

# HEALTH

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**MedicalAssistant**

**MedicalLaboratoryTechnician**

**Nursing-AssociateDegree**

**Nursing-Practical**

**PhysicalTherapistAssistant**

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## Medical Assistant

The Medical Assistant program is designed to prepare men and women to function as members of the health care delivery team and perform administrative and clinical procedures. This most often occurs in ambulatory settings such as medical offices and clinics.

Administrative duties include scheduling and receiving patients, preparing and maintaining medical records, performing basic secretarial skills and medical transcription, handling telephone calls, writing correspondence, serving as liaison between the physician and other individuals, and managing practice finances.

Clinical duties include asepsis and infection control, taking patient histories and vital signs, performing first aid and CPR, preparing patients for procedures, assisting the physician with examinations and treatments, collecting and processing specimens, performing selected diagnostic tests, and preparing and administering medications as directed by the physician.

NIACC's classrooms include the latest in computers, office, and laboratory equipment. The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation of the Committee of Accreditation for Medical Assistant Education.

Students must attain a grade point average of 2.00 (C) in program courses to proceed to the practicum. (A minimum grade of "C-" is allowed in Medical Office Procedures, Clinical Procedures I and II, and a minimum grade of "C" is required in Medical Terminology.) In addition, students must meet all course requirements prior to beginning the practicum. The student may be required to travel a distance for the externship. Externships are randomly assigned to the student and available sites are dependent on the permission of the specific agency.

Further information regarding progression in the program and specific program policies is provided to the MA student in the individual program handbook. Students are provided this handbook during the first MA class day. Students are referred to this handbook throughout the program.

Upon completion of the prescribed curriculum with a 2.00 GPA and a minimum overall cumulative college grade point average of 2.00, the student is awarded a diploma from NIACC. In addition, the student is eligible for the national certification examination to become a CMA (Certified Medical Assistant).

Beginning with the January 2001 administration of the Certification Examination, a student with a felony record will not be eligible for Certification Examination unless the CB (Curriculum Board) grants a waiver based on one or more of the mitigating circumstances listed in the *Disciplinary Standards*. The student can verify certification eligibility prior to entering the program by contacting the CB at the following address: AAMA (American Association of Medical Assistants), 20 North Wacker Drive, Ste. 1575, Chicago, IL 60606-2903.

A night class sequencing is also available for this program if numbers are sufficient. If the program is being extended beyond a one-year period, courses 90:141 and 90:142 are required to be taken during the final year of the course of study.

### ENTRANCEREQUIREMENTS

High school graduation or the equivalent is necessary for entrance into the program. Students are encouraged to meet with the counselor prior to program enrollment to arrange for assessment in keyboarding, reading, writing, and math to determine if additional course work is required to promote success. A physical examination providing evidence of current immunization and sound physical and mental health is also required prior to 90:141, Clinical Procedures I.

### PRESCRIBEDCURRICULUM

#### First Term

15:211 Word Processing .....	2 s.h.
15:212 Business Communication.....	3 s.h.
15:251 Medical Terminology I.....	3 s.h.
90:141 Clinical Procedures I .....	4 s.h.
94:104 Body Structure and Function .....	4 s.h.
OR Anatomy and Physiology I and II	
	<b>16 s.h.</b>

#### Second Term

15:109 Introduction to Accounting.....	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
15:241 Human Relations .....	3 s.h.
15:250 Basic Medical Insurance and Coding.....	2 s.h.
15:259 Medical Office Procedures .....	3 s.h.
89:150 Employment Strategies .....	1 s.h.
90:142 Clinical Procedures II .....	4 s.h.
	<b>17 s.h.</b>

#### Summer Term (only Eight Weeks)

90:208 Medical Assistant Externship.....	<b>6 s.h.</b>
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### Course Descriptions-Medical Assistant

**15:109 Introduction to Accounting (3 s.h.)** A basic understanding of the process of collecting and using financial information in business. (45-0)

**15:110 Electronic Calculators (1 s.h.) [Structured or Open Entry/Open Exit]** A study of the 10-key, electronic calculator. Applied business problems on the calculator. This course has been designated as a pass/no pass course. (5-20)

**15:211 Word Processing (2 s.h.)** This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

**15:212 Business Communication (3 s.h.)** This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student

plans and writes business letters and interoffice memoranda. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

**15:241 Human Relations (3 s.h.)** The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the work place have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

**15:250 Basic Medical Insurance and Coding (2 s.h.)**  
Prerequisite: 15:251, Medical Terminology I, and 94:104, Body Structure and Function. This course will provide the students with an overview of medical health insurance claims, submission guidelines, and basic coding procedures. In addition, the student will work through a number of relevant case studies. (30-0)

**15:251 Medical Terminology I (3 s.h.)** A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

**15:259 Medical Office Procedures (3 s.h.)** Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a medical office that includes preparing correspondence and patient records, using the Internet to access information, filing, handling telephone services, making and keeping appointments, developing transcription skills, composing letters, discussing professionalism, applying grammar rules, and taking care of general office duties. Also includes medical ethics and etiquette, medical law, and use of a computer for word processing. Students are expected to spend time outside of class working in the computer lab. (45-0)

**89:150 Employment Strategies (1 s.h.)** Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

**90:141 Clinical Procedures I (4 s.h.)** Assist physician with examinations and treatments, prepare patients for examinations and diagnostic procedures, administer first aid and CPR, maintain and use aseptic techniques, obtain and record patient data. Perform routine tests, steril-

ize instruments, and learn related terminology. If taking curriculum beyond a one-year period, this course should be taken during the final year of the curriculum, (45-30)

**90:142 Clinical Procedures II (4 s.h.)** Prerequisite: 90:141, Clinical Procedures I. A continuation of Clinical Procedures I with emphasis on pharmacology, administration of medications, electrocardiography and the circulatory system. Principles of radiography and nutrition. Collection and testing of laboratory specimens, including phlebotomy. If taking curriculum beyond a one-year period, this course should be taken during the final year of the curriculum, (45-30)

**90:208 Medical Assistant Externship (6 s.h.)** An eight-week term of practical experience in selected physicians' offices, clinics, or laboratories. It offers the students an opportunity to perform various clinical and office procedures under the supervision of the physician or assistant and the instructor/coordinator. This course has been designated as a pass/no pass course. (0-270)

**94:104 Body Structure and Function (4 s.h.)** A basic study of the anatomy and physiology of the human body. Study progresses from the cell to tissues, organs and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

## Medical Laboratory Technician

### (Cooperative Program with Hawkeye Community College)

The Medical Laboratory Technician program prepares men and women to work under the supervision of the medical technologist, pathologist, or other qualified physician in a medical laboratory. A technician performs tests that aid in the diagnosis and treatment of disease.

Specific tasks which the Medical Laboratory Technician might perform include collection of blood and other specimens, preparation and examination of stained slides of blood cells or bacteria, microscopic examination of urine, blood, and other body fluids, grouping and typing of blood, and the analysis of body fluids for chemical components.

This program is offered jointly by NIACC and Hawkeye Community College. The first two semesters of the program may be taken at NIACC and the completion of the program is taken at Hawkeye Community College, Waterloo, Iowa. The final semester of the program is provided in the clinical setting, which may occur in a location of the student's choice. This placement, however, is dependent on a space available basis in the agency of choice. Upon completion of the prescribed curriculum, the student is awarded an associate in applied science degree and is then prepared to work in hospital laboratories, clinics, physicians' offices, public health agencies, research institutions, and the armed forces. The program is accredited by the Committee on Allied Health Education and Accreditation and the National Accrediting Agency for Clinical Laboratory Sciences.

Graduates of the Medical Laboratory Technician Program are eligible for the national certification examination.

Medical Laboratory Technicians may continue their education and become Medical Technologists.

#### ENTRANCE REQUIREMENTS

The applicant must meet at least one of the following groups of requirements and be a high school graduate or the equivalent to be eligible for admission to the Medical Laboratory Technology Program.

1. Be in the upper one-third of high school graduating class (or GED percentile average of 75 or above) and one year of high school Algebra I, Chemistry, and Biology with a "B" grade or higher in each semester.

OR

2. Be a high school or GED graduate. Score at least the following standard scores on each COMPASS Test (42 on Algebra, 82 on Reading, and 65 on Writing) or a 20 standard score on each ACT: Math, Reading, and English subtests and have

one year of high school Algebra I, Chemistry, and Biology with a "B" grade or higher in each semester

OR

3. Successfully complete the following courses at NIACC or comparable courses at Hawkeye Community College:

30:090 Basic Writing  
 30:120 College Reading Skills  
 40:060 Beginning Algebra  
 70:101 Biological Principles AND  
 70:102 Biological Principles Lab  
 70:140 Introductory Chemistry

All course work above must be completed with a 2.00 GPA.

OR

4. Any combination of the above requirements in 2 and 3 for algebra, reading, writing, chemistry, and biology that fulfill all 5 basic requirements.

The required related courses may be taken prior to enrolling or during the time the student is enrolled in the program. However, it is recommended that the curriculum be followed once the student is enrolled.

Students who withdraw from the program will be readmitted on a space-available basis. Preference will be given to those students who have been academically successful.

#### CURRICULUM

##### First Semester - NIACC

30:101 Communication Skills.....	3 s.h.
70:100 Intro to Lab Science.....	2 s.h.
70:140 Introductory Chemistry.....	4 s.h.
70:250 Anatomy and Physiology I.....	4 s.h.
80:110 Sociology OR	
80:101 General Psychology.....	3 s.h.
	<b>16 s.h.</b>

##### Second Semester - NIACC

15:251 Medical Terminology I.....	3 s.h.
70:109 Microbiology.....	4 s.h.
70:249 Urinalysis I.....	3 s.h.
70:251 Anatomy and Physiology II.....	4 s.h.
85:101 Public Speaking.....	2 s.h.
	<b>16 s.h.</b>

##### Summer Session - Hawkeye

112 Fundamental Lab Techniques.....	3 s.h.
114 Hematology I.....	3 s.h.
113 Clinical Microbiology I.....	4 s.h.
	<b>10 s.h.</b>

##### Third Semester - Hawkeye

216 Immunohematology I.....	4 s.h.
217 Coagulation.....	2 s.h.
218 Advanced Hematology.....	3 s.h.

219	Clinical Chemistry I.....	6 s.h.
220	Parasitology.....	1 s.h.
221	Serology.....	2 s.h.
		<b>18 s.h.</b>

#### Fourth Semester - Area II Clinical Sites\*

(24-week term, clinical in term ship)

229	Clinical Chemistry II.....	4 s.h.
224	Hematology II.....	4 s.h.
223	Clinical Microbiology.....	4 s.h.
226	Immunohematology II.....	2 s.h.
231	Serology II.....	1 s.h.
225	Urinalysis II.....	1 s.h.
232	Lab Survey & Review.....	1 s.h.
		<b>17 s.h.</b>

\*As identified in the curriculum, this program is offered over a two-year period of time. The first two semesters are taken at NIACC. The next summer session and fall semester are taken at Hawkeye Community College in Waterloo, Iowa. The final semester is a 24-week clinical in term ship. NIACC and Hawkeye will attempt to secure clinical experiences in the NIACC area (not guaranteed).

## Course Descriptions - Medical

### Laboratory Technician

**15:251 Medical Terminology I (3 s.h.)** A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

**30:101 Communication Skills I (3 s.h.)** Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

**70:100 Intro to Lab Science (2 s.h.)** This course familiarizes the student with the Medical Laboratory Technician program and the field of laboratory medicine. The organization and role of the clinical laboratory are explored, as well as medical ethics and conduct, employment opportunities, and professional opportunities. (30-0)

**70:109 Microbiology (4 s.h.)** Morphology, physiology, taxonomy, and relationship of microorganisms to disease. In-depth laboratory study and suitable lecture material with applications to agriculture, industry, and medicine. (45-30)

**70:140 Introductory Chemistry (4 s.h.)** Prerequisite: 40:060, Beginning Algebra, or equivalent. A first-year college chemistry course which covers the concepts of

chemistry. Among the topics included are systems of measurement, matter and energy, atomic theory, energy levels and atomic structure, the periodic table, ionic and covalent bonding, chemical equations, stoichiometry, acids and bases, states of matter, solutions, and redox. Lab experiments are performed and complement the classroom theory. Not accepted as a prerequisite for other advanced chemistry courses except 70:273, Organic Chemistry. Equivalent to University of Iowa 4:7, General Chemistry I. (45-30)

**70:249 Urinalysis I (3 s.h.)** Prerequisite: 70:100, Intro to Lab Science. This course includes the study of urine formation and methodology determining the physical, chemical, and microscopic properties of urine in normal and abnormal states. (30-30)

**70:250 Anatomy and Physiology I (4 s.h.)** Prerequisite: 70:111, Human Biology, or 70:101, Biological Principles, highly recommended. A study of the human body emphasizing the complementary nature of structure and function, molecular and cellular interactions, homeostasis, and metabolic processes. A cat dissection constitutes a major portion of the laboratory exercises. 70:250 includes a study of cells, tissue, membranes, skeletal, muscular, and reproductive systems. (45-30)

**70:251 Anatomy and Physiology II (4 s.h.)** Prerequisite: Successful completion of 70:250, Anatomy and Physiology I, strongly recommended. A continuation of 70:250, Anatomy and Physiology I. Includes a study of the circulatory, respiratory, digestive, endocrine, urinary, and nervous systems. Cat dissections continued, plus kidney, brain, and eye dissections. (45-30)

**80:101 General Psychology (3 s.h.)** Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to co-enroll in 30:120, College Reading Skills. An introduction to the scientific study of behavior; a brief history of psychology as a science, and topics fundamental to human behavior including developmental issues, sensory abilities, cognitive performance, social and emotional factors in behavior, and abnormal behavior and therapies. (45-0)

**80:110 Sociology (3 s.h.)** An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

**85:101 Public Speaking (2 s.h.)** Public speaking as an intellectual tool for use in argumentation and persuasion in a democratic society. (Offered each term.) (30-0)

## Associate Degree Nursing

Associate Degree Nursing is designed to prepare men and women for general staff registered nursing positions which involve direct care of patients. There are two routes of entry into the program — one for beginning regular students and one for Licensed Practical Nurses. For beginning students entering in June, the program can be completed in one summer term and four academic terms. Transfer students are assessed on an individual basis. The Iowa Code authorizes the Iowa Board of Nursing to review past felony convictions prior to determining eligibility for licensure. In dividends considering enrollment or currently enrolled in the nursing program should notify the Iowa Board of Nursing regarding prior felony convictions to ensure eligibility for licensure upon completion of the program.

Students should be aware they may need to travel a distance for clinical experience and that some clinical experiences will be scheduled during evening/night hours and week ends. Criminal/adult abuse checks and drug testing may also be required by individual agencies and the cost will be the responsibility of the student.

Upon satisfactory completion of the prescribed curriculum, the student is awarded an associate in applied science degree and is eligible for the NCLEX-RN exam. After passing this examination, the graduate receives registered nurse status. The program is approved by the Iowa Board of Nursing and accredited by the National League for Nursing Accrediting Commission, 61 Broadway - 33rd Floor, New York, NY 10006, (212-363-5555, ext. 153).

Further information regarding progression in the program and specific program policies is provided to the ADN student in the individual program handbook. Students are provided this handbook during the first ADN class day at the beginning of each year. Students are referred to this handbook throughout the program.

For graduates wishing to obtain a baccalaureate degree in nursing, the ADN program articulates into other BSN programs in Iowa. The University of Iowa College of Nursing offers its satellite RN to BSN Progression Program on the NIACC campus. Through this program RNs may complete all course work for their BSN locally.

### ENTRANCEREQUIREMENTS

The applicant must complete the application process through the health professions counselor located in the Student Services office. Admission is based on the following criteria:

1. Completion of a high school diploma or equivalency program
2. Meet two of the following criteria:
  - a. Graduated in the upper half of the high school class.
  - b. Graduated from high school with a minimum of a 2.5 GPA.

c. Completed the ACT exam with a composite score of 20 or higher. If the ACT was taken in high school, results are probably recorded on the high school transcript. If the ACT was taken after high school and is not recorded on the high school transcript, results must be forwarded to NIACC. Students with no ACT scores must contact the Admissions Office to take the COMPASS placement assessment.

3. Approved applicants are accepted into the program chronologically, based on the date of application. Completed applications are reviewed beginning in October of the year prior to the June start date and completed by the end of January of each year.

Applicants who do not meet requirements or those with a poor academic history may meet entrance requirements by successfully completing approved college courses. These courses should be discussed with the health professions counselor. Preference is given to students who meet the prerequisites the fall semester prior to anticipated entry into the program. Students currently enrolled in high school are an exception to this.

**Prerequisites:** The following required courses must be completed with a "C" grade or better.

#### Mathematics:

Two full-year courses (2 semesters each year) of math in high school (e.g., Algebra I, Algebra II, Geometry) OR two semesters of college equivalent math (e.g., 40:060, Beginning Algebra; 40:120, Intermediate Algebra)

#### Science:

Chemistry: two semesters of high school/college preparatory chemistry OR one semester of college chemistry (e.g., 70:140, Introductory Chemistry)

Biology: two semesters of high school/college preparatory biology OR one semester of a college biology course (e.g., 70:101, Biology and lab or 70:111, Human Biology and Lab)

#### Computer Technology:

Since the NCLEX licensing exam is a computerized test, two semesters of high school computer classes or one semester of a computer application class are also strongly recommended.

It is recommended that 4-6 semesters of high school English and 4-6 semesters of social studies be taken. An application to the ADN program, high school transcript, GED scores (if applicable), all college transcripts, and results of the ACT must be in the applicant's folder before the admissions committee takes action on acceptance into the Associate Degree Nursing Program. Upon acceptance, a physical examination providing evidence of current immunization and sound physical and mental health is required. After being accepted into the program, a student may delay entrance into the program no more than two years. A student will be required to reapply to the program after this time period.

The related course requirements scheduled for the freshman year must be taken in the sequence and time lines indicated. However, the required related courses (noted with an \* in the curriculum) may be taken prior to enrolling or during the time the student is in the nursing program.

Students must attain a "C" grade in all nursing courses and related required courses. An overall 2.00 GPA in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00 is required for graduation from this program.

Students who withdraw from the program must make for mal application for re entry and upon acceptance will be considered on a space-available basis. Readmission criteria is addressed in the ADN Student Handbook. A student may re enter the nursing curriculum one time. Options will be discussed on an individual basis for students unsuccessful at any level of the program.

**PRESCRIBED CURRICULUM**

**First Term (Summer - 6 weeks)**

30:101 Communication Skills I* (30:101C).....	3 s.h.
70:109 Microbiology* .....	4 s.h.
90:106 Introduction to Nursing.....	1 s.h.
	<b>8 s.h.</b>

**Second Term (Fall)**

**70:250 Anatomy and Physiology I* .....	4 s.h.
80:101 General Psychology* .....	3 s.h.
80:230 Human Growth and Development* .....	3 s.h.
90:108 Nursing I.....	7 s.h.
	<b>17 s.h.</b>

**Third Term (Spring)**

70:200 Nutrition*.....	3 s.h.
**70:251 Anatomy and Physiology II* .....	4 s.h.
90:111 Nursing II .....	10 s.h.
	<b>17 s.h.</b>

\*\* Anatomy and Physiology I and II must be completed within five years of beginning the nursing component of the curriculum.

**Fourth Term (Fall)**

80:110 Sociology* .....	3 s.h.
90:210 Nursing III .....	12 s.h.
	<b>15 s.h.</b>

**Fifth Term (Spring)**

30:102 Communication Skills II* (30:102C).....	3 s.h.
90:211 Nursing IV.....	12 s.h.
	<b>15 s.h.</b>

\*Courses which may be taken prior to entering the nursing program. Once in the nursing program, courses must be taken in the identified sequence.

**NOTE: Prior to Nursing I, students are required to obtain CPR certification for the adult, child and infant, and current certification must be maintained throughout the duration of the program. They may select either American Heart Association or American Red Cross classes to satisfy this requirement.**

**Course Descriptions - Associate Degree Nursing**

**30:101C Communication Skills I (3 s.h.)** Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

**30:102C Communication Skills II (3 s.h.)** Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

**70:109 Microbiology (4 s.h.)** Morphology, physiology, taxonomy, and relationship of microorganisms to disease. In-depth laboratory study and suitable lecture material with applications to agriculture, industry, and medicine. (45-30)

**70:200 Nutrition (3 s.h.)** Prerequisite: high school or college chemistry. Introduces the scope of the science of nutrition and its application to the nurse's role in promoting good nutrition throughout the life span. Principles of diet modification are presented as they relate to specific health problems. Nursing assessment, the patient's nutritional needs, and dietary planning are included. This course may also be taken during the summer between the freshman and sophomore year but must be completed prior to Nursing III. (45-0)

**70:250 Anatomy and Physiology I (4 s.h.)** Prerequisite: 70:111, Human Biology or 70:101, Biological Principles, highly recommended. A study of the human body emphasizing the complementary nature of structure and function, molecular and cellular interactions, homeostasis, and metabolic processes. A cat dissection constitutes a major portion of the laboratory exercises. 70:250 includes a study of cells, tissue, membranes, skeletal, muscular, and reproductive systems. (45-30)

**70:251 Anatomy and Physiology II (4 s.h.)** Prerequisite: Successful completion of 70:250, Anatomy and Physiology I, strongly recommended. A continuation of 70:250, Anatomy and Physiology I. Includes a study of the circulatory, respiratory, digestive, endocrine, and nervous systems. Cat dissections continued, plus kidney, brain, and eye dissections. (45-30)

**80:101 General Psychology (3 s.h.)** Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to co-enroll in 30:120, College Reading Skills. An introduction to the scientific study of behavior; a brief history of psychology as a science, and topics fundamental to human behavior including developmental issues, sensory abilities, cognitive performance, social and emotional factors in behavior, and abnormal behavior and therapies. (45-0)

**80:110 Sociology (3 s.h.)** An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

**80:230 Human Growth and Development (3 s.h.)** A study of the physical, mental, emotional, and social growth of the person from infancy through adulthood. Discussions include the need for love, affection, and attention; the concept of ego and sense of identity; the need of human bonds; the value of interpersonal dialogue; the capacity to develop intelligence; and the socioeconomic/ethnic influences. (45-0)

**90:106 Introduction to Nursing (1 s.h.)** An introduction to the philosophy and conceptual framework of the NIACC Associate Degree Nursing program. The course includes basic concepts related to legal and ethical aspects of nursing, nursing roles, and current trends in health care. The student is introduced to wellness-illness theory, the therapeutic nurse-patient relationship and effective communication techniques. An introduction to caring concepts is also included. This course has been designated as a pass/no pass course. (15-0)

**90:108 Nursing I (7 s.h.)** Prerequisite: 90:106, Introduction to Nursing, 70:109, Microbiology, and 30:101C, Communication Skills I. Introduction of the basic nursing concepts and the nursing process with special emphasis on the assessment and nursing diagnosis component. The course progresses from simple to complex, including comfort and safety needs in basic skill development. Includes beginning concepts from the life span, health maintenance, diet modification, psychological health, and pharmacology. Application from the biological, physical, and social sciences are utilized by the student in the care of clients, in long-term care and medical-surgical settings. (60-105)

**90:111 Nursing II (10 s.h.)** Prerequisite: 90:108, Nursing I; 70:250, Anatomy and Physiology I; 80:230, Human Growth and Development; and 80:101, General Psychology. Utilization of the nursing process with emphasis on planning in meeting client needs resulting from primary assaults on self-esteem as seen in alteration in body structure, body function, lifestyle, self-concept, and interpersonal relationships. Principles of diet modification, pharmacological therapy,

mental health concepts, mobility concepts, and health maintenance through the life span are integrated into the progressive development of the student's knowledge and skills. Clinical experiences include opportunities to apply the nursing process in maternal-newborn, pediatrics, and medical-surgical settings. (105-135)

**90:210 Nursing III (12 s.h.)** Prerequisite: 90:111, Nursing II; or 90:113, Nursing IIA, or consent of Associate Degree Nursing faculty, plus all freshman year nonnursing courses. Utilization of the nursing process with emphasis on implementation in meeting client needs resulting from manifestations of disturbed personal coping, disruptive personal lifestyles, disintegrated life patterns, and impairments in oxygenation and nutrition throughout the life span. Clinical experiences will include opportunities to apply the nursing process in a variety of care settings. (105-225)

**90:211 Nursing IV (12 s.h.)** Prerequisite: 90:210, Nursing III, or consent of Associate Degree Nursing faculty, plus 80:110, Sociology. Utilization of the nursing process with emphasis on evaluation in meeting client needs resulting from impairments relating to nutrition, elimination, and sensory stimulation throughout the life span. Concepts of management, legal, and ethical aspects of the nursing profession and issues related to current trends are presented. Clinical experiences will focus on clients with complex needs. The management experience is the culmination of the student's academic and clinical education in which the student will have an opportunity to care for several clients and apply basic skills in leadership and conflict management. (105-225)

## ADN Option for Licensed Practical Nurses

A limited number of Licensed Practical Nurses who meet the following criteria are eligible to enter the Associate Degree Nursing Program at the sophomore level upon successful completion of the bridge course, 90:113, Nursing IIA. Criteria include: graduation from an approved Practical Nursing Program with a 2.5 cumulative GPA in the nursing courses; a current, unencumbered license; have practiced nursing within the past two years; meet ADN Program prerequisites; and have completed the support courses required during the first year of the ADN Program. If as a practical nursing student, the cumulative GPA for the nursing classes is below 2.5, the returning student would be required to enroll in 90:111, Nursing II. Therefore, the LPN candidate should apply at least a year before the desired date of entering Nursing III to allow for placement in Nursing II, if necessary. One year must transpire from completion of a practical nursing program and entry into the ADN Program. In addition, the student must be employed as an LPN in at least a part-time status during the one-year interval. Individual consideration will be given to applicants who have not practiced nursing within the last two years or who have practiced in a nontraditional setting. This may include a challenge examination. A verification of current skills and total hours of employment from the employers will also be used to assess appropriate placement in the program.

Another option available for the Licensed Practical Nurse to enter the second year of the ADN program is if the student has met the following criteria:

- Previously met entrance requirements for the ADN program and has been enrolled until mid term of Nursing I of the ADN program.
- Has attained a "C" in all support courses that would be required at the completion of Nursing II in the ADN program.
- Has attained a 2.50 GPA in the nursing component of the PN program.
- Has successfully passed NCLEX-PN and presents a copy of the license to the Division Head.
- Has an overall college GPA of 2.00.

Eighteen semester hours of first year nursing credit will be awarded upon successful completion of Nursing III, the first course with a clinical component. In the event a student is not successful in Nursing IIA or Nursing III, the student will be required to apply for reentry into the program for the second semester of the freshman year on a space-available basis.

Students should be aware they may need to travel a distance for clinical experience and that some clinical experiences will be scheduled during evening/night hours and week ends. Criminal/adult abuse checks and drug testing may also be required by individual agencies and the cost will be the responsibility of the student.

**Prerequisites:** The following required courses must be completed with a grade of "C" or better.

### Mathematics:

Two full-year courses (2 semesters each year) of math in high school (e.g., Algebra I, Algebra II, Geometry) OR two semesters of college equivalent math (e.g., 40:060, Beginning Algebra; 40:120, Intermediate Algebra)

### Science:

Chemistry: two semesters of high school/college preparatory chemistry OR one semester of college chemistry, 70:140, Introductory Chemistry

Biology: two semesters of high school/college preparatory biology OR

one semester of a college biology course, 70:101, Biology and lab or 70:111, Human Biology and lab

### Computer Technology:

Since the NCLEX-RN exam is a computerized test, computer competencies are strongly recommended.

Other elements of the selection process include high school and college GPA and ACT scores. All criteria for the ADN Program apply and should be reviewed. This information must be in the applicant's file before the admissions committee will act on the application. Upon acceptance, a physical examination providing evidence of current immunization and sound physical and mental health is required.

Since the applicant's progress toward meeting prerequisites and admission requirements must be tracked, applicants to the Licensed Practical Nursing to Associate Degree Nursing Program must complete the application process through the health professions council selector located in the Student Services Office. Expected date of graduation will determine when the application to the program must be submitted.

Students must attain a "C" grade in all ADN courses and related required courses. An overall 2.00 GPA in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00 is required for graduation from this program.

Further information regarding progression in the program and specific program policies is provided to the ADN student in the individual program handbook. Students are provided this handbook during the first ADN class day. Students are referred to this handbook throughout the program.

The following are the support courses required prior to beginning the nursing aspect of the curriculum. These courses must be completed with a minimum of a "C" grade.

30:101 Communication Skills I (30:101C).....	3 s.h.
70:109 Microbiology .....	4 s.h.
70:200 Nutrition .....	3 s.h.
*70:250 Anatomy and Physiology I.....	4 s.h.

*70:251 Anatomy and Physiology II.....	4 s.h.
80:101 General Psychology.....	3 s.h.
80:230 Human Growth and Development.....	3 s.h.

**\*Anatomy and Physiology I and II must be completed within five years of beginning Nursing IIA (90:113)**

#### PRESCRIBED CURRICULUM

##### **First Term (Summer - one week, end of August)**

90:113 Nursing IIA.....	1 s.h.
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##### **Second Term (Fall)**

80:110 Sociology* .....	3 s.h.
90:210 Nursing III .....	12 s.h.
	<b>15 s.h.</b>

##### **Third Term (Spring)**

30:102 Communications Skills II* (30:102C).....	3 s.h.
90:211 Nursing IV.....	12 s.h.
	<b>15 s.h.</b>

\*Courses which may be taken prior to entering the program.

**NOTE:** Prior to Nursing III, students are required to obtain CPR certification for the adult, child and infant. Students may select either American Heart Association or American Red Cross classes to satisfy this requirement and current certification must be maintained throughout the duration of the program.

### Course Descriptions - ADN Option for Licensed Practical Nurses

**30:101C Communication Skills I (3 s.h.)** Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

**30:102C Communication Skills II (3 s.h.)** Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

**80:110 Sociology (3 s.h.)** An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

**90:113 Nursing IIA (1 s.h.)** Prerequisite: Graduate of approved practical nursing program; hold current, unencumbered practical nurse license, plus successful completion of all freshman nonnursing courses. Provides introduction to program, differentiates roles of LPN and RN, reviews nursing process, presents specific communication techniques, and reviews content in laboratory setting. Students must obtain a passing grade in this course to continue into Nursing, 90:210. If a passing grade is not attained, the student will be required to register for Nursing, 90:111. This course has been designated as a pass/no pass course. (14-2)

**90:210 Nursing III (12 s.h.)** Prerequisite: 90:111, Nursing II; or 90:113, Nursing IIA, or consent of Associate Degree Nursing faculty, plus all freshman year nonnursing courses. Utilization of the nursing process with emphasis on implementation in meeting client needs resulting from manifestations of disturbed personal coping, disruptive personal lifestyles, discontinued life patterns, and impairments in oxygenation and nutrition throughout the life span. Clinical experiences will include opportunities to apply the nursing process in a variety of care settings. (105-225)

**90:211 Nursing IV (12 s.h.)** Prerequisite: 90:210, Nursing III, or consent of Associate Degree Nursing faculty, plus 80:110, Sociology. Utilization of the nursing process with emphasis on evaluation in meeting client needs resulting from impairments relating to nutrition, elimination, and sensory stimulation throughout the life span. Concepts of management, legal, and ethical aspects of the nursing profession and issues related to current trends are presented. Clinical experiences will focus on clients with complex needs. The management experience is the culmination of the student's academic and clinical education in which the student will have an opportunity to care for several clients and apply basic skills in leadership and conflict management. (105-225)

## Practical Nursing

Practical Nursing is designed to prepare individuals to work in nursing situations which are relatively stable and unchanging. They are also prepared to assist experienced registered nurses and physicians in nursing situations that are complex and changing. The Iowa Code authorizes the Iowa Board of Nursing to review past felony conviction prior to determining eligibility for licensure. Individuals considering enrollment or currently enrolled in the nursing program should notify the Iowa Board of Nursing regarding prior felony convictions to ensure eligibility for licensure upon completion of the program.

Students should be aware they may need to travel a distance for clinical experience and that some clinical experiences will be scheduled during evening/night hours and weekends. Criminal/adult abuse checks and drug testing may also be required by individual agencies and the cost will be the responsibility of the student.

Students must attain a "C" grade in all nursing courses and at least a "C-" in related required courses. However, an overall 2.00 GPA in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00 is required for graduation from this program. If the student wishes to later seek application to the ADN program, a cumulative GPA of 2.5 in the nursing courses must be attained, as well as a "C" grade in all support courses required for the ADN program. If the student has not attained a 2.5 cumulative nursing course GPA, the student will be required to enroll in Nursing II, 90:111, of the ADN program.

Upon satisfactory completion of the prescribed curriculum, a diploma is awarded and the graduate is eligible for the NCLEX-PN exam. After passing this examination, the graduate receives licensed practical nurse status and is prepared to work in a beginning licensed practical nurse position under the supervision of qualified personnel. The program is approved by the Iowa Board of Nursing.

### ENTRANCEREQUIREMENTS

The applicant must complete the application process through the health professions counselor located in the Student Services Office. Entrance requirements include the following criteria:

1. Completion of a high school diploma or equivalency program.
2. Completion of high school with a grade point average of 2.00 or higher.
3. Satisfactory COMPASS assessment test results in reading, writing, and math (these are administered by NIACC).
4. Approved applicants are accepted into the program chronologically, based on the date of application. Completed applications are reviewed beginning in October of the year prior to the June start date and completed by the end of January of each year.

Applicants who do not meet requirements or those with a poor academic history may meet entrance requirements by successfully completing approved college courses and/or in creating assessment test results in an approved manner. This should be discussed with the health professions counselor.

Biology, general math (Basic Math, Mathematics for Decision Making, Algebra), and six semesters of English are recommended prior to applying to the program. Since the NCLEX-PN exam is a computerized test, a computer class is strongly recommended. An application to the Practical Nursing Program, high school transcript, GED scores (if applicable), and all college transcripts must be in the applicant's folder before the Admissions Committee takes action on acceptance into the Practical Nursing Program. After acceptance, a physical examination providing evidence of current immunization and sound physical and mental health is required.

Applicants who have been previously enrolled in an approved nursing program may request consideration for advanced standing.

Students must complete all course requirements in the first two terms before enrolling in the third term. Students should be aware they may need to travel a distance for clinical experience and that some clinical experiences will be scheduled during evening hours and weekends.

Students who withdraw from the program must make formal application for reentry and upon acceptance will be considered on a space-available basis. After being accepted into the program, a student may delay entrance into the program no more than two (2) years. A student will be required to reapply to the program after this period of time. Readmission criteria is addressed in the PN Student Handbook. A student may reenter the nursing curriculum one time.

Further information regarding progression in the program and specific program policies is provided to the PN student in the individual program handbook. Students are provided this handbook during the first PN class day. Students are referred to this handbook throughout the program.

### PRESCRIBEDCURRICULUM

#### **First Term (Summer - 6 weeks)**

30:101 Communication Skills I* (30:101C).....	3 s.h.
94:101 Practical Nursing Arts I.....	4 s.h.
94:104A Body Structure and Function** .....	4 s.h.
OR Anatomy and Physiology I and II	

**11 s.h.**

\*\* Body Structure and Function must be completed within five years of beginning the nursing component of the curriculum.

**Second Term (Fall)**

80:101 General Psychology*	3 s.h.
94:102 Practical Nursing Arts II	8 s.h.
94:103 Practical Nursing: Maternal, Infant, and Child Care	5 s.h.
	<b>16 s.h.</b>

**Third Term (Spring)**

80:230 Human Growth and Development*	3 s.h.
94:110 Practical Nursing in Physical/Mental Illness of Adults	13 s.h.
	<b>16 s.h.</b>

\*Courses which may be taken prior to entering the nursing program.

**NOTE:** Prior to enrolling in the fall semester of the program, students are required to obtain CPR certification for the adult, child, and infant, and current certification must be maintained throughout the duration of the program. They may select either American Heart Association or American Red Cross classes to satisfy this requirement.

**Course Descriptions - Practical Nursing**

**30:101C Communication Skills I (3 s.h.)** Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

**80:101 General Psychology (3 s.h.)** Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to co-enroll in 30:120, College Reading Skills. An introduction to the scientific study of behavior; a brief history of psychology as a science, and topics fundamental to human behavior including developmental issues, sensory abilities, cognitive performance, social and emotional factors in behavior, and abnormal behavior and therapies. (45-0)

**80:230 Human Growth and Development (3 s.h.)** A study of the physical, mental, emotional, and social growth of the person from infancy through adulthood. Discussions include the need for love, affection, and attention; the concept of ego and sense of identity; the need of human bonds; the value of interpersonal dialogue; the capacity to develop intelligence; and the socioeconomic/ethnic influences. (45-0)

**94:101 Practical Nursing Arts I (4 s.h.)** Prerequisite/Corequisite: 94:104, Body Structure and Function, 30:10C Communication Skills I. Orientation to nursing and the role of the practical nurse in the health community, history of nursing, ethical principles, legal nursing assessment, basic nursing skills, and practice of nursing skills in college laboratory. (45-30)

**94:102 Practical Nursing Arts II (8 s.h.)** Prerequisite: 94:101, Practical Nursing Arts I; 94:104, Body Structure and Function; and 30:101C, Communication Skills I. Prerequisite/Corequisite: 80:101, General Psychology. A continuation of 94:101. Continued development of basic skills, nursing assessment, creating and maintaining the physical environment, physical and psychological supportive measures, basic scientific principles of therapeutic nursing interventions and documentation, introduction to pharmacology and the administration of medications, normal nutrition, and therapeutic diets. Supervised practice in a college laboratory, long-term care nursing facilities, and medical-surgical settings. (75-120)

**94:103 Practical Nursing: Maternal, Infant, and Child Care (5 s.h.)** Prerequisite: 94:101, Practical Nursing Arts I; 30:101, Communication Skills I; 94:104A, Body Structure and Function. Prerequisite/Corequisite: 80:101, General Psychology. Offers the student basic knowledge about the family from the prenatal experience through labor and delivery to nursing care of the postpartum family and newborn. Includes an orientation to the nursing care of children in relation to normal growth and development through adolescence, as well as the effect of illness and hospitalizations on the child and family. Supervised clinical experience is provided in a birth center, a pediatric unit, and selected community agencies. (60-45)

**94:104A Body Structure and Function (4 s.h.)** A basic study of the human body. Study progresses from the cell to tissues, organs, and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

**94:110 Practical Nursing in Physical-Mental Illness of Adults (13 s.h.)** Prerequisite: 94:101, Practical Nursing Arts I; 94:102, Practical Nursing Arts II; 94:103, Practical Nursing: Maternal, Infant and Child Care; 94:104A, Body Structure and Function; and 80:101, General Psychology. Prerequisite/Corequisite: 80:230, Human Growth and Development. Utilization of the nursing process to develop basic skills in providing nursing care for patients with common health problems associated with each body system. Continuation of pharmacology and nutrition, beginning management skills and responsibilities of a licensed practical nurse, trends in nursing, preparation for licensure, and employment. Supervised clinical experience in medical/surgical areas, and surgical patient follow-through, mental health, home care and nursing facilities. (105-292)

## Physical Therapist Assistant

The Physical Therapist Assistant Program is designed to prepare individuals to work under the supervision of a Physical Therapist in the delivery of physical therapy services. Responsibilities can include: implementing treatment programs according to the Physical Therapist's plan of care, training patients in exercises and activities of daily living, administering modalities such as ultrasound, electrical stimulation, whirl pool, and other treatment procedures, and communicating with the Physical Therapist on the patient's progress.

Physical Therapist Assistants are employed at a variety of settings including but not limited to the following: hospitals, private practice clinics, rehabilitation centers, home health agencies, sports injury clinics, long-term care facilities, industrial settings, and schools.

The program is two academic years in length including one summer. Students must attain a "C" grade in all PTA courses, achieve a "pass" grade in all clinical assignments, and a "C-" grade in all support courses to progress through the program. Minimum standards for graduation are a GPA of 2.00 in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00. Upon completion of the curriculum, the student is awarded an associate in applied science degree. The program is accredited by the Commission on Accreditation in Physical Therapy Education, 111 N. Fairfax Street, Alexandria, VA 22314, Telephone (703)706-3245. Graduates are eligible to sit for the licensure examination. Criminal/adult abuse checks and drug testing may also be required by individual agencies and the cost will be the responsibility of the student.

### ENTRANCE REQUIREMENTS

The applicant must complete the application process through the health professions counselor located in the Student Services Office. Entrance requirements include the following criteria:

1. Have a high school diploma or its equivalent.
2. Meet two of the three following criteria:
  - a. Graduated in the upper half of the high school class.
  - b. Graduated from high school with a minimum of a 3.00 GPA.
  - c. Achieved an ACT composite score of 20 or higher.

If the ACT was taken while in high school, the results are probably on the high school transcript. If the ACT was taken following high school, results must be forwarded to NIACC. Students with no ACT score must contact the Admissions Office to take the COMPASS placement assessment.

Applicants who do not meet the above requirements or those with a poor academic history may meet entrance requirements by successfully completing approved col-

lege courses. This should be discussed with the health professions counselor.

An applicant's file will not be reviewed until all application criteria have been submitted.

**Prerequisites:** The following courses must be completed with a grade of "C-" or better:

#### Mathematics:

Four semesters of high school/college preparatory math (e.g., Algebra I, Algebra II, Geometry) OR  
Two semesters of college math (e.g., 40:060, Beginning Algebra, 40:120, Intermediate Algebra)

#### Science:

Two semesters of high school/college preparatory biology OR  
One semester of college biology (e.g., 70:101, Biology Principles and lab or 70:111, Human Biology and lab)

Two semesters of high school/college preparatory chemistry or physics OR  
One semester of college chemistry (e.g., 70:140, Introductory Chemistry) or physics (e.g., 70:122, Principles of Physics)

#### Computer Technology:

The student must provide evidence of knowledge of basic computer hardware and software functions, including proper use of e-mail and the Internet.

**After acceptance, a physical examination documenting current immunization and abilities to perform program requirements is needed. Students are also required to obtain CPR certification for the adult, child, and infant. Current certification is required and must be maintained throughout the duration of the program. They may select either American Heart Association or American Red Cross classes to satisfy this requirement.**

Students who withdraw from the program must make formal application for re-entry and upon acceptance will be considered on a space-available basis. Readmission criteria is addressed in the PTA Student Handbook. A student may re-enter the PTA curriculum once. After being accepted into the program, a student may delay entrance into the program no more than two (2) years. A student will be required to re-apply to the program after this period of time.

Further information regarding progression in the program and specific program policies is provided to the PTA student in the individual program handbook. Students are provided this handbook during the first PTA class day. Students are referred to this handbook throughout the program.

### PRESCRIBED CURRICULUM

#### First Term (Fall)

*15:251 Medical Terminology OR .....	3 s.h.
*90:145 PTA Terminology (1 s.h.)	
*70:250 Anatomy and Physiology I.....	4 s.h.
*80:101 General Psychology .....	3 s.h.
90:149 Introduction to PTA.....	2 s.h.
90:144 Fundamentals for PTA .....	3 s.h.

\* 00:000 Humanities Elective++..... 3 s.h.  
**16-18 s.h.**

### **Sec ond Term (Spring)**

90:136 In tro duc tion to the Clinic (1 week)..... 1 s.h.  
\*30:101 Com mu ni ca tions Skills I (30:101C) ..... 3 s.h.  
OR \*30:101 Com mu ni ca tions Skills (4 s.h.)  
\*70:149 Kinesiology ..... 3 s.h.  
\*70:251 Anat omy and Phys i ology II..... 4 s.h.  
\*90:146 De vel op men tal Pro ces ses..... 3 s.h.  
90:159 PTA Mo dal ities ..... 4 s.h.  
90:137 PTA Clinic I (2 weeks)..... 2 s.h.  
**20-21 s.h.**

### **Third Term (Sum mer - 7 weeks)**

90:147 Pathophysiology..... 3 s.h.  
90:150 PTA Assessment Procedures ..... 3 s.h.  
90:138 PTA Clinic II (2 weeks) ..... 2 s.h.  
**8 s.h.**

### **Fourth Term (Fall)**

\*30:102 Com mu ni ca tion Skills II (30:102C) ..... 3 s.h.  
OR \*30:102 Com mu ni ca tion Skills II (4 s.h.)  
90:212 Therapeutic Exercise..... 3 s.h.  
90:213 Orthopedics ..... 3 s.h.  
90:214 Neurology ..... 4 s.h.  
90:215 PTA Man a ge ment ..... 2 s.h.  
**15-16 s.h.**

### **Fifth Term (Spring)**

90:218 PTA Clinic III (8 weeks)..... 7 s.h.  
90:219 PTA Clinic IV (6 weeks) ..... 5 s.h.  
90:217 PTA Seminar ..... 1 s.h.  
**13 s.h.**

\*Courses which may be taken prior to en ter ing the pro gram, but pre re qui sites may need to be taken. Anat omy and Phys i ology must be taken within five years of be gin ning the program. Kinesiology must be taken within three years of start ing the pro gram. Once en rolled in the pro gram, courses must be taken in the iden ti fied se quence. Courses 90:136, 90:137, 90:138, 90:218 and 90:219 will be as signed a pass/no pass grade and will not be cal cu lated in the stu dent's GPA.

++Humanities elective may be taken any time prior to Term V.

**The stu dent should be aware that the clin i cal ex pe ri ence hours nec es si tate travel to var i ous hos pi tals and clin ics and may nec es si tate hous ing ex pen ses. Each in di vid ual clin i cal site may have spe cif ic re quire ments that vary (e.g., 10-hour days, back ground checks, urinalysis tests). The stu dent is re spon si ble for all costs and must com ply with clin i cal re quire ments in or der to be pro vid ed with an af filia tion.**

## **Course De scrip tions - Physical Therapist Assistant**

**90:145 PTA Ter mi nol ogy (1 s.h.)** Pre re qui site: None. In cludes an ori en ta tion to the vo cab u lary of med i cine with em pha sis on ter mi nol ogy re lated to re ha bil i ta tion. (15-0)

**90:149 In tro duc tion to PTA (2 s.h.)** Pre re qui site: None. This course pro vides an over view of the phys i cal ther apy pro fes sion and the role of the phys i cal ther a pist as sis tant, in clud ing le gal and eth i cal as pects of prac tice. Stu dents will be in tro duced to the pa tient care pro cess, be in struc ted in doc u men ta tion, and given much op por tu nity to work on their com mu ni ca tion skills. In cludes an in tro duc tion to the Clin i cal Edu ca tion com pon ent of the pro gram. (30-0)

**90:144 Fun da men tals for PTA (3 s.h.)** Pre re qui site: None. This course pro vides a founda tion in phys i cal ther apy in ter ven tions by cov er ing basic as sess ment and mea sure ment tech niques that the PTA can uti lize to monitor pa tients as well as basic treat ment in ter ven tions such as range of mo tion and trans fers. Pur poses of all skills, proper tech niques, and safety con sid er a tions will be ad dressed. Stu dents will have lab time to ap ply, prac tice, and dem on strate skills they are taught. (30-30)

**90:136 In tro duc tion to the Clinic (1 s.h.)** Pre re qui site: 15:251, Med i cal Ter mi nol ogy or 90:145, PTA Ter mi nol ogy; 90:149, In tro duc tion to PTA; and 90:144, Fun da men tals for the PTA. Skills, knowl edge, and at ti tudes learned will be ap plied to di rect pa tient care in se lected clin i cal set tings. In cludes ap pli ca tion/in te gra tion of PTA course work with the goal of stu dent pro vid ing qual ity care with un com pli cated pa tients and a high de gree of su per vi sion and guid ance. (0-40)

**70:149 Kinesiology (3 s.h.)** Pre re qui site: 70:250, Anat omy & Phys i ology I. Pro vides a ba sic un der stand ing of nor mal hu man body move ment as re lated to skel e tal, articular, neu rolog ical, and muscu lar sys tems. Le vers, torques, cen ter of grav ity, base of sup port and their re la tion ship to posture, bal ance, and move ment will be ad dressed. The stu dent will learn an a tom i cal pa tions and the ba sics of hu man gait. (30-30)

**90:146 De vel op men tal Pro ces ses (3 s.h.)** Pre re qui site: 80:101, Gen eral Psy chol ogy. Pres ents nor mal phys i cal, cog ni tive, so cial, and em o tional de vel op men tal pro ces ses which af fect an in di vid ual through out the life span. Em pha sis on in te gra tion of all as pects of hu man de vel op ment and ad di tional focus on ap pli ca tion of phys i cal pro ces ses to the field of phys i cal ther apy. Ob ser va tional ex pe ri ence in cluded. (45-0)

**90:159 PTA Mo dal ities (4 s.h.)** Pre re qui site: 90:144, Fun da men tals for PTA. Pre pares the stu dent for safe and ef fec tive ap pli ca tion of mo dal ities for pa tient treat ment. Mech a nisms of ac tion, in di ca tions, con tra in di ca tions and treat ment pro ce dures will be cov ered for the fol low ing: heat, elec tro mag netic ra di a tion, cold, mas sage, bio feed back, ex ter nal com pres sion, whirl pool, wound care, trac tion, and elec trical stim u la tion. Pain and skin as sess ment will be in cluded. Stu dents will prac tice ap pli ca tions in lab. (37.5-45)

**90:137 PTA Clinic I (2 s.h.)** Pre re qui site: 15:251, Med i cal Ter mi nol ogy or 90:145, PTA Ter mi nol ogy; 90:149, In tro duc tion to PTA; and 90:144, Fun da men tals for the PTA; 70:149, Kinesiology; 90:146, De vel op men tal Pro ces ses; and 90:159, PTA Mo dal ities. Skills, knowl edge,

and attitudes learned in Developmental Processes, Kinesiology, and PTA Modalities will be applied to direct patient care in selected clinical settings. Includes application/integration of all PTA course work with the goal of student providing quality care with uncomplicated to complex patients and a degree of supervision and guidance that will vary with the complexity of the patient or the environment. This course has been designated as a pass/no pass course. (0-80)

**90:147 Pathophysiology (3 s.h.)** Prerequisite: 15:251, Medical Terminology or 90:145, PTA Terminology; 70:250, Anatomy & Physiology I; and 70:251, Anatomy & Physiology II. Presents clinical disorders and diseases commonly treated in physical therapy. Pathology, etiology, diagnosis, signs, symptoms, prognosis and implications for rehabilitation will be covered. (45-0)

**90:150 PTA Assessment Procedures (3 s.h.)** Prerequisites: 90:149, Introduction to the PTA; 90:144, Fundamentals for PTA; and 70:149, Kinesiology. This course provides an in-depth look at various assessment skills performed and utilized by the PTA. Special emphasis will be on theory, application procedures, and documentation of findings when utilizing goniometry and manual muscle testing in the clinic setting. Students will have an opportunity in the lab portion to apply, practice, and demonstrate techniques they are taught. (30-30)

**90:138 PTA Clinic II (2 s.h.)** Prerequisite: 15:251, Medical Terminology or 90:145, PTA Terminology; 90:149, Introduction to PTA; and 90:144, Fundamentals for the PTA; 70:149, Kinesiology; 90:146, Developmental Processes; 90:159, PTA Modalities; 90:147, Pathophysiology; and 90:150, PTA Assessment Procedures. Skills, knowledge, and attitudes learned in Pathophysiology and PTA Assessment Procedures will be applied to direct patient care in selected clinical settings. Includes application/integration of all PTA course work, with the goal of the student providing quality care with uncomplicated to complex patients and a degree of supervision/guidance that will vary with the complexity of the patient or environment. This course has been designated as a pass/no pass course. (0-80)

**90:212 Therapeutic Exercise (3 s.h.)** Prerequisite: 90:144, Fundamentals for PTA, and 90:149, Kinesiology. This course studies the physiological effects of exercise on the musculoskeletal, cardiovascular, and pulmonary systems. Physical therapy treatment techniques to improve strength, flexibility, cardiovascular and pulmonary functions are presented. Treatment programs for specific diagnoses such as diabetes, pregnancy, and amputation are addressed. Students will practice techniques in lab. (30-30)

**90:213 Orthopedics (3 s.h.)** Prerequisite: 70:250 and 70:251, Anatomy and Physiology I and II, and 90:149, Kinesiology. Principles of fracture and soft tissue healing are applied to musculoskeletal injuries and disorders. Injuries, disorders, and function specific to each joint are covered. Physical therapy treatment for specific joint injuries are presented. Students will practice techniques in lab. (30-30)

**90:214 Neurology for the PTA (4 s.h.)** Prerequisites: 70:250, Human Anatomy and Physiology I; 70:251, Human Anatomy and Physiology II; 90:147, Pathophysiology; 90:146, Developmental Processes. This course will provide information, discussion, and treatment considerations with neurologically based diagnoses. Emphasis will be on exploring clinical manifestations and treatment considerations with all the disorders with special emphasis on cardiovascular accidents. Typical treatment techniques, exercise programs, and treatment progression will be applied to lab scenarios with a variety of neurological diagnoses. Students will have an opportunity in the lab portion to apply, practice, and demonstrate techniques they are taught. (45-30)

**90:215 PTA Management (2 s.h.)** Prerequisite: All previous PTA technical courses. Includes the basic principles of management including levels of authority and responsibility, supervisory process, performance appraisals, and policies and procedures. The process of quality assurance and chart audits are discussed. Varieties of reimbursement systems and their impact on health care delivery are discussed. Resume writing, interviewing, and employability skills will be covered. Ethical and legal issues in the practice of physical therapy will also be examined. (30-0)

**90:218 PTA Clinic III (7 s.h.)** Prerequisite: All PTA courses except 90:217, PTA Seminar. Skills, knowledge, and attitudes will be applied to direct patient care in selected clinical settings. Includes application and integration of all PTA course work with the goal of the student consistently and efficiently providing quality care with uncomplicated to complex patients and a moderate to low degree of supervision/guidance except when addressing new and highly complex situations. This course has been designated as a pass/no pass course. (0-320)

**90:219 PTA Clinic IV (5 s.h.)** Prerequisite: All PTA courses except 90:217, PTA Seminar. Skills, knowledge, and attitudes learned in all PTA course work will be applied to direct patient care in selected clinical settings. Includes application and integration of all PTA course work with the goal of the student consistently and efficiently providing quality care with uncomplicated to complex patients. The student usually needs no further guidance or supervision except when addressing new and highly complex situations. This course has been designated as a pass/no pass course. (0-240)

**90:217 PTA Seminar (1 s.h.)** Prerequisite: All PTA courses. This course will focus on the role of the PTA in helping patients achieve optimal mobility and become as independent as possible with functional activities. Lecture and discussions will incorporate students' experiences from PTA Clinic III and PTA Clinic IV so that each student has time to process and consider these learning experiences. All aspects of patient care will be addressed and case study presentations will be included to assist with problem-solving skills. (15-0)

## **Are you considering transferring to a four-year college or university?**

Students who earn associate degrees in the Health programs at NIACC may wish to apply their studies toward a bachelor's degree in health-related fields at a four-year college or university. For further information on such options as dentistry, nursing, occupational therapy, optometry, pharmacy, physical therapy, physician, physician assistant, radiology, and rehabilitation services at Drake University, St. Ambrose College, and the University of Iowa, please refer to pages 125-149 in the catalog or speak with a NIACC advisor.

