

HEALTH

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Medical Assistant

Medical Laboratory Technician

Nursing - Associate Degree

Nursing - Practical

Optometric Assistant

Physical Therapist Assistant

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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 and are staffed by qualified instructors in their field.

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 and Clinical Procedures I and II.) In addition, students must meet all course requirements prior to beginning their 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.

Upon completion of the prescribed curriculum with a grade point average of 2.00 (C), the student is awarded a diploma.

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

ENTRANCE REQUIREMENTS

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.

SUGGESTED SCHEDULE**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	
	16 s.h.

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.
90:142 Clinical Procedures II	4 s.h.
89:150 Job-Seeking Skills.....	1 s.h.
	17 s.h.

Summer Term (only Eight Weeks)

90:208 Medical Assistant Externship	6 s.h.
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Course Descriptions - Medical Assistant

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

15:110 Electronic Calculators (1 s.h.) [Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

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. (30-0)

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, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, nonverbal communication, and international communication. (45-0)

15:241 Human Relations (3 s.h.) Problems of defining the wants of the worker and of management and bringing these elements together in formal and informal organizations; implementing programs to help them achieve their common purpose to work together productively and cooperatively and with economic, psychological, and social satisfaction. (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.) 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, 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. (60-30)

89:150 Job-Seeking Skills (1 s.h.) Develop skills necessary to find, obtain, and keep a job. Students learn to understand and appreciate the world of work as they examine personal job readiness and skills to make job entry successful. (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, sterilize 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. (0-270)

94:104 Body Structure and Function (4 s.h.) 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. Upon completion of the prescribed curriculum, the student is awarded an associate of 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 may take a national certification examination.

Medical Laboratory Technicians may continue their education and become medical technologists.

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:

1. Completion of high school diploma or equivalency program.
2. Graduated in the upper half of the high school class.
3. Graduated from high school with a minimum of 2.5 GPA.
4. Completed ACT testing with a composite score of 20 or higher (recommended, but not required). If the ACT was taken while in high school, the results are probably recorded on the high school transcript. If the ACT was taken after high school or the score is not recorded on the high school transcript, the 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 requirements or those with a poor academic history may meet entrance requirements by successfully completing approved college courses. This should be discussed with the health professions counselor.

PrerequisitesThe following courses must be taken with a grade of C or better.

Mathematics:

Two semesters of high school/college preparatory math in high school (e.g., Algebra I) OR one semester of college equivalent math (e.g., 40:060, Beginning 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; 70:102L, Biology Lab)

It is recommended that 4-6 semesters of high school social studies be taken. An application, high school transcript, GED scores (if applicable), all college transcripts, and results of the ACT or COMPASS test must be in the applicant's folder before the admissions committee takes action on acceptance into the program. Upon acceptance, a physical examination providing evidence of current immunization and sound physical and mental health is required.

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.
	16 s.h.

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.
	16 s.h.

Summer Session - Hawkeye

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

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.
		18 s.h.

Fourth Semester - Area II Clinical Sites*

(24-week term, clinical internship)

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.
		17 s.h.

*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 course is a 24-week clinical internship. 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.) 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 must meet competency requirements in writing to receive a C grade or higher. Students may use word processors and a computer-aided editing system, Writer's Workbench. (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.) Prerequisite: New students with entering ACT or COMPASS reading scores below college level will be required to coenroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:110 Sociology (3 s.h.) An introductory course in sociology. A study of basic processes of group behavior identifying the main forces that hold groups together or weaken them. The study of society, family and group life, social organizations, culture, population, social change, and community structure, both urban and rural. (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.

Upon completion of the prescribed curriculum, the student is awarded an associate in applied science degree and is then prepared to work, with some degree of independence, in a beginning staff nurse position. Graduates are 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.

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.

ENTRANCE REQUIREMENTS

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. Graduated in the upper half of the high school class.
3. Graduated from high school with a minimum of a 2.5 GPA.
4. 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.

Applicants who do not meet requirements or those with a poor academic history may meet entrance requirements by successfully completing approved college courses. This 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:

Four semesters of high school/college preparatory 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)

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 available), 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 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 and adult abuse checks 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 related required courses. An overall 2.0 GPA in the prescribed curriculum is required for graduation from this program.

Students who withdraw from the program must make formal application for reentry and upon acceptance will be considered on a space-available basis. Preference for entry/reentry will be given to those students who have been academically successful. A student may reenter the nursing curriculum one time. Options will be discussed on an individual basis for students unsuccessful at any level of the program.

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.
	8 s.h.

Second Term (Fall)

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

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.
	17 s.h.

* 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.
	15 s.h.

Fifth Term (Spring)

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

*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 must meet minimum competency requirements in writing and speaking to receive a grade of C or higher. Students may use the computer editing system, Writer's Workbench. (45-0)

30:102C Communication Skills II (3 s.h.) continuation of 30:101C with emphasis on argumentative and persuasive writing, research methods, and language. Students must meet minimum competency requirements in writing to receive a grade of C or higher. Students may use the computer editing system, Writer's Workbench. (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.) Prerequisite: New students with entering ACT or COMPASS reading scores below college level will be required to enroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:110 Sociology (3 s.h.) An introductory course in sociology. A study of basic processes of group behavior identifying the main forces that hold groups together or weaken them. The study of society, family and group life, social organizations, culture, population, social change, and community structure, both urban and rural. (45-0)

80:230 Human Growth and Development (3 s.h.) study of human growth: physical, mental, emotional, and social. Investigation of the child's need for love, affection, and attention; the need for reexamination of many conventional school practices in relation to the child's ego concept, sense of identity, and level of aspiration; the importance of human bonds and the value of interpersonal dialogue in development; the capacity children have for the development of intelligence; and the influence of socioeconomic class and racial and ethnic discrimination on human development. (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. (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. (60-75)

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. 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.

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.

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

Mathematics:

Four semesters of high school/college preparatory 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

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. Criminal and adult abuse checks may also be required by individual agencies and the cost will be the responsibility of the student.

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 counselor 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 2.0 GPA in the prescribed curriculum is required for graduation from this 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.
80:230 Human Growth and Development.....	3 s.h.
80:101 General Psychology	3 s.h.

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

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.
	15 s.h.

Third Term (Spring)

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

*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

30:102C Communication Skills II (3 s.h.) continuation of 30:101 with emphasis on argumentative and persuasive writing, research methods, and language. Students must meet minimum competency requirements in writing to receive a grade of C or higher. Students may use the computer editing system, Writer's Workbench. (45-0)

80:110 Sociology (3 s.h.) An introductory course in sociology. A study of basic processes of group behavior identifying the main forces that hold groups together or weaken them. The study of society, family, group life, social organizations, culture, population, social change, and community structure, both urban and rural. (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. (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, 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)

Practical Nursing

Practical Nursing is designed to prepare men and women 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.

Students must attain a C grade in all nursing courses and at least a C- in related required courses. However, an overall 2.0 GPA in the prescribed curriculum 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. 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 completion of the prescribed curriculum, a diploma is awarded. 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.

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. 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. Have satisfactory COMPASS assessment test results in reading, writing, and math (these are administered by NIACC).

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 increasing assessment test results in an approved manner. This should be discussed with the health professions counselor.

It is recommended that biology, general math (Basic Math, Mathematics for Decision Making, Algebra), and six semesters of English be taken. 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 dis-

tance 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. Preference for entry/reentry will be given to those students who have been academically successful. A student may reenter the nursing curriculum one time.

CURRICULUM

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.

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.
	16 s.h.

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.
	16 s.h.

*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 in expository methods of development and personal experience. Students must meet minimum competency requirements in writing and speaking to receive a grade of C or higher. Students may use the computer editing system, Writer's Workbench. (45-0)

80:101 General Psychology (3 s.h.) Prerequisite: New students with entering ACT or COMPASS reading scores below college level will be required to enroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:230 Human Growth and Development (3 s.h.) study of human growth: physical, mental, emotional, and social. Investigation of the child's need for love, affection, and attention; the need for reexamination of many conventional school practices in relation to the

child's ego concept, sense of identity, and level of aspiration; the importance of human bonds and the value of interpersonal dialogue in development; the capacity children have for the development of intelligence; and the influence of socioeconomic class and racial and ethnic discrimination on human development. (45-0)

94:101 Practical Nursing Arts I (4 s.h.) Prerequisite: 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, principles of planning nursing care, 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. A continuation of 94:101. Continued development of basic skills, creating and maintaining the physical environment, physical and psychological supportive measures, basic scientific principles of therapeutic nursing techniques and clinical recording, introduction to pharmacology and the administration of medications, normal nutrition, and introduction to disease. Supervised practice in a college laboratory and selected community agencies. (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. 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 in a birth center and a pediatric unit is provided. (60-45)

94:104A Body Structure and Function (4 s.h.) 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. 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, and nursing homes. (105-316)

Optometric Assistant

Optometric Assistant is an 11-month program designed to prepare men and women for an assisting position in optometric or ophthalmic offices.

Under the supervision of the optometrist or ophthalmologist, the graduate will: assist with a visual examination, assist patients in selecting frames, instruct patients in the care of glasses and contact lenses, work with contact lenses, assist in detection of eye pathology and visual problems, schedule and receive patients, maintain records, and handle telephone calls, appointments, and correspondence.

To satisfactorily complete the program and be awarded a diploma, the student must maintain a 2.00 (C) in Introduction to Accounting (15:109) and Electronic Calculators (15:110), all optometric courses (those with a 94:000 number) including the eight-week summer practicum, as well as an overall program GPA of 2.00.

*Students must complete all course requirements and have a C average prior to beginning 94:152, Optometric Assisting III, clinical practicum.

ENTRANCE REQUIREMENTS

The applicant must:

1. have a high school diploma or its equivalent.
2. have a high school grade point average of 2.00 or higher.
3. have satisfactory COMPASS test results in reading, writing, and math (these are administered by NIACC).

Basic typing skills (30-45 wpm) are recommended. Applicants should have two semesters of physical science, two semesters of basic math, and six semesters of English, all with a C grade or better. All high school and college transcripts must be submitted.

Applicants who do not meet requirements or those with a poor academic history may meet entrance requirements by successfully completing remedial work or completing approved college courses the summer prior to admission. This should be discussed with the health professions counselor.

SUGGESTED SCHEDULE

First Term

15:241 Human Relations.....	3 s.h.
15:212 Business Communications.....	3 s.h.
94:150 Optometric Assisting I.....	3 s.h.
94:153 Optometric Assisting I Lab.....	4 s.h.
94:160 Optometric Office Practice I.....	5 s.h.
	18 s.h.

Second Term

15:109 Introduction to Accounting.....	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
94:151 Optometric Assisting II*.....	4 s.h.
94:154 Optometric Assisting II Lab.....	3 s.h.
94:161 Optometric Office Practice II.....	5 s.h.
	16 s.h.

Third Term (Summer - 8 weeks)

94:152 Optometric Assisting III.....	6 s.h.
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(Clinical experience practicum)

*The student should be aware that the clinical experience hours necessitate travel to various offices or clinics.

NOTE: Prior to graduation, students are required to obtain CPR training. They may select either Iowa Heart Association or American Red Cross classes to satisfy this requirement. Clinical experience practicum shall be on a full-time basis (40 hours per week).

Course Descriptions - Optometric Assistant

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

15:110 Electronic Calculators (1 s.h.) [Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

15:241 Human Relations (3 s.h.) Problems of defining the wants of the worker and of management and bringing these elements together in formal and informal organizations; implementing programs to help them achieve their common purpose to work together productively and cooperatively and with economic, psychological, and social satisfaction. (45-0)

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, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, nonverbal communication, and international communication. (45-0)

94:150 Optometric Assisting I (3 s.h.) The responsibilities and functions of an optometric assistant; legal and ethical responsibilities; AOAR; history of optometry; introduction to optometric terminology; anatomy and physiology of the eye; ophthalmic optics geometrical, physical and physiological; history taking; visual skills testing. Introduction to dispensing techniques including lens neutralization, verification, use of lensometer, transposition, tolerances, frame selection, and adjustment. (45-0)

94:153 Optometric Assisting I Lab (4 s.h.) prerequisite: 94:150, Optometric Assisting I. The student will practice and perform the identified competencies in the laboratory setting. (0-120)

94:151 Optometric Assisting II (4 s.h.) prerequisite: 94:150, Optometric Assisting I; and 94:153, Optometric Assisting I Lab; Corequisite: 94:154, Optometric Assisting II Lab. Optometric examination skills and introduction to instrumentations. Pharmacology, emergency care, pathology, low vision, vision therapy. Contact lens: structure, fitting, theories, modification, verification, and patient instruction. Professionalism, liability, and public relations. Continuation of optometric terminology. (60-0)

94:154 Optometric Assisting II Lab (3 s.h.) prerequisites: 94:150, Optometric Assisting I; and 94:153, Optometric Assisting I Lab; Corequisite: 94:151, Optometric Assisting II. The student will practice and perform the identified competencies in the laboratory setting. (0-90)

94:152 Optometric Assisting III (6 s.h.) prerequisite: 15:109, Introduction to Accounting; 15:110, Electronic Calculators; 94:151, Optometric Assisting II; and 94:161, Optometric Office Practice II. Practical experience in selected optometrists' or ophthalmologists' offices under the supervision of the optometrist or assistant and the instructor. Will also include summarization and evaluation. (0-320)

94:160 Optometric Office Practice I (5 s.h.) prerequisite: Basic typing skills (35-40 wam). Management of an optometric office that includes preparing correspondence and patient records, filing, telephone techniques, receiving patients, making and keeping records of appointments, completing various types of insurance forms and Title XIX forms, some discussion and training on microcomputers and word processing, and other general office duties. (75-0)

94:161 Optometric Office Practice II (5 s.h.) prerequisite: 94:160, Optometric Office Practice I, or permission of instructor. A continuation of 94:160. (75-0)

Physical Therapist Assistant

The Physical Therapist Assistant Program is designed to prepare men and women to administer treatments to clients while working under the supervision of a licensed physical therapist. Their duties include assisting the physical therapist in implementing treatment programs according to the plan of care, training clients in exercises and activities of daily living, gait training, administering modalities such as ultrasound, electrical stimulation and whirlpools, client and family education, and reporting the client's response to treatment to the physical therapist.

Graduates are prepared to work in a variety of settings which include hospitals, long-term care facilities, home health care, private physical therapy clinics, and school settings.

The program is two academic years in length including one summer. Students must attain a C grade in all PTA courses 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. Upon completion of the curriculum, the student is awarded the associate of applied science degree. The program is accredited by the Commission on Accreditation in Physical Therapy Education. Graduates are eligible to sit for the licensure examination.

ENTRANCE REQUIREMENTS

Sixteen students are accepted into the program each fall. Application deadline is October 1 the year prior to entry into the program. The admissions committee will begin reviewing completed applications and making class selections in October, the year prior to entry into the program. Applications may be submitted at any time with priority given by date of application for those meeting the 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 college courses. This should be discussed with the appropriate NIACC counselor.

The applicant must also:

3. submit a paper of two pages or less (typewritten, double-spaced) indicating why he/she wants to be a physical therapist assistant.
4. obtain exposure to physical therapy and/or other health occupations through observation, volunteerism, or work experience for a minimum of 40 hours. A minimum of eight hours must be in a physical therapy setting. These hours must be documented by a supervisor.

An applicant's file will not be reviewed by the Admissions Committee until this documentation and all other 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)

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 reentry and upon acceptance will be considered on a space-available basis. Preference for entry/reentry will be given to those students who have been academically successful. A student may reenter 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 reapply to the program after this period of time.

CURRICULUM**First Term (Fall)**

*15:251 Medical Terminology OR 90:145 PTA Terminology (1 s.h.)	3 s.h.
*60:232 First Aid and Personal Safety	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.
15:114 Computer Literacy	1 s.h.
	15-17 s.h.

Second Term (Spring)

*30:101 Communications Skills I (30:101C) OR *30:101 Communications Skills (4 s.h.)	3 s.h.
70:149 Kinesiology	3 s.h.
*70:251 Anatomy and Physiology II	4 s.h.
90:146 Developmental Processes	3 s.h.
90:148 PTA Modalities	5 s.h.
	18-19 s.h.

Third Term (Summer - 7 weeks)

*00:000 Humanities Elective	3 s.h.
90:147 Pathophysiology	3 s.h.
90:150 PTA Assessment Procedures	3 s.h.
90:157 PTA Clinic I (1 week)	1 s.h.
	10 s.h.

Fourth Term (Fall)

*30:102 Communication Skills II (30:102C) OR *30:102 Communication Skills II (4 s.h.)	3 s.h.
90:212 Therapeutic Exercise	3 s.h.
90:213 Orthopedics	3 s.h.
90:214 Neurology	4 s.h.
90:215 PTA Management	2 s.h.
90:216 PTA Clinic II (1 week)	1 s.h.
	16-17 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 entering the program. Anatomy and Physiology must be taken within five years of beginning the program. Once enrolled in the program, courses must be taken in the identified sequence. Courses 90:218 and 90:219 will be assigned a pass/fail grade and will not be calculated in the student's GPA.

The student should be aware that the clinical experience hours necessitate travel to various hospitals and clinics. Clinics III and IV may necessitate housing expenses.

**Course Descriptions -
Physical Therapist Assistant**

70:149 Kinesiology (3 s.h.) Prerequisite: 70:250, Anatomy & Physiology I. Provides a basic understanding of normal human body movement as related to skeletal, articular, neurological, and muscular systems. Levers, torques, center of gravity, base of support and their relationship to posture, balance, and movement will be addressed. The student will learn anatomical palpitations and the basics of human gait. (30-30)

15:114 Computer Literacy (1 s.h.) [Open Entry/Open Exit] Introduces a student to basic computer hardware and software functions. Students with little or no computer background are encouraged to take this course. (This course will also introduce students to the proper use of E-mail and the Internet on the NIACC campus.) (0-30)

90:144 Fundamentals for PTA (3 s.h.) Introduction to patient care activities for the PTA, including infection control techniques, measuring and recording vital signs, patient positioning and draping, posture and body mechanics, and patient transfers. The cause and effect of immobility will be discussed. Preambulation activities will be covered including range of motion exercise, functional activities, and fitting of assistive devices. Gait training and negotiation of architectural barriers will be addressed. (30-30)

90:145 PTA Terminology (1 s.h.) Includes an orientation to the vocabulary of medicine with emphasis on terminology related to rehabilitation. (15-0)

90:146 Developmental Processes (3 s.h.) Prerequisite: 80:101, General Psychology. Presents normal physical, cognitive, and psychosocial developmental processes which affect an individual throughout the life span. Emphasis on integration of physical, psychosocial, cognitive, social, and cultural aspects of development. Clinic observation experience is included. (38-24)

90:147 Pathophysiology (3 s.h.) Prerequisite: 15:251, Medical 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)

90:148 PTA Modalities (5 s.h.) Prerequisite: 90:144, Fundamentals for PTA. Prepares the student to use modalities for patient treatment. Mechanisms of action, indications, and contraindications will be discussed for each modality covered. Modalities covered will include heat (hot packs, paraffin, ultrasound), diathermy, electromagnetic radiation, cold, intermittent compression pump, massage, biofeedback, external compression, whirlpool, wound dressings, traction, and electrical stimulation. Pain rating and skin assessment procedures will be included. Treatment regimes will be presented using case studies. (45-60)

90:149 Introduction to PTA (2 s.h.) Provides an overview of the physical therapy profession and the role of the physical therapist assistant, including legal and ethical aspects of practice. Additional topics include effective communication and interpersonal interaction, the patient care process, documentation, critical thinking, and problem-solving skills. Students are also introduced to the clinical education component of the program. (30-0)

90:150 PTA Assessment Procedures (3 s.h.) Prerequisite: 15:251, Medical Terminology or 90:145, PTA Terminology; 90:144, Fundamentals for PTA; and 90:147, Pathophysiology. Introduction to assessment skills performed by the PTA. Theory and application of goniometry, manual muscle testing, and various other assessment techniques will be covered. Laboratory demonstration and practice of each skill will be included. (30-30)

90:157 PTA Clinic I (1 s.h.) Prerequisite: All previous PTA courses. Introduces the student to the clinic. Skills learned in Fundamentals for PTA, Kinesiology, PTA Modalities, Kinesiology and PTA Assessment Procedures will be applied to direct patient care in selected clinical affiliations. (0-40)

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. (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, including joint mobilization, for specific joint injuries are presented. (30-30)

90:214 Neurology (4 s.h.) Provides an overview of the human nervous system in regards to anatomy, neurodevelopment, and function. Clinical neuropathologies, therapeutic analysis, and program planning will be discussed. Pediatric considerations, as well as adult neurological problems, are included. Exercise theories covered will include PNF, NDT, Brunnstrom, and motor learning. (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 also be covered. (30-0)

90:216 PTA Clinic II (1 s.h.) Prerequisite: All previous PTA technical courses. New concepts and skills learned in therapeutic exercise, neurology, and orthopedics, will be applied to direct patient care in selected clinical settings. (0-40)

90:217 PTA Seminar (1 s.h.) Prerequisite: All previous PTA technical courses. Ethical and legal aspects of being a physical therapist assistant and the role of the American Physical Therapy Association will be presented. The course will focus on the role of the physical therapist assistant in assisting the patient to achieve optimal health, mobility, and independence. Interpersonal relationships, functional independence, patient/family education, and discharge planning are emphasized. Case study presentations will be included to assist with clinical problem solving skills. (15-0)

90:218 PTA Clinic III (7 s.h.) Prerequisite: All previous PTA courses. Includes application of all previous concepts and skills as well as developing proficiency in previously learned skills while providing direct patient care in selected clinical settings. The goal is integration of PTA skills to the level of employability. This course is assigned a pass/fail grade. (0-320)

90:219 PTA Clinic IV (5 s.h.) Prerequisite: All previous PTA courses. Includes application of all previous concepts and skills as well as developing proficiency in previously learned skills while providing direct patient care in selected clinical settings. The goal is integration of PTA skills to the level of employability. This course is assigned a pass/fail grade. (0-240)

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 117-138 in the catalog or speak with a NIACC advisor.