiology related to principles and use of the microscope.
- 02.09 Perform urinalysis techniques related to normal and abnormal components of the urine.
- 02.10 Perform urinalysis techniques related to collection and preservation of specimens.
- 02.11 Perform urinalysis techniques related to physical properties of urine and related odors, color.
- 02.12 Perform urinalysis techniques related to urine ph and describe clinical significance.
- 02.13 Perform urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometers and refractometers.
- 02.14 Perform urinalysis techniques related to performance of chemical tests.
- 02.15 Perform urinalysis techniques related to microscopic identification of significant elements.
- 02.16 Perform urinalysis techniques related to principles and use of centrifuge.
- 02.17 Perform techniques of clinical chemistry related to metric measurement.
- 02.18 Perform techniques of clinical chemistry related to laboratory glassware and equipment.
- 02.19 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.
- 02.20 Perform techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.
- 02.21 Perform techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.
- 02.22 Perform techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.
- 02.23 Perform techniques of clinical chemistry related to normal abnormal physiology.
- 02.24 Perform techniques of hematology related to counting formed elements of blood.
- 02.25 Perform techniques of hematology related to preparation, staining and cell differential microscopic examination of blood films.
- 02.26 Perform techniques of hematology related to hematocrit tests.
- 02.27 Perform techniques of hematology related to bleeding and clotting times.
- 02.28 Perform techniques of hematology related to hemoglobin tests.
- 02.29 Perform techniques of hematology related to calculation of red blood cell indices.
- 02.30 Perform techniques of hematology related to normal and abnormal physiology.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Medical Laboratory Assisting</u>	PROGRAM NUMBER: <u>8409000</u>
COURSE TITLE: <u>Medical Laboratory Assisting 3</u>	COURSE NUMBER: <u>8409030</u>

COURSE DESCRIPTION:

This course prepares students to perform CPR, EKG, and blood sample collection. These will be performed in a clinical setting. Written contractual agreements must be prepared for each clinical setting. The instructor must be physically present in the hospital laboratory setting. Students will be employable at the aide level for hospital bleeding teams or EKG Departments.

03.0 BASED ON KNOWLEDGE OF THE HEART AND CIRCULATORY SYSTEM, PERFORM CPR AND ELECTROCARDIOGRAPH TECHNIQUES--The student will be able to:

- 03.01 Demonstrate knowledge of anatomy and physiology of the heart.
- 03.02 Perform the electrocardiogram test.
- 03.03 Perform CPR and first aid.

04.0 BASED ON KNOWLEDGE OF ANATOMY AND PHYSIOLOGY, PERFORM VENIPUNCTURES AND SKIN PUNCTURES, PREPARE BLOOD SMEARS, LABEL AND PROCESS SPECIMENS--The student will be able to:

- 04.01 Demonstrate knowledge of established protocol for patient and specimen identification.
- 04.02 Perform appropriate methods for decontaminating site for skin or venipuncture.
- 04.03 Perform venipunctures by evacuated tube and syringe systems.
- 04.04 Perform skin punctures.
- 04.05 Prepare blood smears.
- 04.06 Label and process specimens.

05.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING--The student will be able to:

- 05.01 Demonstrate mastery of skills outlined in outcomes 1, 2, 3 and 4.
- 05.02 Complete clinical rotations.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Medical Laboratory Technology (Associate Degree)

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP H017.030900

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS x

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): 7-9 9-12 Postsecondary Adult Vocational

x Postsecondary Vocational

Other

CERTIFICATION COVERAGE:

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as medical laboratory technicians (078.381-014), or medical laboratory technicians (associate degree) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to specific techniques and instruments, identification of factors directly affecting procedures and results, confirmation of results and monitoring quality control programs within pre-determined parameters, and correction of errors using pre-set standards. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The graduate should be prepared to take the appropriate licensing examination to practice in Florida and an appropriate national certifying examination.

The typical length of this program for the average achieving student is an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Discuss phlebotomy in relation to the health care setting.
02. Identify the anatomic structure and function of the body systems in relation to services performed by clinical laboratory personnel.
03. Recognize and identify collection reagents supplies, equipment and interfering chemical substances.
04. Practice collection procedures and recognize possible complications.
05. Practice effective infection control.
06. Practice accepted procedures of requisitioning, transporting and processing specimens.
07. Demonstrate accepted professional, communication and interpersonal skills.
08. Practice quality assurance and safety.
09. Demonstrate knowledge of urinalysis principles and procedures.
10. Demonstrate knowledge of hematological principles and procedures.
11. Demonstrate knowledge of microbiological principles and procedures.
12. Demonstrate knowledge of clinical chemistry principles and procedures.
13. Demonstrate knowledge of immunohematological principles and procedures.

Medical Laboratory Technology (Associate Degree) - continued

14. Demonstrate knowledge of immunological/serological principles and procedures.
15. Demonstrate knowledge of miscellaneous principles and procedures.
16. Demonstrate knowledge of specialty hematological principles and procedures.
17. Demonstrate knowledge of specialty clinical chemistry principles and procedures.
18. Demonstrate knowledge of specialty microbiological principles and procedures.
19. Demonstrate knowledge of operation and principles of laboratory instruments.
20. Correlate clinical laboratory procedures with theoretical knowledge.
21. Demonstrate employability skills.

01.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

- 01.01 List, classify and discuss various departments and services within the health care setting in which the phlebotomist must interact to obtain laboratory specimens from patients.
- 01.02 Identify the major departments/sections within the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
- 01.03 Describe the roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, MLT, phlebotomist, etc.).
- 01.04 Define and utilize correct medical terminology and metric measurement needed.
- 01.05 Describe appropriate and legal usage of patient's medical charts.

02.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY CLINICAL LABORATORY PERSONNEL--The student will be able to:

- 02.01 Discuss the renal system and related laboratory tests.
- 02.02 Discuss the liver as related to liver function tests.
- 02.03 Discuss the central nervous system and related tests.
- 02.04 Discuss enzymes in relation to health and disease.
- 02.05 Discuss lipid metabolism and related tests.
- 02.06 Discuss the reproductive system and venereal diseases.
- 02.07 Discuss body fluids, fecal and blood components and related procedures.
- 02.08 Discuss carbohydrate metabolism and its relationship to diabetes mellitus.
- 02.09 Discuss electrolyte balance as related to health and disease.
- 02.10 Discuss the physiology of the endocrine system and the principle tests used to determine endocrine function.
- 02.11 Define and discuss the differences between transudates and exudates.
- 02.12 Discuss physical and chemical properties of immunoglobulins and their reactions in vitro.
- 02.13 Discuss basic genetics of the antigen system.
- 02.14 Discuss hemolytic disease of the newborn and related procedures.
- 02.15 Discuss the organs, cells and cellular interaction of the lymphoid and reticuloendothelial systems.
- 02.16 Discuss current principles of hemostasis.

03.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS, SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

- 03.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
- 03.02 Explain the special precautions and types of equipment needed to collect blood from a newborn infant.
- 03.03 Identify and discuss proper use of supplies used in collecting microspecimens.
- 03.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
- 03.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the collection and the transportation of these specimens to the laboratory.
- 03.06 Describe substances that can interfere in analysis of blood constituents.

04.0 PRACTICE COLLECTION PROCEDURES AND RECOGNIZE POSSIBLE COMPLICATIONS--The student will be able to:

- 04.01 Implement established protocol for patient and specimen identification.

- 04.02 Identify five potential sites for venipuncture and name/find the most desirable one(s).
 - 04.03 Identify five appropriate sites for skin puncture and name/find the most desirable one(s).
 - 04.04 Discuss/perform methods for facilitating skin or venipuncture, including tourniquet, warming the site, palpating, clenching fist and dangling arm.
 - 04.05 Discuss/perform appropriate methods for decontaminating a site for skin or venipuncture.
 - 04.06 List four agents useful in decontamination sites for skin/venipuncture. Describe when it is appropriate to use each agent.
 - 04.07 Perform a venipuncture by evacuated tube and syringe systems, demonstrating appropriate supplies, proper handling of needle, tube and specimen, and patient care.
 - 04.08 Perform a skin puncture demonstrating appropriate supplies, proper depth of puncture for adults, children and neonates, proper angle and pressure, etc.
 - 04.09 Describe the appropriate order of drawing additive tubes when using venipuncture and skin puncture.
 - 04.10 Describe the most common complications associated with skin/venipuncture, their causes, and preventative and therapeutic techniques.
 - 04.11 Determine need for re-collections, utilizing factors described in hospital or clinical protocol.
 - 04.12 Determine when to reject specimen utilizing factors described in hospital protocol.
 - 04.13 Describe/perform procedures for disposing of used or contaminated supplies.
 - 04.14 Describe/perform the appropriate techniques for making a blood smear for hematologic evaluation.
- 05.0 PRACTICE EFFECTIVE INFECTION CONTROL--The student will be able to:
- 05.01 Define the term "nosocomial infection."
 - 05.02 Describe/perform procedures for infection prevention.
 - 05.03 Discuss/perform isolation procedures.
 - 05.04 Identify potential routes of infection.
 - 05.05 Identify and label biohazardous specimens.
- 06.0 PRACTICE ACCEPTED PROCEDURES OF REQUISITIONING, TRANSPORTING AND PROCESSING SPECIMENS--The student will be able to:
- 06.01 Describe routine and special procedures for transporting and processing specimens.
 - 06.02 Describe the significance of time constraints for specimen delivery.
 - 06.03 Describe scheduling constraints that affect laboratory operational time.
 - 06.04 Inspect and report properly concerning suitability of specimen for the analysis required.
 - 06.05 Prepare aliquot(s) or component(s) of specimen for analysis according to specimen type and analysis to be performed.
 - 06.06 Prepare smears, droplets or mounts of the specimen for analysis according to institutional protocol.
 - 06.07 Demonstrate knowledge of procedures for accepting verbal test orders.
 - 06.08 Describe various transportation and communication systems.
- 07.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION AND INTERPERSONAL SKILLS--The student will be able to:
- 07.01 Communicate appropriately with the patient.
 - 07.02 Explain to patients the procedure to be used in specimen collection.
 - 07.03 Demonstrate understanding of patient rights and responsibilities.
 - 07.04 Demonstrate understanding of ethical behavior, legal aspects, and the importance of following protocol.
 - 07.05 Demonstrate the correct use of the telephone.
 - 07.06 Maintain acceptable appearance and grooming.

08.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:

- 08.01 Distinguish and perform methods which ensure quality when collecting blood specimens for the clinical laboratory.
- 08.02 Demonstrate knowledge of appropriate patient safety.
- 08.03 Demonstrate knowledge of first-aid techniques including CPR (cardiopulmonary resuscitation).
- 08.04 Practice safety in accordance with institutional policy.
- 08.05 Identify documentation procedures for accidents that occur during specimen procurement and handling.
- 08.06 Describe the phlebotomist role in providing quality assurance in laboratory testing, reporting, and use and maintenance of equipment.

09.0 DEMONSTRATE KNOWLEDGE OF URINALYSIS PRINCIPLES AND PROCEDURES--The student will be able to:

- 09.01 Perform routine urinalysis testing.
- 09.02 Perform selected special urinalysis testing.
- 09.03 Describe collection procedures for the special tests.

10.0 DEMONSTRATE KNOWLEDGE OF HEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

- 10.01 Perform selected manual and automated hematology procedures.
- 10.02 Discuss conditions and diseases related to abnormal white cell morphology.
- 10.03 Discuss conditions and diseases related to abnormal red cell morphology.
- 10.04 Perform selected manual and automated coagulation procedures.
- 10.05 Discuss conditions and diseases related to abnormal hemostasis.

11.0 DEMONSTRATE KNOWLEDGE OF MICROBIOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

- 11.01 Discuss microbial taxonomy and classification.
- 11.02 Discuss bacterial metabolism, reproduction, cell parts and the function of those parts.
- 11.03 Discuss disinfection and sterilization techniques.
- 11.04 Discuss media classification and prepare culture media.
- 11.05 Discuss specimen collection, handling, and cultural techniques for urine, stool, wound, throat, body fluids, blood and exudates.
- 11.06 Perform and interpret antibiotic susceptibility tests.
- 11.07 Discuss diseases associated with selected anaerobic and aerobic bacteria.
- 11.08 Identify selected aerobic and anaerobic bacteria through biochemical tests.
- 11.09 Prepare permanent smears, stain with acid-fast and Gram stains, and observe bacteria microscopically.
- 11.10 Discuss handling and collection of specimens for fungal isolation.
- 11.11 Discuss handling, collection and identification of mycobacteria.
- 11.12 Discuss collection and handling of specimens for viral studies.
- 11.13 Prepare and examine specimens, and report ova and parasites as indicated.

12.0 DEMONSTRATE KNOWLEDGE OF CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES--The student will be able to:

- 12.01 Perform selected renal function tests.
- 12.02 Perform selected tests for carbohydrate, protein and lipid metabolism.
- 12.03 Demonstrate knowledge of principles of automation as related to the clinical chemistry laboratory.
- 12.04 Perform clinical chemistry procedures on selected instruments.
- 12.05 Perform selected liver function tests.
- 12.06 Discuss electrophoresis.
- 12.07 Perform enzyme procedures.
- 12.08 Perform electrolyte analyses.
- 12.09 Discuss and perform renal clearance procedures.
- 12.10 Discuss therapeutic drug monitoring and related tests.

- 13.0 DEMONSTRATE KNOWLEDGE OF IMMUNOHEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:
- 13.01 Discuss the ABO, Rh and other blood group systems.
 - 13.02 Perform antigen and antibody testing to establish ABO group and Rh.
 - 13.03 Perform immunohematological procedures relating to compatibility testing.
 - 13.04 Discuss blood donor processing.
 - 13.05 Perform a donor interview and prepare a donor for phlebotomy.
 - 13.06 Discuss compatibility testing including special tests and transfusion reactions.
 - 13.07 Discuss aphereses in relation to component collection and therapy.
 - 13.08 Demonstrate knowledge of specialty immunohematological principles.
 - 13.09 Perform selected specialty immunohematology tests such as blood components for therapy.
- 14.0 DEMONSTRATE KNOWLEDGE OF IMMUNOLOGICAL/SEROLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:
- 14.01 Perform tests for venereal disease.
 - 14.02 Perform selected serological procedures.
 - 14.03 Perform pregnancy tests.
 - 14.04 Demonstrate knowledge of specialty immunological/serological principles.
 - 14.05 Perform selected specialty serological tests such as immunofluorescence assays.
- 15.0 DEMONSTRATE KNOWLEDGE OF MISCELLANEOUS PRINCIPLES AND PROCEDURES--The student will be able to:
- 15.01 Perform routine laboratory procedures on miscellaneous fluids.
 - 15.02 Operate and perform routine maintenance of selected laboratory instruments.
- 16.0 DEMONSTRATE KNOWLEDGE OF SPECIALTY HEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:
- 16.01 Identify normal and abnormal molecular structures of hemoglobin and the more common hemoglobinopathies.
 - 16.02 Identify normal and abnormal, immature and mature erythrocytes at each stage of maturation.
 - 16.03 Perform selected cytochemical staining procedures.
 - 16.04 Identify and distinguish between normal, atypical and leukemic leukocytes at each stage of maturation.
 - 16.05 Perform selected clinical coagulation procedures.
- 17.0 DEMONSTRATE KNOWLEDGE OF SPECIALITY CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES--The student will be able to:
- 17.01 Perform selected chromatography and electrophoresis procedures.
 - 17.02 Perform and calculate results of immunoassay procedures.
 - 17.03 Perform, calculate, analyze and interpret selected enzyme assays.
 - 17.04 Perform, calculate, analyze and interpret blood lipids.
 - 17.05 Perform, calculate, analyze and interpret procedures related to endocrine function.
 - 17.06 Perform selected assays for therapeutic and toxic substances.
- 18.0 DEMONSTRATE KNOWLEDGE OF SPECIALTY MICROBIOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:
- 18.01 Classify fungi and state their clinical significance.
 - 18.02 Perform general and specialized techniques used in identifying fungi.
 - 18.03 Identify selected fungi.
 - 18.04 Discuss automated microbiological procedures.
 - 18.05 Identify life cycles, modes of transmission, prevention and pathophysiology of clinically significant parasites.
 - 18.06 Discuss microbial and immunological techniques to identify selected clinically significant viruses.

MEDICAL LABORATORY TECHNOLOGY (ASSOCIATE DEGREE) - Continued

- 18.07 Discuss classification and related disease states of clinically significant viruses.
- 18.08 Identify commonly used antibiotics, their usage and mechanisms of activity.
- 19.0 DEMONSTRATE KNOWLEDGE OF OPERATION AND PRINCIPLES OF LABORATORY INSTRUMENTS--The student will be able to:
 - 19.01 Discuss electricity, electronics, electromagnetic radiation and electrochemical techniques.
 - 19.02 Discuss principles of clinical laboratory automation.
 - 19.03 Operate, calibrate and maintain selected clinical laboratory instruments within predetermined limits.
 - 19.04 Perform entry level computer skills.
- 20.0 CORRELATE CLINICAL LABORATORY PROCEDURES WITH THEORETICAL KNOWLEDGE--The student will be able to:
 - 20.01 Associate laboratory findings and clinical data to assess test results and procedures.
 - 20.02 Analyze laboratory findings to recognize common technical/procedural problems.
 - 20.03 Evaluate laboratory findings to take predetermined corrective action according to predetermined criteria.
 - 20.04 Evaluate laboratory findings to recognize the needs for additional testing.
- 21.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 21.01 Conduct a job search.
 - 21.02 Secure information about a job.
 - 21.03 Identify documents that may be required when applying for a job.
 - 21.04 Complete a job application.
 - 21.05 Demonstrate competence in job interview techniques.
 - 21.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 21.07 Identify acceptable work habits.
 - 21.08 Demonstrate knowledge of how to make job changes appropriately.
 - 21.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Medical Laboratory Technology (Certificate)

CODE NUMBER: Secondary _____

Postsecondary MLS0990

Florida CIP H017.030530

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC MED #7

LAB TECH 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as medical laboratory technicians (078.381--14), medical laboratory technicians (certificate) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, didactic and laboratory performance of routine procedures in hematology, immunology, urinalysis, immunohematology, microbiology and clinical chemistry including the use of common laboratory instruments. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). The graduate should be prepared to take the appropriate licensing examination to practice in Florida and an appropriate national certifying examination.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1260 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Discuss phlebotomy in relation to the health care setting.
02. Identify the anatomic structure and function of the body systems in relation to services performed by clinical laboratory personnel.
03. Recognize and identify collection reagent supplies, equipment, and interfering chemical substances.
04. Practice collection procedures and recognize possible complications.
05. Practice effective infection control.
06. Practice accepted procedures of requisitioning, transporting, and processing specimens.
07. Demonstrate accepted professional, communication, and interpersonal skills.

Medical Laboratory Technology (Certificate) - continued

08. Practice quality assurance and safety.
09. Demonstrate knowledge of urinalysis principles and procedures.
10. Demonstrate knowledge of hematological principles and procedures.
11. Demonstrate knowledge of microbiological principles and procedures.
12. Demonstrate knowledge of clinical chemistry principles and procedures.
13. Demonstrate knowledge of immunohematological principles and procedures.
14. Demonstrate knowledge of immunological/serological principles and procedures.
15. Demonstrate knowledge of miscellaneous principles and procedures.
16. Demonstrate employability skills.

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Medical Laboratory
Technology (Certificate)POSTSECONDARY NUMBER: MLS0990

01.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

- 01.01 List, classify and discuss various departments and services within the health care setting in which the phlebotomist must interact to obtain laboratory specimens from patients.
- 01.02 Identify the major departments/sections within the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
- 01.03 Describe the roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, MLT, phlebotomist, etc.).
- 01.04 Define and utilize correct medical terminology and metric measurement.
- 01.05 Describe appropriate and legal usage of patient's medical charts.

02.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY CLINICAL LABORATORY PERSONNEL--The student will be able to:

- 02.01 Discuss the renal system and related laboratory tests.
- 02.02 Discuss the liver as related to liver function tests.
- 02.03 Discuss the central nervous system and related tests.
- 02.04 Discuss enzymes in relation to health and disease.
- 02.05 Discuss lipid metabolism and related tests.
- 02.06 Discuss the reproductive system and venereal diseases.
- 02.07 Discuss body fluids, fecal and blood components and related procedures.
- 02.08 Discuss carbohydrate metabolism and its relationship to diabetes mellitus.
- 02.09 Discuss electrolyte balance as related to health and disease.
- 02.10 Discuss the physiology of the endocrine system and the principle tests used to determine endocrine function.
- 02.11 Define and discuss the differences between transudates and exudates.
- 02.12 Discuss physical and chemical properties of immunoglobulins and their reactions in vitro.
- 02.13 Discuss basic genetics of the antigen system.
- 02.14 Discuss hemolytic disease of the newborn and related procedures.
- 02.15 Discuss the organs, cells and cellular interaction of the lymphoid and reticuloendothelial systems.
- 02.16 Discuss current principles of hemostasis.

03.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS, SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

- 03.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
- 03.02 Explain the special precautions and types of equipment needed to collect blood from a newborn infant.
- 03.03 Identify and discuss proper use of supplies used in collecting microspecimens.
- 03.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
- 03.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and collection and/or transportation of these specimens to the laboratory.
- 03.06 Describe substances that can interfere in analysis of blood constituents.

04.0 PRACTICE COLLECTION PROCEDURES AND RECOGNIZE POSSIBLE COMPLICATIONS--The student will be able to:

- 04.01 Implement established protocol for patient and specimen identification.
- 04.02 Identify five potential sites for venipuncture and name/find the most desirable one(s).

MEDICAL LABORATORY TECHNOLOGY (CERTIFICATE) - Continued

- 04.03 Identify five appropriate sites for skin puncture and name/find the most desirable one(s).
 - 04.04 Discuss/perform methods for facilitating skin or venipuncture, including tourniquet, warming the site, palpating, clenching fist and dangling arm.
 - 04.05 Discuss/perform appropriate methods for decontaminating a site for skin or venipuncture.
 - 04.06 List four agents useful in decontaminating sites for skin/venipuncture. Describe when it is appropriate to use each agent.
 - 04.07 Perform a venipuncture by evacuated tube and syringe systems, demonstrating appropriate supplies, proper handling of needle, tube and specimen, and patient care.
 - 04.08 Perform a skin puncture demonstrating appropriate supplies, proper depth of puncture for adults, children and neonates, proper angle and pressure, etc.
 - 04.09 Describe the appropriate order of drawing additive tubes when using venipuncture and skin puncture.
 - 04.10 Describe the most common complications associated with venipuncture and skin puncture.
 - 04.11 Determine need for re-collections, utilizing factors described in hospital or clinical protocol.
 - 04.12 Determine when to reject specimen utilizing factors described in hospital protocol.
 - 04.13 Describe/perform procedures for disposing of used or contaminated supplies.
 - 04.14 Describe/perform the appropriate techniques for making a blood smear for hematologic evaluation.
- 05.0 PRACTICE EFFECTIVE INFECTION CONTROL--The student will be able to:
- 05.01 Define the term "nosocomial infection."
 - 05.02 Describe/perform procedures for infection prevention.
 - 05.03 Discuss/perform isolation procedures.
 - 05.04 Identify potential routes of infection.
 - 05.05 Identify and label biohazardous specimens.
- 06.0 PRACTICE ACCEPTED PROCEDURES OF REQUISITIONING, TRANSPORTING AND PROCESSING SPECIMENS--The student will be able to:
- 06.01 Describe routine and special procedures for transporting and processing specimens.
 - 06.02 Describe the significance of time constraints for specimen delivery.
 - 06.03 Describe scheduling constraints that affect laboratory operational time.
 - 06.04 Inspect and report properly concerning suitability of specimen for the analysis required.
 - 06.05 Prepare aliquot(s) or component(s) of specimen for analysis according to specimen type and analysis to be performed.
 - 06.06 Prepare smears, droplets or mounts of the specimen for analysis according to institutional protocol.
 - 06.07 Demonstrate knowledge of procedures for accepting verbal test orders.
 - 06.08 Describe various transportation and communication systems.
- 07.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION AND INTERPERSONAL SKILLS--The student will be able to:
- 07.01 Communicate appropriately with the patient.
 - 07.02 Explain to patient the procedure to be used in specimen collection.
 - 07.03 Demonstrate understanding of patient rights and responsibilities.
 - 07.04 Demonstrate understanding of ethical behavior, legal aspects, and the importance of following protocol.
 - 07.05 Demonstrate the correct use of the telephone.
 - 07.06 Maintain acceptable appearance and grooming.
- 08.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:
- 08.01 Distinguish and perform methods which ensure quality when collecting blood specimens for the clinical laboratory.
 - 08.02 Demonstrate knowledge of appropriate patient safety.
 - 08.03 Demonstrate knowledge of first-aid techniques including CPR (cardiopulmonary resuscitation).

MEDICAL LABORATORY TECHNOLOGY (CERTIFICATE) - Continued

- 08.04 Practice safety in accordance with institutional policy.
 - 08.05 Identify documentation procedures for accidents that occur during specimen procurement and handling.
 - 08.06 Describe the technician's role in providing quality assurance in laboratory testing, reporting, and use and maintenance of equipment.
 - 08.07 Calibrate selected equipment and prepare curves as indicated.
 - 08.08 Perform and records all quality control procedures required for the tests assayed and recognize unacceptable results.
 - 08.09 Corrects problems encountered in daily quality control.
- 09.0 DEMONSTRATE KNOWLEDGE OF URINALYSIS PRINCIPLES AND PROCEDURES--The student will be able to:
- 09.01 Discuss and perform routine urinalysis testing.
 - 09.02 Discuss and perform selected special urinalysis testing.
 - 09.03 Describe collection procedures for the special tests.
- 10.0 DEMONSTRATE KNOWLEDGE OF HEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:
- 10.01 Perform selected manual and automated hematology procedures.
 - 10.02 Discuss normal WBC morphology and condition's and diseases associated with abnormal WBC morphology.
 - 10.03 Discuss normal red cell morphology and conditions and diseases associated with abnormal RBC morphology.
 - 10.04 Perform selected manual and automated coagulation procedures.
 - 10.05 Discuss normal hemostasis and conditions and diseases related to abnormal hemostasis.
- 11.0 DEMONSTRATE KNOWLEDGE OF MICROBIOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:
- 11.01 Discuss microbial taxonomy and classification.
 - 11.02 Discuss bacterial metabolism, reproduction, cell parts and the function of those parts.
 - 11.03 Discuss disinfection and sterilization techniques.
 - 11.04 Discuss media classification and prepare culture media.
 - 11.05 Discuss specimen collection, handling, and cultural techniques for urine, stool, wound, throat, body fluids, blood and exudates.
 - 11.06 Perform and interpret antibiotic susceptibility tests.
 - 11.07 Discuss diseases associated with selected anaerobic and aerobic bacteria.
 - 11.08 Identify selected aerobic and anaerobic bacteria through biochemical tests.
 - 11.09 Prepare permanent smears, stain with acid-fast and Gram stains, and observe bacteria microscopically.
 - 11.10 Discuss handling and collection of specimens for fungal isolation.
 - 11.11 Discuss handling, collection and identification of mycobacteria.
 - 11.12 Discuss collection and handling of specimens for viral studies.
 - 11.13 Prepare and examine specimens, and report ova and parasites as indicated.
- 12.0 DEMONSTRATE KNOWLEDGE OF CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES--The student will be able to:
- 12.01 Discuss principles of and perform selected renal function tests.
 - 12.02 Discuss principles of and perform selected tests for carbohydrate, protein and lipid metabolism.
 - 12.03 Demonstrate knowledge of principles of automation as related to the clinical chemistry laboratory.
 - 12.04 Perform clinical chemistry procedures on selected instruments.
 - 12.05 Discuss principles of and perform selected liver function tests.
 - 12.06 Discuss electrophoresis.
 - 12.07 Discuss principles of and perform enzyme procedures.
 - 12.08 Discuss principles of and perform electrolyte analyses.
 - 12.09 Discuss and perform renal clearance procedures.
 - 12.10 Discuss therapeutic drug monitoring and related tests.
 - 12.11 Discuss the endocrine system and related tests.
 - 12.12 Discuss toxic substances and related tests.

13.0 DEMONSTRATE KNOWLEDGE OF IMMUNOHEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

- 13.01 Discuss the ABO, Rh and other blood group systems.
- 13.02 Perform antigen and antibody testing to establish ABO group and Rh.
- 13.03 Discuss and perform immunohematological procedures relating to compatibility testing.
- 13.04 Discuss and perform antibody, screening and identification procedures.
- 13.05 Discuss absorption and elation techniques for identification and antibodies.
- 13.06 Discuss blood donor processing.
- 13.07 Perform a donor interview and prepare a donor for phlebotomy.
- 13.08 Discuss compatibility testing including special tests and transfusion reactions.
- 13.09 Discuss aphereses in relation to component collection and therapy.

14.0 DEMONSTRATE KNOWLEDGE OF IMMUNOLOGICAL/SEROLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

- 14.01 Discuss and perform tests for venereal disease.
- 14.02 Discuss and perform selected serological procedures.
- 14.03 Discuss and perform pregnancy tests.

15.0 DEMONSTRATE KNOWLEDGE OF MISCELLANEOUS PRINCIPLES AND PROCEDURES--The student will be able to:

- 15.01 Discuss miscellaneous fluids and perform selected procedures.
- 15.02 Operate and perform routine maintenance of selected laboratory instruments.

16.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 16.01 Conduct a job search.
- 16.02 Secure information about a job.
- 16.03 Identify documents that may be required when applying for a job.
- 16.04 Complete a job application.
- 16.05 Demonstrate competence in job interview techniques.
- 16.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 16.07 Identify acceptable work habits.
- 16.08 Demonstrate knowledge of how to make job changes appropriately.
- 16.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Medical Records Technology

CODE NUMBER: Secondary _____

Postsecondary MRE0990

Florida CIP H017.050600

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: MED RECTEC 7

- I. MAJOR CONCEPTS/CONTENT: This program is designed to prepare students for employment as health record technicians (10120600), or medical record technicians, or to provide supplemental training for persons previously or currently employed in these occupations. It prepares a person to take the national accreditation examination for Accredited Record Technician (ART). The program should meet the program requirements of the American Medical Association Committee of Allied Health Education and Accreditation in collaboration with the American Medical Record Association.

The content includes, but is not limited to, health information management, medico-legal aspects, basic computer usage for medical records, medical terminology, anatomy and physiology, pathophysiology, microbiology, medical record science, machine transcription, statistics, coding and indexing, hospital procedures, directed clinical practice, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory facilities and equipment should be provided. Laboratory activities should be correlated with classroom activities and reinforced in the clinical area. Supervised clinical practice is an integral part of the program.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students should be encouraged to join the American Medical Record Association and participate in the local association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed. Students desiring to continue their studies at a four year university should meet the general education requirements under the Gordon Rule.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Describe management functions of health information services.

Medical Records Technology - Continued

02. Identify the legal aspects for the control and use of health information.
03. Describe various aspects of personnel supervision.
04. Demonstrate the application of techniques used in the development and implementation of health information systems.
05. Demonstrate the application techniques necessary to assure adequate documentation of health care.
06. Demonstrate the application of techniques for the filing, maintenance and acquisition of primary and secondary health information.
07. Perform the acts of collecting, computing, analyzing, interpreting and presenting health care statistics.
08. Demonstrate techniques for reviewing and evaluating health care services.
09. Demonstrate proficiency in using classification systems.
10. Discuss the Health Care Delivery System.
11. Demonstrate employability skills.

- 01.0 DESCRIBE MANAGEMENT FUNCTIONS OF HEALTH INFORMATION SERVICES--The student will be able to:
- 01.01 Assist in preparing reports which reflect the status of a health information service.
 - 01.02 Apply policies and procedures of a health information service.
 - 01.03 Maintain quality and quantity of work performed in a health information service using established standards.
 - 01.04 Maintain a systematic work flow for a health information service.
 - 01.05 Retrieve information and prepare reports for the administrative and professional staff.
 - 01.06 Define the role of the medical record technologist as a manager.
- 02.0 IDENTIFY THE LEGAL ASPECTS FOR THE CONTROL AND USE OF HEALTH INFORMATION--The student will be able to:
- 02.01 Identify information on a patient chart that is confidential and non-confidential.
 - 02.02 Determine what information may be released without an authorization.
 - 02.03 Correctly use legal terminology encountered in a medical record department.
 - 02.04 Interpret and respond to various legal documents received in the department.
 - 02.05 Assist in designing proper consent forms for release of information.
 - 02.06 Identify local, state and federal laws pertinent to the health record field.
- 03.0 DESCRIBE VARIOUS ASPECTS OF PERSONNEL SUPERVISION--The student will be able to:
- 03.01 Describe and apply the leadership, direction and documentation necessary for supervision of personnel.
 - 03.02 Write a job description.
 - 03.03 Apply personnel policies within a health information service.
- 04.0 DEMONSTRATE THE APPLICATION OF TECHNIQUES USED IN THE DEVELOPMENT AND IMPLEMENTATION OF HEALTH INFORMATION SYSTEMS--The student will be able to:
- 04.01 Apply policies and procedures for collecting data, computing statistics and retaining information by manual or automated systems.
 - 04.02 Interpret, read and understand the language of medicine.
 - 04.03 Write, spell, pronounce and type medical terms correctly.
 - 04.04 Explain important principles of disease, its etiology pathophysiology, diagnostic techniques and treatment.
 - 04.05 Explain operation of transcribing machines.
 - 04.06 Type well enough to enter data in the computer accurately.
- 05.0 DEMONSTRATE THE APPLICATION TECHNIQUES NECESSARY TO ASSURE ADEQUATE DOCUMENTATION OF HEALTH CARE--The student will be able to:
- 05.01 Follow policies and procedures for quantitative analysis of health records.
 - 05.02 Identify purposes and uses of medical records.
 - 05.03 Identify basic medical record forms and content.
 - 05.04 Assemble a chart in filing order and analyze for deficiencies.
 - 05.05 Identify record retention policies for selected hospital forms.
 - 05.06 Follow policies and procedures designed to control the flow of patient care data within the organization.

- 06.0 DEMONSTRATE THE APPLICATION OF TECHNIQUES FOR THE FILING, MAINTENANCE AND ACQUISITION OF PRIMARY AND SECONDARY HEALTH INFORMATION--The student will be able to:
- 06.01 Identify and describe admission numbering systems and their advantages and disadvantages.
 - 06.02 Identify and describe filing systems and their advantages and disadvantages.
 - 06.03 File and retrieve records using the above systems.
 - 06.04 Identify items on a patient index card.
 - 06.05 Retrieve health information from manual or automated systems.
- 07.0 PERFORM THE ACTS OF COLLECTING, COMPUTING, ANALYZING, INTERPRETING AND PRESENTING HEALTH CARE STATISTICS--The student will be able to:
- 07.01 Index and retrieve information contained on a patient abstract.
 - 07.02 Discuss basic microfilming techniques and equipment.
 - 07.03 Trace development of data processing uses in the medical record field.
 - 07.04 Calculate and present hospital statistical information.
 - 07.05 Describe the uses and functions of DRG'S.
- 08.0 DEMONSTRATE TECHNIQUES FOR REVIEWING AND EVALUATING HEALTH CARE SERVICES--The student will be able to:
- 08.01 Describe hospital organizational and management structure.
 - 08.02 Discuss the functions of medical staff committees.
 - 08.03 Describe hospital quality assurance mechanisms.
 - 08.04 Assist the administrative and medical staffs in the development and analysis of peer review tools including medical evaluation studies, quality assurance monitors and generic screening.
 - 08.05 Define the role of health and the patient in society.
 - 08.06 Define the role of the medical records technologist as a manager.
 - 08.07 Define the role and functions of the professional review organization (PRO).
 - 08.08 Describe medical record requirements for Medicare under current state programs.
 - 08.09 Define the role of the medical record in non-hospital settings.
- 09.0 DEMONSTRATE PROFICIENCY IN USING CLASSIFICATION SYSTEMS--The student will be able to:
- 09.01 Outline the development of nomenclatures and classification systems.
 - 09.02 Identify conventions and characters used in the basic coding books.
 - 09.03 Analyze and code diagnoses and operations pertaining to various systems of the body.
 - 09.04 Direct coding, classifying and indexing activities.
- 10.0 DISCUSS THE HEALTH CARE DELIVERY SYSTEM--The student will be able to:
- 10.01 Give definition of health, as stated by the World Health Organization.
 - 10.02 Explain development of hospitals from ancient times to the present.
 - 10.03 Explain the effect on family and community life with the change from rural to urban society.
 - 10.04 List factors which influence health of the individual, nation and world.
 - 10.05 List the responsibilities of national, state and local health agencies to citizens.
 - 10.06 Describe different types of health care facilities, i.e., clinics, community health service facilities, etc.
 - 10.07 Explain purpose and classification of hospitals.
- 11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 11.01 Conduct a job search.
 - 11.02 Secure information about a job.
 - 11.03 Identify documents that may be required when applying for a job.
 - 11.04 Complete a job application.

MEDICAL RECORDS TECHNOLOGY - Continued

- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Medical Records Transcribing

CODE NUMBER: Secondary _____

Postsecondary MTS0990

Florida CIP HO17.050601

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: MED REC TEC 7 MED TRANS 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as health record clerks (10120600), or medical record transcriptionists or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, medical terminology, anatomy and physiology, grammatical and punctuation practices, machine transcription/dictation, health care delivery system, basics of medical record services, ethical and legal responsibilities, safety/security procedures and employability skills. Basic computer skills/word processing should be included.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Practice in a simulated transcription setting is an integral part of this program. Clinical learning experiences are an appropriate part of this program.
- III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program. Students should be encouraged to become members of the American Association of Medical Transcription, their professional organization, and participate in the local chapter activities.

Admissions should be limited to individuals who have the ability to type 30-45 words per minute.

The program should prepare the graduate to take the national examination to practice as a Certified Medical Transcriptionist. Graduates are eligible to take this examination after three years of employment.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflect equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 10.0. The grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 900 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate proficiency in the identification and application of medical terminology and anatomy and physiology.
02. Use correct grammatical and punctuation practices.
03. Transcribe medical dictation using the latest transcription equipment.
04. Discuss the health care delivery system.
05. Explain the basics of medical record services.
06. Demonstrate ethical and legal principles with regard to the use of medical records.
07. Practice safety/security procedures.
08. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Medical Records
Transcribing

POSTSECONDARY NUMBER: MTS0990

- 01.0 DEMONSTRATE PROFICIENCY IN THE IDENTIFICATION AND APPLICATION OF MEDICAL TERMINOLOGY AND ANATOMY AND PHYSIOLOGY--The student will be able to:
- 01.01 Recognize and identify word parts in daily use of medical terminology.
 - 01.02 Build, spell and pronounce correctly appropriate terms from word parts learned and be able to give meaning of the word.
 - 01.03 Identify word parts and be able to build, spell and understand new words with those parts.
 - 01.04 Spell and use medical abbreviations.
 - 01.05 Identify and explain structure and function of the human body by systems.
 - 01.06 Identify disorders of the body systems.
 - 01.07 Recognize and identify terminology of hospital and other clinical forms.
- 02.0 USE CORRECT GRAMMATICAL AND PUNCTUATION PRACTICES--The student will be able to:
- 02.01 Recognize and use the principal parts of speech.
 - 02.02 Recognize and use punctuation marks.
 - 02.03 Express numbers in writing.
 - 02.04 Apply rules of capitalization.
 - 02.05 Use abbreviations.
 - 02.06 Demonstrate ability to spell words in common usage and use reference words.
 - 02.07 Proofread and correct own work.
- 03.0 TRANSCRIBE MEDICAL DICTATION USING THE LATEST TRANSCRIPTION EQUIPMENT--The student will be able to:
- 03.01 Explain how drugs are divided into trade, generic and chemical name categories.
 - 03.02 Identify types of diagnostic tests and the terminology peculiar to each.
 - 03.03 Demonstrate use of basic terminology common to medical/surgical practices.
 - 03.04 Transcribe and type the following reports: history and physical, radiology, pathology, consultations, discharge summaries, and special reports.
- 04.0 DISCUSS THE HEALTH CARE DELIVERY SYSTEM--The student will be able to:
- 04.01 Give definition of health, as stated by the World Health Organization.
 - 04.02 Explain development of hospitals from ancient times to the present.
 - 04.03 Explain the effect on family and community life with the change from rural to urban society.
 - 04.04 List factors which influence health of the individual, nation and world.
 - 04.05 List the responsibilities of national, state and local health agencies to citizens.
 - 04.06 Describe different types of health care facilities, i.e., clinics, community health service facilities, etc.
 - 04.07 Explain purpose and classification of hospitals.
- 05.0 EXPLAIN THE BASICS OF MEDICAL RECORD SERVICES--The student will be able to:
- 05.01 Describe origin, history and definition of medical records.
 - 05.02 Describe the functions of the medical record department, i.e., filing, coding, indexing, etc.
 - 05.03 Explain the classification and functions of medical record personnel and chain of command.

MEDICAL RECORDS TRANSCRIBING - Continued

- 05.04 State reasons medical records are important in the health care delivery system.
 - 05.05 Explain different filing systems used in health care institutions.
 - 05.06 Describe the development of the medical record.
 - 05.07 Explain the importance of the medical record in relation to the state and federal agencies, accrediting and licensing agencies.
- 06.0 DEMONSTRATE ETHICAL AND LEGAL PRINCIPLES WITH REGARD TO THE USE OF MEDICAL RECORDS--The student will be able to:
- 06.01 Explain the importance of maintaining ethical and legal standards in compiling and using medical records.
 - 06.02 Discuss the Code of Ethics of the American Association for Medical Transcription.
 - 06.03 Discuss the Code of Ethics of the American Medical Record Association.
- 07.0 PRACTICE SAFETY/SECURITY PROCEDURES--The student will be able to:
- 07.01 Participate in emergency or disaster plans.
 - 07.02 Report safety hazards.
 - 07.03 Identify institution's security policies/procedures.
 - 07.04 Practice good body mechanics.
- 08.0 USE EMPLOYABILITY SKILLS--The student will be able to:
- 08.01 Conduct a job search.
 - 08.02 Secure information about a job.
 - 08.03 Identify documents that may be required when applying for a job.
 - 08.04 Complete a job application form.
 - 08.05 Demonstrate competence in job interview techniques.
 - 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 08.07 Identify acceptable work habits.
 - 08.08 Demonstrate knowledge of how to make job changes appropriately.
 - 08.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Mental Health/Human Services Technology

CODE NUMBER: Secondary _____

Postsecondary HUS0990

Florida CIP H017.040600

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other 13-15

CERTIFICATION COVERAGE: MENTAL HEALTH 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to reprepare students for employment as psychiatric aides (70061011), human services workers, or mental health workers or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, personal awareness, history and present status of mental health/human services movement, mental health/human services roles and functions, human growth and development, adaptive and maladaptive patterns of behavior, case management, various treatment modalities, therapeutic interventions, interpersonal communications, assessment, evaluation, information management, employability skills, health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Clinical experiences are provided and may be in the form of practicums, internships, or apprenticeships.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

There is a new national system for voluntary registration and certification of human service workers. Additional information is available from the National Commission for Human Service Workers, Field Box 2303, Columbia, South Carolina 29202.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills and tasks relevant to the occupation the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate personal awareness skills.
02. Demonstrate knowledge of the mental health/human services system and how it affects practice and policy.

Mental Health/Human Services Technology - Continued

03. Demonstrate knowledge of mental health/human service work and the roles of the mental health/human service worker in various settings.
04. Demonstrate knowledge of human development from birth to senescence.
05. Demonstrate knowledge of adaptive and maladaptive patterns of behavior.
06. Demonstrate an understanding of and effective application of various treatment modalities and therapeutic interventions.
07. Demonstrate skills in interpersonal communication with clients, co-workers, and supervisors.
08. Demonstrate assessment, evaluation, problem-solving, and referral skills.
09. Demonstrate knowledge of legal and ethical issues in practice.
10. Demonstrate skill in information management.
11. Demonstrate employability skills.
12. Provide a safe and healthy environment.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Mental Health/Human
Services Technology

POSTSECONDARY NUMBER: HUS0990

- 01.0 DEMONSTRATE PERSONAL AWARENESS SKILLS--The student will be able to:
- 01.01 Use effective self-disclosure.
 - 01.02 Identify and express own feelings congruently.
 - 01.03 Demonstrate verbal responses denoting responsibility for self, ie "I" statements.
 - 01.04 Demonstrate ability to engage in non-defensive self-exploration.
 - 01.05 Assess with accuracy the impact of one's own needs, values, behaviors, motives and limitations on ones self and others.
 - 01.06 Demonstrate genuineness, congruence, empathy, warmth, acceptance and respect.
- 02.0 DEMONSTRATE KNOWLEDGE OF THE MENTAL HEALTH/HUMAN SERVICES SYSTEM AND HOW IT AFFECTS PRACTICE AND POLICY--The student will be able to:
- 02.01 Relate mental health/human service trends, issues, laws and regulations to current practice.
 - 02.02 Describe the Mental Health/Human Services system and tell how it may be accessed.
 - 02.03 Describe the relationship of the Mental Health/Human Services system with the legal system.
 - 02.04 Describe local community resources and referral processes.
- 03.0 DEMONSTRATE KNOWLEDGE OF MENTAL HEALTH/HUMAN SERVICE WORK AND THE ROLES OF THE MENTAL HEALTH/HUMAN SERVICE WORKER IN VARIOUS SETTINGS--The student will be able to:
- 03.01 Describe the role and function of the Mental Health/Human Service workers in day care programs for incompetent adult clients, the elderly clients and the chronic client.
 - 03.02 Contrast those activities with a worker in a health department clinic.
 - 03.03 Describe the activities of the Mental Health/Human Service worker in a prison.
 - 03.04 Describe the role and functions of the mental health/human service workers in a psychiatric rehabilitation facility.
- 04.0 DEMONSTRATE KNOWLEDGE OF HUMAN DEVELOPMENT FROM BIRTH TO SENESCENCE--The student will be able to:
- 04.01 Describe each developmental stage and the associated developmental tasks.
 - 04.02 Discuss the application of developmental stages and tasks to the roles and functions of the human service worker in the various delivery systems.
 - 04.03 Establish rapport with all age groups.
- 05.0 DEMONSTRATE KNOWLEDGE OF ADAPTIVE AND MALADAPTIVE PATTERNS OF BEHAVIOR--The student will be able to:
- 05.01 Demonstrate knowledge of terminology associated with mental disorders.
 - 05.02 Demonstrate knowledge of and ability to use major diagnostic categories.
 - 05.03 Recognize various levels of adaptive and maladaptive behavior patterns and social functioning.
- 06.0 DEMONSTRATE AN UNDERSTANDING OF AND EFFECTIVE APPLICATION OF VARIOUS TREATMENT MODALITIES AND THERAPEUTIC INTERVENTIONS--The student will be able to:
- 06.01 Identify with accuracy basic assumptions of intervention techniques associated with current major therapeutic approaches.
 - 06.02 Utilize intervention techniques relative to the client and the setting.
 - 06.03 Utilize group intervention techniques relative to group purpose and client population.
 - 06.04 Plan and implement structured group experiences.

MENTAL HEALTH/HUMAN SERVICES TECHNOLOGY - Continued

- 06.05 Recognize and assess the degree of severity in a crisis situation and demonstrate crisis intervention skills.
 - 06.06 Demonstrate skills in case management.
 - 06.07 Demonstrate knowledge of psychotropic medications: actions, reactions.
- 07.0 DEMONSTRATE SKILLS IN INTERPERSONAL COMMUNICATION WITH CLIENTS, CO-WORKERS, AND SUPERVISORS--The student will be able to:
- 07.01 Use a one to one relationship with the client based on an understanding of psychodynamics.
 - 07.02 Demonstrate sensitivity to clients' verbal and nonverbal communication and changes in thought processes, mood, and behavior.
 - 07.03 Obtain meaningful information leading to an appropriate intervention.
 - 07.04 Establish effective working relationships with staff, supervisors, and community resource personnel.
- 08.0 DEMONSTRATE ASSESSMENT, EVALUATION, PROBLEM-SOLVING, AND REFERRAL SKILLS--The student will be able to:
- 08.01 Describe with accuracy client needs.
 - 08.02 Describe with accuracy significant events in client's personal history.
 - 08.03 Develop ability to plan and identify strengths and weaknesses in personal and interpersonal behavior patterns.
 - 08.04 Demonstrate ability to develop, implement and monitor appropriate treatment goals and plans.
 - 08.05 Demonstrate ability to develop an appropriate discharge plan.
 - 08.06 Demonstrate ability to develop a case management plan.
 - 08.07 Recognize the measurement and assessment techniques used to evaluate intelligence, adaptive behavior, learning problems, affective characteristics.
 - 08.08 Describe with accuracy identifying problems and precipitating events.
 - 08.09 Demonstrate recognition of when, where and how to refer clients to other professionals and/or community resources.
- 09.0 DEMONSTRATE KNOWLEDGE OF LEGAL AND ETHICAL ISSUES IN PRACTICE--The student will be able to:
- 09.01 Demonstrate application of the concept of client self-determination.
 - 09.02 Demonstrate respect for values of client.
 - 09.03 Demonstrate application of the principle of confidentiality.
 - 09.04 Demonstrate recognition of the worth and uniqueness of the individual.
 - 09.05 Demonstrate belief that individuals, social and service systems can change.
 - 09.06 Demonstrate ability to function as a part of the mental health/human service team.
 - 09.07 Implement knowledge of current legislation effecting client care.
 - 09.08 Know and use a professional code of ethics relevant to mental health/human service work.
 - 09.09 Recognize the limits of his/her competence and perform only those functions for which he/she is prepared.
 - 09.10 Recognize the necessity of continued professional development and upgrading of skills.
- 10.0 DEMONSTRATE SKILL IN INFORMATION MANAGEMENT--The student will be able to:
- 10.01 Obtain and record with accuracy intake information.
 - 10.02 Note and report accurate behavioral observation.
 - 10.03 Compile a case summary.
 - 10.04 Compile a psycho-social history.
 - 10.05 Perform accurate record-keeping.
 - 10.06 Present an oral case presentation.
 - 10.07 Assess adequacy and validity of information provided.
 - 10.08 Verify accuracy of information provided by others.
 - 10.09 Evaluate information received re: significance, relevance, timeliness.
 - 10.10 Compile, synthesize and categorize information.

MENTAL HEALTH/HUMAN SERVICES TECHNOLOGY - Continued

- 10.11 Demonstrate competency in written reporting, charting, logging, etc.
- 10.12 Describe legal implications of charting and observational notes.
- 11 0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 11.01 Conduct a job search.
 - 11.02 Secure information about a job.
 - 11.03 Identify documents that may be required when applying for a job.
 - 11.04 Complete a job application.
 - 11.05 Demonstrate competence in job interview techniques.
 - 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 11.07 Identify acceptable work habits.
 - 11.08 Demonstrate knowledge of how to make job changes appropriately.
 - 11.09 Demonstrate acceptable employee health habits.
- 12.0 PROVIDE A SAFE AND HEALTHY ENVIRONMENT--The student will be able to:
 - 12.01 Demonstrate the capability to attend to maintenance and safety of clients in the mental health/human service delivery system.
 - 12.02 Identify fire/safety hazards.
 - 12.03 Identify emergency and crisis procedures of the mental health/human service agencies for protection of clients and staff.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Nuclear Medical Technology

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP HO17.020800

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS x

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

x Postsecondary Vocational

_____ Other _____

CERTIFICATION COVERAGE:

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as radiologic technicians, nuclear medicine (10120804) or nuclear medical technologists (078.361-018), or to provide supplemental training for persons previously or currently employed in these occupations.

The nuclear medicine technologist performs patient care with understanding of patient's special needs, fears and concerns and recognizes emergency patient reactions to radiopharmaceuticals. Limiting the exposure of the patient and other health care workers to minimal levels of radiation is of paramount importance.

The content includes, but is not limited to, the utilization of radioactive materials for diagnostic and therapeutic procedures, patient care, administrative functions, health and safety including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

A fundamental knowledge and understanding of the physical and biological sciences, including radiation biology and protection, as well as radiopharmaceuticals in vivo and in vitro, is essential: nuclear physics, biochemistry, immunology, physiology and an introduction to computer application/operation with data manipulation must be included.

- II. LABORATORY ACTIVITIES: Simulation activities are utilized extensively to prepare students for real clinical experiences which are integrated with the didactic portion of the program. Equipment used must be similar to that used in hospitals.

A clinical practicum where students work with regular patients under competent medical direction and close supervision is required. An effective ratio of students to clinical instructors must be maintained at all times.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for developing leadership skills. Students should be encouraged to belong to their professional association.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA). Accreditation by AMA/CAHEA is important so that graduates may take appropriate licensure and certification examinations.

The typical length of this program for an average achieving student is an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Perform patient care.
02. Practice radiation safety.
03. Practice basic radiopharmacy.

Nuclear Medical Technology - Continued

04. Calculate doses and administer radiopharmaceuticals.
05. Perform in vitro/in vivo nonimaging procedures.
06. Perform imaging procedures.
07. Perform computerized procedures.
08. Practice quality control.
09. Demonstrate employability skills.

01.0 PERFORM PATIENT CARE--The student will be able to:

- 01.01 Perform cardiopulmonary resuscitation and first aide.
- 01.02 Determine vital signs.
- 01.03 Provide for patient comfort before, during and after procedures.
- 01.04 Communicate effectively.
- 01.05 Provide for safe and sanitary conditions.
- 01.06 Monitor and maintain life support equipment.
- 01.07 Take and record case histories.

02.0 PRACTICE RADIATION SAFETY--The student will be able to:

- 02.01 Assure compliance with local, state and federal regulations.
- 02.02 Follow appropriate protection procedures.
- 02.03 Perform area surveys and wipe tests.
- 02.04 Perform decontamination procedures.
- 02.05 Appropriately dispose of radioactive waste.
- 02.06 Follow approved procedures for identifying and labeling.
- 02.07 Practice personnel monitoring of radiation exposure.

03.0 PRACTICE BASIC RADIOPHARMACY--The student will be able to:

- 03.01 Maintain radiopharmaceutical laboratory records and materials.
- 03.02 Obtain generator eluate.
- 03.03 Prepare radiopharmaceuticals and perform quality control tests.
- 03.04 Appropriately dispose of radioactive waste.
- 03.05 Demonstrate understanding of ordering pharmaceuticals in appropriate dosage and effective time frame.

04.0 CALCULATE DOSES AND ADMINISTER RADIOPHARMACEUTICALS--The student will be able to:

- 04.01 Assay radiopharmaceuticals.
- 04.02 Calculate doses.
- 04.03 Dispense exact doses.
- 04.04 Properly administer radiopharmaceuticals.
- 04.05 Maintain records of administrations/preparations.
- 04.06 Perform dose calibrator quality control tests.

05.0 PERFORM IN VITRO/IN VIVO NONIMAGING PROCEDURES--The student will be able to:

- 05.01 Operate conventional laboratory equipment.
- 05.02 Prepare doses and standards.
- 05.03 Collect specimens.
- 05.04 Operate radiation detection equipment.
- 05.05 Perform calculations.
- 05.06 Perform radioassays.
- 05.07 Perform venipuncture accurately and efficiently.

06.0 PERFORM IMAGING PROCEDURES--The student will be able to:

- 06.01 Prepare patients.
- 06.02 Select imaging parameters.
- 06.03 Position patients and obtain images.
- 06.04 Perform data processing.
- 06.05 Maintain appropriate records.

07.0 PERFORM COMPUTERIZED PROCEDURES--The student will be able to:

- 07.01 Retrieve patient studies and display on computer video screen.
- 07.02 Select proper protocol and process data.
- 07.03 Acquire and store patient studies for future reference.
- 07.04 Manipulate computer data for appropriate display.

08.0 PRACTICE QUALITY CONTROL--The student will be able to:

- 08.01 Perform quality assurance testing of imaging systems.
- 08.02 Calibrate and operate scintillation counters.

08.03 Calibrate and operate gas-filled detectors.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 09.01 Conduct a job search.
- 09.02 Secure information about a job.
- 09.03 Identify documents that may be required when applying for a job.
- 09.04 Complete a job application.
- 09.05 Demonstrate competence in job interview techniques.
- 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 09.07 Identify acceptable work habits.
- 09.08 Demonstrate knowledge of how to make job changes appropriately.
- 09.09 Demonstrate acceptable employee health habits.
- 09.10 Compile a comprehensive resume.
- 09.11 Demonstrate good interpersonal relationships with others in the clinical environment.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Nursing Assisting

CODE NUMBER: Secondary 8418100

Postsecondary HCP0992

Florida CIP HO17.060200

SECONDARY
SCHOOL CREDITS 2

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other 11-12, 13-15, 21

CERTIFICATION COVERAGE: NURSING ED @ 5 PRAC NURSE 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as nurse aides/orderlys (70061010), nursing assistants/nurse aides, or to provide supplemental training for persons previously or currently employed in these occupations. Successful completion of the program prepares the student for certification for employment as a Nursing Assistant in a nursing home in accordance with Chapter 82-163, Florida Statutes.

The content includes, but is not limited to, interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work practices, clerical skills, basic patient care, life span including gerontology, nutrition, Pet facilitated therapy, health and safety including CPR, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8418110 Nursing Assisting 1
8418120 Nursing Assisting 2

- II. LABORATORY ACTIVITIES: Students will perform nursing skills in the clinical settings, for approximately one-half of the program under the supervision of a qualified registered nurse instructor.

Clinical learning experiences must correlate with didactic instruction and laboratory experiences.

For nursing assistant certification, clinical learning experiences must be obtained in a licensed nursing home.

- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, the teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for

this postsecondary adult vocational program is: Mathematics 6.0, Language 7.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving secondary student is 300 hours or 240 hours for the postsecondary student.

Completion of this program should enable the postsecondary student to be given advanced standing in the Practical Nursing program PRN0990.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

IV. INTENDED OUTCOMES: After successfully completing the program, the student will be able to:

01. Demonstrate acceptable communication skills and behavior in both clinical and classroom activities.
02. Demonstrate knowledge of physical safety and emotional needs of workers, patients and visitors.
03. Demonstrate knowledge of ethical behavior and legal aspects of health care in both classroom and clinical settings.
04. Using prescribed employability skills, identify a job which meets his/her career goals.
05. Identify anatomic structure and function of body systems in relation to the effect of diseases and services performed by nursing assistants.
06. Successfully complete laboratory and clinical learning experiences by demonstrating competency in selected nursing skills.
07. Demonstrate knowledge of changes which occur during the aging process.
08. Demonstrate knowledge of effective infection control.
09. Care for equipment and supplies.
10. Participate in fire drill and evacuation procedure.

01.0 DEMONSTRATE ACCEPTABLE COMMUNICATION SKILLS AND BEHAVIOR IN BOTH CLINICAL AND CLASSROOM ACTIVITIES--The student will be able to:

- 01.01 Recognize and utilize various forms of communication.
- 01.02 Recognize barriers to communication.
- 01.03 Use appropriate medical terminology and abbreviations.
- 01.04 Record and relate pertinent observations related to patient treatment, procedures and conditions.
- 01.05 Assist patients in writing letters and messages.
- 01.06 Use the intercom and telephone.
- 01.07 Demonstrate an understanding of positive self concepts.
- 01.08 Identify basic human needs.
- 01.09 Recognize a typical behavior.

02.0 DEMONSTRATE KNOWLEDGE OF PHYSICAL SAFETY AND EMOTIONAL NEEDS OF WORKERS, PATIENTS AND VISITORS--The student will be able to:

- 02.01 Follow approved clinical procedures for identifying and labeling.
- 02.02 Follow emergency procedures as outlined by institution.
- 02.03 Follow policies and established procedures affecting the health, safety and well being of patients.
- 02.04 Demonstrate effective interpersonal relationships.
- 02.05 Recognize that patients and families have psychosocial needs.
- 02.06 Identify the role of the family in patient care.
- 02.07 Defend the need for patient dignity and identity.
- 02.08 Recognize psychological problems of the terminally ill patients and their families.
- 02.09 Apply restraints as directed.

03.0 DEMONSTRATE KNOWLEDGE OF ETHICAL BEHAVIOR AND LEGAL ASPECTS OF HEALTH CARE IN BOTH CLASSROOM AND CLINICAL SETTINGS--The student will be able to:

- 03.01 Recognize limits of authority and responsibility of health care workers.
- 03.02 Identify patients' rights and responsibilities.
- 03.03 Understand legal ramifications of actions/inactions in the clinical settings.
- 03.04 Maintain confidentiality of information.

4.0 USING PRESCRIBED EMPLOYABILITY SKILLS, IDENTIFY A JOB WHICH MEETS HIS/HER CAREER GOALS--The student will be able to:

- 04.01 Identify and demonstrate proper work ethic and grooming.
- 04.02 Participate in an interview.
- 04.03 Identify information necessary to complete a job application.
- 04.04 List factors to consider when applying for a job.
- 04.05 Describe characteristics and advantages of being a productive worker.
- 04.06 Explain the purpose of performance evaluations.
- 04.07 Identify procedures for terminating employment.
- 04.08 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other persons.
- 04.09 Demonstrate acceptable employee health habits.

05.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY NURSING ASSISTANTS--The student will be able to:

- 05.01 Describe the structure and function of cells, tissues, organs and systems.
- 05.02 Apply understanding of body structure and function to patient care.
- 05.03 Recognize interrelationship of body systems.

06.0 SUCCESSFULLY COMPLETE LABORATORY AND CLINICAL LEARNING EXPERIENCES BY DEMONSTRATING COMPETENCY IN SELECTED NURSING SKILLS--The student will be able to:

- 06.01 Perform skills relative to moving, positioning and transporting patients.
- 06.02 Assist with personal care and hygiene of patients.
- 06.03 Provide for patients' nutritional needs.
- 06.04 Assist with patients' elimination needs.
- 06.05 Provide care to patients with assistive devices.
- 06.06 Provide special skin care to patients.
- 06.07 Perform special treatments.
- 06.08 Collect specimens as directed.
- 06.09 Measure and record vital signs.
- 06.10 Assist with admission, discharge and transfer of patients.
- 06.11 Assist patients to reach an optimum level of rehabilitation and independence.
- 06.12 Perform post mortem care.

07.0 DEMONSTRATE KNOWLEDGE OF CHANGES WHICH OCCUR DURING THE AGING PROCESS--The student will be able to:

- 07.01 Describe general characteristics, particular needs and problems of older persons.
- 07.02 Identify attitudes and living habits which promote positive mental and physical health for the elderly.
- 07.03 Distinguish between fact and fallacy about the aging process.
- 07.04 Identify community resources and services available to older persons.

08.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE INFECTION CONTROL--The student will be able to:

- 08.01 Exhibit proper hand washing technique.
- 08.02 Follow proper isolation technique.
- 08.03 Apply infection control policy to the care of equipment, supplies, and persons.

09.0 CARE FOR EQUIPMENT AND SUPPLIES--The student will be able to:

- 09.01 Maintain patients' units.
- 09.02 Maintain service areas on the unit.
- 09.03 Prevent waste.

10.0 PARTICIPATE IN FIRE DRILL AND EVACUATION PROCEDURE--The student will be able to:

- 10.01 Be familiar with fire and evacuation policies and be able to perform evacuation procedures.
- 10.02 Report to station for instruction.
- 10.03 Transport patient by arms carry.
- 10.04 Transport patient by bed linens (drag).
- 10.05 Be calm, reassure residents.
- 10.06 Report fire by pulling lever in fire box.
- 10.07 Notify nurse in charge and move patient from immediate danger.
- 10.08 Extinguish fire with water or remove patient from burning bed and place patient on a blanket clear of the fire and wrapped up tightly in order to smother the fire.
- 10.09 Remove patients from affected area to complete safety. (while removing patients from fire area stay as low as possible to avoid breathing the super hot smoke and gases which are extremely hazardous to you and especially to the patient).
- 10.10 Evacuate patients using the most expedient methods at hand: wheelchair, bed with rollers, arms carry or by the most practical method, placing him on a blanket and pulling him along the floor.
- 10.11 Close all doors and windows - fire permitting.
- 10.12 Disconnect all electrical equipment but not the lights (shut off all oxygen equipment, and any other devices that could aid the spread of fire - fans, air conditioners and other ventilating equipment).
- 10.13 Use fire extinguishers.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health

COURSE CREDIT: 1

PROGRAM TITLE: Nursing Assisting

PROGRAM NUMBER: 8418100

COURSE TITLE: Nursing Assisting 1

COURSE NUMBER: 8418110

COURSE DESCRIPTION:

This course is designed to provide students with nurse assistant job related competencies such as communication skills, legal and ethical behavior, employability skills, and knowledge of the function, interrelatedness and needs of the human body systems. Patient care activities of daily living, health and hygiene are provided for all age groupings with particular emphasis on gerontology. Clinical experiences are provided under the direct supervision of the teacher, in licensed nursing homes and hospitals and may include home health agencies. Written contractual agreements are required for each agency. Patient and worker safety is stressed.

01.0 DEMONSTRATE ACCEPTABLE COMMUNICATION SKILLS AND BEHAVIOR IN BOTH CLINICAL AND CLASSROOM ACTIVITIES--The student will be able to:

- 01.01 Recognize and utilize various forms of communication.
- 01.02 Recognize barriers to communication.
- 01.03 Use appropriate medical terminology and abbreviations.
- 01.04 Record and relate pertinent observations related to patient treatment, procedures and conditions.
- 01.05 Assist patients in writing letters and messages.
- 01.06 Use the intercom and telephone.
- 01.07 Demonstrate an understanding of positive self concepts.
- 01.08 Identify basic human needs.
- 01.09 Recognize a typical behavior.

02.0 DEMONSTRATE KNOWLEDGE OF PHYSICAL SAFETY AND EMOTIONAL NEEDS OF WORKERS, PATIENTS AND VISITORS--The student will be able to:

- 02.02 Follow emergency procedures as outlined by institution.
- 02.03 Follow policies and established procedures affecting the health, safety and well being of patients.
- 02.04 Demonstrate effective interpersonal relationships.
- 02.05 Recognize that patients and families have psychosocial needs.
- 02.06 Identify the role of the family in patient care.
- 02.07 Defend the need for patient dignity and identity.
- 02.08 Recognize psychological problems of the terminally ill patients and their families.

03.0 DEMONSTRATE KNOWLEDGE OF ETHICAL BEHAVIOR AND LEGAL ASPECTS OF HEALTH CARE IN BOTH CLASSROOM AND CLINICAL SETTINGS--The student will be able to:

- 03.01 Recognize limits of authority and responsibility of health care workers.
- 03.02 Identify patients' rights and responsibilities.
- 03.03 Understand legal ramifications of actions/inactions in the clinical settings.
- 03.04 Maintain confidentiality of information.

04.0 USING PRESCRIBED EMPLOYABILITY SKILLS, IDENTIFY A JOB WHICH MEETS HIS/HER CAREER GOALS--The student will be able to:

- 04.01 Identify and demonstrate proper work ethic and grooming.
- 04.02 Participate in an interview.
- 04.03 Identify information necessary to complete a job application.
- 04.04 List factors to consider when applying for a job.
- 04.05 Describe characteristics and advantages of being a productive worker.
- 04.06 Explain the purpose of performance evaluations.
- 04.07 Identify procedures for terminating employment.
- 04.08 Identify or demonstrate appropriate responses to criticism from employer, supervisor or other persons.
- 04.09 Demonstrate acceptable employee health habits.

05.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO THE EFFECT OF DISEASES AND SERVICES PERFORMED BY NURSING ASSISTANTS--The student will be able to:

- 05.01 Describe the structure and function of cells, tissues, organs and systems.
- 05.02 Apply understanding of body structure and function to patient care.
- 05.03 Recognize interrelationship of body systems.

07.0 DEMONSTRATE KNOWLEDGE OF CHANGES WHICH OCCUR DURING THE AGING PROCESS--The student will be able to:

- 07.01 Describe general characteristics, particular needs and problems of older persons.
- 07.02 Identify attitudes and living habits which promote positive mental and physical health for the elderly.
- 07.03 Distinguish between fact and fallacy about the aging process.
- 07.04 Identify community resources and services available to older persons.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health

COURSE CREDIT: 1

PROGRAM TITLE: Nursing Assisting

PROGRAM NUMBER: 8418120

COURSE TITLE: Nursing Assisting 2

COURSE NUMBER: 8418120

COURSE DESCRIPTION:

Clinical experiences are continued. Nursing Assisting 1 is pre-requisite to this course. Patient care activities including specified treatments and procedures are practiced. Patient safety is taught in relation to all treatments practiced. Patient needs for nutrition, tender loving care, and well being is stressed.

02.0 DEMONSTRATE KNOWLEDGE OF PHYSICAL SAFETY AND EMOTIONAL NEEDS OF WORKERS, PATIENTS AND VISITORS--The student will be able to:

- 02.01 Follow approved clinical procedures for identifying and labeling.
- 02.09 Apply restraints as directed.

06.0 SUCCESSFULLY COMPLETE LABORATORY AND CLINICAL LEARNING EXPERIENCES BY DEMONSTRATING COMPETENCY IN SELECTED NURSING SKILLS--The student will be able to:

- 06.01 Perform skills relative to moving, positioning and transporting patients.
- 06.02 Assist with personal care and hygiene of patients.
- 06.03 Provide for patients' nutritional needs.
- 06.04 Assist with patients' elimination needs.
- 06.05 Provide care to patients with assistive devices.
- 06.06 Provide special skin care to patients.
- 06.07 Perform special treatments and collect specimens as directed.
- 06.08 Measure and record vital signs.
- 06.09 Assist with admission, discharge and transfer of patients.
- 06.10 Assist patients to reach an optimum level of rehabilitation and independence.
- 06.11 Perform post mortem care.

08.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE INFECTION CONTROL--The student will be able to:

- 08.01 Exhibit proper hand washing technique.
- 08.02 Follow proper isolation technique.
- 08.03 Apply infection control policy to the care of equipment, supplies, and persons.

- 09.0 CARE FOR EQUIPMENT AND SUPPLIES--The student will be able to:
- 09.01 Maintain patients' units.
 - 09.02 Maintain service areas on the unit.
 - 09.03 Prevent waste.
- 10.0 PARTICIPATE IN FIRE DRILL AND EVACUATION PROCEDURE--The student will be able to:
- 10.01 Be familiar with fire and evacuation policies and procedures.
 - 10.02 Report to station for instruction.
 - 10.03 Transport patient by arms carry.
 - 10.04 Transport patient by bed linens (drag).
 - 10.05 Be calm, reassure residents.
 - 10.06 Report fire by pulling lever in fire box.
 - 10.07 Notify nurse in charge and move patient from immediate danger.
 - 10.08 Extinguish fire with water or remove patient from burning bed and place patient on a blanket clear of the fire and wrapped up tightly in order to smother the fire.
 - 10.09 Remove patients from affected area to complete safety. (while removing patients from fire area stay as low as possible to avoid breathing the super hot smoke and gases which are extremely hazardous to you and especially to the patient).
 - 10.10 Evacuate patients using the most expedient methods at hand: wheelchair, bed with rollers, arms carry or by the most practical method, placing him on a blanket and pulling him along the floor.
 - 10.11 Close all doors and windows - fire permitting.
 - 10.12 Disconnect all electrical equipment but not the lights (shut off all oxygen equipment, and any other devices that could aid the spread of fire - fans, air conditioners and other ventilating equipment).
 - 10.13 Use fire extinguishers.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Nursing (Associate Degree) R.N.

CODE NUMBER: Secondary _____ Postsecondary _____

Florida CIP HO18.110100

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS x

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ x Postsecondary Vocational _____ Other _____

CERTIFICATION COVERAGE:

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as nurses, professional (10100800), head nurses (075.127-018), private duty nurses (075.374-018), or staff nurses (075.374-022), or general duty nurse (075.374-010), or to provide supplemental training for persons previously or currently employed in these occupations.

Associate degree nurses (ADN) are prepared to provide patient services in a variety of settings. They administer care to patients experiencing defined health problems with predictable outcomes. ADN graduates are eligible to write the National Council licensing examination for registered nurses, which predominantly tests the knowledge needed to give safe care to patients in the settings specific to the practice of associate degree graduates.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The location of the ADN program within the community college setting provides an appropriate academic environment for instruction in the biological, physical, social, and behavioral sciences. The community college setting further provides instruction in the communication skills basic to the successful performance of the ADN graduate in the work setting. This body of knowledge supports concepts specific to the practice of nursing.

According to the Florida Nurse Practice Act (Chapter 464, FS) and as set forth by the Florida Board of Nursing rules, Chapter 210, instruction shall include but not be limited to, the following:

1. Theoretical instruction and clinical experience in medical, surgical, obstetric, pediatric, geriatric and psychiatric nursing. There shall be instruction and clinical experience in both acute and long-term care situations.
2. Theoretical instruction and clinical application of nursing process, human growth and development through the life span, cultural diversity, community health, pharmacology and administration of medications, nutrition, legal aspects of practice, interpersonal relationship and leadership skills, professional role and function, health teaching and counseling skills and current issues in nursing practice.
3. 210-7.25 Curriculum Guidelines

In order to ensure the preparation of nurses capable of competent practice, the curriculum shall:

- a. Reflect the stated philosophy and objectives of the program.
- b. Evidence an organized pattern of instruction consistent with principles of learning and sound educational practices.
- c. Provide for systematic evaluation of student learning in both clinical experiences and effectiveness of graduate performance.

- d. Evidence ongoing program evaluation in relation to currency of content, competency of instruction, adequacy of clinical experiences and effectiveness of graduate performance.
- e. Include clinical learning experience sufficient to develop nursing skills required for safe practice.

II. LABORATORY ACTIVITIES: Clinical instruction of nursing students will meet the rules of the Florida Board of Nursing as specified in Chapter 210.

210-7.27 Clinical Training

1. Clinical learning experiences shall be an integral part of the total curriculum plan and show relationship to concurrent theory.
2. Clinical experiences based on program objectives may be planned so that the student may gain clinical experience on all shifts within the twenty-four (24) hour period.
3. The faculty shall select clinical experience and provide students with effective guidance and supervision in clinical learning.
4. Each student in the clinical area shall be under the supervision of a faculty member who at no time shall be responsible for supervising students on more than two patient units. No more than twelve (12) students shall be assigned to a faculty member for supervision in the clinical area for any one clinical instruction period.
5. Faculty shall be physically present within the agency while students are engaged in experiences in a health care agency and must be readily available to students when they are engaged in observational experiences.
6. Clinical facilities utilized for clinical training by students of approved programs shall provide evidence satisfactory to the Board that they meet the following requirements:
 - a. Current licensure and accreditation.
 - b. The director of nurses or person responsible for nursing services is a registered nurse currently licensed in Florida.
 - c. The number and variety of patients are sufficient to meet clinical learning objectives of the nursing program.
 - d. There is nursing personnel, sufficient in number, currently licensed and appropriately qualified, to ensure that patients receive safe and effective care at all times.
 - e. There are written job descriptions for all categories of nursing personnel which are used as a basis for assigning responsibilities.
 - f. Appropriate references and current practice and procedure manuals are available on the floor where students receive experience.
7. Nursing programs shall seek prior approval from the Board for any clinical facility utilized for student clinical instruction.
8. It shall be the responsibility of the nursing program to obtain and maintain current contractual agreements with each agency utilized for student clinical training to ensure that the nursing program can provide the appropriate clinical experiences necessary to fulfill the requirements of these rules.
9. When more than one nursing program is using an agency for student clinical experience, there shall be written documentation of cooperative planning among the programs and the agency.
10. Preceptorships may be included in a professional curriculum when they meet all the following requirements:
 - a. Written objectives are specified and given to the preceptor prior to the experience.
 - b. The preceptor is approved by the faculty of the program.
 - c. The preceptor shall have clinical expertise and competence in the area where serving as a preceptor.
 - d. The preceptor shall be physically present in the unit and available to the student at times the student is performing in a nursing capacity with patients and clients.

Nursing (Associate Degree) R.N. - continued

- e. The preceptor shall be assigned no more than two (2) students for any preceptor experience.
- f. The student shall be enrolled in the course of the program in which the preceptor experience is a part and shall not be reimbursed for nursing services from the agency in which the experience is received.
- g. Each student shall have a designated program faculty member who supervises the student and is readily available to the student during the time the student is performing in a nursing capacity with patients and clients.
- h. The student shall have received clinical and theoretical instruction in all areas of nursing specified in Rule 210-7.25 (2) prior to any preceptor experience.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc. is an appropriate vocational student organization. The Florida Association of Student Nurses is the appropriate student professional organization.

The program must be approved by the Florida Board of Nursing. It is important that each associate degree nursing program effectively utilize the services of an active program advisory committee composed of representative employers. Only when the educators and employers work together can the associate degree nursing graduate be provided the competencies that are most needed for successful employment as a new registered nurse.

Entering students who have successfully completed the program HO17.060500, Practical Nursing, should be given appropriate advanced standing.

The typical length of this program for the average achieving student is an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Utilize the nursing process in giving care, applying concepts of human growth and development and cultural diversity, according to established standards.
02. Utilize assessment skills to provide individualized care.
03. Utilize communication skills to interact with persons in the clinical setting, patients' families, significant others, health teams, and agency representatives, and become familiar with computer systems.
04. Utilize approved safety procedures.
05. Provide hygienic care and assist the patient with activity and rest.
06. Utilize therapeutic principles of nutrition.
07. Utilize therapeutic principles of elimination.
08. Perform therapeutic respiratory procedures.
09. Administer medications and specific therapeutics.
10. Participate as a member of the nursing team.
11. Demonstrate a commitment to self-growth, practicing within the framework of the professions legal and ethical responsibilities.
12. Suggest and adapt to constructive changes in the health care delivery system through appropriate channels.
13. Demonstrate employability skills.
14. Demonstrate an understanding of entrepreneurship.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Nursing (Associate Degree) R.N.

POSTSECONDARY NUMBER: HO18.110100

01.0 UTILIZE THE NURSING PROCESS IN GIVING CARE, APPLYING CONCEPTS OF HUMAN GROWTH AND DEVELOPMENT AND CULTURAL DIVERSITY, ACCORDING TO ESTABLISHED STANDARDS--The student will be able to:

- 01.01 Take nursing history.
- 01.02 Assess client needs.
- 02.03 Develop nursing diagnoses.
- 01.04 Develop care plan.
- 01.05 Implement according to priority needs.
- 01.06 Evaluate and document according to standards of care.
- 01.07 Modify plan according to changes in client.

02.0 UTILIZE ASSESSMENT SKILLS TO PROVIDE INDIVIDUALIZED CARE--The student will be able to:

- 02.01 Measure, monitor, interpret, report, and record:
 - Vital signs
 - Weight and body measurement
 - Fluid balance
- 02.02 Observe, monitor, interpret, report, and record:
 - Skin color, condition, and temperature
 - Mental health status (e.g., neuro check, thought content, thought process, and affect)
 - Secretions and excretions
 - Intake and output
 - Normal vs. gross abnormal results of diagnostic tests
 - Normal vs. gross abnormal heart, lung, and bowel sounds
- 02.03 Assess the client's environment.
- 02.04 Recognize common alterations in client's physiological status.
- 02.05 Recognize common alterations in client's psychological status.

03.0 UTILIZE COMMUNICATION SKILLS TO INTERACT WITH PERSONS IN THE CLINICAL SETTING, PATIENTS' FAMILIES, SIGNIFICANT OTHERS, HEALTH TEAMS, AND AGENCY REPRESENTATIVES, AND BECOME FAMILIAR WITH COMPUTER SYSTEMS--The student will be able to:

- 03.01 Establish and maintain rapport with members of the health care team.
- 03.02 Utilize therapeutic communication skills (i.e., data collection, active listening, information giving, and problem solving).
- 03.03 Communicate the needs of the client with the physician and other members of the health care team.
- 03.04 Collaborate with the multidisciplinary team in providing client care.
- 03.05 Record pertinent data on client's clinical record according to agency policy and procedure.
- 03.06 Report pertinent data to appropriate personnel in a timely fashion.
- 03.07 Provide report to oncoming staff based on client progress identification.
- 03.08 Participate in the referral process to health/social agencies.
- 03.09 Teach clients and families appropriate self-care and health maintenance measures.
- 03.10 Initiate the discharge planning process.

04.0 UTILIZE APPROVED SAFETY PROCEDURES--The student will be able to:

- 04.01 Promote and maintain a safe and therapeutic environment.
- 04.02 Implement and maintain medical asepsis:
 - Infection control
 - Skin prep
- 04.03 Implement and maintain surgical asepsis:
 - Wound care
 - Gowning
 - Gloving
- 04.04 Use proper body mechanics (self and client).
- 04.05 Identify client.

NURSING (ASSOCIATE DEGREE) R.N. - Continued

- 04.06 Recognize changes in client's condition and intervene with basic safety measures:
 - Orientation
 - Restraints
 - Bedrails
- 04.07 Recognize and question safety of prescribed care.
- 04.08 Care for clothing and valuables according to hospital policy.
- 04.09 Function in appropriate role in fire/disaster procedure.

- 05.0 PROVIDE HYGIENIC CARE AND ASSIST THE PATIENT WITH ACTIVITY AND REST--The student will be able to:
 - 05.01 Administer and/or supervise complete hygienic care.
 - 05.02 Administer, teach, and supervise activities of daily living.
 - 05.03 Provide post-mortem care.
 - 05.04 Make beds:
 - Occupied
 - Unoccupied
 - Surgical
 - 05.05 Maintain correct body alignment.
 - 05.06 Teach, direct, and assist with mobility:
 - Ambulation with and without assistive devices
 - Passive and active range of motion
 - Transfer
 - 05.07 Maintain immobilization and support:
 - Casts
 - Traction
 - Splints
 - Special beds/frames
 - Slings
 - Bandages
 - Binders
 - Antiembolism stockings
 - 05.08 Perform comfort measures:
 - Back rub
 - Relaxation technique
 - Recreational and diversional activities

- 06.0 UTILIZE THERAPEUTIC PRINCIPLES OF NUTRITION--The student will be able to:
 - 06.01 Assess general nutritional status.
 - 06.02 Utilize principles of diet therapy in administering client care.
 - 06.03 Direct and assist with oral feeding.
 - 06.04 Perform enteral tube feeding.
 - 06.05 Maintain nutritional infusion pumps.
 - 06.06 Monitor and maintain clients receiving total parenteral alimentation according to hospital procedure.

- 07.0 UTILIZE THERAPEUTIC PRINCIPLES OF ELIMINATION--The student will be able to:
 - 07.01 Anticipate, identify, and intervene for elimination problems.
 - 07.02 Assist client with equipment for elimination:
 - Fracture pan
 - Bed pan
 - Urinal
 - Bedside commode
 - 07.03 Insert, determine patency, irrigate, and remove tubes:
 - Rectal
 - Urinary
 - Levine
 - 07.04 Perform continuous and intermittent bladder irrigations.*
 - 07.05 Give enemas.
 - 07.06 Recognize indications of fecal impaction and know principles of removal.
 - 07.07 Assist in bowel and bladder retraining.
 - 07.08 Perform ostomy care.*

- 08.0 PERFORM THERAPEUTIC RESPIRATORY PROCEDURES--The student will be able to:
 - 08.01 Initiate and maintain basic oxygen therapy.

NURSING (ASSOCIATE DEGREE) R.N. - Continued

- 08.02 Maintain a patent airway:
Position for optimum ventilation
Perform nasopharyngeal suctioning
Supervise coughing and deep - breathing exercises
Perform tracheostomy care*
Perform basic life rescue techniques as defined by the American Heart Association
Introduce oropharyngeal airway
Position for postural drainage, percussion, and therapeutics
- 09.0 ADMINISTER MEDICATIONS AND SPECIFIC THERAPEUTICS---The student will be able to:
- 09.01 Apply heat and cold treatments:
Heat lamp
Ice cap
Ice collar
Hot water bottle
Sterile compresses
Cradle
Electric hot water pack
Moist heat and cold
- 09.02 Prepare and administer medications as prescribed by the physician:
Calculate for clients of all ages
Prevent tissue damage and complications arising from the way in which the meds were prepared and administered
Anticipate and monitor therapeutic effects
Prevent complications from adverse effects and intervene when such occur:
Oral
Topical
Subcutaneous
Intramuscular
Intradermal*
Inhalent
Suppositories
Nose, eye, and ear drops
Instillations*
- 09.03 Initiate, maintain, and discontinue intravenous therapy and medications:
Perform venapuncture for I.V. infusion*
Add secondary lines
Flush heparin locks
Maintain tubing patency
Change tubing
Change I.V. dressings
Maintain infusion pump
Mix compatible solutions and medications
Administer I.V. push meds*
Check blood products for proper identity*
Recognize, report, and record transfusion and infusion reactions
Observe, maintain, and dress subclavian and other special main lines*
Discontinue and dress venapuncture site
- 09.04 Administer therapeutic baths:
Sitz
Medicated
- 09.05 Prepare the client for and assist with diagnostic and therapeutic procedures:
Collect specimens
Label specimens
Deliver specimens
- 10.0 PARTICIPATE AS A MEMBER OF THE NURSING TEAM---The student will be able to:
- 10.01 Demonstrate beginning skills in leading a nursing team of other health personnel in the total nursing care of a group of clients.
10.02 Plan and give total nursing care in primary care unit.
10.03 Participate in client care conferences.
10.04 Demonstrate beginning skills in leading a team conference.
10.05 Make client rounds.

NURSING (ASSOCIATE DEGREE) R.N. - Continued

- 10.06 Transcribe client orders.
- 10.07 Find and use community resources specific to client needs.
- 11.0 DEMONSTRATE A COMMITMENT TO SELF-GROWTH, PRACTICING WITHIN THE FRAMEWORK OF THE PROFESSION'S LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:
 - 11.01 Accept responsibility for his/her own behavior.
 - 11.02 Take responsibility for continued learning.
 - 11.03 Recognize and initiate constructive action for own limitations.
 - 11.04 Accept responsibility for own physiological and psychological wellness.
- 12.0 SUGGEST AND ADAPT TO CONSTRUCTIVE CHANGES IN THE HEALTH CARE DELIVERY SYSTEM THROUGH APPROPRIATE CHANNELS--The student will be able to:
 - 12.01 Describe and provide input into nursing service.
 - 12.02 Describe and provide input into legislation.
 - 12.03 Describe and provide input into professional organizations.
 - 12.04 Describe and provide input into education.
- 13.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 13.01 Conduct a job search.
 - 13.02 Secure information about a job.
 - 13.03 Identify documents that may be required when applying for a job.
 - 13.04 Complete a job application.
 - 13.05 Demonstrate competence in job interview techniques.
 - 13.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 13.07 Identify acceptable work habits.
 - 13.08 Demonstrate knowledge of how to make job changes appropriately.
 - 13.09 Demonstrate acceptable employee health habits.
- 14.0 DEMONSTRATE AN UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:
 - 14.01 Define entrepreneurship.
 - 14.02 Describe the importance of entrepreneurship to the American economy.
 - 14.03 List the advantages and disadvantages of business ownership.
 - 14.04 Identify the risks involved in ownership of a business.
 - 14.05 Identify the necessary personal characteristics of a successful entrepreneur.
 - 14.06 Identify the business skills needed to operate a small business efficiently and effectively.

*In selected instances where clinical experience is not readily available, evaluation will be achieved in a simulated laboratory experience.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Occupational Therapy Assistant

CODE NUMBER: Secondary _____

Postsecondary OTH0990

Florida CIP H017.080800

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other _____ 13-15

CERTIFICATION COVERAGE: OCCUP THER @4 6 OC THER AS 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as occupational therapy assistants (076.364-010), or to provide supplemental training for persons previously or currently employed in this occupation.

The program prepares students to assist an occupational therapist in implementing the plan of therapy for a patient prescribed by a physician.

The content includes, but is not limited to, communication and interpersonal skills, health-illness-health concepts, specific life tasks and skills, occupational therapy principles and application, and employability skills, health and safety including CPR, anatomy and physiology, kinesiology, psychology, sociology, and gerontology.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: The occupational therapy activity lab should provide students practice in dressing, bathing, feeding, kitchen and home-making activities, and techniques for the disabled; acquaint the students with splinting and bracing methods and materials, slings, and splinting substitutes; acquaint the students with sources of supplies and adaptive equipment and the care and maintenance of same; and enable the students to acquire skills in life tasks and activities.
- III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The program should meet the guidelines of the American Occupational Therapy Association so that program completers will be eligible to take the national certification examination administered by the American Occupational Therapy Association. Florida requires licensing of graduates by the Department of Professional Regulation through the Florida Board of Medical Examiners for persons completing programs approved by the American Occupational Therapy Association.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Student must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

Occupational Therapy Assistant - continued

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate ability to communicate and use interpersonal skills effectively.
02. Demonstrate an understanding of and apply health-illness-health concepts.
03. Analyze and apply learned skills in specific life tasks and activities.
04. Apply occupational therapy principles in patient/client relationship.
05. Demonstrate employability skills.
06. Demonstrate knowledge of ethics related to occupational therapy assistants.
07. Transport patients.
08. Demonstrate knowledge of first aid and CPR.
09. Discuss the etiology, progression, management, and prognosis of physical, emotional, and environmental stresses and trauma.
10. Discuss the effect of stress on optimal human functioning.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Occupational Therapy
Assistant

POSTSECONDARY NUMBER: OTH0990

01.0 DEMONSTRATE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 01.01 Demonstrate awareness of self and relationship with others.
- 01.02 Conduct dyadic and group discussions.
- 01.03 Record/report observations.
- 01.04 Instruct individuals and groups.

02.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY HEALTH-ILLNESS-HEALTH CONCEPTS--The student will be able to:

- 02.01 Explain occupation as a health determinant.
- 02.02 Use health terminology appropriately.
- 02.03 Describe the basic function of the human body with particular emphasis on the neurological, muscular/skeletal and cardiopulmonary systems.
- 02.04 Describe the basic development of personality and learning.
- 02.05 Describe appropriate life tasks as related to the developmental process from birth to death.
- 02.06 Identify the effects of environment and the community on the individual.
- 02.07 Identify and describe basic influences contributing to health.
- 02.08 Identify and describe disabling conditions commonly referred to occupational therapy.
- 02.09 Explain the role of occupational therapy as a profession.
- 02.10 Explain the relationship of occupational therapy to other health care workers.

03.0 ANALYZE AND APPLY LEARNED SKILLS IN SPECIFIC LIFE TASKS AND ACTIVITIES--The student will be able to:

- 03.01 Demonstrate skill in performing selected life tasks and activities.
- 03.02 Demonstrate skill in instructing and adapting selected life tasks and activities.
- 03.03 Analyze activities.
- 03.04 Demonstrate proper care and maintenance of equipment and supplies.

04.0 APPLY OCCUPATIONAL THERAPY PRINCIPLES IN PATIENT/CLIENT RELATIONSHIP--The student will be able to:

- 04.01 Contribute to initial screening of patients/clients.
- 04.02 Contribute to evaluation of occupational performance, performance components, and life space.
- 04.03 Plan occupational therapy programs to prevent deterioration of occupational performance.
- 04.04 Contribute to occupational therapy program planning for remediation of occupational performance deficits and performance component dysfunction.
- 04.05 Implement occupational therapy program to prevent deterioration of occupational performance.
- 04.06 Contribute to implementation of occupational therapy programs to restore and develop occupational performance.
- 04.07 Contribute to the implementation of occupational therapy programs to restore, develop, or prevent the deterioration of performance components.
- 04.08 Contribute to program administration and support.
- 04.09 Function in the role of supervisee and assist with supervision of aides and volunteers.

05.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 05.01 Conduct a job search.
- 05.02 Secure information about a job.
- 05.03 Identify documents that may be required when applying for a job.
- 05.04 Complete a job application.
- 05.05 Demonstrate competence in job interview techniques.

OCCUPATIONAL THERAPY ASSISTANT - Continued

- 05.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 05.07 Identify acceptable work habits.
 - 05.08 Demonstrate knowledge of how to make job changes appropriately.
 - 05.09 Demonstrate acceptable employee health habits.
- 06.0 DEMONSTRATE KNOWLEDGE OF ETHICS RELATED TO OCCUPATIONAL THERAPY ASSISTANTS--The student will be able to:
- 06.01 Describe the relationship of the occupational therapy assistant to: a) the physician, b) the occupational therapist, c) the employer.
 - 06.02 Explain the term "risk management".
 - 06.03 Discuss the definition of ethics and explain the application of ethical principles in health care.
 - 06.04 Explain to patient what you are going to do before you begin.
 - 06.05 Explain the process of applying for a Florida license.
 - 06.06 Identify documents which may be required when applying for a license.
- 07.0 TRANSPORT PATIENTS--The student will be able to:
- 07.01 Transfer patient from bed to wheelchair.
 - 07.02 Move wheelchair through corridors, elevators, cars, etc.
 - 07.03 Provide information to patient as needed.
- 08.0 DEMONSTRATE KNOWLEDGE OF FIRST AID AND CPR--The student will be able to:
- 08.01 Describe the legal ramifications of emergency care.
 - 08.02 Recognize air obstruction and take proper actions.
 - 08.03 Describe methods of immobilization a suspected fracture.
 - 08.04 Perform CPR and keep American Red Cross or American Heart Association certification current.
- 09.0 DISCUSS THE ETIOLOGY, PROGRESSION, MANAGEMENT, AND PROGNOSIS OF PHYSICAL, EMOTIONAL, AND ENVIRONMENTAL STRESSES AND TRAUMA--The student will be able to:
- 09.01 Discuss the "self fulfilling prophecy" concept as related to outcome after severe trauma, alteration of body image and self concept.
 - 09.02 List the symptoms of stress in progressive order.
 - 09.03 Define psychosomatic illness.
 - 09.04 Define prognosis.
- 10.0 DISCUSS THE EFFECT OF STRESS ON OPTIMAL HUMAN FUNCTIONING--The student will be able to:
- 10.01 Define stress in terms of physical assessment.
 - 10.02 List three positive effects of stress.
 - 10.03 Discuss stress as a motivator in improving human performance.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Ophthalmic Dispensing

CODE NUMBER: Secondary _____

Postsecondary OPT0994

Florida CIP HO17.070100

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC OPTICS 7 OPTIC MECH 07

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dispensing opticians 2(299.474-010), optician apprentices, dispensing (713.361-010), dispensing opticians 1, or opticians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, lens surfacing, finishing and mounting; dispensing of completed prescriptions; fitting contact lenses; frame repair, business management techniques and human relations.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Clinical and/or commercial laboratory experiences are integrated with the didactic portion of this program.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Graduates of a recognized program with an A.S. Degree are eligible to take the Florida optician licensure examination administered by the Department of Professional Regulation for the Board of Opticianry.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 2100 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Surface ophthalmic lenses.
02. Edge and finish lenses.
03. Insert and mount lenses.
04. Select and order frames and lenses.
05. Fit and dispense prescriptions.
06. Fit contact lenses.
07. Repair frames.

Ophthalmic Dispensing - continued

08. Demonstrate knowledge of communication skills, legal and ethical principles, interpersonal relationships, and office management.
09. Practice effective business management techniques.
10. Demonstrate knowledge of anatomy and physiology of the eye.
11. Demonstrate knowledge of the effects ophthalmic devices have in correcting the errors of human vision.
12. Practice technical and business computer functions.
13. Demonstrate employability skills.

207

- 01.0 SURFACE OPHTHALMIC LENSES--The student will be able to:
- 01.01 Layout single vision and multi-focal lenses.
 - 01.02 Grind, fine and polish single vision lenses and/or multi-focal lenses.
 - 01.03 Select lenses and supplies.
 - 01.04 Inspect lenses.
- 02.0 EDGE AND FINISH LENSES--The student will be able to:
- 02.01 Layout and block lenses.
 - 02.02 Machine and hand edge lenses.
 - 02.03 Inspect lenses.
 - 02.04 Air temper glass lenses.
 - 02.05 Chemical temper glass lenses.
 - 02.06 Tint hard resin lenses.
 - 02.07 Select appropriate lenses.
- 03.0 INSERT AND MOUNT LENSES--The student will be able to:
- 03.01 Insert lenses into zyl frames.
 - 03.02 Insert lenses into metal frames.
 - 03.03 Mount lenses into rimless and semi-rimless mountings or other appropriate designs.
 - 03.04 Perform final inspection of eye glasses.
 - 03.05 Demonstrate knowledge of lens accessories.
- 04.0 SELECT AND ORDER FRAMES AND LENSES--The student will be able to:
- 04.01 Analyze written prescriptions.
 - 04.02 Duplicate prescriptions from existing lenses.
 - 04.03 Evaluate patient's life-style needs.
 - 04.04 Use selected instruments to assist in the calculation of fitting measurements.
 - 04.05 Calculate lens size and availability.
 - 04.06 Discuss charges with patients.
 - 04.07 Order lenses and frames.
- 05.0 FIT AND DISPENSE PRESCRIPTIONS--The students will be able to:
- 05.01 Verify finished prescriptions to specifications.
 - 05.02 Align frames.
 - 05.03 Adjust and fit optical devices to patients.
- 06.0 FIT CONTACT LENSES--The student will be able to:
- 06.01 Analyze prescriptions.
 - 06.02 Evaluate patient suitability.
 - 06.03 Use selected instruments to conduct and assess fittings.
 - 06.04 Identify types of contact lenses.
 - 06.05 Conduct patient training.
 - 06.06 Outline potential complications.
 - 06.07 Conduct follow-up evaluations.
- 07.0 REPAIR FRAMES--The student will be able to:
- 07.01 Restore finish and replace/repair decorative trim on frames.
 - 07.02 Replace/repair nose pieces on zyl or metal frames.
 - 07.03 Solder metal frames.
 - 07.04 Replace/repair temples, front pieces, monofilament, and broken hinges.
 - 07.05 Reshape damaged frames to lenses.
 - 07.06 Replace/repair temples.
 - 07.07 Modify frames for special needs.
- 08.0 DEMONSTRATE KNOWLEDGE OF COMMUNICATION SKILLS, LEGAL AND ETHICAL PRINCIPLES, INTERPERSONAL RELATIONSHIPS, AND OFFICE MANAGEMENT--The student will be able to:
- 08.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.

OPHTHALMIC DISPENSING - Continued

- 08.02 Demonstrate the use of several means of communication.
 - 08.03 Maintain and file patient records.
 - 08.04 Bill and collect current and overdue accounts.
 - 08.05 Practice office supply control.
- 09.0 PRACTICE EFFECTIVELY BUSINESS MANAGEMENT TECHNIQUES--The student will be able to:
- 09.01 Develop a small business plan of operation.
 - 09.02 Develop an office policy/procedure manual.
 - 09.03 Demonstrate knowledge of business finance and operating expenses.
 - 09.04 Set up a pay scale and benefit program for employees and a bookkeeping system.
 - 09.05 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
 - 09.06 Demonstrate knowledge of employee hiring and orientation.
- 10.0 DEMONSTRATE KNOWLEDGE OF ANATOMY AND PHYSIOLOGY OF THE EYE--The student will be able to:
- 10.01 Demonstrate understanding of the interrelationships between body systems.
 - 10.02 Diagram and explain the anatomy of the visual system.
 - 10.03 Recognize and discuss physiological conditions of the eye.
- 11.0 DEMONSTRATE KNOWLEDGE OF THE EFFECTS OPHTHALMIC DEVICES HAVE IN CORRECTING THE ERRORS OF HUMAN VISION--The student will be able to:
- 11.01 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.
 - 11.02 Describe the influence of thick and thin prisms on the behavior of light.
 - 11.03 Apply the principles of light acting on curved single refracting surface to the optice of ophthalmic lenses for parallel and nonparallel light.
 - 11.04 Describe the relationship and optical properties of cylindrical lenses.
 - 11.05 Demonstrate knowledge of the theory of lens surface power measuring devices.
 - 11.06 Create and eliminate prismatic effect by decentration.
 - 11.07 Demonstrate the influence of lens thickness and surface curvature.
- 12.0 PRACTICE TECHNICAL AND BUSINESS COMPUTER FUNCTIONS--The student will be able to:
- 12.01 Demonstrate knowledge of technical computer functions.
 - 12.02 Demonstrate knowledge of business applications of computers.
- 13.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 13.01 Conduct a job search.
 - 13.02 Secure information about a job.
 - 13.03 Identify documents that may be required when applying for a job.
 - 13.04 Complete a job application.
 - 13.05 Demonstrate competence in job interview techniques.
 - 13.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 13.07 Identify acceptable work habits.
 - 13.08 Demonstrate knowledge of how to make job changes appropriately.
 - 13.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Ophthalmic Laboratory Dispensing Technology

CODE NUMBER: Secondary _____

Postsecondary OPT0990

Florida CIP HO17.070200

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC OPTICS 7 OPTIC MECH @7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as lens grinders (50143001), dispensing opticians (50143002), opticians or ophthalmic dispensing technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, mechanical optics, lens design, ophthalmic sketching, geometric optics, contact lenses, ophthalmic dispensing, anatomy of the eye, physiology of the eye, advanced optics, psychology, business concepts, economics, contemporary social problems, employability skills, leadership and human relations skills, health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Both laboratory and clinical experiences are an appropriate part of this program.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The program should be accredited by the Council on Opticianry Education of the Florida Medical Association so that students should be eligible to take the certification examination to practice in Florida as a Dispensing Optician.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Utilize effective human relations skills.
 02. Demonstrate employability skills.
 03. Grind prescription lenses.
 04. Fit and dispense prescriptions.

Ophthalmic Laboratory Dispensing Technology - Continued

05. Demonstrate knowledge of the anatomy, physiology and pathology of the eye.
06. Demonstrate knowledge of legal and ethical principles in health care.
07. Fit contact lenses.
08. Straighten and fit frames.

01.0 UTILIZE EFFECTIVE HUMAN RELATIONS SKILLS--The student will be able to:

- 01.01 Demonstrate effective courteous communication skills with patients, coworkers and others.
- 01.02 Discuss the special considerations needed in communicating with the visually impaired.
- 01.03 Perform according to acceptable standards of professional ethics.
- 01.04 Recognize the particularly stressful problems associated with vision impairment.

02.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 02.01 Conduct a job search.
- 02.02 Secure information about a job.
- 02.03 Identify documents that may be required when applying for a job.
- 02.04 Complete a job application.
- 02.05 Demonstrate competence in job interview techniques.
- 02.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 02.07 Identify acceptable work habits.
- 02.08 Demonstrate knowledge of how to make job changes appropriately.
- 02.09 Demonstrate acceptable employee health habits.

03.0 GRIND PRESCRIPTION LENSES--The student will be able to:

- 03.01 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.
- 03.02 Describe the influence of thick and thin prisms on the behavior of light.
- 03.03 Apply the principles of light acting on curved single refracting surface to the optics of ophthalmic lenses for parallel and nonparallel light.
- 03.04 Describe the relationship and optical properties of cylindrical lenses.
- 03.05 Demonstrate knowledge of the theory of lens surface power measuring devices.
- 03.06 Create and eliminate prismatic effect by decentration.
- 03.07 Demonstrate the influence of lens thickness and surface curvature.
- 03.08 Layout single vision and multi-focal lenses.
- 03.09 Grind, fine and polish single vision lenses.
- 03.10 Grind, fine and polish multi-focal lenses.
- 03.11 Layout and block lenses.
- 03.12 Machine and hand edge lenses.
- 03.13 Inspect lens.
- 03.14 Air temper glass lenses.
- 03.15 Chemical temper glass lenses.
- 03.16 Tint hard resin lenses.
- 03.17 Insert lenses into zyl frames.
- 03.18 Insert lenses into metal frames.
- 03.19 Mount lenses into drilled rimless, monofilament, cemented and notched rimless frames.
- 03.20 Perform final inspection of eye glasses.

04.0 FIT AND DISPENSE PRESCRIPTIONS--The student will be able to:

- 04.01 Verify finished prescriptions to specifications.
- 04.02 Align frames.
- 04.03 Adjust and fit optical devices to patients.

05.0 DEMONSTRATE KNOWLEDGE OF THE ANATOMY, PHYSIOLOGY AND PATHOLOGY OF THE EYE--The student will be able to:

- 05.01 Demonstrate knowledge of interrelationships between and among body systems.
- 05.02 Diagram the anatomy of the visual system and explain the function of each part.

- 05.03 List and describe the major pathological conditions of the eye.
- 05.04 Describe the psychological stress problems associated with pathology of the eye.

06.0 DEMONSTRATE KNOWLEDGE OF LEGAL AND ETHICAL PRINCIPLES IN HEALTH CARE--The student will be able to:

- 06.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
- 06.02 Demonstrate the use of several means of communication.
- 06.03 Maintain and file patient records.
- 06.04 Bill and collect current and overdue accounts.
- 06.05 Practice office supply control.

07.0 FIT CONTACT LENSES--The student will be able to:

- 07.01 Analyze prescriptions.
- 07.02 Evaluate eye conditions.
- 07.03 Using selected instruments assist in identifying appropriate types of lenses.
- 07.04 Conduct and assess fittings.
- 07.05 Conduct patient training.

08.0 STRAIGHTEN AND FIT FRAMES--The student will be able to:

- 08.01 Restore/finish and replace/repair decorative trim on frames.
- 08.02 Replace/repair nose pieces on zyl or metal frames.
- 08.03 Solder metal frames.
- 08.04 Replace/repair temples, front pieces, monofilament, and broken hinges.
- 08.05 Reshape damaged frames to lenses.
- 08.06 Replace/repair temples.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
PROGRAM TITLE: Optometric Assisting
CODE NUMBER: Secondary _____ Postsecondary OPT0991
Florida CIP HO17.070400

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC OPTICS 7 OPTOM ASST @7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as optometric assistant (079.364-014) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, basic instruction in anatomy and physiology, office practices and dispensing of visual devices.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Students are prepared to assist in performing tests to determine defects in vision, preparing and fitting eyeglasses and contact lenses, and administering corrective eye exercises and other treatments which do not require drugs or surgery under the supervision of a person licensed under FL Statutes 458, 459, 463 or 4841.

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Students should be strongly encouraged to take the Registry examination offered by the Paraoptometric Section of the American Optometric Association.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1350 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate knowledge of business management techniques.
02. Performs delivery of optical devices.
03. Perform and assist in procedures used in visual testing.
04. Perform special procedures.

Optometric Assisting - Continued

05. Demonstrate knowledge of the refractive status of the eye and binocularity.
06. Demonstrate knowledge of basic ocular anatomy and physiology.
07. Demonstrate employability skills.

215

01.0 DEMONSTRATE KNOWLEDGE OF BUSINESS MANAGEMENT TECHNIQUES--The student will be able to:

- 01.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
- 01.02 Demonstrate the use of several means of communication.
- 01.03 Maintain and file patient records.
- 01.04 Bill and collect current and overdue accounts.
- 01.05 Practice office supply control.
- 01.06 Demonstrate knowledge of medical terminology.
- 01.07 Practice accepted work ethic.
- 01.08 Maintain basic equipment.
- 01.09 Schedule patients.
- 01.10 Complete and file third party forms.
- 01.11 Type 25 words per minute correctly.

02.0 PERFORM DELIVERY OF OPTICAL DEVICES--The student will be able to:

- 02.01 Transcribe and interpret prescriptions.
- 02.02 Neutralize and verify lenses.
- 02.03 Edge and insert lenses.
- 02.04 Select and order lenses.
- 02.05 Adjust, dispense and repair spectacles.
- 02.06 Assist patients with frame and lens selection.
- 02.07 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.
- 02.08 List the types of repairs which can be performed on plastic and metal frames and describe how these repairs are accomplished.

03.0 PERFORM AND ASSIST IN PROCEDURES USED IN VISUAL TESTING--The student will be able to:

- 03.01 Perform vision screening and preliminary testing.
- 03.02 Measure and record visual acuity.
- 03.03 Measure and record color vision.
- 03.04 Measure and record stereo acuity.
- 03.05 Take and record patient histories.
- 03.06 Perform chairside assisting.
- 03.07 Describe components of and instrumentation used in comprehensive vision evaluation.

04.0 PERFORM SPECIAL PROCEDURES--The student will be able to:

- 04.01 Assist in fitting contact lenses.
- 04.02 Instruct patients in care and handling of contact lenses.
- 04.03 Use selected instruments to verify contact lenses.
- 04.04 Demonstrate knowledge of the advantages and disadvantages of various contact lens materials and designs.
- 04.05 Instruct patients in visual therapy.
- 04.06 Measure and record intraocular pressure.
- 04.07 Measure and record a visual field.
- 04.08 Take and record blood pressure.
- 04.09 Perform First Aid and CPR.

05.0 DEMONSTRATE KNOWLEDGE OF THE REFRACTIVE STATUS OF THE EYE AND BINOCULARITY--The student will be able to:

- 05.01 Demonstrate knowledge of refractive errors.
- 05.02 Demonstrate knowledge of visual deficiencies.
- 05.03 Demonstrate knowledge of ocular motility.
- 05.04 Demonstrate knowledge of binocular vision.
- 05.05 Demonstrate ability to communicate knowledge to patients.
- 05.06 Demonstrate the ability to recognize sight threatening emergencies.

06.0 DEMONSTRATE KNOWLEDGE OF BASIC OCULAR ANATOMY AND PHYSIOLOGY--The student will be able to:

- 06.01 Demonstrate knowledge of ocular anatomy.
- 06.02 Demonstrate knowledge of ocular physiology.

OPTOMETRIC ASSISTING - Continued.

06.03 Demonstrate knowledge of pathological and functional disorders of the eye.

06.04 Correlate general health as it relates to ocular health.

07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

07.01 Conduct a job search.

07.02 Secure information about a job.

07.03 Identify documents that may be required when applying for a job.

07.04 Complete a job application form correctly.

07.05 Demonstrate competence in job interview techniques.

07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

07.07 Identify acceptable work habits.

07.08 Demonstrate knowledge of how to make job changes appropriately.

07.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Optometric Technology

CODE NUMBER: Secondary _____

Postsecondary OPT0993

Florida CIP HO17.070500

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 2-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC OPTICS 7 OPTIC MECH #7

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as dispensing optician apprentices, or optometric technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The program prepares students to perform a variety of vision care procedures or to specialize in a particular area of vision care under the supervision of an optometrist or ophthalmologist.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The content includes, but is not limited to, general studies, basic sciences, optometric sciences, ophthalmic clinical techniques, ophthalmic dispensing and office management.

- II. **LABORATORY ACTIVITIES:** Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.
- III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program.

The program should be approved by the Council on Optometric Education and students should be prepared to take the certification examination offered by the National Paraoptometric Registry of the American Optometric Association.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:
01. Apply knowledge of anatomy and physiology of the eye to normal and abnormal ocular function.
 02. Demonstrate knowledge of the effects ophthalmic devices have in correcting the errors of human vision.

Optometric Technology - continued

03. Demonstrate knowledge of ocular disease and emergencies.
04. Demonstrate knowledge of vision therapy in rehabilitation of abnormal ocular functions.
05. Demonstrate knowledge of communication skills, legal and ethical principles, interpersonal relationships and office management.
06. Collect patient data under the supervision of a practitioner.
07. Demonstrate knowledge of contact lenses as a vision correction device.
08. Fabricate ophthalmic prescription spectacles.
09. Demonstrate knowledge of frame and lens selection; and eyewear dispensing and adjustment.
10. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Optometric Technology

POSTSECONDARY NUMBER: OPT0993

- 01.0 APPLY KNOWLEDGE OF ANATOMY AND PHYSIOLOGY OF THE EYE TO NORMAL AND ABNORMAL OCULAR FUNCTION--The student will be able to:
- 01.01 Demonstrate understanding of the interrelationships and interdependency of various body systems.
 - 01.02 Demonstrate in depth knowledge of anatomy and physiology of the visual system.
 - 01.03 Demonstrate knowledge of growth and development of the eye from birth to old age.
- 02.0 DEMONSTRATE KNOWLEDGE OF THE EFFECTS OPHTHALMIC DEVICES HAVE IN CORRECTING THE ERRORS OF HUMAN VISION--The student will be able to:
- 02.01 Demonstrate an understanding of refractive errors.
 - 02.02 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.
 - 02.03 Describe the influence of prisms on the behavior of light.
 - 02.04 Apply the principles of light acting on a curved single refracting surface to the optics of ophthalmic lenses for parallel and nonparallel light.
 - 02.05 Describe the relationship and optical properties of cylindrical lenses.
 - 02.06 Demonstrate knowledge of the theory of lens surface power measuring devices.
 - 02.07 Demonstrate knowledge of prismatic effect by decentration.
 - 02.08 Demonstrate the influence of lens thickness and surface curvature on the effective ophthalmic prescription.
 - 02.09 Diagram lens powers on an optical cross.
- 03.0 DEMONSTRATE KNOWLEDGE OF OCULAR DISEASE AND EMERGENCIES--The student will be able to:
- 03.01 Perform ocular first aid.
 - 03.02 Demonstrate knowledge of the differences between the normal and abnormal eye.
 - 03.03 Demonstrate the ability to recognize diseases of the eye and their effect on vision.
 - 03.04 Demonstrate the ability to recognize sight threatening emergencies and related patient management.
 - 03.05 Recognize the implications of sudden vision loss.
 - 03.06 Under supervision, collect clinical data.
 - 03.07 Demonstrate knowledge of the application of pharmacological principles in the treatment of the eye.
- 04.0 DEMONSTRATE KNOWLEDGE OF VISION THERAPY IN REHABILITATION OF ABNORMAL OCULAR FUNCTIONS--The student will be able to:
- 04.01 Assess the level of binocularity and identify the compensating anomalies of the developmental process.
 - 04.02 Distinguish between functional and paretic motor problems.
 - 04.03 Under supervision, administer and interpret procedures to assess the level of binocularity and the remediation of anomalies.
 - 04.04 Assist in/administer visual therapy.
- 05.0 DEMONSTRATE KNOWLEDGE OF COMMUNICATION SKILLS, LEGAL AND ETHICAL PRINCIPLES, INTERPERSONAL RELATIONSHIPS AND OFFICE MANAGEMENT--The student will be able to:
- 05.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
 - 05.02 Demonstrate effective telephone and written communication skills and computer literacy.
 - 05.03 Maintain and file patient records.
 - 05.04 Bill and collect current and overdue accounts.
 - 05.05 Maintain office inventory.
 - 05.06 Demonstrate knowledge of medical terminology.
 - 05.07 Practice accepted work ethic.
 - 05.08 Maintain equipment.
 - 05.09 Schedule patients.
 - 05.10 Complete and file third party forms.
 - 05.11 Maintain office recall system.

OPTOMETRIC TECHNOLOGY - Continued

06.0 COLLECT PATIENT DATA UNDER THE SUPERVISION OF A PRACTITIONER--The student will be able to:

- 06.01 Elicit and record patient medical, occupational, recreational and social history.
- 06.02 Demonstrate knowledge of the principles of measuring visual acuity at different age levels and reading maturational levels.
- 06.03 Develop skill in assessing visual entrance skills.
- 06.04 Perform hypertension screening.
- 06.05 Perform ocular measurements.
- 06.06 Identify and verify ophthalmic prescription spectacles within accepted laboratory tolerances.
- 06.07 Measure and record intraocular pressure.
- 06.08 Measure and record a visual field.
- 06.09 Perform photographic documentation of ocular conditions.
- 06.10 Describe components of and instrumentation used in comprehensive vision evaluation.

07.0 DEMONSTRATE KNOWLEDGE OF CONTACT LENSES AS A VISION CORRECTION DEVICE--The student will be able to:

- 07.01 Explain the history and background of contact lenses.
- 07.02 Evaluate and record relevant ocular parameters.
- 07.03 Demonstrate knowledge of the advantage and disadvantages of various contact lens materials and designs.
- 07.04 Verify and modify the parameters of all types of contact lenses within accepted laboratory tolerances.
- 07.05 Explain the relationship of a contact lens to the physiology of the eye, considering oxygen and tear flow requirements.
- 07.06 Describe acceptable vs. unacceptable symptoms a contact lens patient may experience and the clinical procedures used to correct adverse contact lens adaptation.
- 07.07 Select appropriate contact lens types for patients by their specific personal and visual needs.
- 07.08 Describe techniques for fitting various types of contact lenses.
- 07.09 Select appropriate lens care systems and instruct a patient in the maintenance, hygiene, and wearing of all types of contact lenses.
- 07.10 Demonstrate knowledge of contact lens fee structuring, marketing, and service agreements.
- 07.11 Demonstrate proper ordering, inventorying, and recordkeeping procedures used with contact lenses.

08.0 FABRICATE OPHTHALMIC PRESCRIPTION SPECTACLES--The student will be able to:

- 08.01 Demonstrate an understanding of the process of surfacing of lenses.
- 08.02 Compute lens orientation and layout in preparation for edging.
- 08.03 Machine and hand edge lenses.
- 08.04 Temper lenses for impact resistance.
- 08.05 Drill, groove and notch lenses for rimless mountings.
- 08.06 Edge polish hard resin lenses.
- 08.07 Tint hard resin lenses.
- 08.08 Mount lenses into all frame types to accepted prescription tolerances.
- 08.09 Perform final inspection of ophthalmic prescription glasses in accordance with American Standard Institute (ANSI) Standards.

09.0 DEMONSTRATE KNOWLEDGE OF FRAME AND LENS SELECTION; AND EYEWEAR DISPENSING AND ADJUSTMENT--The student will be able to:

- 09.01 Identify ophthalmic frames and parts.
- 09.02 Determine and record frame and lens measurements.
- 09.03 Measure and record all appropriate patient measurements for prescription fitting.
- 09.04 Assist patients with frame and lens selection.
- 09.05 Adjust all types of frames to standard alignment for dispensing to a patient.
- 09.06 Demonstrate a working knowledge of specialty ophthalmic lenses.
- 09.07 Perform repairs on plastic and metal frames.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 10.01 Conduct a job search.

OPTOMETRIC TECHNOLOGY - Continued

- 10.02 Secure information about a job.
- 10.03 Identify documents that may be required when applying for a job.
- 10.04 Complete a job application.
- 10.05 Demonstrate competence in job interview techniques.
- 10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 10.07 Identify acceptable work habits.
- 10.08 Demonstrate knowledge of how to make job changes appropriately.
- 10.03 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Perfusionist

CODE NUMBER: Secondary _____

Postsecondary CTP0991

Florida CIP H017.029901

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other _____ 13-15

CERTIFICATION COVERAGE: PRAC NURSE 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as perfusionists or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, the operation of circulation equipment during any medical situation where it is necessary to support or temporarily replace the patient's circulatory or respiratory function. A clinical component is a necessary element of this program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.
- III. SPECIAL NOTE: Students should be encouraged to become members of Health Occupations Students of America, Inc., and/or their appropriate professional organization.

The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation (CAHEA) so that the graduates may be eligible to take the examination given by the American Board of Cardiovascular Perfusion or state licensure examinations.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Identify the anatomic structure and function of body systems in relation to diseased states and services performed by the perfusionist.
 02. Practice quality assurance, safety, and acceptable communication skills.
 03. Adhere to legal and ethical principles related to the practice of perfusion technology.
 04. Perform heart-lung bypass for adult, pediatric and infant patients undergoing heart surgery.
 05. Demonstrate knowledge of catastrophic event management.
 06. Perform adjunctive techniques used with extracorporeal circulation.
 07. Monitor patients undergoing extracorporeal circulation.
 08. Perform perfusion procedures on laboratory animals.
 09. Perform special applications of perfusion technology.
 10. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Perfusionist

POSTSECONDARY NUMBER: CTP0991

- 01.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DISEASED STATES AND SERVICES PERFORMED BY THE PERFUSIONIST--The student will be able to:
- 01.01 Demonstrate knowledge of human anatomy and physiology with particular emphasis on the cardiovascular and pulmonary systems.
 - 01.02 Demonstrate knowledge of specific principles of adult and pediatric cardiac diseases.
 - 01.03 Demonstrate knowledge of principles of cardiovascular surgery.
- 02.0 PRACTICE QUALITY ASSURANCE, SAFETY, AND ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:
- 02.01 Demonstrate knowledge of quality assurance as directed by the local hospital.
 - 02.02 Recognize and use various forms of communication.
 - 02.03 Demonstrate effective interpersonal relationships.
 - 02.04 Follow institutional policies and procedures related to safety.
- 03.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF PERFUSION TECHNOLOGY--The student will be able to:
- 03.01 Identify the duties and responsibilities of the perfusionist.
 - 03.02 Demonstrate knowledge of patients rights.
 - 03.03 Demonstrate knowledge of the legal ramifications of clinical practice.
 - 03.04 Recognize the limits of authority and responsibility of health care workers.
- 04.0 PERFORM HEART-LUNG BYPASS FOR ADULT, PEDIATRIC AND INFANT PATIENTS UNDERGOING HEART SURGERY--The student will be able to:
- 04.01 Perform a minimum of 50 safe cases as specified by the American Board of Cardiovascular Perfusion.
 - 04.02 Select proper equipment used in each case.
 - 04.03 Demonstrate knowledge of the disease entity of each case.
- 05.0 DEMONSTRATE KNOWLEDGE OF CATASTROPHIC EVENT MANAGEMENT--The student will be able to:
- 05.01 Demonstrate knowledge of Basic Life Saving Support.
 - 05.02 Demonstrate knowledge of emergency procedures developing during heart-lung surgery.
 - 05.03 Use laboratory data in making decisions to prevent catastrophic event during surgery.
- 06.0 PERFORM ADJUNCTIVE TECHNIQUES USED WITH EXTRACORPOREAL CIRCULATION--The student will be able to:
- 06.01 Perform hypothermia.
 - 06.02 Demonstrate knowledge of pulsatile assistive devices.
 - 06.03 Demonstrate knowledge of myocardial preservation techniques.
 - 06.04 Perform red cell concentration and hemodilution.
 - 06.05 Demonstrate knowledge of pharmacological agents.
- 07.0 MONITOR PATIENTS UNDERGOING EXTRACORPOREAL CIRCULATION--The student will be able to:
- 07.01 Demonstrate knowledge of hemodynamic monitoring and measurement.
 - 07.02 Demonstrate knowledge of bubble detection and level sensing.
 - 07.03 Monitor patients' temperature, electrocardiogram, and coagulation.
- 08.0 PERFORM PERFUSION PROCEDURES ON LABORATORY ANIMALS--The student will be able to:
- 08.01 Operate heart-lung machine during laboratory animal surgery.
 - 08.02 Demonstrate acceptable operating room technique during animal surgery.
 - 08.03 Assist in adjunct animal experimentation.

PERFUSIONIST - Continued

09.0 PERFORM SPECIAL APPLICATIONS OF PERFUSION TECHNOLOGY--The student will be able to:

- 09.01 Demonstrate knowledge of right and left heart bypass and autotransfusion.
- 09.02 Demonstrate hypothermic and hyperthermic perfusion and isolated limb or organ perfusion.
- 09.03 Demonstrate knowledge of hemodialysis and organ preservation.

10.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 10.01 Conduct a job search.
- 10.02 Secure information about a job.
- 10.03 Identify documents that may be required when applying for a job.
- 10.04 Complete a job application.
- 10.05 Demonstrate competence in job interview techniques.
- 10.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 10.07 Identify acceptable work habits.
- 10.08 Demonstrate knowledge of how to make job changes appropriately.
- 10.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Pharmacy Assisting

CODE NUMBER: Secondary _____

Postsecondary PHV0990

Florida CIP HO17.050700

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x Other 13-15

CERTIFICATION COVERAGE: PHARMACY 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as pharmacy helpers (10121009), pharmacy assistants or pharmacy technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, metric system, medical terminology, medicinal drugs, pharmaceutical compounding, sterile techniques, maintenance of inventory, preparing purchase orders, receiving and checking supplies purchased, printing labels, typing prescription labels, delivering medications, pricing prescription drug orders and supplies, prepackaging unit dose packages, patient record systems, control records, data processing, employability skills, leadership and human relations skills, health and safety, including CPR.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory demonstration, practice and return demonstrations are essential in this program.

Clinical practicum experiences are an integral part of this program.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Assist a pharmacist in maintaining inventory, typing labels, pricing prescriptions and patient charges.
02. Assist with adding medications to IV solutions.
03. Prepackage unit dose packets..

226

Pharmacy Assisting - Continued

04. Check patient records to identify possible drug interactions.
05. Deliver medications.
06. Recognize unusual orders.
07. Demonstrate employability skills.

01.0 ASSIST A PHARMACIST IN MAINTAINING INVENTORY, TYPING LABELS, PRICING PRESCRIPTIONS AND PATIENT CHARGES--The student will be able to:

- 01.01 List the major classifications of pharmaceuticals and define each.
- 01.02 List the sources from which medications are produced.
- 01.03 Define poison; define placebo.
- 01.04 Read and discuss the patients bill of rights, American Hospital Association.
- 01.05 Discuss the Harrison Narcotic Act and list the controlled substances.
- 01.06 Using the pharmacy inventory manual, prepare a listing of the usual adult dose for each item, the medicinal uses, the contraindications and route of administration.
- 01.07 List the two official compendia of standards for quality and purity of drugs and authoritative information on dosage and administration and list six non-official reference manuals.
- 01.08 Define pharmacotherapeutics, pharmacodynamics and pharmacognosy.
- 01.09 List at least 50 of the major symbols and abbreviations used on prescriptions and state the meaning of each.
- 01.10 Explain the difference between a cubic centimeter and a milliliter.
- 01.11 Use common pharmaceutical weighing equipment.
- 01.12 Use common pharmaceutical volume measurement equipment.
- 01.13 Explain the technique of preparing a solution, a suspension, an elixir, an emulsion and an extract.
- 01.14 Convert measurements within the apothecary, avoirdupois, and metric systems.
- 01.15 Use the following arithmetic procedures: ratio and proportion; percentage.
- 01.16 Discuss the advantages, disadvantages and limitations of the various routes of administration of drugs.
- 01.17 Use pharmaceutical medical terminology.
- 01.18 Explain the safety considerations in:
 - a) handling toxic and caustic substances
 - b) handling and storing flammable chemicals
 - c) sterile theory
- 01.19 Display knowledge of trade names and generic name equivalents, chemical names.
- 01.20 Maintain stock inventory and prepare purchase orders.
- 01.21 Receive, store and distribute pharmaceuticals.
- 01.22 Type labels.
- 01.23 Price prescriptions and refunds.
- 01.24 Answer routine inquiries--refer pharmacologic inquiries to pharmacist.
- 01.25 Maintain records.
- 01.26 Process unadministered drugs.
- 01.27 Operate distilled water stills and prepare de-ionized water.
- 01.28 Sterilize ointments.
- 01.29 Discuss legal and ethical parameters of the Pharmacy Assistant.
- 01.30 Accept responsibility for own actions.
- 01.31 Interpret the organizational chart, describe the general duties and responsibilities of others on the chart.
- 01.32 Establish and maintain a healthy rapport with coworkers.
- 01.33 State three valid reasons for confidentiality of patient information.
- 01.34 Display a general knowledge of vaccines.
- 01.35 Display a general knowledge of nutritional supplements.
- 01.36 Display a general knowledge of dental products.
- 01.37 Display a general knowledge of foot products.
- 01.38 Display a general knowledge of first aid products.
- 01.39 Display a general knowledge of hygiene products.
- 01.40 Display a general knowledge of veterinary products.
- 01.41 Display a general knowledge of common cold products.
- 01.42 Display a general knowledge of eye products.
- 01.43 Display a general knowledge of skin care products.
- 01.44 Display a general knowledge of hair products.
- 01.45 Display a general knowledge of nail products.

PHARMACY ASSISTING - Continued

- 02.0 ASSIST WITH ADDING MEDICATIONS TO IV SOLUTIONS--The student will be able to:
- 02.01 Compare order with label on vial and check expiration date of product.
 - 02.02 Determine amount of drug to use.
 - 02.03 Use aseptic technique to withdraw medication from stock vial, measure correct quantity as instructed, select and insert it into IV solution without error.
 - 02.04 Place label on IV solution container and keep records.
 - 02.05 Reconstitute parenteral medications.
 - 02.06 Use specialized equipment such as laminar flow hoods; filters, pumps, and vacuum sets; pipetters.
 - 02.07 Recognize incompatibilities.
 - 02.08 Perform quality control check.
 - 02.09 Prepare Parenteral Alimentation solutions.
- 03.0 PREPACKAGE UNIT DOSE PACKETS--The student will be able to:
- 03.01 Locate correct stock container.
 - 03.02 Weigh, measure or count required individual doses of drug.
 - 03.03 Place individual dose in appropriate containers, repackage in predetermined quantities.
 - 03.04 Label every packet: name of drug, dose(quantity of drug) instructions.
 - 03.05 Distribute or shelve.
- 04.0 CHECK PATIENT RECORDS TO IDENTIFY POSSIBLE DRUG INTERACTIONS--The student will be able to:
- 04.01 Use and maintain patient medication profiles.
 - 04.02 Check all new orders on computer drug interaction program.
 - 04.03 Check all new orders with medications listed on profile.
 - 04.04 Seek assistance as necessary.
- 05.0 DELIVER MEDICATIONS--The student will be able to:
- 05.01 Transport medications safely being aware of hazards: theft, legal implications of accidental loss, Harrison Narcotic Act--other consequences.
 - 05.02 Recognize hazards in hospitals such as false prescriptions, impaired professionals, drug overdose.
 - 05.03 Recognize special dangers to children - e.g. poison.
- 06.0 RECOGNIZE UNUSUAL ORDERS--The student will be able to:
- 06.01 Recognize that physicians and nurses can make mistakes--misplace decimals, misspell, order wrong dosage amounts.
 - 06.02 Read and understand medication orders and prepare same for dispensing.
 - 06.03 Seek professional assistance as needed.
- 07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 07.01 Conduct a job search.
 - 07.02 Secure information about a job.
 - 07.03 Identify documents that may be required when applying for a job.
 - 07.04 Complete a job application.
 - 07.05 Demonstrate competence in job interview techniques.
 - 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 07.07 Identify acceptable work habits.
 - 07.08 Demonstrate knowledge of how to make job changes appropriately.
 - 07.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Phlebotomy Technician

CODE NUMBER: Secondary _____

Postsecondary MLS0042

Florida CIP HO17.030100

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC MED @7 LAB TECH 7
LAB ASST 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as blood bank or plasma center donor screener or phlebotomists or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, communication, leadership, human relations, and employability skills; performance of safe and efficient work practices in obtaining adequate and correct blood specimens by skin puncture or venipuncture on adults, children and infants; maintaining the integrity of the specimen in relation to the test to be performed; preparing blood smears; labeling specimens accurately and completely; collecting timed specimens including glucose tolerance; promoting the comfort and well-being of the patient while performing blood collecting duties; observing safety policies and procedures; delivering a variety of clinical specimens to the clinical laboratory; sorting and recording specimens received in the laboratory; centrifuging specimens and preparing aliquots of samples according to the designated protocol; distributing samples to appropriate laboratory sections; and preparing collection trays for specimen procurement.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program. Clinical experience is defined as patient contact in which the student performs phlebotomy skills under the supervision of qualified health worker.
- III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. When provided, these activities are considered an integral part of the curriculum.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 150 hours.

Phlebotomy Technician - continued

IV. INTENDED OUTCOMES: After successfully completing the program, the student will be able to:

01. Discuss phlebotomy in relation to the health care setting.
02. Identify the anatomic structure and function of body systems and services performed by phlebotomist.
03. Recognize and identify collection reagents supplies, equipment and interfering chemical substances.
04. Practice collection procedures and recognize possible complications.
05. Practice effective infection control.
06. Practice accepted procedures of requisitioning, transporting and processing specimens.
07. Practice quality assurance and safety.
08. Demonstrate accepted professional, communication, and interpersonal skills.
09. Demonstrate employability skills.

01.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

- 01.01 List, classify and discuss various departments and services within the health care setting in which the phlebotomist must interact to obtain laboratory specimens from patients.
- 01.02 Identify the major departments/sections with the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
- 01.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).
- 01.04 Define and utilize correct medical terminology and metric measurement needed by phlebotomists.
- 01.05 Describe appropriate and legal usage of patient's medical charts.

02.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS AND SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

- 02.01 Describe and define 9 body systems with emphasis on: respiratory system, urinary system, endocrine system and circulatory system.
- 02.02 List and describe the main superficial veins used in performing venipunctures.
- 02.03 List blood components and tests performed to identify those components.

03.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

- 03.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipunctures.
- 03.02 Explain the special precautions and types of equipment needed to collect blood from a newborn infant.
- 03.03 Identify and discuss proper use of supplies used in collecting microspecimens.
- 03.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
- 03.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.
- 03.06 Describe substances that can interfere in analysis of blood constituents.

04.0 PRACTICE COLLECTION PROCEDURES AND RECOGNIZE POSSIBLE COMPLICATIONS--The student will be able to:

- 04.01 Implement established protocol for patient and specimen identification.
- 04.02 Identify five potential sites for venipuncture and name/find the most desirable one(s).
- 04.03 Identify five appropriate sites for skin puncture and name/find the most desirable one(s).
- 04.04 Discuss/perform methods for facilitating skin or venipuncture, including tourniquet, warming the site, palpating, clenching fist and dangling arm.
- 04.05 Discuss/perform appropriate methods for decontaminating a site for skin or venipuncture.
- 04.06 List four agents useful in decontaminating sites for skin/venipuncture. Describe when it is appropriate to use each agent.
- 04.07 Perform a venipuncture by evacuated tube and syringe systems, demonstrating appropriate supplies, proper handling of needle, tube and specimen, and patient care.

PHLEBOTOMY TECHNICIAN - Continued

- 04.08 Perform a skin puncture demonstrating appropriate supplies, proper depth of puncture for adults, children and neonates, proper angle and pressure, etc.
 - 04.09 Describe the appropriate order of drawing additive tubes when using venipuncture and skin puncture.
 - 04.10 Describe the most common complications associated with venipuncture and skin puncture.
 - 04.11 Determine need for re-collections, utilizing factors described in hospital or clinical protocol.
 - 04.12 Determine when to reject specimen utilizing factors described in hospital protocol.
 - 04.13 Describe/perform procedures for disposing of used or contaminated supplies.
 - 04.14 Describe/perform the appropriate techniques for making a blood smear for hematologic evaluation.
- 05.0 PRACTICE EFFECTIVE INFECTION CONTROL--The student will be able to:
- 05.01 Define the term "nosocomical infection."
 - 05.02 Describe/perform procedures for infection prevention.
 - 05.03 Discuss/perform isolation procedures.
 - 05.04 Identify potential routes of infection.
 - 05.05 Identify and label biohazardous specimens.
- 06.0 PRACTICE ACCEPTED PROCEDURES OF REQUISITIONING, TRANSPORTING AND PROCESSING SPECIMENTS --The student will be able to:
- 06.01 Describe routine and special procedures for transporting and processing specimens.
 - 06.02 Describe the significance of time constraints for specimen delivery.
 - 06.03 Describe scheduling constraints that affect laboratory operational time.
 - 06.04 Inspect and report suitability of specimen for the analysis required.
 - 06.05 Prepare aliquot(s) or component(s) of specimen for analysis according to specimen type and analysis to be performed.
 - 06.06 Prepare smears, droplets or mounts of the specimen for analysis according to institutional protocol.
 - 06.07 Demonstrate knowledge of procedures for accepting verbal test orders.
 - 06.08 Describe various transportation and communication systems.
- 07.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:
- 07.01 Distinguish and perform methods which ensure quality when collecting blood specimens for the clinical laboratory.
 - 07.02 Demonstrate knowledge of appropriate patient safety.
 - 07.03 Demonstrate knowledge of first-aid techniques including CPR (cardiopulmonary resuscitation).
 - 07.04 Practice safety in accordance with institutional policy.
 - 07.05 Identify documentation procedures for accidents that occur during specimen procurement and handling.
 - 07.06 Describe the phlebotomist's role in providing quality assurance in laboratory testing, reporting, and use and maintenance of equipment.
- 08.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:
- 08.01 Communicate appropriately with the patient.
 - 08.02 Explain to patient the procedure to be used in specimen collection.
 - 08.03 Demonstrate understanding of patient rights and responsibilities.
 - 08.04 Demonstrate understanding of ethical behavior, legal aspects, and the importance of following protocol.
 - 08.05 Demonstrate the correct use of the telephone.
 - 08.06 Maintain acceptable appearance and grooming.
- 09.6 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 09.01 Conduct a job search.
 - 09.02 Secure information about a job.
 - 09.03 Identify documents that may be required when applying for a job.
 - 09.04 Complete a job application.

PHLEBOTOMY TECHNICIAN - Continued

- 09.05 Demonstrate competence in job interview techniques.
- 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 09.07 Identify acceptable work habits.
- 09.08 Demonstrate knowledge of how to make job changes appropriately.
- 09.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK PROGRAM AFEA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
PROGRAM TITLE: Physical Therapy Aide
CODE NUMBER: Secondary _____ Postsecondary PHT0091
Florida CIP H017.081400

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: PH THERAPY ~~6~~ 6 PH THERTEC 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as physical therapy aides (355.354-010), or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, hospital operation, anatomy and physiology, patient care services, disabilities amenable to physical therapy, therapeutic procedures, lifting and moving, positioning patients, role of the physical therapy aide, first aid and cardiopulmonary resuscitation (CPR), employability skills, leadership and human relations skills, health and safety.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory activities are an integral part of this program.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

The cooperative method of instruction is appropriate for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 6.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for an average achieving student is 450 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Transport patients.
02. Assist therapist with various treatment/procedures.
03. Demonstrate safe, ethical and legal practice.
04. Demonstrate employability skills.
05. Recognize the role of the physical therapy aide.
06. Recognize the Patients' Bill of Rights.
07. Demonstrate knowledge of safe administration of hot or cold treatments.

Physical Therapy Aide - Continued

08. Describe use of exercise, physical agents, assistive and supportive devices, and specialized equipment.
09. Perform routine maintenance for equipment.
10. Demonstrate knowledge of control of infections.

236

- 01.0 TRANSPORT PATIENTS--The student will be able to:
- 01.01 Move patient from bed to stretcher with assistance.
 - 01.02 Move patient from bed to wheelchair.
 - 01.03 Transport patients through hallways, doors, elevators, etc.
 - 01.04 Use safety belts, holding devices.
 - 01.05 Follow safety practices - never leave patient unattended.
- 02.0 ASSIST THERAPIST WITH VARIOUS TREATMENT/PROCEDURES--The student will be able to:
- 02.01 Assist therapist to ambulate patient.
 - 02.02 Assist therapist to administer activities of daily living training to clients.
 - 02.03 Assist therapist with application of external bandages, dressings and support devices.
 - 02.04 Perform basic range of motion exercises and exercise regimes as supervised by therapist.
 - 02.05 Record treatments on billing forms or into computer as directed by policy.
- 03.0 DEMONSTRATE SAFE, ETHICAL AND LEGAL PRACTICE--The student will be able to:
- 03.01 Perform according to acceptable standards of professional ethics.
 - 03.02 Comply with agencies' policies.
 - 03.03 Respect the confidences imparted in the course of professional activities.
 - 03.04 Practice under the direction of a physical therapist.
 - 03.05 Familiarize self with agencies' emergency procedures and equipment.
 - 03.06 Demonstrate knowledge of indications and contraindications for each treatment procedure.
 - 03.07 Demonstrate knowledge of the techniques of CPR.
 - 03.08 Record treatments/results in appropriate places.
- 04.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 04.01 Conduct a job search.
 - 04.02 Secure information about a job.
 - 04.03 Identify documents that may be required when applying for a job.
 - 04.04 Complete a job application.
 - 04.05 Demonstrate competence in job interview techniques.
 - 04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 04.07 Identify acceptable work habits.
 - 04.08 Demonstrate knowledge of how to make job changes appropriately.
 - 04.09 Demonstrate acceptable employee health habits.
- 05.0 RECOGNIZE THE ROLE OF THE PHYSICAL THERAPY AIDE--The student will be able to:
- 05.01 Recognize own feelings of self worth and the dignity of work.
 - 05.02 Recognize the helping relationship to therapist, physician, etc by interpreting the organizational chart.
 - 05.03 Prepare areas for treatment.
 - 05.04 Transport patient into area and place in appropriate area.
 - 05.05 Recognize importance of own appearance as well as that of therapy department.
 - 05.06 Maintain the environment in a hydrotherapy room.
 - 05.07 Perform housekeeping and maintenance functions.
- 06.0 RECOGNIZE THE PATIENTS BILL OF RIGHTS--The student will be able to:
- 06.01 Demonstrate awareness of patient's need for dignity and the ability to function as an independent being in society.
 - 06.02 Recognize patient expressions of pain, spoken or unspoken (body language).

PHYSICAL THERAPY AIDE - Continued

- 06.03 Recognize patients' need to prevent deformity.
- 06.04 Recognize patients' need for improving muscle strengths, improved systematic functioning and maximizing remaining abilities.
- 06.05 Deal effectively with patients' emotional responses.

- 07.0 DEMONSTRATE KNOWLEDGE OF SAFE ADMINISTRATION OF HOT OR COLD TREATMENTS--The student will be able to:
 - 07.01 Read a variety of thermometers, fahrenheit or centigrade (celsius) with an assortment of shapes and constructions.
 - 07.02 State normal body temperatures and take an oral, axillary or rectal temperatures.
 - 07.03 Take the temperature of liquids, oils, solids.
 - 07.04 State the correct temperature for and apply a moist heat treatment.
 - 07.05 State the correct temperature for and apply a dry heat treatment.
 - 07.06 State the correct temperature for and apply a controlled heat treatment (electric).
 - 07.07 State the correct temperature for and apply a mechanical heat treatment (diathermy).

- 08.0 DESCRIBE USE OF EXERCISE, PHYSICAL AGENTS, ASSISTIVE AND SUPPORTIVE DEVICES, AND SPECIALIZED EQUIPMENT--The student will be able to:
 - 08.01 State the benefits of exercise.
 - 08.02 Discuss uses of physical agents such as water, electricity, heat and cold.
 - 08.03 Define "splint" and "brace" and state the importance of proper fit and use of comfort measures.
 - 08.04 Perform crutch walking, stair climbing, use of wheelchair.
 - 08.05 Describe differences in wheelchairs.

- 09.0 PERFORM ROUTINE MAINTENANCE FOR EQUIPMENT--The student will be able to:
 - 09.01 Recognize importance of routine maintenance.
 - 09.02 Clean and check operation of wheelchairs, stretchers, treatment tables, etc.
 - 09.03 Perform routine maintenance on machines such as diathermy according to manufacturers specifications.

- 10.0 DEMONSTRATE KNOWLEDGE OF CONTROL OF INFECTIONS--The student will be able to:
 - 10.01 Perform isolation techniques related to patient care.
 - 10.02 Disinfect used equipment.
 - 10.03 Prepare materials for sterilization.
 - 10.04 Define: disinfect, sterilize, germicide, vaccinate, immunize, antiseptic, septic.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Physical Therapy Assisting

CODE NUMBER: Secondary _____

Postsecondary PHT0092

Florida CIP H017.081500

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other _____ 13-15

CERTIFICATION COVERAGE: PH THERAPH 6 PH THERTEC 7

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as physical therapy technicians (10121012) or physical therapy assistants (076.224-010) or to provide supplemental training for persons previously or currently employed in these occupations.

The program should meet the requirements of the American Physical Therapy Association so that the graduate is eligible to write the Florida physical therapist assistant licensing examination (Chapter 486, Physical Therapy Practice), administered by the Florida Department of Professional Regulation, Florida Board of Medical Examiners.

The content includes, but is not limited to, physical therapy procedures, human anatomy and physiology, kinesiology, administrative skills, human relations skills, teaching skills, psychology, communication skills, medical law and ethics, safety practices, community health, leadership skills, first aid and CPR, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Theory of physical therapy procedures is presented prior to practical application. An instructional mode of demonstration/return demonstration is appropriate. In a simulated patient setting, students administer/apply or instruct in physical therapy techniques and physical agents.

Laboratory work is structured so that students begin with basic patient care skills, progress to basic physical therapy skills and then, finally, to more advanced physical therapy application and techniques.

Prior to being allowed to practice under supervision in the clinic, each student is evaluated for competency in a given procedure or modality. A minimum of 75% accuracy is required. Clinical practicums are required for this program.

- III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Upon completion of an approved program, the student is eligible to write the Florida physical therapist assistant licensing examination.

The cooperative method of instruction is not appropriate for this program.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 7.0, Language 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

Physical Therapy Assisting - continued

The typical length of this program for the average student is 1500 hours or an associate degree.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Transport patients.
02. Assist therapist with various treatment/procedures.
03. Demonstrate safe, ethical and legal practice.
04. Demonstrate employability skills.
05. Recognize the role of the physical therapy aide.
06. Recognize the Patients' Bill of Rights.
07. Demonstrate knowledge of safe administration of hot or cold treatments.
08. Describe use of exercise, physical agents, assistive and supportive devices, and specialized equipment.
09. Perform routine maintenance for equipment.
10. Demonstrate knowledge of control of infections.
11. Provide physical therapy services as specified in the plan of care developed by the physical therapist.
12. Respond to acute changes in physiological state.
13. Teach other health care providers, patients and families to perform selected treatment procedures and functional activities.
14. Identify architectural barriers.
15. Interact with patients and families in a manner which provides the desired psycho-social support.
16. Demonstrate appropriate and effective written, oral and nonverbal communication with patients and their families, colleagues and the public.
17. Recognize own strengths and limitations and interpret for others their scope and function.
18. Understand basic concepts related to the health care system including multidisciplinary team approach, quality care, governmental agencies, private sector, role of other health care providers, health care facilities, issues and problems.
19. Demonstrate understanding of basic principles of levels of authority and responsibility, planning, time management, supervisory process, performance evaluations, policies and procedures, and fiscal consideration (provider and consumer).

- 01.0 TRANSPORT PATIENTS--The student will be able to:
- 01.01 Move patient from bed to stretcher with assistance.
 - 01.02 Move patient from bed to wheelchair.
 - 01.03 Transport patients through hallways, doors, elevators, etc.
 - 01.04 Use safety belts, holding devices.
 - 01.05 Follow safety practices - never leave patient unattended.
- 02.0 ASSIST THERAPIST WITH VARIOUS TREATMENT/PROCEDURES--The student will be able to:
- 02.01 Perform gait training techniques.
 - 02.02 Assist therapist to administer activities of daily living training to clients.
 - 02.03 Assist therapist with application of external bandages, dressings and support devices.
 - 02.04 Implement therapeutic exercises as demonstrated by therapist.
 - 02.05 Record treatments on billing forms or into computer as directed by policy.
 - 02.06 Recognize gait deviations.
 - 02.07 Measure for and fit assistive devices.
 - 02.08 Demonstrate familiarity with disease entities.
- 03.0 DEMONSTRATE SAFE, ETHICAL AND LEGAL PRACTICE--The student will be able to:
- 03.01 Perform according to acceptable standards of professional ethics.
 - 03.02 Comply with agencies' policies.
 - 03.03 Respect the confidences imparted in the course of professional activities.
 - 03.04 Practice under the direction of a physical therapist.
 - 03.05 Familiarize self with agencies' emergency procedures and equipment.
 - 03.06 Demonstrate knowledge of indications and contraindications for each treatment procedure.
 - 03.07 Demonstrate knowledge of the techniques of CPR.
 - 03.08 Record treatments/results in acceptable progress notes using correct format, content and terminology.
 - 03.09 Read and draw pertinent patient information from patient charts.
 - 03.10 Observe safety precautions when treating patients.
- 04.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 04.01 Conduct a job search.
 - 04.02 Secure information about a job.
 - 04.03 Identify documents that may be required when applying for a job.
 - 04.04 Complete a job application.
 - 04.05 Demonstrate competence in job interview techniques.
 - 04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 04.07 Identify acceptable work habits.
 - 04.08 Demonstrate knowledge of how to make job changes appropriately.
 - 04.09 Demonstrate acceptable employee health habits.
- 05.0 RECOGNIZE THE ROLE OF THE PHYSICAL THERAPY AIDE--The student will be able to:
- 05.01 Recognize own feelings of self worth and the dignity of work.
 - 05.02 Recognize the helping relationship to therapist, physician, etc by interpreting the organizational chart.
 - 05.03 Prepare areas for treatment.
 - 05.04 Transport patient into area and place in appropriate area.
 - 05.05 Recognize importance of own appearance as well as that of therapy department.
 - 05.06 Maintain the environment in a hydrotherapy room.
 - 05.07 Perform housekeeping and maintenance functions.
 - 05.08 Communicate effectively and as necessary with supervisor and staff as evidence of good interpersonal relationships.
 - 05.09 Perform all delegated tasks with confidence and efficiency.

PHYSICAL THERAPY ASSISTING - Continued

- 06.0 RECOGNIZE THE PATIENTS BILL OF RIGHTS--The student will be able to:
- 06.01 Demonstrate awareness of patient's need for dignity and the ability to function as an independent being in society.
 - 06.02 Recognize patient expressions of pain, spoken or unspoken (body language).
 - 06.03 Recognize patients' need to prevent deformity.
 - 06.04 Recognize patients' need for improving muscle strengths, improved systematic functioning and maximizing remaining abilities.
 - 06.05 Deal effectively with patients' emotional responses.
- 07.0 DEMONSTRATE KNOWLEDGE OF SAFE ADMINISTRATION OF HOT OR COLD TREATMENTS--The student will be able to:
- 07.01 Read a variety of thermometers, fahrenheit or centigrade (celsius) with an assortment of shapes and constructions.
 - 07.02 State normal body temperatures and take an oral, axillary or rectal temperatures.
 - 07.03 Take the temperature of liquids, oils, solids.
 - 07.04 State the correct temperature for and apply a moist heat treatment.
 - 07.05 State the correct temperature for and apply a dry heat treatment.
 - 07.06 State the correct temperature for and apply a controlled heat treatment (electric).
 - 07.07 State the correct temperature for and apply a mechanical heat treatment (diathermy).
 - 07.08 Verbalize known indications, contraindications, and precautions for all PT procedures.
 - 07.09 Identify physiological effects of heat vs cold applications.
- 08.0 DESCRIBE USE OF EXERCISE, PHYSICAL AGENTS, ASSISTIVE AND SUPPORTIVE DEVICES, AND SPECIALIZED EQUIPMENT--The student will be able to:
- 08.01 State the benefits of exercise.
 - 08.02 Discuss uses of physical agents such as water, electricity, heat and cold.
 - 08.03 Define Orthotics and state the importance of proper fit and use of comfort measures.
 - 08.04 Perform crutch walking, stair climbing, use of wheelchair.
 - 08.05 Describe differences in wheelchairs.
 - 08.06 Discuss upper and lower extremity prosthetics in terms of types of amputations and prosthetics.
 - 08.07 Identify some common problems in prosthetic management and applying managerial skills in dealing effectively with them.
 - 08.08 Recognize and assist as supervised in advanced exercise techniques (PNF, Bobath, Brunnstrum, etc.).
 - 08.09 Perform postural drainage and instruct patient in proper coughing and breathing exercises to assist the treatment.
- 09.0 PERFORM ROUTINE MAINTENANCE FOR EQUIPMENT--The student will be able to:
- 09.01 Recognize importance of routine maintenance.
 - 09.02 Clean and check operation of wheelchairs, stretchers, treatment tables, etc.
 - 09.03 Perform routine maintenance on machines such as diathermy according to manufacturers specifications.
- 10.0 DEMONSTRATE KNOWLEDGE OF CONTROL OF INFECTIONS--The student will be able to:
- 10.01 Perform isolation techniques related to patient care.
 - 10.02 Disinfect used equipment.
 - 10.03 Prepare materials for sterilization.
 - 10.04 Define: disinfect, sterilize, germicide, vaccinate, immunize, antiseptic, septic.
- 11.0 PROVIDE PHYSICAL THERAPY SERVICES AS SPECIFIED IN THE PLAN OF CARE DEVELOPED BY THE PHYSICAL THERAPIST--The student will be able to:
- 11.01 Prepare patients, treatment areas and equipment.

PHYSICAL THERAPY ASSISTING - Continued

- 11.02 Implement treatment programs that include: therapeutic exercises, gait training and techniques, ADL training techniques, administration of therapeutic heat and cold, administration of ultrasound, administration of therapeutic electric current, administration of ultraviolet, application of traction, performance of intermittent venous compression, administration of pulmonary hygiene techniques, application of external bandages, dressings and support, performance of goniometric measurement, and manual muscle testing.
- 12.0 RESPOND TO ACUTE CHANGES IN PHYSIOLOGICAL STATE--The student will be able to:
- 12.01 Apply rules related to blood pressure, pulse, respiration, sweating, skin color, mental alertness, skin temp, pupil size and pupil reaction.
- 12.02 Determine baseline physiological state.
- 12.03 Recognize change in baseline physiological state.
- 12.04 Determine significance of change in physiological state.
- 12.05 Define pathokinesiology.
- 13.0 TEACH OTHER HEALTH CARE PROVIDERS, PATIENTS AND FAMILIES TO PERFORM SELECTED TREATMENT PROCEDURES AND FUNCTIONAL ACTIVITIES--The student will be able to:
- 13.01 Detail equipment or treatment preparation methods.
- 13.02 Instruct in safety rules for equipment or treatment adjustment and preparation.
- 13.03 Utilize proper teaching techniques relative to level of individuals understanding.
- 13.04 Describe desired outcomes of the selected treatment procedure or functional activity.
- 13.05 Utilize proper medical terminology verbally and in writing.
- 13.06 Demonstrate knowledge of human anatomy and physiology as it relates to communicating outcomes of treatment.
- 14.0 IDENTIFY ARCHITECTURAL BARRIERS--The student will be able to:
- 14.01 Identify which environmental factors are potential architectural barriers.
- 14.02 Determine which aspects of the patients functional level and ambulatory/mobility equipment are germane to architectural problems.
- 14.03 Document action.
- 15.0 INTERACT WITH PATIENTS AND FAMILIES IN A MANNER WHICH PROVIDES THE DESIRED PSYCHO-SOCIAL SUPPORT--The student will be able to:
- 15.01 Recognize own reaction to the patients illness or disability.
- 15.02 Recognize patients and families' reactions to illness and disability.
- 15.03 Respect individual cultural, religious and socio-economic differences in people.
- 15.04 Utilize appropriate communicative processes.
- 16.0 DEMONSTRATE APPROPRIATE AND EFFECTIVE WRITTEN, ORAL AND NONVERBAL COMMUNICATION WITH PATIENTS AND THEIR FAMILIES, COLLEAGUES AND THE PUBLIC--The student will be able to:
- 16.01 Identify techniques of communication.
- 16.02 Express self clearly and concisely.
- 16.03 Develop alternative methods of communication as appropriate.
- 16.04 Utilize correct grammar, terminology, and diction.
- 16.05 Adjust level of communication for the listener/reader.
- 17.0 RECOGNIZE OWN STRENGTHS AND LIMITATIONS AND INTERPRET FOR OTHERS THEIR SCOPE AND FUNCTION--The student will be able to:
- 17.01 Demonstrate own awareness of his/her role.
- 17.02 Identify own physical limitations when managing the patient.
- 17.03 Identify scope of responsibility as it relates to patient care and departmental function.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Practical Nursing

CODE NUMBER: Secondary _____

Postsecondary PRN0990

Florida CIP H017.060500

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x _____ Other 13-15

CERTIFICATION COVERAGE: NURSE ED #5

PRAC NURSE 7

- I. **MAJOR CONCEPTS/CONTENT:** The program is designed to prepare students for employment as licensed practical nurses (10121010) or to provide supplemental training for a person previously or currently employed in this occupation. The program must be approved by the Florida State Board of Nursing so the graduate may take the examination to practice as a Licensed Practical Nurse.

The content includes, but is not limited to, theoretical instruction and clinical experience in medical, surgical, obstetric, pediatric, and geriatric nursing; theoretical instruction and clinical experience in both acute and long term care situations; theoretical instruction and clinical application of vocational role and function; personal, family and community health concepts; nutrition; human growth and development over the life span; body structure and function; interpersonal relationship skills, mental health concepts including pet facilitated therapy; pharmacology and administration of medications; legal aspects of practice; and current issues in nursing. Clinical experience should make up at least 40% of the total program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Simulated practice and clinical experiences are included as an integral part of this program.

Clinical Experience Rules:

- (1) Each student providing direct care to patients/clients in a health care agency shall be under the supervision of a faculty member. Faculty should be responsible for supervising students on no more than two units during one clinical instruction period.
- (2) No more than twelve students shall be assigned to a faculty member for supervision in providing direct care to patients/clients for any one clinical instruction period.
- (3) Faculty shall be physically present within the health care agency while students are engaged in providing direct care to patients/clients.
- (4) Faculty shall be immediately available by telephone to students engaged in an observational experience or assigned to family-community health experiences.
- (5) Clinical facilities utilized for clinical training by students of approved programs shall provide evidence satisfactory to the Board that they meet the following requirements:
 - (a) Current state licensure certification.

- (b) The director of nurses or person responsible for nursing services is a registered nurse currently licensed in Florida.
 - (c) The number and variety of patients are sufficient to meet clinical learning objectives of the nursing program.
 - (d) There is nursing personnel, sufficient in number currently licensed and appropriately qualified, to ensure that patients receive safe and effective care at all times.
 - (e) There are written job descriptions for all categories of nursing personnel which are used as a basis for assigning responsibilities.
 - (f) Appropriate references and current practice and procedure manuals are available on the unit where students receive experience.
- (6) Nursing programs shall seek prior approval from the Board for any clinical facility utilized for student clinical instruction.
- (7) It shall be the responsibility of the nursing program to obtain and maintain current contractual agreements with each agency utilized for student clinical training to ensure that the nursing program can provide the appropriate clinical experiences necessary to fulfill the requirements of these rules; and
- (8) When more than one nursing program is using an agency for student clinical experience, there shall be written documentation of cooperative planning among the programs and the agency.

III. SPECIAL NOTE: The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

Students must take a state licensing examination. Minimal acceptable performance for each graduating class on the licensing examination shall be determined by the Board. Board requirements shall not exceed the national average as published by the testing service of the National Council of State Boards of Nursing, Inc.

Program must comply with the State Board of Nursing rules, including faculty qualifications, number of students admitted, length of courses, etc. There may be no deviations from an approved plan of instruction without Board of Nursing approval.

The director of the practical nursing program shall be given time apart from classroom and clinical responsibilities sufficient to meet the administrative needs of the program.

Students who have successfully completed the program HO17.060200, Nursing Assisting, should be given appropriate recognition, such as advanced standing for demonstrating those competencies.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1300 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

- 01. Perform supervised management functions.
- 02. Provide personal patient care.
- 03. Perform comfort and safety functions.
- 04. Conduct nursing procedures.
- 05. Provide pre-operative and post-operative care.
- 06. Administer medication.
- 07. Perform aseptic techniques.
- 08. Care for maternal/newborn patient.
- 09. Implement nursing process for medical/surgical patients.
- 10. Use verbal and written communication.
- 11. Care for the pediatric patient.
- 12. Apply the principles of individual, family, and community health.

Practical Nursing - continued

13. Utilize principles of nutrition as related to health and disease.
14. Demonstrate legal and ethical responsibilities.
15. Demonstrate employability skills.
16. Care for geriatric patients.
17. Describe the anatomy and physiology of the human body.
18. Provide emergency care.
19. Compare/contrast growth and development throughout the life span.

01.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS--The student will be able to:

- 01.01 Demonstrate ability to supplement patient care plan.
- 01.02 Demonstrate ability to fill out charge slip.
- 01.03 Demonstrate ability to compile patient census.
- 01.04 Demonstrate ability to complete medical information release form.

02.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

- 02.01 Admit patient.
- 02.02 Develop inventory of patient's personal property.
- 02.03 Acquaint physically or mentally impaired patient with surroundings.
- 02.04 Transfer patient.
- 02.05 Discharge patient.
- 02.06 Assist conscious patient to maintain oral hygiene.
- 02.07 Administer oral hygiene to an unconscious patient.
- 02.08 Assist patient in using bedside commode.
- 02.09 Assist patient in using bedpan.
- 02.10 Assist patient in using urinal.
- 02.11 Assist patient with tub bath or shower.
- 02.12 Groom patient's hair.
- 02.13 Groom patient's nails.
- 02.14 Assist patient to dress.
- 02.15 Feed patient.
- 02.16 Give bed bath.
- 02.17 Give shampoo to bed patient.
- 02.18 Shave patient.
- 02.19 Give back rub.

03.0 PERFORM COMFORT AND SAFETY FUNCTIONS--The student will be able to:

- 03.01 Record patient's daily behavior.
- 03.02 Test patient's mental awareness.
- 03.03 Respond to emotional needs of terminally ill patient and family.
- 03.04 Adjust bed and siderails.
- 03.05 Transfer patient from bed to wheelchair using mechanical lifter.
- 03.06 Transfer patient to stretcher.
- 03.07 Turn bedridden patient.
- 03.08 Apply protective devices (vest, belt, wrist, and ankle mitt).
- 03.09 Apply comfort devices (footboard, overbed cradle, sandbag, alternating pressure mattress).
- 03.10 Assist patient to dangle.
- 03.11 Assist patient to walk.
- 03.12 Assist patient in crutch-walking.
- 03.13 Assist patient in using cane.
- 03.14 Assist patient in using walker.
- 03.15 Assist patient in using wheelchair.

04.0 CONDUCT NURSING PROCEDURES--The student will be able to:

- 04.01 Wash hands.
- 04.02 Make unoccupied/occupied and surgical bed.
- 04.03 Take patient's pulse and respiration.
- 04.04 Take patient's blood pressure.
- 04.05 Take patient's temperature.
- 04.06 Take patient's height and weight.
- 04.07 Logroll patient.
- 04.08 Monitor patient's emesis.
- 04.09 Assist with postmortem care.
- 04.10 Apply hot and cold applications.
- 04.11 Administer tepid bath.
- 04.12 Administer gavage feeding.
- 04.13 Apply anti-embolic hose.
- 04.14 Apply bandage.
- 04.15 Apply binders.

PRACTICAL NURSING - Continued

- 04.16 Position patient in cervical traction.
 - 04.17 Position patient in pelvic traction.
 - 04.18 Position patient in Buck's traction.
 - 04.19 Apply brace.
 - 04.20 Apply splints.
 - 04.21 Clean tong/pin site.
 - 04.22 Assist patient in range of motion exercises.
 - 04.23 Assist patient with sitz bath.
 - 04.24 Insert urinary catheter.
 - 04.25 Monitor catheter drainage system.
 - 04.26 Perform neurochecks.
 - 04.27 Remove retention catheter.
 - 04.28 Change ostomy dressing.
 - 04.29 Change ostomy pouch, bag, or appliance.
 - 04.30 Administer perineal care.
 - 04.31 Strain urine.
 - 04.32 Control external hemorrhage (bleeding).
 - 04.33 Connect nasogastric tube to suction machine.
 - 04.34 Give enema.
 - 04.35 Regulate intravenous (IV) infusion.
 - 04.36 Hang intravenous (IV) bottle and tubing.
 - 04.37 Monitor venipuncture site.
 - 04.38 Discontinue intravenous (IV) infusion.
 - 04.39 Monitor postoperative site.
 - 04.40 Assist postoperative patient in voiding.
 - 04.41 Administer oxygen.
 - 04.42 Set up vaporizer/humidifier.
 - 04.43 Instruct patient in breathing exercises.
 - 04.44 Clean inner cannula of tracheostomy.
 - 04.45 Suction tracheostomy.
 - 04.46 Maintain chest tubes.
 - 04.47 Suction patient's naso-oral-pharyngeal passages.
 - 04.48 Monitor post-myelogram patient.
 - 04.49 Irrigate urinary bladder (continous).
 - 04.50 Irrigate ear.
 - 04.51 Irrigate eye.
 - 04.52 Irrigate nasogastric tube.
 - 04.53 Irrigate vaginal canal.
 - 04.54 Irrigate wound.
 - 04.55 Apply local hot application.
 - 04.56 Collect gastric analysis specimen.
 - 04.57 Irrigate oral cavity.
 - 04.58 Irrigate urinary catheter.
 - 04.59 Irrigate colostomy.
 - 04.60 Test stool for occult blood.
 - 04.61 Collect stool specimen.
 - 04.62 Collect routine urine specimen.
 - 04.63 Collect clean-catch (midstream voided) urine specimen.
 - 04.64 Collect timed urine specimen.
 - 04.65 Collect sputum specimen.
 - 04.66 Collect and test urine for sugar and acetone.
 - 04.67 Obtain specimen from urinary drainage tubing.
 - 04.68 Measure specific gravity.
 - 04.69 Test a drop of blood for sugar.
 - 04.70 Assist with physical examination.
 - 04.71 Assist with diagnostic special procedures.
 - 04.72 Assist with patient having laboratory and/or radiological diagnostic procedures.
 - 04.73 Provide care for assigned patient.
- 05.0 PROVIDE PRE-OPERATIVE AND POST-OPERATIVE CARE--The student will be able to:
- 05.01 Shave and prep patient.
 - 05.02 Ready patient for operating room.
 - 05.03 Prepare patient's medical records for operating room.
 - 05.04 Check medication times three.
 - 05.05 Provide pre-operative teaching.
 - 05.06 Administer post-operative care.
- 06.0 ADMINISTER MEDICATION--The student will be able to:
- 06.01 Administer pre-operative medication.
 - 06.02 Administer topical medication.

PRACTICAL NURSING - Continued

- 06.03 Administer inhalants.
- 06.04 Administer oral medication.
- 06.05 Administer sublingual medication.
- 06.06 Administer rectal medication.
- 06.07 Administer vaginal medication.
- 06.08 Administer subcutaneous (sub Q) injection.
- 06.09 Administer eye medications.
- 06.10 Administer ear drops.
- 06.11 Administer nose drops.
- 06.12 Administer intramuscular (IM) injection.
- 06.13 Administer intradermal injection.
- 06.14 Instill bladder medication.
- 06.15 Monitor fluid intake and output (I&O).
- 06.16 Count controlled substances.

07.0 PERFORM ASEPTIC TECHNIQUES--The student will be able to:

- 07.01 Apply sterile gloves and remove.
- 07.02 Apply sterile dressing.
- 07.03 Dress burns.
- 07.04 Open sterile equipment and supplies.
- 07.05 Set up isolation unit.
- 07.06 Serve isolation food tray.
- 07.07 Put on and remove isolation garments.
- 07.08 Collect specimen from isolated patient.
- 07.09 Remove materials from isolation unit.

08.0 CARE FOR MATERNAL/NEWBORN PATIENT--The student will be able to:

- 08.01 Admit patient to labor and delivery.
- 08.02 Wash hands for surgical scrub.
- 08.03 Monitor fetal heart tones.
- 08.04 Perform perineal care.
- 08.05 Monitor contractions.
- 08.06 Prepare patient for Caesarean.
- 08.07 Provide post-partum care.
- 08.08 Provide breast care.
- 08.09 Instruct mother in infant care.
- 08.10 Discharge obstetric patient.
- 08.11 Describe care during delivery process.
- 08.12 Describe prenatal care.
- 08.13 Bathe infant.
- 08.14 Instill ophthalmic medication.
- 08.15 Carry infant.
- 08.16 Collect urine specimen from infant.
- 08.17 Assist with circumcision.
- 08.18 Apply dressing to circumcision site.
- 08.19 Assist with Apgar score.
- 08.20 Weigh and measure infant.
- 08.21 Suction infant's respiratory passage with bulb syringe.
- 08.22 Identify infant using mother's bracelet.
- 08.23 Feed infant.
- 08.24 Clean infant genitalia and diaper.

09.0 IMPLEMENT NURSING PROCESS FOR MEDICAL/SURGICAL PATIENTS--The student will be able to:

- 09.01 Identify signs and symptoms, diagnostic tests and medications for each of the body systems.
- 09.02 Care for the patient with respiratory disease/disorder.
- 09.03 Care for the patient with cardio-vascular disease/disorder.
- 09.04 Care for the patient with muscular-skeletal disease/disorder.
- 09.05 Care for the patient with nervous sensory disease/disorder.
- 09.06 Care for the patient with reproductive disease/disorder.
- 09.07 Care for the patient with urinary disease/disorder.
- 09.08 Care for the patient with digestive disease/disorder.
- 09.09 Care for the patient with endocrine disease/disorder.
- 09.10 Identify common alterations in patient's with psychological disorder.

10.0 USE VERBAL AND WRITTEN COMMUNICATION--The student will be able to:

- 10.01 Provide emotional support.
- 10.02 Receive and give oral report of patient's status.

PRACTICAL NURSING - Continued

- 10.03 Chart nursing care.
- 10.04 Prepare incident report.
- 10.05 Demonstrate computer literacy.

- 11.0 CARE FOR THE PEDIATRIC PATIENT--The student will be able to:
 - 11.01 Adapt nursing care for the pediatric patient.
 - 11.02 Apply safety principles for the pediatric patient.
 - 11.03 Implement prescribed nutritional requirement.
 - 11.04 Provide diversion and recreational activities.

- 12.0 APPLY THE PRINCIPLES OF INDIVIDUAL, FAMILY, AND COMMUNITY HEALTH--The student will be able to:
 - 12.01 Describe measures to maintain personal health.
 - 12.02 Discuss family roles and their significances to health.
 - 12.03 List community resources for individual and family health.

- 13.0 UTILIZE PRINCIPLES OF NUTRITION AS RELATED TO HEALTH AND DISEASE--The student will be able to:
 - 13.01 Describe special diets.
 - 13.02 Explain regional, cultural, and religious food patterns.
 - 13.03 Prepare a food plan.
 - 13.04 List factors which must be considered when purchasing food.
 - 13.05 Identify nutrients and food groups.

- 14.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:
 - 14.01 Explain the patient's "Bill of Rights".
 - 14.02 Identify legal and ethical responsibilities regarding the patients' chart, correcting errors, confidentiality, transcribing orders, patient contact and job description.
 - 14.03 Follow institutional policies.
 - 14.04 Identify the components of the Nurse Practice Act.
 - 14.05 Demonstrate ability to prepare legal forms.
 - 14.06 Describe the role of each team member.

- 15.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
 - 15.01 Conduct a job search.
 - 15.02 Secure information about a job.
 - 15.03 Identify documents that may be required when applying for a job.
 - 15.04 Complete a job application.
 - 15.05 Demonstrate competence in job interview techniques.
 - 15.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 15.07 Identify acceptable work habits.
 - 15.08 Demonstrate knowledge of how to make job changes appropriately.
 - 15.09 Demonstrate acceptable employee health habits.

- 16.0 CARE FOR GERIATRIC PATIENTS--The student will be able to:
 - 16.01 Adapt nursing care/safety principles as related to the elderly.
 - 16.02 Describe general characteristics, particular needs and problems of older persons.
 - 16.03 Identify attitudes and living habits which promote positive mental and physical health for the elderly.
 - 16.04 Distinguish between fact and fallacy about the aging process.
 - 16.05 Identify signs and symptoms of common disorders/diseases.
 - 16.06 Identify community resources and services available to older persons.
 - 16.07 Describe the feelings, reactions, and needs of the dying persons, family members and the Practical Nurse.

- 17.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY--The student will be able to:
 - 17.01 Identify the structure and function of the respiratory system.
 - 17.02 Identify the structure and function of the cardio-vascular system.
 - 17.03 Identify the structure and function of the muscular-skeletal system.

PRACTICAL NURSING - Continued

- 17.04 Identify the structure and function of the nervous sensory system.
 - 17.05 Identify the structure and function of the reproductive system.
 - 17.06 Identify the structure and function of the urinary system.
 - 17.07 Identify the structure and function of the digestive system.
 - 17.08 Identify the structure and function of the endocrine system.
- 18.0 PROVIDE EMERGENCY CARE--The student will be able to:
- 18.01 Demonstrate CPR.
 - 18.02 Insert oral airway (adult).
 - 18.03 Assist with emergency evacuation drill.
 - 18.04 Demonstrate first aid skills.
- 19.0 COMPARE/CONTRAST GROWTH AND DEVELOPMENT THROUGHOUT THE LIFE SPAN--The student will be able to:
- 19.01 Trace characteristics of development
 - a. from conception to birth
 - b. from birth through preschool
 - c. from school age through adolescence
 - d. of the adult.
 - 19.02 Identify characteristics of development
 - a. from conception to birth
 - b. from birth through preschool
 - c. from school age through adolescence
 - d. of the adult.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Psychiatric Technician

CODE NUMBER: Secondary _____

Postsecondary PST0990

Florida CIP HO18.110600

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: PRAC NURSE 7

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as psychiatric aides (70061011) or psychiatric technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, nursing assistance skills, physical assessment, depression, schizophrenia, personality disorders, charting, obsessive compulsive behavior, anxiety values, crisis intervention, coma, hallucinations, organic brain syndrome, manic/depressive illness, electro convulsive therapy, group therapy, medications, adjunctive therapy, employability skills, leadership and human relations skills, and health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Laboratory activities and clinical experiences are an integral part of this program which should be correlated with the didactic instruction.
- III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 7.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 450 hours.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:
01. Participate in observing patients' physical and behavioral reactions to medications.
 02. Provide emergency services through crisis intervention techniques and/or medications as prescribed.
 03. Conduct individual, group, remotivation, family and drug discussion groups to facilitate patients' rehabilitation.
 04. Participate in home visits and crisis intervention to prevent hospitalization or rehospitalization.

Psychiatric Technician - continued

05. Participate as a member of a multi-disciplinary team in the planning and implementation of treatment for individual patients.
06. Provide services to staff for treatment programs at the ward level in terms of therapeutic communities and patient government.
07. Demonstrate employability skills.
08. Perform nursing assisting skills.
09. Use human relations skills in motivating others.

- 01.0 PARTICIPATE IN OBSERVING PATIENTS' PHYSICAL AND BEHAVIORAL REACTIONS TO MEDICATIONS--The student will be able to:
- 01.01 List the observable physical signs indicating a medication reaction which should be reported.
 - 01.02 Discuss behavioral changes which might occur from medications other than expected changes.
 - 01.03 Seek assistance and initiate resuscitation measures when appropriate.
 - 01.04 Report completely and accurately to team leader or head nurse.
- 02.0 PROVIDE EMERGENCY SERVICES THROUGH CRISIS INTERVENTION TECHNIQUES AND/OR MEDICATIONS AS PRESCRIBED--The student will be able to:
- 02.01 Recognize suicidal behavior as a cry for help and provide emergency psychologic aid by establishing open communication, reminding the patient of his identity, and help him to identify the problem which precipitated the crisis.
 - 02.02 Offer constructive help with the problem.
 - 02.03 Remind the patient that others care.
 - 02.04 Record/report events accurately.
 - 02.05 Assist with medication if ordered.
 - 02.06 Maintain professional growth through attending conferences, workshops and inservice programs, and reading current literature on this topic.
 - 02.07 Discuss the methods of suicide.
 - 02.08 Observe suicidal patient and note the hazards.
- 03.0 CONDUCT INDIVIDUAL, GROUP, REMOTIVATION, FAMILY AND DRUG DISCUSSION GROUPS TO FACILITATE PATIENTS' REHABILITATION--The student will be able to:
- 03.01 Demonstrate sensitivity to patient's verbal and non verbal communication, changes in thought processes, mood and behavior.
 - 03.02 Document clinical condition of patient's progress and responses to therapy and patient teaching.
 - 03.03 Execute skillful interactions.
 - 03.04 Maintain the professional attitude of a therapeutic environment.
 - 03.05 Discuss four kinds of involuntary admissions.
 - 03.06 Discuss elopement precautions, methods, and patient observation.
 - 03.07 Describe four techniques used in a physical assessment.
 - 03.08 Examine the patient's head and neck and list the pertinent items to observe.
 - 03.09 List causes of changes in skin color, moisture, texture, temperature, mobility, and turgor.
 - 03.10 Describe normal pupillary reactions--direct and consensual constriction and accomodation.
- 04.0 PARTICIPATE IN HOME VISITS AND CRISIS INTERVENTION TO PREVENT HOSPITALIZATION OR REHOSPITALIZATION--The student will be able to:
- 04.01 Accept this expanded role as delegated by the head nurse.
 - 04.02 Accompany patient to home if requested by head nurse.
 - 04.03 Accompany the psychiatric nurse or physician to a patients home if assigned.
 - 04.04 Assist in planned care.
- 05.0 PARTICIPATE AS A MEMBER OF A MULTI DISCIPLINARY TEAM IN THE PLANNING AND IMPLEMENTATION OF TREATMENT FOR INDIVIDUAL PATIENTS--The student will be able to:
- 05.01 Relate unit problems and needs to the team leader, or head nurse as appropriate.
 - 05.02 Contribute to the formulation of unit goals for individual patient.
 - 05.03 Share in the planning--decision making through staff meetings.
 - 05.04 Support hospital policies and procedures as well as use the procedure manual for the psychiatric unit.

PSYCHIATRIC TECHNICIAN - Continued

- 05.05 Display understanding of the limitations of the role of the psychiatric technician.
 - 05.06 Display cooperation when asked to work other shifts or change assignments.
 - 05.07 Demonstrate ability to function independently without constant supervision.
 - 05.08 Show respect for coworkers and be able to interpret the organizational chart.
 - 05.09 Maintain own proper physical, emotional, and mental health through proper application of body mechanics giving constructive criticism, and utilizing appropriate coping mechanisms.
- 06.0 PROVIDE SERVICES TO STAFF FOR TREATMENT PROGRAMS AT THE WARD LEVEL IN TERMS OF THERAPEUTIC COMMUNITIES AND PATIENT GOVERNMENT--The student will be able to:
- 06.01 Promote a healthy interpersonal relationship with peers-show respect and recognition.
 - 06.02 Initiate or assist in the orientation, education and training of new persons on the unit.
 - 06.03 Facilitate positive communication among peers.
 - 06.04 Give pertinent report to other members of the health care team regarding assigned patient care.
 - 06.05 Demonstrate understanding of the condition of assigned patients.
 - 06.06 Collaborate with other team members in proper application of the nursing process (assessment, planning, implementation and evaluation).
 - 06.07 Adhere to proper dress code.
 - 06.08 List and explain four objectives of a health history.
- 07.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 07.01 Conduct a job search.
 - 07.02 Secure information about a job.
 - 07.03 Identify documents that may be required when applying for a job.
 - 07.04 Complete a job application.
 - 07.05 Demonstrate competence in job interview techniques.
 - 07.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 07.07 Identify acceptable work habits.
 - 07.08 Demonstrate knowledge of how to make job changes appropriately.
 - 07.09 Demonstrate acceptable employee health habits.
- 08.0 PERFORM NURSING ASSISTING SKILLS--The student will be able to:
- 08.01 Take and record vital signs.
 - 08.02 Weigh and measure patient.
 - 08.03 Record intake and output.
 - 08.04 Perform urine sugar and acetone tests.
 - 08.05 Perform catheter care.
 - 08.06 Apply restraints as ordered.
 - 08.07 Perform decubitus care.
 - 08.08 Perform bed baths and assist patient with tub or shower.
 - 08.09 Make beds.
 - 08.10 Transfer patients.
 - 08.11 Assist with electroconvulsive therapy (ECT).
 - 08.12 Give pre and post ECT care.
 - 08.13 Use proper body mechanics.
 - 08.14 Establish good rapport with patients and others.
 - 08.15 Discuss the use of the seclusion room.
 - 08.16 Formulate a care plan consulting directly with team leader.
 - 08.17 Discuss the following behaviors: aggressive patient, depressed patient, withdrawn patient, hallucinating patient, delusional patient, suspicious patient, anxious patient, manipulative patient.
- 09.0 USE HUMAN RELATIONS SKILLS IN MOTIVATING OTHERS--The student will be able to:
- 09.01 Intervene appropriately in nursing care rather than rely on a rigidly structured plan of care.
 - 09.02 Ensure quality patient care by developing good rapport and understanding of patient needs.

PSYCHIATRIC TECHNICIAN - Continued

- 09.03 Recognize that all human behavior is meaningful and goal directed.
- 09.04 Promote effective communication through skillful interviewing techniques and base assessments and therapeutic decisions on an understanding of the patients psychodynamics.
- 09.05 Demonstrate skill in using a one to one relationship with the patient based on an understanding of psychodynamics.
- 09.06 Obtain meaningful information leading to an appropriate nursing intervention.
- 09.07 State three behaviors which are essential in an effective nurse/patient relationship.
- 09.08 Differentiate between direct and open-ended questioning.
- 09.09 Listen carefully and non-judgmentally.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Radiation Protection Technology

CODE NUMBER: Secondary _____

Postsecondary RHT0990

Florida CIP HO41.020300

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: TEC ELEC @7 TEC X-RAY 7 TEC MED @7

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as engineering technicians, other (10081898), radiation monitors (199.167-010), scientific helpers (199.364-019), or radiation protection technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, nuclear and radiation physics; detection, control and measurement of radioactive materials; legal and ethical aspects; worker and public protection against radioactivity; health and safety including CPR; and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Laboratory and field activities incorporate practical application of scientific principles and are a required portion of this program.
- III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

After three years experience in the nuclear power industry, graduates are eligible to take the certification examination given by the National Registry for Radiation Protection Technicians provided security requirements have been met.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 12.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree .

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:
01. Demonstrate knowledge of protection standards and professional aspects related to the use of fissionable and radioactive materials.
 02. Demonstrate knowledge of various communication skills.

Radiation Protection Technology - Continued

03. Demonstrate knowledge of basic and applied mathematics and science required for understanding and practice of radiological protection techniques.
04. Demonstrate knowledge of detection, sources, decay, interaction and measurement of radioactivity.
05. Demonstrate knowledge of worker and public protection against the biological effects and risks of exposure to ionizing radiation.
06. Demonstrate knowledge of the handling of radioactive materials and radioactive contamination control.
07. Demonstrate knowledge of radiation exposure control.
08. Demonstrate knowledge of calibration and use of instruments to measure and detect radiation.
09. Demonstrate knowledge of environmental radiation monitoring and control.
10. Demonstrate knowledge of nuclear power plant technology and radiation control procedures.
11. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Radiation Protection
Technology

POSTSECONDARY NUMBER: RHT0990

01.0 DEMONSTRATE KNOWLEDGE OF PROTECTION STANDARDS AND PROFESSIONAL ASPECTS RELATED TO THE USE OF FISSIONABLE AND RADIOACTIVE MATERIALS--The student will be able to:

- 01.01 Demonstrate knowledge of the professional responsibilities of persons using fissionable and radioactive materials.
- 01.02 Demonstrate knowledge of radiation protection standards and guidelines and identify related regulatory and advisory organizations.
- 01.03 Demonstrate knowledge of Nuclear Regulatory Commission (NRC) and Department of Transportation (DOT) standards and their implementation.

02.0 DEMONSTRATE KNOWLEDGE OF VARIOUS COMMUNICATION SKILLS--The student will be able to:

- 02.01 Demonstrate acceptable oral communication.
- 02.02 Demonstrate written communication through radiation work permits and other written records.
- 02.03 Practice acceptable interpersonal relations skills.

03.0 DEMONSTRATE KNOWLEDGE OF BASIC AND APPLIED MATHEMATICS AND SCIENCE REQUIRED FOR UNDERSTANDING AND PRACTICE OF RADIOLOGICAL PROTECTION TECHNIQUES--The student will be able to:

- 03.01 Practice basic mathematics, metric conversion and graphing skills.
- 03.02 Use exponents, radicals, scientific notation and manipulate algebraic expressions as required in radiological protection technology.
- 03.03 Demonstrate knowledge of chemical structures, properties and the solution of simple chemical equations.

04.0 DEMONSTRATE KNOWLEDGE OF DETECTION, SOURCES, DECAY, INTERACTION AND MEASUREMENT OF RADIOACTIVITY--The student will be able to:

- 04.01 Characterize alpha particles, beta particles, gamma rays and neutrons.
- 04.02 Demonstrate knowledge of radioactivity and radioactive decay.
- 04.03 Identify and quantify major sources of background radiation and those sources of radiation routinely found in nuclear power plants.
- 04.04 Identify radiological quantities, differentiate between dose and dose rate and convert radiological units to respective subunits.
- 04.05 Demonstrate knowledge of the principles of radiation detection and measurement.
- 04.06 Apply exponential buildup and decay in solving radioactive decay and gamma ray shielding problems.
- 04.07 Demonstrate knowledge of isotopes, mass-energy equivalence, nuclear forces, binding energy, and simple nuclear equations.
- 04.08 Demonstrate knowledge of fission and fusion and related yields.
- 04.09 Demonstrate knowledge of the statistical nature of radioactive decay, calculation of minimum detectable activity and the importance of the statistical accuracy of measurement.

05.0 DEMONSTRATE KNOWLEDGE OF WORKER AND PUBLIC PROTECTION AGAINST THE BIOLOGICAL EFFECTS AND RISKS OF EXPOSURE TO IONIZING RADIATION--The student will be able to:

- 05.01 Demonstrate knowledge of the biological effects and risks associated with exposure to ionizing radiation.
- 05.02 Describe the acute radiation syndrome.
- 05.03 Describe the somatic and genetic effects of radiation exposure.
- 05.04 Identify the long-term health risks associated with low-level radiation exposure as related to personal and public health concerns.

- 05.05 Estimate dose to internal organs from swallowing and breathing radioactivity.
- 05.06 Define maximum permissible concentration in air (MPCa) of airborne activity.
- 05.07 Discuss biological half-life and effective half-life.

06.0 DEMONSTRATE KNOWLEDGE OF THE HANDLING OF RADIOACTIVE MATERIALS AND RADIOACTIVE CONTAMINATION CONTROL--The student will be able to:

- 06.01 Demonstrate knowledge of dangers engendered by and techniques for decontamination of spilled and mishandled radioactive materials.
- 06.02 Identify the sources of radioactive contamination.
- 06.03 Demonstrate proper survey techniques.
- 06.04 Demonstrate proper techniques and procedures for limiting the spread of radioactive contamination.
- 06.05 Post contamination areas properly with required signs.
- 06.06 Identify, plan contamination monitoring systems, related operating principles and capabilities.
- 06.07 Properly select, don and remove anticontamination clothing.
- 06.08 Demonstrate knowledge of radioactive material storage and related procedures.
- 06.09 Implement regulatory procedures for shipping and receiving radioactive materials.
- 06.10 Describe solid waste compactor operations and related problems.
- 06.11 Describe controls governing radiological waste systems and contaminated laundry.
- 06.12 Discuss procedures for minimizing solid and liquid radioactive waste.
- 06.13 Demonstrate knowledge of the hazards associated with waste solidification.

07.0 DEMONSTRATE KNOWLEDGE OF RADIATION EXPOSURE CONTROL--The student will be able to:

- 07.01 Demonstrate knowledge and use of selected respiratory equipment.
- 07.02 Enter confined spaces and work under subatmospheric conditions when applicable.
- 07.03 Define personnel dosimetry requirements for gamma rays, beta particles and neutrons and identify related long term effects of this exposure.
- 07.04 Explain the operating characteristics of dosimeters worn by personnel and relative advantages and disadvantages.
- 07.05 Discuss personnel dosimetry administrative control and exposure records.
- 07.06 Utilize the principles of time, distance, and shielding to reduce personnel exposure.

08.0 DEMONSTRATE KNOWLEDGE OF CALIBRATION AND USE OF INSTRUMENTS TO MEASURE AND DETECT RADIATION--The student will be able to:

- 08.01 Describe the operation and characteristics of radiation detectors, dosimeters and single and multi-channel analyzers.
- 08.02 Describe the factors affecting instrument efficiency and calculation of efficiency.
- 08.03 Differentiate between radiation field survey instruments and radioactive contamination survey instruments.
- 08.04 Perform gamma ray shielding calculations.
- 08.05 Convert meter reading to radioactivity levels.
- 08.06 Demonstrate the use of portable air sampling equipment.
- 08.07 Describe the operation of CAM's, ARM's, hand and foot monitors and portal monitors.
- 08.08 Operate and calibrate radiological survey and monitoring instruments.

09.0 DEMONSTRATE KNOWLEDGE OF ENVIRONMENTAL RADIATION MONITORING AND CONTROL--The student will be able to:

- 09.01 Identify ventilation and filtration systems in a nuclear power plant.
- 09.02 Identify techniques for reducing airborne activity.
- 09.03 Identify airborne radionuclides in a nuclear power plant.
- 09.04 Demonstrate knowledge of environmental sampling and evaluation.

RADIATION PROTECTION TECHNOLOGY - Continued

10.0 DEMONSTRATE KNOWLEDGE OF NUCLEAR POWER PLANT TECHNOLOGY AND RADIATION CONTROL PROCEDURES--The student will be able to:

- 10.01 Demonstrate knowledge of plant safety and containment of radioactivity.
- 10.02 Demonstrate knowledge of the purpose and major components of a nuclear power plant.
- 10.03 Describe flow paths and interactions of plant systems.
- 10.04 Demonstrate knowledge of nuclear power plant operations, maintenance and operating procedures.
- 10.05 Identify radiological conditions which could result in accidents.
- 10.06 Demonstrate knowledge of radiological emergency procedures.
- 10.07 Demonstrate knowledge of incident evaluation and control.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required when applying for a job.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Radiation Therapy Technology

CODE NUMBER: Secondary _____

Postsecondary RAT0990

Florida CIP H017.020901

SECONDARY

SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other 13-15

CERTIFICATION COVERAGE: TEC X RAY 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as x-ray technicians (10120801), radiologic technologists (078.362-026), or radiation therapists, or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the American Medical Association Committee on Allied Health Education and Accreditation to enable graduates to become candidates for examination in radiation therapy technology by the American Registry of Radiologic Technologists. It must also be approved by the Department of Health and Rehabilitative Services so that the graduate is eligible for licensure in Florida as a certified Radiation Therapy Technologist.

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Therapist, uses ionizing radiation to treat disease. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform radiation therapy procedures with skill and understand and practice the art and science of radiation therapy technology; to administer the prescribed radiation therapy treatments of the highest caliber, thereby providing the patient treatments of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient; to provide radiation protection to the patient, self and health care team; to work with the health care team to improve radiotherapeutic health care in the hospital and community; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY/CLINICAL ACTIVITIES: Radiation therapy centers which provide clinical experiences for students must meet the criteria for major cancer management centers published by the American College of Radiology. Students must be under the supervision of a qualified Radiation Therapy Technologist, RTT (ARRT) and radiation therapist.

Clinical education has been established for the students in these programs. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical education component of the program. After completion of the prerequisite practice of radiotherapeutic procedures, students indicate readiness for evaluation in a specific category to the clinical affiliate or faculty in the assigned clinical education center.

Clinical education and laboratory activities facilitate student rotations to provide them equitable opportunity to achieve the program clinical objectives utilizing multiple affiliates. The resulting clinic rotation

and laboratory practicum provides students with patient treatment techniques utilizing a variety of megavoltage equipment, radiation therapy patient care procedures, localization and treatment, radiation therapy physics including dosimetry, machine calibration, quality assurance, handling of sealed radioactive sources and protection, follow up, patient care and patient recordkeeping.

- III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization. Student membership in the professional organization, Florida Society of Radiologic Technologists, and the local radiation therapy technology society is encouraged.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Deliver a planned course of radiation therapy.
02. Verify the mathematical accuracy of the prescription.
03. Maintain daily records and document technical details of the treatment administered.
04. Observe the clinical progress of the patient undergoing radiation therapy; recognize the first signs of any complication; and determine when treatment should be withheld until a physician may be consulted.
05. Provide patient care and comfort essential to radiation therapy procedures.
06. Detect equipment malfunctions; report same to the proper authority; and know the safe limits of equipment operation.
07. Apply the rules and regulations for radiation safety; detect any radiation hazards; and maintain control in the event of a radiation accident.
08. Understand the function of equipment and utilize equipment to its full potential.
09. Demonstrate the use of all treatment accessories.
10. Construct immobilization and beam-directional devices and prepare brachytherapy molds.
11. Assist in the preparation of brachytherapy sources.
12. Assist the physicist in calibration of equipment and in treatment planning procedures.
13. Participate in the patient follow-up program and in recording statistical data.
14. Demonstrate employability skills.

01.0 DELIVER A PLANNED COURSE OF RADIATION THERAPY--The student will be able to:

- 01.01 Orient patient to the planned treatment procedure and give emotional support.
- 01.02 Identify patient scheduled for treatment by arm band, photograph, or verbally and help patient onto and off from treatment table with the aid of assistants, when necessary, using proper body mechanics to avoid injury to patient or technologist.
- 01.03 Position patient to reproduce set-up indicated in the treatment chart, using positioning aids and immobilization devices.
- 01.04 Position treatment machine to reproduce set-up indicated by the approved treatment plan.
- 01.05 Set appropriate controls on treatment machine console (e.g., modality, energy, monitor units, time) and activate machine to deliver prescribed treatment indicated on treatment plan.
- 01.06 Discuss with physician any questions concerning patient's prescription.

02.0 VERIFY THE MATHEMATICAL ACCURACY OF THE PRESCRIPTION--The student will be able to:

- 02.01 Calculate the number of monitor units/exposure time for each treatment session to achieve the prescribed dose indicated by the physician, taking into account such factors as the energy of the beam, number of and orientation of the beam(s), SSD or SAD, depth of tumor, patient thickness, size and shape of portal, use of wedges, et cetera.
- 02.02 Record factors used in the calculation of monitor units/exposure time onto treatment chart to allow checking of calculations for correctness.
- 02.03 Recognize if proposed treatment plan appears to deliver inappropriate dose to critical structures in order to alert the physician.

03.0 MAINTAIN DAILY RECORDS AND DOCUMENT TECHNICAL DETAILS OF THE TREATMENT ADMINISTERED--The student will be able to:

- 03.01 Obtain and process verification radiographs for documentation of accuracy of field position.
- 03.02 Set up preliminary treatment field and take a radiograph with the field marked by collimator wires, solder wire, or lead ladders taped to the patient's skin.
- 03.03 Record information on treatment chart, describing the conditions used in the simulation, to aid in their reproduction (e.g., patient position, technique and positioning devices) on the treatment machine.

04.0 OBSERVE THE CLINICAL PROGRESS OF THE PATIENT UNDERGOING RADIATION THERAPY; RECOGNIZE THE FIRST SIGNS OF ANY COMPLICATION; AND DETERMINE WHEN TREATMENT SHOULD BE WITHHELD UNTIL A PHYSICIAN MAY BE CONSULTED--The student will be able to:

- 04.01 When requested, measure and record vital signs (blood pressure, respiratory rate, pulse rate and temperature).
- 04.02 Schedule patient for blood studies and record result (e.g., platelets, WBC, PVC (HCT)) on treatment chart to provide record of effects of radiation on patient during course of treatment, and report abnormal results to physician.
- 04.03 Observe and/or question patient regarding nutritional status offering dietary hints or referring patient to appropriate personnel for management,
- 04.04 Observe and question patient about any side effects or problems he/she may be experiencing, and notify physician.

05.0 PROVIDE PATIENT CARE AND COMFORT ESSENTIAL TO RADIATION THERAPY PROCEDURES--The student will be able to:

- 05.01 Answer patient's questions regarding treatment related topics or refer to the physician when inappropriate for RTT to answer.
- 05.02 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen tanks) to avoid endangering the patient during the therapy procedure using knowledge of such hospital apparatus.
- 05.03 Educate patient concerning proper skin care of treatment area(s).
- 05.04 Identify patient scheduled for simulation by arm band, photograph, or verbally and help patient onto and off from simulator table with the aid of assistants, when necessary, using proper body mechanics to avoid injury to patient or technologist.

06.0 DETECT EQUIPMENT MALFUNCTIONS; REPORT SAME TO THE PROPER AUTHORITY; AND KNOW THE SAFE LIMITS OF EQUIPMENT OPERATION--The student will be able to:

- 06.01 Warm up treatment machines and/or simulators and check all safety and operation procedures according to manufacturer's operating manual for possible malfunction.
- 06.02 Monitor console of treatment machine to spot any malfunctioning of equipment during treatment using indicators on machine, and take appropriate action when necessary to assure safety of patient and personnel.
- 06.03 Maintain treatment machines and accessories to minimize necessary interruptions in treatment due to mechanical breakdown.

07.0 APPLY THE RULES AND REGULATIONS FOR RADIATION SAFETY; DETECT ANY RADIATION HAZARDS; AND MAINTAIN CONTROL IN THE EVENT OF RADIATION ACCIDENT--The student will be able to:

- 07.01 Wear a monitoring device while on duty to obtain a record of radiation exposure over a period of time.
- 07.02 Protect workers and others in the area from radiation exposure by closing door to treatment room to activate interlock.
- 07.03 Monitor patient visually (directly or indirectly) and by intercommunication system to insure patient's safety and accuracy of treatment.

08.0 UNDERSTAND THE FUNCTION OF EQUIPMENT AND UTILIZE EQUIPMENT TO ITS FULL POTENTIAL--The student will be able to:

- 08.01 Position patient on simulator table in proper orientation to the simulator using positioning aids and immobilization devices.
- 08.02 Assist physician in localizing tumor volume and critical organs using radiographic techniques, with or without contrast media.
- 08.03 Process films to produce finished radiographs and have physician approve treatment (field) area indicated in film.

09.0 DEMONSTRATE THE USE OF ALL TREATMENT ACCESSORIES--The student will be able to:

- 09.01 Assist physician in determining optimum fields to cover volume of interest utilizing knowledge of shape of field, gantry angle, blocks, et cetera.
- 09.02 Take contours of body parts for use in treatment planning using methods or materials such as solder wire, pin device, pantograph, CT, et cetera.
- 09.03 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen masks) to avoid endangering the patient during procedure, using knowledge of such hospital apparatus.

10.0 CONSTRUCT IMMOBILIZATION AND BEAM DIRECTIONAL DEVICES AND PREPARE BRACHYTHERAPY MOLDS--The student will be able to:

- 10.01 When procedure requires, manufacture individualized immobilization devices to aid in the replication of the treatment set-up (e.g., bite blocks, molds, plaster shells).
- 10.02 When appropriate, measure and record information necessary to fabricate blocks or accessories required for treatment.
- 10.03 Prepare custom blocks for use in shaping treatment fields by cutting lead blocks or using molten metal techniques.

RADIATION THERAPY TECHNOLOGY - Continued

11.0 ASSIST IN THE PREPARATION OF BRACHYTHERAPY SOURCES--The student will be able to:

- 11.01 Take placement radiographs of implants to be used in dose calculation and placement verification according to protocol.
- 11.02 Assist with measurement and recording of the necessary parameters for calculation of the dose to be delivered.
- 11.03 Assist with brachytherapy using knowledge of radionuclides employed and interstitial and intracavitary applications as integrated into the patient treatment plan.

12.0 ASSIST THE PHYSICIST IN CALIBRATION OF EQUIPMENT AND IN TREATMENT PLANNING PROCEDURES--The student will be able to:

- 12.01 Check dose rate by measuring radiation dose reading at standard distance and standard conditions, and then compare with proper standard using appropriate radiation measuring devices (e.g., Victoreen Tumble Chamber).
- 12.02 Perform light field test on treatment machine to check alignment of collimator light and cross hairs with treatment beam by setting a standard field size, exposing a radiograph and physically measuring the field size recorded on the radiograph.
- 12.03 Check rotation by setting gantry so it goes through complete arc.

13.0 PARTICIPATE IN THE PATIENT FOLLOW UP PROGRAM AND IN RECORDING STATISTICAL DATA--The student will be able to:

- 13.01 Assist physician with the physical examinations of patients (e.g., preparing patient, examination room, instruments).
- 13.02 Clean, wash, disinfect and/or sterilize facility and equipment, and dispose of contaminated items in preparation for next patient.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 14.01 Conduct a job search.
- 14.02 Secure information about a job.
- 14.03 Identify documents that may be required when applying for a job.
- 14.04 Complete a job application.
- 14.05 Demonstrate competence in job interview techniques.
- 14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 14.07 Identify acceptable work habits.
- 14.08 Demonstrate knowledge of how to make job changes appropriately.
- 14.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Radiographer

CODE NUMBER: Secondary _____

Postsecondary RTE0990

Florida CIP HO17.020900

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational

x Other 13-15

CERTIFICATION COVERAGE: TEC X RAY 7

- I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as X-ray technicians (10120801), radiologic technologists (078.362-026), and radiographers, or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the American Medical Association Committee on Allied Health Education and Accreditation. The program must be approved by the Department of Health and Rehabilitative Services so that the graduate is eligible for licensure in Florida as a Certified Radiologic Technologist.

Radiographers provide patient services using imaging modalities, as directed by physicians qualified to order and/or perform radiologic procedures. Radiographers usually provide patient care essential to radiologic procedures, including exercising judgment when performing medical imaging procedures. When providing patient services, the radiographer adheres to the principles of radiation protection for the patient, self, and others.

Radiographers accurately demonstrate anatomical structures on various imaging receptors by knowledge of anatomy, positioning, radiographic technique, and radiation protection. Radiographers must also be able to recognize emergency patient conditions and initiate lifesaving first aid. Additional duties may include performing quality assurance, processing film, and keeping patient records. Radiographers may be required to perform some of these duties at the patient's bedside or in the operating room.

The content includes, but is not limited to, introduction to radiography, medical ethics and law, medical terminology, methods of patient care, human structure and function, radiographic procedures, principles of radiographic exposure, imaging equipment, radiographic film processing, evaluation of radiographs, radiation physics, principles of radiation protection, principles of radiation biology, radiographic pathology, introduction to quality assurance, introduction to computer literacy, and clinical education. The curriculum includes a plan for well-structured competency based clinical education.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Clinical education and laboratory activities shall be supervised and include a clinical education center that offers a sufficient and well-balanced variety of radiographic examinations and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principles and procedures of image quality, their evaluation and assurance, and radiation protection; a valid plan for clinical assignments and rotations; opportunities may be provided for elective clinical rotations.

Radiographer - Continued

The policies and process by which students receive clinical education shall be published and made known to all concerned in order to avoid practices in which students are substituted for paid staff. Students shall not take the responsibility or the place of qualified staff. After demonstrating competency, students may be permitted to perform procedures with indirect supervision. Unsatisfactory radiographs shall be repeated only in the presence of a qualified radiographer.

- III. SPECIAL NOTE: Health Occupations Students of America is an appropriate vocational student organization and students are encouraged to become members of their appropriate professional organization.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1500 hours or an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Apply knowledge of anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor.
 02. Evaluate radiographic images for appropriate positioning and image quality.
 03. Apply the principles of radiation protection for the patient, self and others.
 04. Anticipate and provide patient care and comfort.
 05. Recognize emergency patient conditions and initiate life saving first aid and basic life-support procedures.
 06. Perform quality assurance procedures.
 07. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
 08. Demonstrate proper operation of radiographic equipment and accessories.
 09. Demonstrate employability skills.

01.0 APPLY KNOWLEDGE OF ANATOMY, PHYSIOLOGY, POSITIONING AND RADIOGRAPHIC TECHNIQUES TO ACCURATELY DEMONSTRATE ANATOMICAL STRUCTURES ON A RADIOGRAPH OR OTHER IMAGING RECEPTOR--The student will be able to:

- 01.01 Identify patient and check order.
- 01.02 Demonstrate knowledge of human anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor and pathology.
- 01.03 Position patient, utilizing body landmarks, to achieve the best demonstration of the affected body part by adjusting table, radiographic and/or fluoroscopic equipment, and image receptor using knowledge of anatomy, standard radiographic positions and department protocol.
- 01.04 To insure proper patient positioning during film exposure, use immobilization devices, when indicated, to prevent patient movement.
- 01.05 Give patient appropriate breathing instructions (e.g., inspiration, expiration) prior to making exposure.
- 01.06 When indicated, take scout radiograph(s) on trauma patients to determine the extent and nature of injury, and whether injury will permit standard examination procedures.
- 01.07 Remove all radiopaque materials (e.g., jewelry, hairpins, contrast materials) from patient and/or table that could interfere with the quality of the radiograph.
- 01.08 Place film cassette into correct and centered position (erect, tabletop, or Bucky Tray).
- 01.09 Position patient and x-ray tube to produce radiographs of the head and neck.
- 01.10 Position patient and x-ray tube and/or fluoroscopic unit to produce radiographs of the thorax.
- 01.11 Position patient and x-ray tube to produce radiographs of the extremities.
- 01.12 Position patient and x-ray tube to produce radiographs of the spine and pelvic region.
- 01.13 Position patient and x-ray tube or fluoroscopic unit to produce studies of the abdomen and gastrointestinal tract.
- 01.14 Position patient and x-ray tube or fluoroscopic unit to produce cardiovascular studies.
- 01.15 Position patient and x-ray tube or fluoroscopic unit to produce neurological studies.
- 01.16 Position patient and x-ray tube or fluoroscopic unit to produce the following studies: arthrogram, mammogram, tomogram and hysterosalpingogram.
- 01.17 Position patient and x-ray tube or fluoroscopic unit to produce the following studies: cystogram, cystourethrogram, IVP, nephrotomogram, and retrograde pyelogram.

02.0 EVALUATE RADIOGRAPHIC IMAGES FOR APPROPRIATE POSITIONING AND IMAGE QUALITY--The student will be able to:

- 02.01 Identify qualities that characterize a diagnostic radiograph.
- 02.02 Identify human structural landmarks and pathological conditions.
- 02.03 Identify incorrect image density, over/under exposures, artifacts.
- 02.04 Recognize effect of various patient conditions, equipment, accessories, and contrast media on radiographic quality.
- 02.05 Recognize legal, ethical, and professional responsibilities to patients, physicians, and co-workers.
- 02.06 Demonstrate knowledge required to evaluate radiographic images for appropriate positioning and image quality.
- 02.07 Evaluate the developed radiograph using view box to make certain that radiographs are of suitable quality for interpretation by physician.
- 02.08 If radiograph is not suitable, review procedural steps taken and modify as necessary.

03.0 APPLY THE PRINCIPLES OF RADIATION PROTECTION FOR THE PATIENT, SELF AND OTHERS--The student will be able to:

- 03.01 Demonstrate knowledge of the principles of radiation protection for the patient, self and others.
- 03.02 Question female patients of child-bearing age about menstrual cycle and/or possible pregnancy to alert radiologist and/or referring physician.
- 03.03 When indicated place a gonadal shield over male and female reproductive organs prior to taking radiograph.
- 03.04 Stand behind lead barrier or wear a lead apron while activating radiographic equipment, to provide protection from radiation exposure.
- 03.05 Wear a monitoring device while on duty to obtain a record of radiation exposure over a given period of time.
- 03.06 Place protective shield over radiosensitive organs (other than gonads) in or near the primary beam prior to exposure, when repeated examination or high dosage levels are required for procedure.
- 03.07 Remove all unnecessary persons from area prior to taking radiograph to reduce exposure to radiation.
- 03.08 Restrict the beam to the area to be radiographed.

04.0 ANTICIPATE AND PROVIDE PATIENT CARE AND COMFORT--The student will be able to:

- 04.01 Demonstrate knowledge required to anticipate and provide patient care and comfort.
- 04.02 Explain procedures to patient before beginning.
- 04.03 Determine patients' identity using information on request form and confirm by checking wristband and/or by questioning patient.
- 04.04 Observe and/or question patient to determine if alternate radiographic projections are needed as well as any modifications that might be useful.
- 04.05 Assist patient onto or off of table, stool or bed to avoid patient and personal injury using proper body mechanics and/or mechanical transfer devices.
- 04.06 Instruct patient about diet restrictions and/or self-administered preparatory medication or contrast agent relative to an examination.
- 04.07 Clean, wash, disinfect and/or sterilize facilities and equipment (e.g., cassettes, tabletops) and dispose of contaminated items in preparation for next examination.
- 04.08 Observe appropriate protective technique when radiographing a patient in isolation to provide for effective infection control.
- 04.09 Use sterile and/or aseptic technique as required to help prevent infection.
- 04.10 Prior to injecting an iodinated contrast medium, elicit such information about the patient which might indicate a risk of a reaction using patient's chart, radiograph file jacket and/or by questioning patient.
- 04.11 Assist physician in the intravenous injection of contrast medium using appropriate aseptic technique.
- 04.12 After injection of iodinated contrast medium, observe patient to detect adverse reactions to the medium using knowledge of common reactions.
- 04.13 Introduce contrast medium (excluding intravenous injections) into patient according to procedure indicated by physician.

05.0 RECOGNIZE EMERGENCY PATIENT CONDITIONS AND INITIATE LIFE SAVING FIRST AID AND BASIC LIFE SUPPORT PROCEDURES--The student will be able to:

- 05.01 Demonstrate the knowledge required to recognize emergency patient conditions and initiate life saving first aid and basic life support procedures.
- 05.02 Take vital signs.
- 05.03 Recognize the need for medical attention and administer emergency treatment to patient during critical situation while waiting for help to arrive.
- 05.04 Monitor medical equipment to patient (e.g., IVs, oxygen masks) during the radiographic procedure, using knowledge of hospital equipment and procedures.

RADIOGRAPHER - Continued

- 06.0 PERFORM QUALITY ASSURANCE PROCEDURES--The student will be able to:
- 06.01 Demonstrate the knowledge required to perform quality assurance procedures.
 - 06.02 Perform safety checks of radiographic equipment including table, tube and accessories.
 - 06.03 Report malfunction in radiographic unit noting the difficulty, which might assist in locating cause of malfunction.
 - 06.04 Clean screens and cassettes on a regular basis to remove dirt, paper or other artifacts.
 - 06.05 Recognize and report malfunctions in the automatic processor noting difficulties which might assist in locating cause of malfunction.
- 07.0 EXERCISE INDEPENDENT JUDGMENT AND DISCRETION IN THE TECHNICAL PERFORMANCE OF MEDICAL IMAGING PROCEDURES--The student will be able to:
- 07.01 Demonstrate the knowledge to exercise independent judgment and discretion in the technical performance of medical imaging procedures.
 - 07.02 To insure proper patient positioning during film exposure, use immobilization devices, when indicated, to prevent patient movement.
 - 07.03 Select film, screen and/or grid combination appropriate for the part to be radiographed.
 - 07.04 Restrict the beam to limit exposure to the area of interest to improve image quality.
 - 07.05 Set appropriate kVp, mA and time for the radiographic unit to achieve optimum image quality and safe operating conditions.
 - 07.06 Set appropriate kVp, mA, and time for the fluoroscopic and accessory imaging devices to achieve optimum image quality and safe operating conditions.
 - 07.07 Remove all radiopaque materials from patient and/or table that could interfere with the quality of the radiograph.
 - 07.08 Place film cassette into correct and centered position.
- 08.0 DEMONSTRATE PROPER OPERATION OF RADIOGRAPHIC EQUIPMENT AND ACCESSORIES--The student will be able to:
- 08.01 Demonstrate the knowledge to properly operate radiographic equipment and accessories.
 - 08.02 Warm-up x-ray tube to achieve proper operating conditions by following manufacturer's prescribed sequence of steps.
 - 08.03 Set appropriate kVp, mA and time (or if photo-timed, select appropriate kVp, mA, back-up time and photosensor) for the radiographic unit to achieve optimum image quality and safe operating conditions. Utilize measuring calipers, technique charts and tube rating charts for guidance.
 - 08.04 Set appropriate kVp, mA, and time for the fluoroscopic and accessory imaging devices to achieve optimum image quality and safe operating conditions.
 - 08.05 Store film in a manner which will reduce the possibility of accidentally exposing or re-exposing film.
 - 08.06 Process exposed film by unloading cassette and feeding into automatic processor.
 - 08.07 Reload cassettes for later use by selecting film of proper size and type in the darkroom and place in designated area.
- 09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 09.01 Conduct a job search.
 - 09.02 Secure information about a job.
 - 09.03 Identify documents that may be required when applying for a job.
 - 09.04 Complete a job application.
 - 09.05 Demonstrate competence in job interview techniques.
 - 09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 09.07 Identify acceptable work habits.
 - 09.08 Demonstrate knowledge of how to make job changes appropriately.
 - 09.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Respiratory Therapist

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP HO17.081800

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS x

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

x Postsecondary Vocational _____ Other _____

CERTIFICATION COVERAGE:

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as respiratory therapists (079.361-010) or to provide supplemental training for persons previously or currently employed in these occupations.

The respiratory therapist specializes in the application of scientific knowledge and theory to practical, clinical problems of respiratory care. The respiratory therapist is qualified to assume primary clinical responsibility for all respiratory care modalities, including responsibilities involved in supervision of respiratory therapy technician functions.

The respiratory therapist may be required to exercise considerable independent, clinical judgment in the respiratory care of patients under the direct or indirect supervision of a physician. Further, the therapist is capable of serving as a technical resource person to the physician with regard to current practices in respiratory care, and to the hospital staff as to effective and safe methods for administering respiratory therapy.

The respiratory therapist's scope of patient care in an institution or home environment includes, but is not limited to, intermittent positive pressure breathing (IPPB); humidity/aerosol therapy; medical gas administration; broncho-pulmonary drainage; continuous ventilation; airway management; emergency care; pulmonary function testing; cardiorespiratory rehabilitation; infection control; cardiorespiratory drug administration and physiologic monitoring.

Content includes biological and physical sciences basic to understanding the functioning of the cardiopulmonary system, such as anatomy, physiology, medical terminology, chemistry, mathematics, microbiology, physics, therapeutic procedures, clinical medicine and patient assessment. The instruction is more extensive for the respiratory therapist than for the respiratory therapy technician. The program of study also includes social sciences basic to understanding how to relate with patients and includes topics such as psychology, communication skills and medical ethics. Clinical training in routine and special procedures applicable to neonatal, pediatric, adult, geriatric patients and those with varying degrees of cardiopulmonary impairment are also provided. The content also includes computer science.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY/CLINICAL ACTIVITIES: Clinical education and laboratory activities shall be supervised and should include the following: a clinical education center that offers a sufficient and well-balanced variety of respiratory therapy procedures and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principles and procedures of respiratory care, their evaluation and assurance, and a valid plan for clinical assignments and rotations.

Respiratory Therapist - continued

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program. Student membership in the Florida Society for Respiratory Therapy and the American Association for Respiratory Care is encouraged.

The program should be accredited by the American Medical Association Committee on Allied Health Education and Accreditation. Program compliance with the essentials and guidelines are monitored by the Joint Review Committee for Respiratory Therapy Education. State credentialing will be done in accordance with Chapter 468 F.S.

The typical length of this program for an average achieving student is an associate degree.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Select, review, obtain, and interpret patient data.
02. Select, assemble, and check equipment for proper function, operation, and cleanliness.
03. Initiate therapeutic procedures, conduct therapeutic procedures, and modify prescribed therapeutic procedure.
04. Maintain records and communications.
05. Accompany a physician performing special procedures.
06. Perform pulmonary function testing.
07. Draw arterial and mixed venous blood samples and test for blood gases.
08. Perform mechanical ventilation.
09. Perform infection control techniques.
10. Perform cleaning, sterilization, and general maintenance of equipment.
11. Instruct patient in cardiorespiratory rehabilitation.
12. Demonstrate employability skills.
13. Adapt all appropriate respiratory care procedures to the home care environment.
14. Perform advanced respiratory care procedures.
15. Administer cardiorespiratory drugs.
16. Act as an assistant to the physician with special respiratory therapy procedures.
17. Supervise respiratory therapy technicians.

01.0 SELECT, REVIEW, OBTAIN AND INTERPRET PATIENT DATA--The student will be able to:

- 01.01 Review existing data in patient record.
- 01.02 Collect and evaluate additional pertinent clinical information by assessing patient's overall respiratory status by inspection, palpation, percussion, auscultation.
- 01.03 Collect and evaluate additional pertinent clinical information by inspection of chest x-ray and review of ABG's.
- 01.04 Perform and evaluate bedside pulmonary assessment and procedures (Vt, FVC, NIF, etc.).
- 01.05 Interview and evaluate patient's current medical status.
- 01.06 Recommend and/or obtain additional pertinent data based on patient assessment.
- 01.07 Perform and evaluate appropriate cardiopulmonary tests including EKG.
- 01.08 Determine appropriateness of prescribed respiratory care plan and recommend modification where indicated.
- 01.09 Participate in development of respiratory care plan.

02.0 SELECT, ASSEMBLE, AND CHECK EQUIPMENT FOR PROPER FUNCTION, OPERATION AND CLEANLINESS--The student will be able to:

- 02.01 Select suitable equipment from available supply appropriate to respiratory care plan.
- 02.02 Assemble parts, check for completeness, condition, and cleanliness.
- 02.03 Check operation of device and correct malfunctions or send for repair (quality control).
- 02.04 Clean and disinfect used equipment, wrap and sterilize.
- 02.05 Store equipment, transport equipment and gases.
- 02.06 Maintain inventory and monitor oxygen storage systems and change a cylinder bank.
- 02.07 Transport high pressure cylinders, check dates and pressure.

03.0 INITIATE THERAPEUTIC PROCEDURES, CONDUCT THERAPEUTIC PROCEDURES, AND MODIFY PRESCRIBED THERAPEUTIC PROCEDURE--The student will be able to:

- 03.01 Explain planned therapy and goals to patients in nontechnical understandable terms to achieve optimal therapeutic outcome.
- 03.02 Protect patient from nosocomial infection by adherence to infection control policies and procedures.
- 03.03 Conduct prescribed therapeutic procedures to achieve the maintenance of a patent airway, including the care of artificial airways.
- 03.04 Conduct prescribed therapeutic procedures to achieve the removal of bronchopulmonary secretions, including specimens for analysis.
- 03.05 Conduct prescribed therapeutic procedures to achieve adequate spontaneous and mechanical ventilation.
- 03.06 Conduct prescribed therapeutic procedures to achieve adequate arterial and tissue oxygenation, including CPAP and or special therapeutic gases.
- 03.07 Evaluate and monitor prescribed respiratory therapy and patients response to therapy.
- 03.08 Make necessary modification in therapeutic procedures based on patient's response and or appropriate laboratory data.
- 03.09 Recommend modification in the respiratory care prescription based on the patient's response.
- 03.10 Initiate and provide emergency resuscitation.
- 03.11 Initiate and conduct pulmonary rehabilitation and home care.
- 03.12 Terminate treatments based on patient's adverse reaction to any type of therapy being administered.
- 03.13 Modify treatment techniques within the prescription.
- 03.14 Verify computations and note erroneous data.
- 03.15 Initiate, conduct and modify prescribed therapy
- 03.16 Perform cardiopulmonary resuscitation on an infant patient.
- 03.17 Perform cardiopulmonary resuscitation on a child.
- 03.18 Perform one rescuer cardiopulmonary resuscitation on an adult patient.

RESPIRATORY THERAPIST - Continued

- 03.19 Perform two rescuer cardiopulmonary resuscitation on an adult patient.
 - 03.20 Perform obstructed airway maneuver on an unconscious adult patient.
 - 03.21 Perform obstructed airway maneuver on a conscious adult patient.
 - 03.22 Set up and assist with oral intubation on an unconscious adult patient.
 - 03.23 Ventilate patient with a manual resuscitator with mask.
 - 03.24 Ventilate patient with demand valve unit with mask.
 - 03.25 Add an intermittent mandatory ventilation setup with reservoir bag to a ventilator circuit.
 - 03.26 Add positive end expiratory pressure (PEEP) to ventilator circuit.
 - 03.27 Perform proper extubation of adult patient.
- 04.0 MAINTAIN RECORDS AND COMMUNICATIONS--The student will be able to:
- 04.01 Prepare patient charges, put in computer if applicable.
 - 04.02 Chart on medical record: record therapy and results using conventional terminology as required by hospital policy and regulatory agencies.
 - 04.03 Use, monitor, and update departmental policy manual.
 - 04.04 Consistently display a professional and positive attitude in all communications.
 - 04.05 Display respect for patients regardless of race, religion, color, creed, sex, age or diagnosis.
 - 04.06 Maintain confidentiality of all patient records and information.
- 05.0 ACCOMPANY A PHYSICIAN PERFORMING SPECIAL PROCEDURES--The student will be able to:
- 05.01 Observe the physician performing a bronchoscopy.
 - 05.02 Observe the physician performing a thoracentesis.
 - 05.03 Observe the physician performing a tracheostomy.
 - 05.04 Observe the physician performing insertion of chest tubes.
 - 05.05 Observe the physician performing invasive monitoring.
- 06.0 PERFORM PULMONARY FUNCTION TESTING--The student will be able to:
- 06.01 Obtain pulmonary history.
 - 06.02 Perform simple spirometry maneuvers, including tidal volume, minute volume, and vital capacity.
 - 06.03 Compute patient normal values.
 - 06.04 Recognize normal vs. abnormal results.
- 07.0 DRAW ARTERIAL AND MIXED VENOUS BLOOD SAMPLES AND TEST FOR BLOOD GASES--The student will be able to:
- 07.01 Obtain appropriate equipment.
 - 07.02 Identify patient, introduce self, explain procedure.
 - 07.03 Perform Allen test when appropriate.
 - 07.04 Wash hands, collect sample from appropriate site, place in ice if directed.
 - 07.05 Apply pressure for required time when appropriate.
 - 07.06 Place blood sample into the blood gas analyzer according to manufacturers directions.
- 08.0 PERFORM MECHANICAL VENTILATION--The student will be able to:
- 08.01 Classify type of ventilator.
 - 08.02 Verify physicians order for settings.
 - 08.03 Measure/record ventilator parameters.
 - 08.04 Measure/record patient parameters as indicated--BP, Pulse, Respiratory rate and character, color, vital capacity, static and dynamic compliance, etc.
- 09.0 PERFORM INFECTION CONTROL TECHNIQUES--The student will be able to:
- 09.01 Don isolation cap, mask, gown and gloves.
 - 09.02 Perform prescribed therapy in an isolation setting.
 - 09.03 Discard/double bag used equipment.
 - 09.04 List the types of isolation with the required apparel/procedures, etc.
 - 09.05 Chart activity related to isolation setting.

RESPIRATORY THERAPIST - Continued

10.0 PERFORM CLEANING, STERILIZATION, AND GENERAL MAINTENANCE OF EQUIPMENT--The student will be able to:

- 10.01 Maintain a use record on special equipment.
- 10.02 Maintain equipment maintenance records.
- 10.03 Maintain preventive maintenance records.
- 10.04 Clean used equipment and wrap for sterilization.
- 10.05 Operate sterilizer if applicable or send to central service.
- 10.06 Store returned sterilized equipment safely being mindful of sterilization expiration dates.
- 10.07 Perform routine maintenance according to manufacturer's directions.

11.0 INSTRUCT PATIENT IN CARDIORESPIRATORY REHABILITATION--The student will be able to:

- 11.01 Instruct patient and family in equipment cleaning care and use.
- 11.02 Instruct patient and family in proper breathing/coughing exercises.
- 11.03 Instruct patient and family in physical exercise.
- 11.04 Instruct patient and family about the disease state.
- 11.05 Instruct patient and family about when to call the physician.
- 11.06 Instruct patient and family in how to recognize deterioration in physical status.
- 11.07 Instruct patient and family in proper drug dosage and administration techniques and importance of the therapy.
- 11.08 Instruct patient and family in proper therapy techniques.
- 11.09 Instruct patient and family in proper cleaning techniques for equipment.

12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 12.01 Conduct a job search.
- 12.02 Secure information about a job.
- 12.03 Identify documents that may be required when applying for a job.
- 12.04 Complete a job application.
- 12.05 Demonstrate competence in job interview techniques.
- 12.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 12.07 Identify acceptable work habits.
- 12.08 Demonstrate knowledge of how to make job changes appropriately.
- 12.09 Demonstrate acceptable employee health habits.

13.0 ADAPT ALL APPROPRIATE RESPIRATORY CARE PROCEDURES TO THE HOME CARE ENVIRONMENT--The student will be able to:

- 13.01 Provide for O₂ administration, aerosol and bronchial hygiene therapy and lung expansion therapy in the home.
- 13.02 Provide for Continuous Monitored Ventilation in the home.
- 13.03 Instruct patient, family and other health care workers on the appropriate use, operation, cleaning and maintenance of respiratory care equipment.
- 13.04 Perform patient monitoring and assessment in the home.

14.0 PERFORM ADVANCED RESPIRATORY CARE PROCEDURES--The student will be able to:

- 14.01 Assume primary clinical responsibility for all respiratory care modalities.
- 14.02 Check physicians orders or consult with physician.
- 14.03 Design respiratory care plan and notate on appropriate records.
- 14.04 Measure lung volumes and capacities.
- 14.05 Perform diffusion studies.
- 14.06 Perform gas distribution tests.
- 14.07 Perform pulmonary artery sampling.
- 14.08 Perform cardiac output procedures.
- 14.09 Perform arterial line set up and monitoring.
- 14.10 Perform transcutaneous gas monitoring.
- 14.11 Perform mass spectrophotometry and other non invasive monitoring.
- 14.12 Perform earoximetry monitoring.
- 14.13 Perform various other procedures.
- 14.14 Replace tracheostomy tube.
- 14.15 Perform various mathematical computations dealing with cardiopulmonary assessment.

RESPIRATORY THERAPIST - Continued

- 14.16 Intubate infant.
 - 14.17 Initiate infant mechanical ventilation with appropriate ventilator and parameter including CPAP and PEEP.
- 15.0 ADMINISTER CARDIORESPIRATORY DRUGS--The student will be able to:
- 15.01 Demonstrate knowledge of drug classifications, actions and uses, route of administration and usual adult doses, mathematics needed to calculate divided or childrens dosage, contraindications, drug interactions, adverse reactions, how supplied, mixing instructions, storage, laboratory test interferences.
 - 15.02 Recognize the critical importance of this activity and follow directions.
 - 15.03 Verify physicians orders.
 - 15.04 Prepare medication for administration.
 - 15.05 Identify patient, introduce self.
 - 15.06 Administer drug.
 - 15.07 Chart.
 - 15.08 List the symptoms of drug idiosyncracies and allergic reactions.
 - 15.09 Define anaphylactic shock and list the sypmtoms.
- 16.0 ACT AS AN ASSISTANT TO THE PHYSICIAN WITH SPECIAL RESPIRATORY THERAPY PROCEDURES--The student will be able to:
- 16.01 Assist with insertion and maintenance of an umbilical catheter.
 - 16.02 Assist with bronchoscopy, chest tubes, cardiac catheterizations.
 - 16.03 Assist with Swan-Ganz catherization and other invasive monitoring.
 - 16.04 Assist with thoracentesis and tracheostomy.
- 17.0 SUPERVISE RESPIRATORY THERAPY TECHNICIANS--The student will be able to:
- 17.01 Perform respiratory therapy technician evaluations recognizing that many sources of error distort perceptions.
 - 17.02 Make assignments to personnel in entire department.
 - 17.03 Observe employee behavior and counsel re attitudes, demeanor, appearance, protocol, interaction.
 - 17.04 Encourage/provide continuing education activities.
 - 17.05 Observe technician performing procedures, correct discrepancies.
 - 17.06 Instruct technicians (and others) in new procedures/new equipment.
 - 17.07 Demonstrate knowledge of productivity and staffing demands.

277

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Respiratory Therapy Technician

CODE NUMBER: Secondary _____

Postsecondary RET0100

Florida CIP H017.081900

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational

_____ Other _____ 13-15

CERTIFICATION COVERAGE: RESP THER 7

RESP TEC 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as inhalation therapists (10101809), respiratory therapists (079.361-010), respiratory therapy technicians, or to provide supplemental training for persons previously or currently employed in these occupations.

The respiratory therapy technician specializes in the technical details of general respiratory therapeutics. Technicians may assume clinical responsibility for specified respiratory care modalities involving the application of well defined therapeutic techniques under the direct or indirect supervision of a therapist or physician.

The respiratory technician's role does not require the exercising of independent, clinical judgment; however, the technician is expected to adjust or modify therapeutic techniques within well-defined procedures and based on a limited range of patient responses. Therefore, the effective use of the technician, especially in the critical care setting, requires that a respiratory therapist or a physician experienced in respiratory care be available for consultation.

The respiratory therapy technician's scope of patient care includes, but is not limited to the following respiratory care modalities under direct or indirect supervision by a therapist or physician: intermittent positive pressure breathing (IPPB); humidity/aerosol therapy; including the administration of aerosolized medicants under physician prescription; medical gas therapy; pulmonary drainage procedures; and cardiopulmonary resuscitation; pulmonary function testing; drawing/analyzing arterial and venous blood gases, and airway management. Further the technician may perform continuous ventilation, cleaning, sterilization, infection control, cardiorespiratory rehabilitation, and general maintenance of equipment.

The content includes, but is not limited to, biological and physical sciences basic to understanding the functioning of the cardiopulmonary systems, such as anatomy, physiology, medical terminology, chemistry, mathematics, microbiology, physics, therapeutic procedures, clinical medicine, and clinical experiences. Clinical training in routine and special procedures applicable to neonatal, pediatric, adult, and geriatric patients is also provided. The program of study also includes social sciences basic to understanding how to relate with patients and includes topics such as psychology, communication skills, and medical ethics. The content also includes computer science.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY/CLINICAL ACTIVITIES: Clinical education and laboratory activities shall be supervised and should include the following: a clinical education center that offers a sufficient and well-balanced variety of respiratory therapy examinations and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principles and procedures of

Respiratory Therapy Technician - continued

respiratory care, their evaluation and assurance, and a valid plan for clinical assignments and rotations.

- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Student membership in both the American Association for Respiratory Therapy and the Florida Society for Respiratory Therapy is encouraged.

The program must be approved by the American Medical Association, Committee on Allied Health Education and Accreditation. Program compliance with the essentials and guidelines are monitored by the Joint Review Committee for Respiratory Therapy Education.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed under the cooperative method of instruction.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 1350 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the graduate will be able to:
01. Select, review, obtain, and interpret patient data.
 02. Select, assemble, and check equipment for proper function, operation, and cleanliness.
 03. Initiate therapeutic procedures, conduct therapeutic procedures, and modify prescribed therapeutic procedure.
 04. Maintain records and communications.
 05. Accompany a physician performing special procedures.
 06. Perform pulmonary function testing.
 07. Draw arterial and venous blood samples and test for blood gases.
 08. Perform continuous ventilation.
 09. Perform infection control techniques.
 10. Perform cleaning, sterilization, and general maintenance of equipment.
 11. Instruct patient in cardiorespiratory rehabilitation and home care.
 12. Demonstrate employability skills.
 13. Administer cardiorespiratory drugs.

01.0 SELECT, REVIEW, OBTAIN AND INTERPRET PATIENT DATA--The graduate will be able to:

- 01.01 Review existing data in patient record.
- 01.02 Collect and evaluate additional pertinent clinical information by assessing patient's overall respiratory status by inspection, palpation, percussion, auscultation.
- 01.03 Collect and evaluate additional pertinent clinical information by inspection of chest x-ray and review of ABG's.
- 01.04 Perform and evaluate bedside pulmonary assessment and procedures (Vt, FVC, NIF, etc.).
- 01.05 Interview and evaluate patient's current medical status.
- 01.06 Recommend and/or obtain additional pertinent data based on patient assessment.
- 01.07 Perform and evaluate appropriate cardiopulmonary tests.
- 01.08 Determine appropriateness of prescribed respiratory care plan and recommend modification where indicated.
- 01.09 Participate in development of respiratory care plan.

02.0 SELECT, ASSEMBLE, AND CHECK EQUIPMENT FOR PROPER FUNCTION, OPERATION AND CLEANLINESS--The graduate will be able to:

- 02.01 Select suitable equipment from available supply appropriate to respiratory care plan.
- 02.02 Assemble parts, check for completeness, condition, and cleanliness.
- 02.03 Check operation of device and correct malfunctions or send for repair (quality control).
- 02.04 Clean, disinfect, wrap, and sterilize equipment as needed.
- 02.05 Maintain, store, and transport equipment and gases.
- 02.06 Maintain and monitor oxygen storage systems and cylinder banks.

03.0 INITIATE THERAPEUTIC PROCEDURES, CONDUCT THERAPEUTIC PROCEDURES, AND MODIFY PRESCRIBED THERAPEUTIC PROCEDURE--The graduate will be able to:

- 03.01 Explain planned therapy and goals to patients in nontechnical understandable terms to achieve optimal therapeutic outcome.
- 03.02 Protect patient from nosocomial infection by adherence to infection control policies and procedures.
- 03.03 Conduct prescribed therapeutic procedures to achieve the maintenance of a patent airway, including the care of artificial airways.
- 03.04 Conduct prescribed therapeutic procedures to achieve the removal of bronchopulmonary secretions, including specimens for analysis.
- 03.05 Conduct prescribed therapeutic procedures to achieve adequate spontaneous and mechanical ventilation.
- 03.06 Conduct prescribed therapeutic procedures to achieve adequate arterial and tissue oxygenation, including CPAP and/or special therapeutic gases.
- 03.07 Evaluate and monitor prescribed respiratory therapy and patient's response to therapy.
- 03.08 Initiate, conduct, and modify prescribed therapy based on patient's response and/or appropriate laboratory data within the limitations of the prescription.
- 03.09 Initiate and provide emergency resuscitation.
- 03.10 Initiate and conduct pulmonary rehabilitation and home care.
- 03.11 Terminate treatments based on patient's adverse reaction to any type of therapy being administered.
- 03.12 Perform and verify required computations and note erroneous data.
- 03.13 Perform cardiopulmonary resuscitation on an infant patient.
- 03.14 Perform cardiopulmonary resuscitation on a child.
- 03.15 Perform one rescuer cardiopulmonary resuscitation on an adult patient.
- 03.16 Perform two rescuer cardiopulmonary resuscitation on an adult patient.
- 03.17 Perform obstructed airway maneuver on an unconscious adult patient.

RESPIRATORY THERAPY TECHNICIAN - Continued

- 03.18 Perform obstructed airway maneuver on a conscious adult patient.
- 03.19 Set up and assist with oral intubation on an unconscious adult patient.
- 03.20 Ventilate patient with a manual resuscitator with mask.
- 03.21 Ventilate patient with demand valve unit with mask.
- 03.22 Add an intermittent mandatory ventilation setup to a ventilator circuit.
- 03.23 Add positive end expiratory pressure (PEEP) to ventilator circuit.
- 03.24 Perform extubation of adult patient.

04.0 MAINTAIN RECORDS AND COMMUNICATIONS--The graduate will be able to:

- 04.01 Prepare patient charges, put in computer if applicable.
- 04.02 Chart on medical record: record therapy and results using conventional terminology as required by hospital policy and regulatory agencies.
- 04.03 Utilize departmental policy manual.
- 04.04 Consistently display a professional and positive attitude in all communications.
- 04.05 Display respect for patients regardless of race, religion, color, creed, sex, age or diagnosis.
- 04.06 Maintain confidentiality of all patient records and information.

05.0 ACCOMPANY A PHYSICIAN PERFORMING SPECIAL PROCEDURES--The graduate will be able to:

- 05.01 Accompany the physician performing a bronch' copy.
- 05.02 Accompany the physician performing a thoracentesis.
- 05.03 Accompany the physician performing a tracheostomy.
- 05.04 Accompany the physician performing insertion of chest tubes.
- 05.05 Accompany the physician performing invasive monitoring.

06.0 PERFORM PULMONARY FUNCTION TESTING--The graduate will be able to:

- 06.01 Obtain pulmonary history.
- 06.02 Perform simple spirometry maneuvers, including tidal volume, minute volume, and vital capacity.
- 06.03 Compute patient normal values.
- 06.04 Recognize normal vs. abnormal results.

07.0 DRAW ARTERIAL AND VENOUS BLOOD SAMPLES AND TEST FOR BLOOD GASES--The graduate will be able to:

- 07.01 Obtain appropriate equipment.
- 07.02 Identify patient, introduce self, explain procedure.
- 07.03 Perform Allen test and analyze result.
- 07.04 Wash hands, collect sample from appropriate site, place in ice if directed.
- 07.05 Apply pressure for required time.
- 07.06 Place blood sample into the blood gas analyzer according to manufacturers directions.

08.0 PERFORM CONTINUOUS VENTILATION--The graduate will be able to:

- 08.01 Identify type of ventilator: pressure cycled, time cycled or volume cycled.
- 08.02 Verify physician's order for settings.
- 08.03 Measure/record ventilator parameters.
- 08.04 Measure/record patient parameters as indicated-BP, Pulse, Respiration rate and character, color, vital capacity, static and dynamic compliance, etc.

09.0 PERFORM INFECTION CONTROL TECHNIQUES--The graduate will be able to:

- 09.01 Don isolation cap, mask, gown and gloves.
- 09.02 Perform prescribed therapy in an isolation setting.
- 09.03 Discard/double bag used equipment and arrange for proper sterilization or disposal.
- 09.04 List the types of isolation with the required apparel/procedures, etc.
- 09.05 Chart activity related to isolation setting.

RESPIRATORY THERAPY TECHNICIAN - Continued

- 10.0 PERFORM CLEANING, STERILIZATION, AND GENERAL MAINTENANCE OF EQUIPMENT--The graduate will be able to:
- 10.01 Clean used equipment and wrap for sterilization.
 - 10.02 Operate sterilizer if applicable or send to central service.
 - 10.03 Stor. returned sterilized equipment safely, being mindful of sterilization expiration dates.
 - 10.04 Perform routine maintenance according to manufacturer's directions and maintain appropriate maintenance records..
- 11.0 INSTRUCT PATIENT IN CARDIORESPIRATORY REHABILITATION AND HOME CARE--The graduate will be able to:
- 11.01 Instruct patient and family in equipment cleaning, care and use.
 - 11.02 Instruct patient and family in proper breathing/coughing exercises.
 - 11.03 Instruct patient and family in physical exercise.
 - 11.04 Instruct patient and family about the disease state.
 - 11.05 Instruct patient and family about when to call the physician.
 - 11.06 Instruct patient and family in how to recognize deterioration in physical status.
 - 11.07 Instruct patient and family in proper drug dosage and administration techniques and importance of the therapy.
 - 11.08 Instruct patient and family in proper therapy techniques.
 - 11.09 Instruct patient and family in proper cleaning techniques for equipment.
- 12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The graduate will be able to:
- 12.01 Conduct a job search.
 - 12.02 Secure information about a job.
 - 12.03 Identify documents that may be required when applying for a job.
 - 12.04 Complete a job application.
 - 12.05 Demonstrate competence in job interview techniques.
 - 12.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 12.07 Identify acceptable work habits.
 - 12.08 Demonstrate knowledge of how to make job changes appropriately.
 - 12.09 Demonstrate acceptable employee health habits.
- 13.0 ADMINISTER CARDIORESPIRATORY DRUGS--The student will be able to:
- 13.01 Demonstrate knowledge of drug classifications, actions and uses, route of administration and usual adult doses, mathematics needed to calculate divided or childrens dosage, contra:indications, drug interactions, adverse reactions, how supplied, mixing instructions, storage, laboratory test interferences.
 - 13.02 Recognize the critical importance of this activity and follow directions.
 - 13.03 Verify physicians orders.
 - 13.04 Prepare medication for administration.
 - 13.05 Identify patient, introduce self.
 - 13.06 Administer drug.
 - 13.07 Chart.
 - 13.08 List the symptoms of drug idiosyncracies and allergic reactions.
 - 13.09 Define anaphylactic shock and list the sypmtoms.

CURRICULUM FRAMEWORK PROGRAM AREA: Health Occupations
FLORIDA DEPARTMENT OF EDUCATION EFFECTIVE DATE: July, 1987
PROGRAM TITLE: Surgical Technology
CODE NUMBER: Secondary _____ Postsecondary ORT0990
Florida CIP HO17.021100

SECONDARY SCHOOL CREDITS _____ COLLEGE CREDITS _____ POSTSECONDARY ADULT VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational
_____ Postsecondary Vocational _____ x _____ Other _____ 13-15

CERTIFICATION COVERAGE: NURSING ED @5 PRAC NURSE 7 OPR RM TEC 7

- I. **MAJOR CONCEPTS/CONTENT:** The program is designed to prepare students for employment as surgical technicians (10121002), surgical technologists or to provide supplemental training for persons previously or currently employed in these occupations. Selected portions of this program may be utilized to provide additional skills to enable nursing graduates to become employable in operating rooms as surgical technologists. The program should meet the requirements of the American Medical Association Committee on Allied Health Education and Accreditation, CAHEA.

The content includes, but is not limited to, communication and interpersonal skills, legal and ethical responsibilities, anatomy, physiology, pathophysiology, microbiology, aseptic techniques, patient care procedures, surgical technology procedures, patient safety, use and care of equipment and supplies, CPR, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** In a simulated surgical environment, students practice preparing, setting up and maintaining a sterile field, sterilization and disinfection procedures, preparation of supplies and equipment for surgery, and patient preparation.

Clinical learning experiences in an operating room and related areas are an integral part of this program.

- III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

After successful completion of an approved program, students are eligible to take the Association of Surgical Technologists National Certification Examination.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 7.0, Language 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for an average achieving student is 1200 hours.

Surgical Technology - Continued

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

01. Demonstrate communication and interpersonal skills.
02. Demonstrate an understanding of legal and ethical responsibilities.
03. Demonstrate an understanding of the basic sciences related to surgical technology.
04. Describe and practice safety measures in the surgical environment.
05. Perform patient care procedures related to the surgical environment and describe methods for meeting patients' needs.
06. Demonstrate knowledge of the skills necessary to function safely and effectively.
07. Demonstrate knowledge of and assist with surgical procedures.
08. Demonstrate employability skills.

284

- 01.0 DEMONSTRATE COMMUNICATION AND INTERPERSONAL SKILLS--The student will be able to:
- 01.01 Demonstrate use of the intercom.
 - 01.02 Demonstrate proper telephone usage.
 - 01.03 Assist in scheduling patient for surgery.
 - 01.04 Assist in explaining activities to patient.
 - 01.05 Demonstrate effective teamwork as a member of the surgical team.
- 02.0 DEMONSTRATE AN UNDERSTANDING OF LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:
- 02.01 Explain Patients Bill of Rights.
 - 02.02 State methods, standards and aids that assist a surgical technologist with interpreting and following legal responsibilities.
 - 02.03 Explain the job requirements.
 - 02.04 Provide health care within the legal framework of his/her job description.
- 03.0 DEMONSTRATE AN UNDERSTANDING OF THE BASIC SCIENCES RELATED TO SURGICAL TECHNOLOGY--The student will be able to:
- 03.01 Explain microbiology and its relationship to the surgical environment.
 - 03.02 Demonstrate knowledge of medical/surgical terminology.
 - 03.03 Relate anatomy and physiology to surgical procedures.
 - 03.04 Apply the principles of surgical asepsis.
- 04.0 DESCRIBE AND PRACTICE SAFETY MEASURES IN THE SURGICAL ENVIRONMENT--The student will be able to:
- 04.01 Inspect emergency equipment and supplies for condition and quantity.
 - 04.02 Identify and report/correct unsafe conditions.
 - 04.03 Identify and report, to designated personnel, conditions which may exist that could negatively affect the health, safety and well being of the patient or personnel.
 - 04.04 Check electrical equipment in the operating room.
 - 04.05 Demonstrate correct body mechanics.
- 05.0 PERFORM PATIENT CARE PROCEDURES RELATED TO THE SURGICAL ENVIRONMENT AND DESCRIBE METHODS FOR MEETING PATIENT'S NEEDS--The student will be able to:
- 05.01 Perform patient transfer/transportation techniques.
 - 05.02 Take and record temperature pulse, respiration, and blood pressure.
 - 05.03 Shave operative site.
 - 05.04 Connect patient to electrocardiograph monitor.
 - 05.05 Assist with positioning and restraining patient for surgery.
 - 05.06 Ground patient and connect electro surgical cautery unit.
 - 05.07 Assist anesthetist and circulating nurse during induction.
 - 05.08 Prepare operative site.
 - 05.09 Insert foley catheter and connect to drainage.
 - 05.10 Assist in applying sterile dressing and bandage.
- 06.0 DEMONSTRATE KNOWLEDGE OF THE SKILLS NECESSARY TO FUNCTION SAFELY AND EFFECTIVELY--The student will be able to:
- 06.01 Select instruments, equipment and supplies for surgical procedures using surgeon preference cards/procedure cards.
 - 06.02 Measure and pour sterile solutions.
 - 06.03 Perform surgical scrub.
 - 06.04 Put on sterile gown and gloves.
 - 06.05 Drape tables and solution stands.
 - 06.06 Set up sterile mayo stand and instrument table.
 - 06.07 Prepare sutures, ligatures, ties.

SURGICAL TECHNOLOGY - Continued

- 06.08 Assist surgeon in gowning and gloving.
 - 06.09 Assist in draping patient, pass instruments, monitor field.
 - 06.10 Identify/correct and/or report breaks in aseptic technique.
 - 06.11 Monitor body fluids, e.g. blood loss, ascites.
 - 06.12 Perform complete counts with R.N..
 - 06.13 Identify principles and demonstrate techniques of disinfection and sterilization.
 - 06.14 Assist in removing/applying cast.
 - 06.15 Prepare specimen for laboratory analysis.
 - 06.16 Decontaminate instruments equipment and environment.
 - 06.17 Replenish supplies and equipment.
 - 06.18 Prepare and/or update procedure cards.
- 07.0 DEMONSTRATE KNOWLEDGE OF AND ASSIST WITH SURGICAL PROCEDURES--The student will be able to:
- 07.01 Identify preoperative diagnosis, common complications, operative pathology relating to specific surgical procedures.
 - 07.02 List and describe types of incisions and wound closures.
 - 07.03 Select instruments, equipment and supplies any for surgical procedure.
- 08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 08.01 Conduct a job search.
 - 08.02 Secure information about a job.
 - 08.03 Identify documents that may be required when applying for a job.
 - 08.04 Complete a job application.
 - 08.05 Demonstrate competence in job interview techniques.
 - 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 08.07 Identify acceptable work habits.
 - 08.08 Demonstrate knowledge of how to make job changes appropriately.
 - 08.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Unit Treatment and Rehabilitation

CODE NUMBER: Secondary _____

Postsecondary HCP0990

Florida CIP H017.040500

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS _____

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

_____ Postsecondary Vocational _____ x Other _____ 13-15

CERTIFICATION COVERAGE: PRAC NURSE 7

- I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as psychiatric aides (70061011), case aides (195.367-010), unit treatment and rehabilitation specialists, or asylum attendants or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, concepts of mental health and mental illness; treatment plans and activities designed to stabilize, reorient, and rehabilitate mentally ill and emotionally disturbed patients; techniques of administration of prepackaged medication; observation of patients for changes in vital signs and behavior patterns; assisting patients in activities of daily living; supervising individual patients and patient teams; leadership and human relations; CPR, health, safety, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. LABORATORY ACTIVITIES: Laboratory activities and clinical experiences are essential to this program.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor, and the employer which includes instructional objectives and a list of on-the-job and in-school learning experience. and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 6.0, Language 7.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

The typical length of this program for the average achieving student is 300 hours.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Participate in a variety of treatment and rehabilitation activities designed to stabilize, reorient, and rehabilitate mentally ill and emotionally disturbed patients.
 02. Assist treatment and rehabilitation personnel in carrying out prescribed functions of specialized rehabilitation programs centered around personal and social adjustment, i.e., self-help, personal hygiene, and daily living.

Unit Treatment and Rehabilitation - Continued

03. Participate in group therapy sessions with professionals and observe patients for changes in behavior patterns.
04. Take temperatures, pulse, and blood pressures as directed and assist in feeding, bathing, and other personal care activities.
05. Prepare reports, assimilate data and recommend changes in policies, procedures, or techniques as a member of the treatment and rehabilitation team.
06. Supervise individual patients and patient teams in the routine daily living activities of the treatment and rehabilitation unit.
07. Administer prepackaged medications as directed.
08. Demonstrate employability skills.

STUDENT PERFORMANCE STANDARDS

EFFECTIVE DATE: July, 1987

PROGRAM AREA: Health Occupations

SECONDARY NUMBER: _____

PROGRAM TITLE: Unit Treatment and
Rehabilitation

POSTSECONDARY NUMBER: HCP0990

01.0 PARTICIPATE IN A VARIETY OF TREATMENT AND REHABILITATION ACTIVITIES
DESIGNED TO STABILIZE, REORIENT, AND REHABILITATE MENTALLY-ILL AND
EMOTIONALLY DISTURBED PATIENTS--The student will be able to:

- 01.01 Describe agency and programs.
- 01.02 Identify and record maladaptive behaviors.
- 01.03 Initiate effective relationships with clients.
- 01.04 Negotiate a reward system with client.
- 01.05 Identify legal considerations.
- 01.06 Reduce client anxiety.
- 01.07 Identify client's problem by interpreting test results and soliciting information from other agencies within constraints of applicable confidentiality policies and laws.
- 01.08 Observe clients to prevent regression.
- 01.09 Perform reality testing.

02.0 ASSIST TREATMENT AND REHABILITATION PERSONNEL IN CARRYING OUT
PRESCRIBED FUNCTIONS OF SPECIALIZED REHABILITATION PROGRAMS CENTERED
AROUND PERSONAL AND SOCIAL ADJUSTMENT, I.E., SELF-HELP, PERSONAL
HYGIENE, AND DAILY LIVING--The student will be able to:

- 02.01 Obtain relevant information from client using interview techniques.
- 02.02 Explain client's rights.
- 02.03 Obtain client's signature if needed.
- 02.04 Shape client's behavior to substitute appropriate for maladaptive behavior.
- 02.05 Explain anticipated events related to treatment plan.
- 02.06 Obtain client's specific agreement and commitment to an agreed upon treatment plan.
- 02.07 Verify client's understanding of treatment plan contract.
- 02.08 Assist with explanation and interpretation of treatment plan to family.
- 02.09 Teach client personal self-help and living skills to develop an independent self-care program.
- 02.10 Identify specific goals and objectives for client.
- 02.11 Direct communication to client capabilities.
- 02.12 Plan learning tasks in increments appropriate to client's level of functioning.
- 02.13 Utilize effective reinforcement techniques.
- 02.14 Recognize, report/record indications of delirium tremens, hallucinations, confusional states or changes in emotion.
- 02.15 Encourage client compliance with routines.
- 02.16 Acquire assistance in interpreting as needed.

03.0 PARTICIPATE IN GROUP THERAPY SESSIONS WITH PROFESSIONALS AND OBSERVES
PATIENTS FOR CHANGES IN BEHAVIOR PATTERNS--The student will be able to:

- 03.01 "Read" and respond to "feeling tones" of client.
- 03.02 Conduct an activity program planned around the specific needs and interests of clients and their physical/emotional capabilities and limitations.
- 03.03 Assure client safety while encouraging and supporting their participation in activity.
- 03.04 Analyze critical incidents.
- 03.05 Empathize with and reassure client.
- 03.06 Lead, co-lead and/or participate in group therapy sessions.
- 03.07 Enhance socialization and interaction of clients.
- 03.08 Foster and sustain trust building relationship.
- 03.09 Foster involvement of all group members.
- 03.10 Draw out client feelings that encourage the release of tension and anxieties (catharsis).
- 03.11 Reduce excessive group pressure on a client.
- 03.12 Evaluate group session.
- 03.13 Protect client's right to privacy and confidentiality.
- 03.14 Adhere to organization policy in dealing with critical incident.

UNIT TREATMENT AND REHABILITATION - Continued

- 04.0 TAKE TEMPERATURES, PULSE, AND BLOOD PRESSURES AS DIRECTED AND ASSIST IN FEEDING, BATHING, AND OTHER PERSONAL CARE ACTIVITIES--The student will be able to:
- 04.01 Monitor, record, report vital signs.
 - 04.02 Supervise client feeding, bathing and grooming.
 - 04.03 Monitor urine and bowel habits.
- 05.0 PREPARE REPORTS, ASSIMILATE DATA AND RECOMMEND CHANGES IN POLICIES, PROCEDURES, OR TECHNIQUES AS A MEMBER OF THE TREATMENT AND REHABILITATION TEAM--The student will be able to:
- 05.01 Determine appropriate treatment needs.
 - 05.02 Record and review data with client to assure accuracy.
 - 05.03 Prepare report for supervisor.
 - 05.04 Record client's progress.
 - 05.05 Initiate revision to treatment plan if needed.
 - 05.06 Participate in planning and developing policies and procedures for a treatment program.
 - 05.07 Identify treatment program characteristics.
 - 05.08 Assist with identification of necessary budgeting, staffing, equipment, supplies, and physical plant resources.
 - 05.09 Collect and compile information to insure completeness of therapeutic treatment plan.
 - 05.10 Refer clients to another treatment service.
 - 05.11 Assist with establishment of client/family responsibility in the referral process.
 - 05.12 Contact receiving agency to determine availability of service and provide necessary information.
 - 05.13 Participate in follow-up plan.
 - 05.14 Participate in team review (evaluation) of treatment plans.
 - 05.15 Propose treat goals or therapeutic interventions.
 - 05.16 Participate in decision making.
 - 05.17 Record information in written form.
 - 05.18 Obtain information from recorded materials.
- 06.0 SUPERVISE INDIVIDUAL PATIENTS AND PATIENT TEAMS IN THE ROUTINE DAILY LIVING ACTIVITIES OF THE TREATMENT AND REHABILITATION UNIT--The student will be able to:
- 06.01 Use language and expressions that client can understand.
 - 06.02 Maintain attentive behavior.
 - 06.03 Control violent behavior.
 - 06.04 Schedule and supervise client's work assignment.
 - 06.05 Escort clients when necessary.
 - 06.06 Facilitate realigy-based feedback to clients.
- 07.0 ADMINISTER PREPACKAGED MEDICATIONS AS DIRECTED--The student will be able to:
- 07.01 Observe and report side effects of medication.
 - 07.02 Administer prepackaged medication.
 - 07.03 Motivate client to take prescribed medication.
 - 07.04 Assemble information about properties of medications being administered, their potential side effects, and client's rights relating to taking or refusing medication.
 - 07.05 Determine client's medication history from records or family in re-allergic reactions.
 - 07.06 Assure adequate supply and safeguard storage of medications to prevent overdose.
 - 07.07 Assume responsibility for information transfer to/from oncoming shift.
- 08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 08.01 Conduct a job search.
 - 08.02 Secure information about a job.
 - 08.03 Identify documents that may be required when applying for a job.
 - 08.04 Complete a job application.
 - 08.05 Demonstrate competence in job interview techniques.
 - 08.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 08.07 Identify acceptable work habits.
 - 08.08 Demonstrate knowledge of how to make job changes appropriately.
 - 08.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Veterinarian Technology

CODE NUMBER: Secondary _____

Postsecondary _____

Florida CIP H017.051200

SECONDARY
SCHOOL CREDITS _____

COLLEGE CREDITS x

POSTSECONDARY ADULT
VOCATIONAL CREDITS _____

APPLICABLE LEVEL(S): _____ 7-9 _____ 9-12 _____ Postsecondary Adult Vocational

x Postsecondary Vocational

Other _____

CERTIFICATION COVERAGE:

- I. **MAJOR CONCEPTS/CONTENT:** The program is designed to prepare students for employment as animal caretaker (410.674-010), veterinary assistants, veterinary laboratory technicians, veterinary technicians, animal hospital clerks, or to provide supplemental training for persons previously or currently employed in these occupations. The program should meet the program requirements of the American Veterinary Medical Association and the Florida Veterinary Medical Association.

The content includes, but is not limited to, animal office procedure; animal pharmacy and pharmacology; animal examination room/area; animal surgical preparation and assisting; large and small animal nursing; laboratory animal procedures; animal radiology, and employability skills. The curriculum also includes general course material such as computer literacy and use, applied mathematics, biological science, communications skills, fundamentals of microbiology, and humanities or liberal arts. Applicants for the certification examination given by the Florida Veterinary Medical Association must be graduates of approved two-year programs. Program approval is defined as being approved by the American Veterinary Medical Association Committee on Animal Technician Activities and Training.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

- II. **LABORATORY ACTIVITIES:** Laboratory activities are essential to the program. Instructional emphasis is placed on laboratory diagnostic techniques and methods utilized in hematology, blood coagulation, blood chemistry, liver-kidney-pancreatic function tests, body fluid examinations and parasitology.
- III. **SPECIAL NOTE:** Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this program. Students are encouraged to become members of their professional organization.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor, and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The typical length of this program for the average achieving student is an associate degree.

- IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

01. Perform office procedures utilized in the management of a veterinary office.

Veterinarian Technology - Continued

02. Demonstrate an understanding of animal pharmacology by the proper handling and use of related drugs.
03. Perform under supervision, physical examinations, and laboratory procedures.
04. Assist with routine surgical and obstetrical procedures.
05. Prepare animals for surgical procedures.
06. Assist with anesthesia under supervision.
07. Perform surgical clean-up.
08. Perform large and small animal nursing techniques.
09. Perform urinalysis laboratory procedures.
10. Perform hematology laboratory procedures.
11. Perform parasitology laboratory procedures.
12. Perform microbiology laboratory procedures.
13. Perform necropsy laboratory procedures.
14. Perform cytology laboratory procedures.
15. Perform veterinary radiographic procedures.
16. Demonstrate research techniques on laboratory animals.
17. Apply knowledge of hospital management and equipment standards.
18. Apply knowledge of professional ethics, jurisprudence and professionalism.
19. Demonstrate employability skills.

01.0 PERFORM OFFICE PROCEDURES UTILIZED IN THE MANAGEMENT OF A VETERINARY OFFICE--The student will be able to:

- 01.01 Make appointments.
- 01.02 Demonstrate correct telephone usage.
- 01.03 List and describe appropriate information on state/federal health regulations and prepare health and vaccination certificated for signatures.
- 01.04 Admit patients, take history, and maintain records.
- 01.05 Demonstrate basic filing of X-Rays, lab reports, etc.
- 01.06 Demonstrate client and public relations:
 - (a) reception of client
 - (b) discharge of client
 - (c) educating the client
- 01.07 Demonstrate knowledge of ethics and jurisprudence.
- 01.08 Demonstrate knowledge of First-Aid (including CPR)
 - (a) animal techniques
 - (b) human techniques
- 01.09 Identify documentation procedures for responding to veterinarian medical emergencies.
- 01.10 Practice basic cleanliness and orderliness in relationship to the on-going activity of a veterinary facility (including hospital, clinic, center, practice, laboratory, etc.).
- 01.11 Demonstrate the knowledge of the technician's role in generation of veterinary practice income.
- 01.12 Demonstrate basic bookkeeping.
- 01.13 Demonstrate business letter and report writing.
- 01.14 Use a computer to perform simple work processing and veterinary office billing and recordkeeping.

02.0 DEMONSTRATE AN UNDERSTANDING OF ANIMAL PHARMACOLOGY BY THE PROPER HANDLING AND USE OF RELATED DRUGS--The student will be able to:

- 02.01 Identify and discuss general types and groups of drugs.
- 02.02 Label and package dispensed drugs correctly.
- 02.03 Read and fill prescriptions.
- 02.04 Use weights and measures correctly.
- 02.05 Calculate dosages.
- 02.06 Store and handle biologic and therapeutic agents appropriately.
- 02.07 Identify controlled substances and identify controlled handling.
- 02.08 Diagram and describe inventory control.
- 02.09 Prepare medications.
- 02.10 Discuss the signs of adverse drug reactions.
- 02.11 Use and explain appropriate routes and methods of drug administration.

03.0 PERFORM UNDER SUPERVISION, PHYSICAL EXAMINATIONS, AND LABORATORY PROCEDURES--The student will be able to:

- 03.01 List "normal" in all common species: (a) temperature, (b) pulse, (c) respiration.
- 03.02 Use proper medical terminology in oral and written communications.
- 03.03 Perform under supervision and explain to clients: immunizations; procedures; types; and schedules.
- 03.04 Identify common breeds of animals: (a) large animals; (b) small animals; (c) laboratory animals.
- 03.05 Restrain patients: (a) removal from and placement in restraint of small and laboratory animals in/on cages/tables; (b) halte horses and cattle; (c) basic rope usage and knot tying; (d) application of: nose tongs, twitch, hog holder, Elizabethan collar, dog safety muzzle, sheep restraint, bovine tail restraint, hose leg restraint, restraint of birds, operate cattle chute.
- 03.06 Identify heart and lung sounds with stethoscope.
- 03.07 Explain routine hospital procedures (e.g. surgeries, dental work, worming, patient care, etc.).

VETERINARIAN TECHNOLOGY - Continued

- 03.08 Explain and use knowledge of general nutritional requirements and practical approach to feeding common species.
 - 03.09 Collect blood, skin scrapings, administer specific drugs under supervision of veterinarian.
 - 03.10 Obtain and record patient history.
 - 03.11 Describe training of companion animals and correction of behavior problems.
 - 03.12 Identify common grains, grass, hay.
 - 03.13 Identify common poisonous plants.
- 04.0 ASSIST WITH ROUTINE SURGICAL AND OBSTETRICAL PROCEDURES--The student will be able to:
- 04.01 Describe and identify knowledge of the following routine surgical procedures: (a) Ovariohysterectomy--dogs and cats; (b) Caesarian section--all common species; (c) orthopedic procedures; (d) Castration--all common species; (e) tail docking--pups and lambs; (f) laparotomies--all common species; (g) dystocias in common species--recognition of obstetrical equipment; (h) dehorning--cattle and goats; (i) prolapse--common species and incidence.
 - 04.02 Describe and apply knowledge of the following obstetrical procedures:
 - (a) demonstrate knowledge to assist in the artificial insemination techniques and equipment in various species.
 - (b) Discuss pregnancy examination.
- 05.0 PREPARE ANIMALS FOR SURGICAL PROCEDURES--The student will be able to:
- 05.01 Prepare surgical sites--aseptic techniques.
 - 05.02 Clean surgical instruments.
 - 05.03 Prepare sterile surgical packs.
 - 05.04 Prepare and use gowns, masks, gloves, and drapes.
 - 05.05 Sterilize instruments and supplies using steam and cold methods.
 - 05.06 Identify instruments.
 - 05.07 Operate and maintain autoclaves.
 - 05.08 Sanitize operating room and care for used equipment.
 - 05.09 Identify and use common suture materials, types, etc.
 - 05.10 Position patients for common procedures.
 - 05.11 Arrange lighting during surgery.
 - 05.12 Use gas sterilization of instruments and supplies.
- 06.0 ASSIST WITH ANESTHESIA UNDER SUPERVISION--The student will be able to:
- 06.01 List and describe the following anesthetics:
 - (a) Pre-operative medications, (b) Local anesthesia, (c) Regional anesthesia, (d) General anesthesia--species variation: 1. IV anesthesia, 2. Inhalent anesthesia (methoxy-flurane, halothane, nitrous oxide), induction, endotracheal tube usage, equipment types and operation, 3. chemical restraints and muscle relaxants; (e) Anesthetic monitoring: 1. use of esophageal stethoscope, 2. EKG usage and audible monitoring, 3. stages and planes of anesthesia - recognition of clinical signs of stages and planes and understanding of significance of stages and planes; (f) Recognition of anesthetic emergencies: 1. resuscitation, 2. use of respirator, 3. anesthetic antagonists and their use; (g) Monitoring and care during anesthetic recovery, (h) Care and maintenance of anesthetic machine, (i) Waste anesthetic gas disposal and knowledge of human toxicity;
 - 06.02 Assist surgically with: (a) Instrument handling; (b) Maintenance of asepsis, (c) Care of exposed tissues and organs, (d) Obstetrical assistance, (e) Operative records.
- 07.0 PERFORM SURGICAL CLEAN-UP--The student will be able to:
- 07.01 Describe and perform surgical clean-up: (a) Equipment, (b) Surgical room or area, (c) Instruments, (d) Patient, (e) Personnel, (f) Proper disposal of waste and tissue.
- 08.0 PERFORM LARGE AND SMALL ANIMAL NURSING TECHNIQUES--The student will be able to:
- 08.01 Demonstrate injection techniques: (a) intravenous, (b) subcutaneous, (c) intramuscular, (d) intradermal, (e) intraperitoneal, (f) sublingual.

VETERINARIAN TECHNOLOGY - Continued

- 08.02 Demonstrate intravenous catheterization: (a) jugular vein, (b) cephalic and saphenous vein (small animals).
 - 08.03 Maintain fluid therapy (maintain catheter placement, determining and maintaining correct rate).
 - 08.04 Describe and perform pre and post-operative patient care.
 - 08.05 Administer oral medication by means of: (a) dose syringe, (b) balling gun, (c) oral speculum, (d) hand pilling--small animals, (e) gastric lavage--small animals.
 - 08.06 Demonstrate bandaging techniques.
 - 08.07 Apply and remove casts and splints.
 - 08.08 Perform suture removal.
 - 08.09 Apply emergency splint application.
 - 08.10 Perform dental prophylaxis, using hand and machine techniques.
 - 08.11 Perform therapeutic bathing, grooming, and dipping of small animals.
 - 08.12 Demonstrate routine recordkeeping, care, and observation of hospitalized patients.
 - 08.13 Practice stomach tubing: (a) dogs and cats, (b) cattle and sheep.
 - 08.14 Describe and perform intramammary treatment (mastitis therapy only).
 - 08.15 Implement patient and personnel safety measures.
 - 08.16 Describe and perform orphan animal care: (a) small and large animals, (b) exotic animals.
 - 08.17 Feed preparation and prescription diets to animals.
 - 08.18 Clean and care for cages, kennels, and stalls.
 - 08.19 Practice nail trimming for dogs, cats, and birds, and beak-trimming for birds.
 - 08.20 Practice equine leg and tail wraps.
 - 08.21 Express canine anal sacs.
 - 08.22 Practice blood collection and transfusion.
 - 08.23 Practice ear cleaning and dressing.
 - 08.24 Demonstrate enema administration.
 - 08.25 Demonstrate catheterization of urinary tract: (a) canine and feline, (b) large animals.
 - 08.26 Take and examine skin scrapings.
 - 08.27 Demonstrate emergency care of trauma patients.
 - 08.28 Clean, prep, and medicate wounds or abscesses.
 - 08.29 Apply topical medication to the eye.
 - 08.30 Describe and perform nursing care of newborns.
 - 08.31 Care and repair equipment.
 - 08.32 Prepare for equine vaginal examination and cervical culture.
 - 08.33 Demonstrate bovine mastitis testing.
 - 08.34 Demonstrate hoof trimming: (a) bovine, (b) equine, (c) ovine, (d) porcine.
 - 08.35 Mark and tattoo animals (sites and purposes).
 - 08.36 Practice physical therapy.
 - 08.37 Demonstrate sheath cleaning--equine.
- 09.0 PERFORM URINALYSIS LABORATORY PROCEDURES--The student will be able to:
- 09.01 Perform and demonstrate skill in the following: Urinalysis:
 - (a) Sample collection
 - (b) Physical properties
 - 1. color
 - 2. clarity
 - 3. specific gravity:
 - urometer
 - refractometer
 - (c) Chemical properties
 - 1. dipstick and tablet tests
 - (d) Microscopic sediment exam
 - (e) Chemical evaluation of calculi
- 10.0 PERFORM HEMATOLOGY LABORATORY PROCEDURES--The student will be able to:
- 10.01 Perform and demonstrate skill in the following: Hematology:
 - (a) Sample Collection procedures of all types
 - (b) CBC
 - 1. hemoglobin

VETERINARIAN TECHNOLOGY - Continued

2. hematocrit
3. sedimentation rate
4. total protein (refractometer)
5. white cellcount
 - glass pipette
 - unopette
 - automatic cell counter
6. red cell count
 - glass pipette
 - unopette
 - automatic cell counter
7. microscopic exam
 - preparation of blood film
 - staining with a variety of Romanowsky-like stains
 - leukocyte differential--normal/abnormal
 - RBC morphology evaluation--normal/abnormal
 - platelet estimation
 - calculation of absolute value
 - white blood cell correction for nucleated red cells
- (c) Reticulocyte count
- (d) Platelet count
- (e) Total eosinophil count
- (f) Blood parasite identification
 1. dirofilaria sp
 - direct blood exam
 - hematocrit tube method
 - knotts test
 - filter test
 - heartworm kits
 2. haemobartonella sp
 3. anaplasma sp
 4. babesia sp
 5. trypanosoma sp
 6. eperythrozoan sp
- (g) Coagulation
 1. knowledge of clotting principles
 2. Knowledge of one-step prothrombin time
 3. Knowledge of partial thromboplastin time
 4. Knowledge of fibrinogen assay
- (h) Chemistries
 1. use of various types of instruments
 2. perform common tests (BUN, glucose, common enzymes, etc.)
 3. pregnancy tests (MIP tests)
 4. theory of colorimetry and photometry
- (i) Serology--perform various types of slide/card agglutinations
 1. cross matching
 2. Coombs' test
 3. canine brucellosis

11.0 PERFORM PARASITOLOGY LABORATORY PROCEDURES--The student will be able to:

- 11.01 Perform and demonstrate skill in the following: Parasitology:
- (a) Sample collection
 - (b) External parasites
 1. sample preparation
 2. identification of common ectoparasites
 - mites
 - lice
 - ticks
 - (c) Internal parasites
 1. fecal floatation techniques
 2. identification of parasites and their ova
 - nematodes
 - trematodes
 - cestodes
 - flukes
 3. knowledge of parasite life cycles
- 11.02 Perform and demonstrate skill in the following: Coprology
- (a) Occult blood
 - (b) Fecal fat, trypsin

VETERINARIAN TECHNOLOGY - Technology

12.0 PERFORM MICROBIOLOGY LABORATORY PROCEDURES--The student will be able to:

- 12.01 Perform and demonstrate skill in the following: Microbiology:
- (a) Sample collection
 - (b) Bacteriology
 - 1. culture and sensitivity
 - 2. identification of common bacteria
 - 3. common biological tests
 - 4. staining procedures
 - (c) Mycology
 - 1. fungal culture and wet mount
 - 2. identification of common fungi
 - (d) Virology--principles of sampling and testing
 - (e) Principles of immunology

13.0 PERFORM NECROPSY LABORATORY PROCEDURES--The student will be able to:

- 13.01 Perform and demonstrate skill in the following: Necropsy procedures:
- (a) Sample collection, storage, shipment
 - (b) Disposal of dead animals
 - (c) Euthanasia procedures
 - (d) Handling of rabies suspects

14.0 PERFORM CYTOLOGY LABORATORY PROCEDURES--The student will be able to:

- 14.01 Perform and demonstrate skill in the following: Cytology:
- (a) Sample collection techniques for cytologic specimens
 - 1. color and clarity before and after centrifugation
 - 2. specific gravity
 - 3. total protein
 - 4. white cell count
 - 5. smear preparation and staining procedure
 - 6. basic cell identification (normal and common abnormal)
 - (b) Joint fluids
 - 1. color and clarity before and after centrifugation
 - 2. specific gravity
 - 3. total protein
 - 4. viscosity
 - 5. mucin precipitate test
 - 6. white cell count (WBC pipette and saline diluent only)
 - 7. smear preparation and staining procedure
 - 8. basic cell identification (normal and common abnormal)
 - (c) Cerebrospinal fluids
 - 1. color and clarity before and after centrifugation
 - 2. specific gravity
 - 3. quantitative protein
 - 4. white cell count
 - 5. red cell count
 - 6. smear preparation and staining procedures
 - 7. basic cell identification (normal and common abnormal)
 - (d) Airway washings (tracheal washes, nasal flushes, etc.)
 - 1. smear preparation and staining procedures
 - 2. basic cell identification (normal and abnormal)
 - (e) Tissue aspirates and impressions
 - 1. smear preparation and staining procedures
 - 2. basic cell identification (normal and common abnormal)
 - (f) Bone marrows
 - 1. smear preparation and staining procedure
 - 2. basic cell identification (normal and common abnormal)
 - 3. M/E ratio
 - (g) Vaginal smears
 - 1. slide preparation and staining procedures
 - 2. basic cell identification (normal and common abnormal)
 - 3. knowledge of estrous cycle
 - (h) Semen evaluation
 - 1. collection techniques
 - 2. slide preparation and staining procedure
 - 3. sperm count
 - 4. identification of abnormal sperm types

VETERINARIAN TECHNOLOGY - Continued

- 14.2 Perform and demonstrate skill in the following: Miscellaneous laboratory procedures:
- (a) Preparation, preservation, and shipment of laboratory samples
 - (b) Care and maintenance of laboratory equipment
 - (c) Quality control (normal and abnormal controls)
 - (d) Initiation and maintenance of laboratory records
 - (e) Basic principles of laboratory safety
 - (f) Preparation of common reagents
- 15.0 PERFORM VETERINARY RADIOGRAPHIC PROCEDURES--The student will be able to:
- 15.01 Perform and demonstrate the following radiographic procedures:
- (a) Implement safety measures
 - (b) Prepare and use technique charts
 - (c) Take and process diagnostic radiographs
 1. small animal positioning and techniques
 2. large animal positioning and techniques
 3. laboratory or exotic animal positioning and techniques
 - (d) Use darkroom procedures
 1. hand processing
 2. automatic processing
 - (e) Replace or replenish developer and fixer
 - (f) Demonstrate film labeling, filing, and storage
 - (g) Maintain radiographic quality control
 - (h) Maintain equipment
 1. hanging or storage of gloves or aprons
 2. cleaning screens
 3. ability to detect or suspect faulty equipment operation
 - (i) Proper use of both stationary and portable x-ray machines
 - (j) Perform special radiographic techniques (including contrast media studies)
- 16.0 DEMONSTRATE RESEARCH TECHNIQUES ON LABORATORY ANIMALS--The student will be able to:
- 16.01 Explain basic principles of research, and necessity for use of laboratory animals.
- 16.02 Identify and restrain common species of small laboratory animals.
- 16.03 Determine sex of laboratory animals.
- 16.04 Perform and/or supervise basic animal care procedure, e.g. feeding, watering, breeding, identification, and handling.
- 16.05 Administer or inject drugs or medicaments using appropriate sites and routes.
- 16.06 Collect body tissues or fluids.
- 16.07 Demonstrate knowledge of gnotobiotic techniques.
- 16.08 Perform oral dosing (intubation, blunt needle, stomach tube)
- 16.09 Anesthetize laboratory animals.
- 16.10 Identify common disease signs of laboratory animals.
- 16.11 Identify species of non-human primates.
- 17.0 APPLY KNOWLEDGE OF HOSPITAL MANAGEMENT AND EQUIPMENT STANDARDS--The student will be able to:
- 17.01 Demonstrate knowledge of the principles of infection control, cross contamination, and zoonoses.
- 17.02 Maintain inventory of supplies, medications and disposables.
- 17.03 Demonstrate knowledge of personnel management, assignments.
- 17.04 Determine personnel needs on each shift.
- 17.05 Perform routine maintenance checks and monitor equipment use.
- 17.06 Describe risk management techniques.
- 18.0 APPLY KNOWLEDGE OF PROFESSIONAL ETHICS, JURISPRUDENCE AND PROFESSIONALISM--The student will be able to:
- 18.01 List the benefits of belonging to a professional organization of animal technicians.
- 18.02 Describe the technician/veterinarian relationship.
- 18.03 Define ethics.

VETERINARIAN TECHNOLOGY - Continued

19.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 19.01 Conduct a job search.
- 19.02 Secure information about a job.
- 19.03 Identify documents that may be required when applying for a job.
- 19.04 Complete a job application.
- 19.05 Demonstrate competence in job interview techniques.
- 19.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 19.07 Identify acceptable work habits.
- 19.08 Demonstrate knowledge of how to make job changes appropriately.
- 19.09 Demonstrate acceptable employee health habits.

CURRICULUM FRAMEWORK

PROGRAM AREA: Health Occupations

FLORIDA DEPARTMENT OF EDUCATION

EFFECTIVE DATE: July, 1987

PROGRAM TITLE: Vision Care Assisting

CODE NUMBER: Secondary 8421000

Postsecondary _____

Florida CIP H017.070201

SECONDARY

SCHOOL CREDITS 6

COLLEGE CREDITS _____

POSTSECONDARY ADULT

VOCATIONAL CREDIT _____

APPLICABLE LEVEL(S): 7-9 9-12 Postsecondary Adult Vocational

Postsecondary Vocational x Other 10-12, 21

CERTIFICATION COVERAGE: TEC OPTICS 7

- I. MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment at the aide level to assist opticians, lens grinders, and other trained workers in the field of optics.

The content includes, but is not limited to, refraction of light, physics of glass, conversion of metrics, operation of specific machinery, and use of medical equipment used in the testing of eyes, safety and health, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that comprise this program when offered at the secondary level:

8421010 Vision Care Assisting 1
8421020 Vision Care Assisting 2
8421030 Vision Care Assisting 3
8421040 Vision Care Assisting 4
8421050 Vision Care Assisting 5
8421060 Vision Care Assisting 6

- II. LABORATORY ACTIVITIES: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.
- III. SPECIAL NOTE: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program.

The cooperative method of instruction may be utilized for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan, signed by the student, teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

The particular outcomes and student performance standards which the handicapped student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEP's. The job title for which the student is being trained must be designated in the IEP.

- IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:
01. Demonstrate knowledge of acceptable communication skills, physical safety, ethical behavior, and legal aspects.
 02. Demonstrate knowledge of lens theory.

300

Vision Care Assisting - Continued

03. Complete frame and patient measurements.
04. Grind and polish a glass lens to given specifications.
05. Edge, tint and inspect a pair of glass or plastic lenses and insert into a frame.
06. Demonstrate knowledge of frame selection techniques used in a dispensing office setting.
07. Demonstrate knowledge of frame adjustment and alignment.
08. Recognize patient needs in relation to lens characteristics.
09. Complete a case history.
10. Prepare patients for and assist in testing for eye disorders.
11. Demonstrate employability skills.

- 01.0 DEMONSTRATE KNOWLEDGE OF ACCEPTABLE COMMUNICATION SKILLS, PHYSICAL SAFETY, ETHICAL BEHAVIOR, AND LEGAL ASPECTS--The student will be able to:
- 01.01 Recognize and use various forms of communication.
 - 01.02 Use appropriate medical terminology and abbreviations.
 - 01.03 Use the intercom and telephone.
 - 01.04 Follow approved procedures for identifying and labeling.
 - 01.05 Demonstrate effective interpersonal relationships.
 - 01.06 Recognize ethical and legal ramifications of actions/inactions.
 - 01.07 Follow policies and procedures related to safety.
 - 01.08 Identify and demonstrate proper work ethic.
 - 01.09 Perform first aid and CPR.
- 02.0 DEMONSTRATE KNOWLEDGE OF LENS THEORY--The student will be able to:
- 02.01 Demonstrate knowledge of the anatomy and physiology of the eye and the disorders effecting vision.
 - 02.02 Demonstrate knowledge of the metric system and conversion to the Apothecary system.
 - 02.03 Demonstrate knowledge of optical measurement.
 - 02.04 Demonstrate knowledge of light refraction and the physics of glass.
- 03.0 COMPLETE FRAME AND PATIENT MEASUREMENTS--The student will be able to:
- 03.01 Measure the frame, eye and bridge size.
 - 03.02 Identify different frame and temple types.
 - 03.03 Complete patient prescription calculations.
 - 03.04 Perform stock selection.
- 04.0 GRIND AND POLISH A GLASS LENS TO GIVEN SPECIFICATIONS--The student will be able to:
- 04.01 Layout and block a cylindrical and spherical lens.
 - 04.02 Remove required amount of glass as specified from cylindrical and spherical lens.
 - 04.03 Cut concave and convex cylinder to given specification.
 - 04.04 Finish and polish a glass lens to given specifications.
- 05.0 EDGE, TINT AND INSPECT A PAIR OF GLASS OR PLASTIC LENSES AND INSERT INTO A FRAME--The student will be able to:
- 05.01 Edge and bevel a lens. .
 - 05.02 Heat treat a lens.
 - 05.03 Check a lens for safety.
 - 05.04 Insert lens into a frame.
 - 05.05 Demonstrate knowledge of frame repair.
 - 05.06 Demonstrate knowledge of lens tinting.
 - 05.07 Inspect completed spectacles.
- 06.0 DEMONSTRATE KNOWLEDGE OF FRAME SELECTION TECHNIQUES USED IN A DISPENSING OFFICE SETTING--The student will be able to:
- 06.01 Identify frame parts and materials.
 - 06.02 Demonstrate knowledge of frame measurement.
 - 06.03 Demonstrate pupilliary distance measurement.
 - 06.04 Demonstrate frame selection considering customer and frame characteristics.
- 07.0 DEMONSTRATE KNOWLEDGE OF FRAME ADJUSTMENT AND ALIGNMENT--The student will be able to:
- 07.01 Select correct frame and bridge size.
 - 07.02 Verify prescription information.
 - 07.03 Insert lenses in zyl, optyl, and nylon frames.
 - 07.04 Perform frame adjustment and alignment.
 - 07.05 Perform frame repairs.

VISION CARE ASSISTING - Continued

08.0 RECOGNIZE PATIENT NEEDS IN RELATION TO LENS CHARACTERISTICS--The student will be able to:

- 08.01 Identify the effects of types of lights on glass lenses.
- 08.02 Describe the effects of types of tint on the eye.
- 08.03 Identify types of glass coatings.
- 08.04 Identify the effects of the optical prism on lenses.
- 08.05 Define prism imbalance, vertical imbalance and full imbalance.
- 08.06 Identify occupational eyewear and special purpose frames.

09.0 COMPLETE A CASE HISTORY--The student will be able to:

- 09.01 Record the patient's chief complaints.
- 09.02 Record the patient's medical and ocular history.
- 09.03 Record the family's medical and ocular history.
- 09.04 Record the social history.

10.0 PREPARE PATIENTS FOR AND ASSIST IN TESTING FOR EYE DISORDERS--The student will be able to:

- 10.01 Define myopia, hyperopia, astigmatism, and ametropia.
- 10.02 Perform visual acuity screening and record results.
- 10.03 Demonstrate knowledge of selected instruments used in determining specific eye disorders.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.02 Secure information about a job.
- 11.03 Identify documents that may be required when applying for a job.
- 11.04 Complete a job application.
- 11.05 Demonstrate competence in job interview techniques.
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
- 11.07 Identify acceptable work habits.
- 11.08 Demonstrate knowledge of how to make job changes appropriately.
- 11.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Vision Care Assisting</u>	PROGRAM NUMBER: <u>8421000</u>
COURSE TITLE: <u>Vision Care Assisting 1</u>	COURSE NUMBER: <u>8421010</u>

COURSE DESCRIPTION:

This course prepares students with communications, safety, ethical, legal, employability, basic science and introductory vision care skills.

01.0 DEMONSTRATE KNOWLEDGE OF ACCEPTABLE COMMUNICATION SKILLS, PHYSICAL SAFETY, ETHICAL BEHAVIOR, AND LEGAL ASPECTS--The student will be able to:

- 01.01 Recognize and use various forms of communication.
- 01.02 Use appropriate medical terminology and abbreviations.
- 01.03 Use the intercom and telephone.
- 01.04 Follow approved procedures for identifying and labeling.
- 01.05 Demonstrate effective interpersonal relationships.
- 01.06 Recognize ethical and legal ramifications of actions/inactions.
- 01.07 Follow policies and procedures related to safety.
- 01.08 Identify and demonstrate proper work ethic.
- 01.09 Perform first aid and CPR.

02.0 DEMONSTRATE KNOWLEDGE OF LENS THEORY--The student will be able to:

- 02.01 Demonstrate knowledge of the anatomy and physiology of the eye and the disorders effecting vision.
- 02.02 Demonstrate knowledge of the metric system and conversion to the Apothecary system.
- 02.03 Demonstrate knowledge of optical measurement.
- 02.04 Demonstrate knowledge of light refraction and the physics of glass.

03.0 COMPLETE FRAME AND PATIENT MEASUREMENTS--The student will be able to:

- 03.01 Measure the frame, eye and bridge size.
- 03.02 Identify different frame and temple types.
- 03.03 Complete patient prescription calculations.
- 03.04 Perform stock selection.

04.0 GRIND AND POLISH A GLASS LENS TO GIVEN SPECIFICATIONS--The student will be able to:

- 04.01 Layout and block a cylindrical and spherical lens.
- 04.02 Remove required amount of glass as specified from cylindrical and spherical lens.
- 04.03 Cut concave and convex cylinder to given specification.
- 04.04 Finish and polish a glass lens to given specifications.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.02 Secure information about a job.
- 11.03 Identify documents which may be required when applying for a job.
- 11.04 Complete a job application form correctly.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Vision Care Assisting</u>	PROGRAM NUMBER: <u>8421000</u>
COURSE TITLE: <u>Vision Care Assisting 2</u>	COURSE NUMBER: <u>8421020</u>

COURSE DESCRIPTION:

This course prepares students with basic frame dispensing and job seeking skills.

05.0 EDGE, TINT AND INSPECT A PAIR OF GLASS OR PLASTIC LENSES AND INSERT INTO A FRAME--The student will be able to:

- 05.01 Edge and bevel a lens.
- 05.02 Heat treat a lens.
- 05.03 Check a lens for safety.
- 05.04 Insert lens into a frame.
- 05.05 Demonstrate knowledge of frame repair.
- 05.06 Demonstrate knowledge of lens tinting.
- 05.07 Inspect completed spectacles.

06.0 DEMONSTRATE KNOWLEDGE OF FRAME SELECTION TECHNIQUES USED IN A DISPENSING OFFICE SETTING--The student will be able to:

- 06.01 Identify frame parts and materials.
- 06.02 Demonstrate knowledge of frame measurement.
- 06.03 Demonstrate pupillary distance measurement.
- 06.04 Demonstrate frame selection considering customer and frame characteristics.

07.0 DEMONSTRATE KNOWLEDGE OF FRAME ADJUSTMENT AND ALIGNMENT--The student will be able to:

- 07.01 Select correct frame and bridge size.
- 07.02 Verify prescription information.
- 07.03 Insert lenses in zyl, optyl, and nylon frames.
- 07.04 Perform frame adjustment and alignment.
- 07.05 Perform frame repairs.

08.0 RECOGNIZE PATIENT NEEDS IN RELATION TO LENS CHARACTERISTICS--The student will be able to:

- 08.01 Identify the effects of types of lights on glass lenses.
- 08.02 Describe the effects of types of tint on the eye.
- 08.03 Identify types of glass coatings.
- 08.04 Identify the effects of the optical prism on lenses.
- 08.05 Define prism imbalance, vertical imbalance and full imbalance.
- 08.06 Identify occupational eyewear and special purpose frames.

11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

- 11.01 Conduct a job search.
- 11.05 Demonstrate competence in job interview techniques.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE: <u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT: <u>1</u>
PROGRAM TITLE: <u>Vision Care Assisting</u>	PROGRAM NUMBER: <u>8421000</u>
COURSE TITLE: <u>Vision Care Assisting 3</u>	COUSE NUMBER: <u>8421030</u>

COURSE DESCRIPTION:

This course prepares students to prepare patients for and assist in testing for eye disorders and to behave ethically on the job.

- 09.0 COMPLETE A CASE HISTORY--The student will be able to:
- 09.01 Record the patient's chief complaints.
 - 09.02 Record the patient's medical and ocular history.
 - 09.03 Record the family's medical and ocular history.
 - 09.04 Record the social history.
- 10.0 PREPARE PATIENTS FOR AND ASSIST IN TESTING FOR EYE DISORDERS--The student will be able to:
- 10.01 Define myopia, hyperopia, astigmatism, and ametropia.
 - 10.02 Perform visual acuity screening and record results.
 - 10.03 Demonstrate knowledge of selected instruments used in determining specific eye disorders.
- 11.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:
- 11.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
 - 11.07 Identify acceptable work habits.
 - 11.08 Demonstrate knowledge of how to make job changes appropriately.
 - 11.09 Demonstrate acceptable employee health habits.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Vision Care Assisting</u>	PROGRAM NUMBER:	<u>8421000</u>
COURSE TITLE: <u>Vision Care Assisting 4</u>	COURSE NUMBER:	<u>8421040</u>

COURSE DESCRIPTION:

This course is a practicum (clinical experience) which covers all aspects of vision care assisting. Courses #1, 2, and 3 are pre-requisite to this course.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Vision Care Assisting</u>	PROGRAM NUMBER:	<u>8421000</u>
COURSE TITLE: <u>Vision Care Assisting 5</u>	COURSE NUMBER:	<u>8421050</u>

COURSE DESCRIPTION:

This course is a practicum (clinical experience) which covers all aspects of vision care assisting. Courses #1, 2, 3 and 4 are pre-requisite to this course.

STUDENT PERFORMANCE STANDARDS	EFFECTIVE DATE:	<u>July, 1987</u>
PROGRAM AREA: <u>Health</u>	COURSE CREDIT:	<u>1</u>
PROGRAM TITLE: <u>Vision Care Assisting</u>	PROGRAM NUMBER:	<u>8421000</u>
COURSE TITLE: <u>Vision Care Assisting 6</u>	COURSE NUMBER:	<u>8421060</u>

COURSE DESCRIPTION:

This course is a practicum (clinical experience) which covers all aspects of vision care assisting. Courses #1, 2, 3, 4, and 5 are pre-requisite to this course. Students should be employable in many assisting capacities in the ophthalmic professions.