# ALLIED HEALTH PROFESSIONS

## Associate Degrees

The College Transfer Office (https://www.dccc.edu/admissions-financial-aid/transfer/transfer-office/) is set up to help Delaware County Community College students transfer to four-year colleges and universities. If you are planning to transfer, you are strongly encouraged to meet with a transfer advisor within your first two semesters (or before you reach 30 transferable college credits from all institutions attended).

## Associate in Applied Science (AAS) Degrees

### Health Care Management (AHM (https://catalog.dccc.edu/academic-programs/programs-study/health-care-management-aas/))

The Health Care Management curriculum prepares students for management roles in a rapidly changing health care environment. Once focused on episodes of treatment for acute disease, the health care industry now emphasizes lifelong health maintenance and wellness promotion. The program is intended for health care workers who require new knowledge and skills to compete in the changing health care marketplace. It will also be useful for those individuals with no previous health care experience who seek non-clinical entry-level positions in health care, or who plan to continue their education in the field of health care administration.

An Associate in Applied Science will be awarded upon completion of the program with a 2.0 GPA and a “C” or better in all Allied Health and Nursing (AHN) courses.

### Health Studies (HSTU) (https://catalog.dccc.edu/academic-programs/programs-study/health-studies-aas/)

The Associate of Applied Science in Health Studies is designed to offer students interested in working within the health care field an opportunity to attain the associate degree. Students acquiring this degree would be able to pursue advancement opportunities within varied health care settings. Examples of positions that would be applicable include: Billing Supervisor, Patient Service Representative, Medical Administrative Assistant, Medical Supply Manager and Allied Health Instructor. This program is especially advantageous for students who have completed certificates of competency and proficiency programs offered by the Allied Health and Nursing department and wish to complete a degreed course of study. The program offers a broad view of health care related topics while providing a basic liberal study foundation.

An Associate in Applied Science will be awarded upon completion of the program with a 2.0 GPA and a “C” or better in all Allied Health and Nursing (AHN) courses.

Upon completion of this curriculum students are eligible to sit for the CMRS (Certified Medical Reimbursement Specialist) exam. The CMRS designation is awarded by the Certifying Board of the American Medical Billing Association (CBAMBA).

### Medical Assistant (MED) (https://catalog.dccc.edu/academic-programs/programs-study/medical-assistant-aas/)

The Medical Assistant program prepares students as multi-skilled health care workers who function as assistants to physicians and other health care professionals in a variety of ambulatory care settings. The responsibilities of the medical assistant include administrative and clinical duties.

A Medical Assistant, Associate Degree in Applied Science, will be awarded upon successful completion of the required program with a 2.5 G.P.A. and a “C” or better in all allied health courses (AHM and AHA).

Students may complete the Certificate of Proficiency (CMED) program first.

### Medical Coding and Billing (MCBA) (https://catalog.dccc.edu/academic-programs/programs-study/medical-coding-billing-aas/)

The Medical Coding and Billing A.A.S. Degree provides students with the skills necessary to function as Physician-Based Coders, Hospital Coders, or Medical Claims Reviewers. Today, there are many demands for coding specialists and accurately coded data from the medical record in all types of health care institutions. Coded data is used on claims for reimbursement, patient care management and healthcare evaluation and research. The curriculum includes medical terminology, human anatomy, pathophysiology, pharmacology, administrative medical office management, electronic health records and CPT and ICD coding. An Associate in Applied Science will be awarded upon completion of the program with a 2.0 GPA and a “C” or better in all Allied Health and Nursing (AHN) courses.

### Surgical Technology (ORT) (https://catalog.dccc.edu/academic-programs/programs-study/surgical-technology-aas/)

The goal of this Surgical Technology program is to prepare students with the opportunity to develop the skills and knowledge necessary to gain employment as entry-level surgical technologists and become contributing members of the health care team to function under the supervision of professional registered nurses or licensed physicians. This will be accomplished by

1. preparing competent graduates in the cognitive, psychomotor and affective learning domains and
2. meeting or exceeding the criteria set forth in the current Commission on Accreditation of Allied Health Education Program (CAAHEP) Standards and Guidelines for the Accreditation of Educational Programs in Surgical Technology.

The program includes courses in general and technical education. Selected clinical experiences are provided in local hospitals under the supervision of a member of the surgical technology clinical faculty.

An associate in applied science degree will be awarded upon successful completion of the required program with a “C” or better in all surgical technology courses.

# Associate in Science (AS) Degrees

## Science for Health Professions (HSCI) (https://catalog.dccc.edu/academic-programs/programs-study/science-health-professions-as/)

The Science for Health Professions Program is designed for students who plan to transfer and continue their education in an allied health or pre-medical field at another institution. It provides the basic sciences and mathematics needed for a variety of programs, including Physical Therapy, Occupational Therapy, Baccalaureate Nursing, Physician Assistant, Pharmacy, Medicine, Dentistry, Veterinary Medicine, Optometry and Podiatry. Since admission requirements to other institutions vary, students should obtain information on entrance requirements for the specific school and program in which they are interested. Students are strongly encouraged to consult with both the Transfer Office at DCCC and their advisor regarding the best course selections for their transfer.

# Certificates

Certificates are short-term educational programs focused on specific work force skills and/or preparation for continued academic study. Delaware County Community College offers a Certificate of Competency (https://catalog.dccc.edu/academic-information/degree-certificate-requirements/#CertComp) and a Certificate of Proficiency (https://catalog.dccc.edu/academic-information/degree-certificate-requirements/#CertProf).

## Medical Assistant (CMED) (https://catalog.dccc.edu/academic-programs/programs-study/medical-assistant-certificate-proficiency/)

The Medical Assistant program prepares students as multi-skilled health care workers who function as assistants to physicians and other health care professionals in a variety of ambulatory care settings. The responsibilities of the medical assistant include administrative and clinical duties.

A Medical Assistant, Certificate of Proficiency will be awarded upon successful completion of the required program with a 2.5 G.P.A. and a "C" or better in all allied health courses (AHM and AHA).

## Medical Billing (MB) (https://catalog.dccc.edu/academic-programs/programs-study/medical-billing-certificate/)

The Medical Billing 19 college-credit certificate program provides students with the skills necessary to function as medical billers for all types of health care institutions. The curriculum includes medical terminology, health informatics, analysis of coded data used on claims for reimbursement and principles of medical billing.

A Certificate of Competency in Medical Billing will be awarded upon completion of this curriculum with a 2.0 GPA and a "C" or better in all allied health courses.

## Medical Coding and Billing (MC) (https://catalog.dccc.edu/academic-programs/programs-study/medical-coding-billing-certificate/)

The Medical Coding and Billing Certificate of Proficiency provides students with the skills necessary to function as Physician-Based Coders, Hospital Coders, or Medical Claims Reviewers. Today, there are many demands for coding specialists and accurately coded data from the medical record in all types of health care institutions. Coded data is used on claims for reimbursement, patient care management and healthcare evaluation and research. The curriculum includes medical terminology, human anatomy, pathophysiology, pharmacology, administrative medical office management, electronic health records and CPT and ICD-10-CM coding and ICD-10-PCS coding. A Certificate of Proficiency in Medical Coding and Billing will be awarded upon completion of this curriculum with a 2.0 GPA and a "C" or better in all Allied Health (AHA, AHM) courses, which is a departmental requirement of the Allied Health and Nursing (AHN) Division. The courses are listed with a start date of Spring semester but students may begin courses in Fall, Spring, or Summer semesters.

## Perioperative Nursing (NURP) (https://catalog.dccc.edu/academic-programs/programs-study/perioperative-nursing-certificate-competency/)

The knowledge and techniques necessary to assume responsibilities of the perioperative nurse are emphasized in this broad-based yet comprehensive orientation to the operating room and the perioperative role. Standards of patient care in the operating room are explored and identified. Assessment of patient needs and implementation of nursing interventions are emphasized. Collaborative decision making is reviewed relative to total intraoperative care. Subject material guides the learner to provide for and contribute to patient safety through control of internal and external environment, biological testing and product evaluation, as well as to assist the patient with the management of anxiety through the principles of biological, physical and social sciences. The College recognizes the standards of perioperative nursing practice of the Association of periOperative Registered Nurses (AORN) as the conceptual basis of specialty practice in the operating room. All levels of registered nurses may attend the perioperative nursing classes with a current, valid nursing license in the state in which they will perform their perioperative nursing practicum. NCLEX eligible graduate nurses may also apply to the perioperative nursing program.

A certificate will be awarded upon completion of the program with a 2.0 GPA and a "C" or better in all Allied Health and Nursing (AHN) courses.

## RN First Assistant in Surgery (https://catalog.dccc.edu/academic-programs/programs-study/rn-first-assistant-surgery-certificate-competency/)

The knowledge and technique necessary to assuming responsibilities of the RN First Assistant in Surgery (RNFA) are emphasized. The role of the first assistant is explored in its interdependent relationship, as the nurse works both with the physician and for the benefit of the patient. The nursing diagnosis is used as the defining guide in planning and implementing patient care. Expanded functions are stressed and elaborated as the nurse is prepared to assume responsibility in scrubbing, draping, retracting, exposing, clamping, ligating and suturing. Intellectual and manual dexterity are combined to prepare the nurse with the essential skills necessary to this expanded professional role.

To qualify of the RN First Assistant Program, students must be a perioperative registered nurse with two (2) years of perioperative nursing experience, have achieved certification in perioperative nursing (CNOR) or be eligible to take the CNOR Exam, or be a certified Nurse Practitioner, or certified Nurse Midwife.

A certificate will be awarded upon completion of the program with a 2.0 GPA and a "C" or better in all Allied Health and Nursing (AHN) courses.

# Courses

**View full A-Z Course List**

## AHA - Health Administration

**AHA 206 Reimbursement and Financing in Managed Care**
Health care is the largest service industry in the United States. Healthcare managers are controllers of significant financial resources that must be managed with an eye toward the bottom line in a highly competitive marketplace. They must fully understand current financial trends in reimbursement for services provided. This course provides information on the impact of various forces on the financing of healthcare. It also explores reimbursement trends and issues from the perspective of providers, payers, and consumers of health. Special focus in this course is on managed care impact on reimbursements.
*Upon successful completion of this course, students should be able to:*
*Use correct terminology in discussing the financial aspects of health care.*
*Develop a format for capital budget planning.*
*Formulate a budget request.*
*Identify the implications of managed competition and global budgeting on reimbursement initiatives.*
*Analyze the impact of health care reform and changed governmental reimbursement strategies on department management.*
*Evaluate the effects of cost containment measures used by multiple entities in the health care continuum.*
*Describe the emerging methods of reimbursement in fee-for-service and managed care environments.*
**3 Credits 3 Weekly Lecture Hours**

**AHA 207 Ethical/Legal Aspects of Health Care Management**
Rapid advances in medical technology challenge legal and ethical standards, and lend to situations requiring moral decisions. This course provides the student with an introduction to law, ethics and bioethics as they apply to decision making in the health care setting. It is not the intent to provide the student with right or wrong answers for ethical issues. Emphasis is on use of appropriate language, application of ethical principles, and use of critical-thinking skills to articulate a point of view on current issues in health care.
*Upon successful completion of this course, students should be able to:*
*Use appropriate terminology to discuss ethical/legal issues in health care.*
*Explain the nature of human value development.*
*Analyze common theories and methods used in making ethical decisions.*
*Explore ethical/legal positions that pertain to current controversies in health care.*
*Describe legal concepts of concern to the health care manager.*
**3 Credits 3 Weekly Lecture Hours**

**AHA 209 Philosophy of Managed Care**
Managed care is now mainstreamed in America's healthcare system and has changed the delivery of healthcare services. Individuals working in the healthcare arena need to understand the impact of managed care on patients and providers. This course will review the evolution of managed care, explore how it works, contemplate its future and discuss the ethical issues surrounding it today. The roles and responsibilities of the case manager will be investigated as well. The topic of Utilization Review will also be introduced in this course. It is essential for healthcare facilities to be able to control and manage the use of their services to minimize the risk of financial loss. Utilization Review monitors and provides appropriate incentives to influence the use of heatlhcare services. Managed care and Utilization Review are tools to coordinate and measure the delivery of cost effective quality care and have the potential to achieve significant containment of healthcare costs, an essential outcome in our present health care system.
*Upon successful completion of this course, students should be able to:*
*Describe key concepts of the philosophy of managed care.*
*Explain the shift from the fee-for service model to capitation.*
*Use the specific terminology related to managed care models.*
*Identify critical components in developing and implementing treatment plans.*
*Explain the function of critical pathways and disease management strategies.*
*Define the roles and responsibilities of the case manager and or healthcare provider in client advocacy and ethical decision making.*
*Trace the history and development of the utilization review processes.*
*Describe the requirements for utilization review procedures in relation to payer organizations, Managed Care, Medicare, Medical Assistance and private insurers.*
*Examine the role of physician and other health care personnel in resource management.*
*List the various mechanisms used in the resource management process by payer and provider organizations.*
*Discuss the role of the health care manager in the utilization review process.*
**3 Credits 3 Weekly Lecture Hours**

## AHM - Allied Health Medical

**AHM 102 Introduction to Health Care**
This course provides an overview of the organization, reimbursement, regulations and delivery of different healthcare services. The role of various health care professionals is examined. The purpose, use, compliance, and regulations associated with health information systems is emphasized throughout the course.
*Upon successful completion of this course, students should be able to:*
*Describe the major health care organizations and agencies and their role in the health care delivery system.*
*Identify the role of members of the health care team.*
*Describe the major components involved in the payment/reimbursement process.*
*Identify government payment programs.*
*Describe the role of information technology on practice management.*
*Define the basic terminology associated with health information and health information technology.*
*Identify the legal, ethical, privacy, security and confidentially issues and practices applicable to health information.*
*List the data that are included in a health information record.*
*List various measures of health care quality.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 104 Body Structure and Function I**
This course begins with an analysis of the structural foundation of the body and its ability to function integrating the levels of organization: chemical cellular, tissue, organ, and system. The course then emphasizes the anatomical structure, physiology, and selective disease processes specific to the integumentary, skeletal, muscular, lymphatic, circulatory, and respiratory systems. Mechanisms by which the body maintains fluid and electrolyte balance and acid base balance are also emphasized.
*Upon successful completion of this course, students should be able to:*
*Analyze the architectural plan of the human body as a whole, the organization of its functional units, and the mechanisms by which it performs its various activities.*
*Discuss the mechanism and patterns of disease-causing pathogens and neoplasms, and the body's response to threat of injury and disease.*
*Explain the function and interrelationship of fluids and electrolytes, the mechanisms by which the constancy of total body fluids is maintained, and regulation of the acid-base balance.*
*Describe the structure and function of the integumentary system and major disorders of this system.*
*Describe the structure and function of the skeletal and muscular systems as well as disorders of these systems.*
*Describe the structure and function of the circulatory and lymphatic systems as well as disorders of these systems.*
*Describe the structure and function of the respiratory system as well as disorders of this system.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 105 Body Structure and Function II**
This course emphasizes the anatomical structure, physiology, and selective disease processes specific to the digestive system, urinary system, nervous system and sense organs, endocrine system, and reproductive systems. How nutrition, growth, development, aging, and genetics influence body structure and function is also emphasized.
*Upon successful completion of this course, students should be able to:*
*Describe the structure and function of the digestive system as well as disorders of this system.*
*Describe adequate nutrition and the complex mechanism of metabolism, as well as disorders associated with eating and metabolism.*
*Describe the structure and function of the urinary system and major disorders of this system.*
*Describe the structure and function of the nervous system and disorders of this system.*
*Describe the mechanisms by which the sense organs are able to sense changes in our external and internal environments as a requirement for maintaining homeostasis; and diseases commonly affecting the sense organs.*
*Describe the structure and function of the endocrine system and major disorders of this system.*
*Describe the structure and function of the male and female reproductive systems, and briefly describe the major disorders inherent to these systems as well as the major disorders associated with pregnancy.*
*Describe the concept of development as a biological process characterized by continuous modification and change as well as the effects of aging on major body organ systems.*
*Describe genetics, the scientific study of inheritance, and its relationship to human disease.*
*Describe the physiology of congenital diseases and the roles that heredity and environmental factors play in the development of these conditions.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 106 Medical Assistant Clinical I**
This course is structured to prepare the student to assist the physician in the clinic, outpatient office and ambulatory health care settings. The responsibilities include preparation of the client for examination, measurement of basic body functions, assistance in diagnostic testing and procedures, and general clinical procedures performed in the medical office. This course includes an in-person simulation laboratory requirement.
*Upon successful completion of this course, students should be able to:*
*Describe the role and function of the medical assistant in the health care delivery system.*
*Evaluate the impact of disease and disease causing organisms on humans and their environment.*
*Describe the role of the medical assistant in assisting with physical measurements.*
*Perform the duties necessary to assist the physician with the health history and physical examination.*
*Identify and describe the role of the medical assistant in the collecting and handling of specimens.*
*Analyze the role of the medical assistant in assisting the physician in minor surgery.*
*Describe the importance of nutrition, exercise, and diet therapy to the well being of the patient.*
**4 Credits 3 Weekly Lecture Hours**
**2 Weekly Lab Hours**

**AHM 107 Medical Assistant Clinical II**
The course prepares students to assist the physician in the clinic, outpatient office and ambulatory health care settings. Responsibilities include administration of medications, phlebotomy, and aiding in diagnostic tests and procedures commonly performed in the medical office. This course includes an in-person simulation laboratory requirement.
*Upon successful completion of this course, students should be able to:*
*Analyze the role and the responsibility of the Medical Assistant concerning the principles of pharmacology and drug administration.*
*Classify the commonly used diagnostic laboratory procedures that are utilized in a physician's office.*
*Classify the commonly used diagnostic radiological procedures that are utilized in the physician's office.*
*Describe the role of the Medical Assistant in the recording of an EKG and other cardiac tests.*
*Describe the role of the Medical Assistant in assisting with therapeutic modalities, rehabilitative procedures, orthopedic medicine and physical therapy.*
*Evaluate the role of the Medical Assistant during a medical emergency and in preparing for an emergency situation.*
**4 Credits 3 Weekly Lecture Hours**
**2 Weekly Lab Hours**

**AHM 109 Medical Assistant Review Practicum I**
This course is structured to provide the student with a review of the simulation laboratory experience in assisting the physician in the clinic, hospital or private office. Clinical skills covered include preparation of the client for examination, measurement of basic body functions, assistance in diagnostic testing and procedures, and general patient care procedures performed in the medical office.
*Upon successful completion of this course, students should be able to:*
*Understand the role and function of the medical assistant in the health care delivery system.*
*Describe the role of the medical assistant in assisting with physical measurements.*
*Analyze the role of the medical assistant in assisting the physician with the health history and physical examination.*
*Understand the role of the medical assistant in the collecting and handling of specimens.*
*Analyze the role of the medical assistant in assisting the physician in minor surgery.*
**1 Credit**
**2 Weekly Lab Hours**

**AHM 110 Medical Assistant Review Practicum II**
The course prepares students with simulation laboratory experience in assisting the physician in the clinic, hospital or private office. Responsibilities include preparation of the client for examination, measurements of body functions, aiding in diagnostic tests and procedures, and general operation of the office.
*Upon successful completion of this course, students should be able to:*
*Apply the principles of pharmacology and drug administration.*
*Perform diagnostic laboratory procedures that are utilized in a physician's office.*
*Perform an EKG.*
*Describe the role of the medical assistant in assisting with physical therapy.*
*Evaluate the role of the medical assistant during a medical emergency and giving first aid.*
**1 Credit**
**2 Weekly Lab Hours**

**AHM 130 Medical Coding Concepts for Allied Health**
This course, for non-coding majors, is designed to teach students general principles of the most current ICD-CM (International Classification of Disease) And CPT (Current Procedural Terminology) coding. Students will learn to translate medical terminology and descriptions into code numbers. In this course will focus on coding for outpatient procedures and diagnoses. Emphasis will be placed on accuracy of coding in a variety of settings. In addition the course will focus on various aspects of insurance and reimbursement and forms and documents used in the field.
*Upon successful completion of this course, students should be able to:*
*Identify and explain the organization of both the ICD-CM manual and CPT manual.*
*Transform descriptions of diagnostic terms and symptoms into correct ICD-CM codes.*
*Transform outpatient procedures into valid CPT codes.*
*Follow rules and guidelines for selecting the current ICD-CM and CPT codes.*
*Identify and use the HCPCS (Healthcare Common Procedural Coding System) Codes for Medicare patients.*
*Complete forms related to insurance reimbursement, insurance eligibility and describe the process for these activities.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 140 Professional and Communication Issues in Health Care**
This course is designed to provide the student with the knowledge and skills needed to communicate effectively in the health care setting. Emphasis is on development of interpersonal skills for workplace and therapeutic communication. Among the topics covered are basic communication skills, conflict resolution, cultural awareness, confidentiality, and professionalism.
*Upon successful completion of this course, students should be able to:*
*Apply basic principles of communication in responding to verbal and nonverbal communication.*
*Respond appropriately to issues of confidentiality in the health care setting.*
*Demonstrate knowledge of federal and state health care legislation and regulations.*
*Describe professionalism in relation to the health care setting.*
*Explain the role of alternative and complimentary medicine in health care.*
*Develop transcultural communication skills.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 185 Medical Office Management**
This course is structured for the Medical Assisting and other Administrative Health Professions and introduces students to the administrative procedures commonly performed in a health care setting. Emphasis on medical ethics and legal considerations, a history of medicine, communication skills, managing accounts payable and receivable, electronic health records, receptionist responsibility, operational functions and workplace dynamics will help prepare the student for entry-level office management. Coursework will be presented and completed in both manual and computerized formats, so that the student will have a more comprehensive understanding of an administrative health care facility and its procedures.
*Upon successful completion of this course, students should be able to:*
*Describe the ethical and legal responsibilities of a medical office administrator.*
*Demonstrate effective oral and written communication both with professionals and patients.*
*Utilize electronic health record software applications in the health care setting.*
*Use and understand systems of maintaining patient clinical and financial records.*
*Perform office tasks appropriate for computer solutions.*
*Organize and maintain the physical requirements of a medical office.*
**4 Credits 3.5 Weekly Lecture Hours**
**1 Weekly Lab Hour**

**AHM 198 Medical Coding Internship**
Selected medical coding experiences are provided in a healthcare facility or insurance company. Knowledge and guidelines basic to applying correct coding systems for appropriate reimbursement are stressed. NOTE: All certificate program requirements in the Medical Coding or Medical Coding for the Healthcare Professional must be completed before taking this course.
*Upon successful completion of this course, students should be able to:*
*Maintain ethical and legal standards of a Medical Coding ProfessionalDemonstrate the ability to use computer applications and technology relating to Medical Billing and Coding.*
*Interpret and evaluate data in the Electronic Medical Record while searching for deficiencies in demographic and/or insurance information.*
*Apply correct coding systems for appropriate reimbursement.*
*Evaluate coding procedures for achievement of optimal quality in seeking appropriate reimbursement.*
*Create a portfolio to demonstrate professional skills to enhance marketability for employment.*
**3 Credits**

**AHM 199 Medical Assistant Externship**
This 4 credit course is 240 hours and includes administrative and clinical experiences in a medical office or ambulatory health care facility during working hours. Externship must be scheduled with the practicum coordinator of the Medical Assistant program. NOTE: All program courses must be completed prior to taking this course.
*Upon successful completion of this course, students should be able to:*
*Apply knowledge of the anatomical structure and physiological functioning of the human body and of medical terms descriptive of body systems.*
*Apply the business/administrative and clinical duties of the medical assistant.*
*Function as an assistant to the physician in a medical and/or other health care setting.*
*Implement the ethical and legal responsibilities of the medical assistant in the health care delivery system.*
*Apply selected principles of biophysical and psychosocial sciences in providing assistance to the physician.*
*Maintain business and patient health records.*
*Discuss the fundamental concepts of disease.*
**4 Credits 0 Weekly Lecture Hours**

**AHM 202 Fundamentals of Health Information Technology Science**
This course is an introduction to the Health Information Management (HIM) profession and the patient health record. Some of the topics covered are functions of the health record, content and structure of the health record, analysis of health records and health information, health care data sets, data access and retention, storage and retrieval systems, forms and screen design, and indexes and registers. Information is presented for both the paper-based and electronic health record.
*Upon successful completion of this course, students should be able to:*
*Describe the purpose, structure, Code of Ethics and certification processes of the American Health Information Management Association (AHIMA).*
*Differentiate the roles of Health Information Management (HIM) professionals.*
*Describe the workflow of records within a HIM Department.*
*Differentiate between the functions and uses of primary and secondary health records.*
*Identify the basic forms and formats for collection of patient information in various health care facilities.*
*Evaluate and apply principles of forms design.*
*Describe the purposes and techniques related to record analysis, including quantitative, qualitative, and legal.*
*Compare different storage and retrieval systems.*
*Discuss what forces are driving the adoption of electronic health records.*
*Identify the legal.*
*ethical.*
*privacy, security and confidentiality issues and practices as they apply to health information.*
**3 Credits 4 Weekly Lecture Hours**

**AHM 208 Pathophysiology and Pharmacology**
This course provides students with opportunities to learn fundamental concepts of disease processes followed by further study of specific diseases as they relate to a developmental stage or body system. Pathophysiology, etiology, clinical manifestations, diagnostic and laboratory procedures, and treatment modalities, including pharmacology are emphasized. NOTE: College Academic Learning Goal Designation: Scientific Inquiry (SI) when taken with AHM 220.
*Upon successful completion of this course, students should be able to:*
*Explain the disease process, including causes of disease, risk factors, diagnosis, and treatment modalities.*
*Explain the physiology, assessment and management of pain.*
*Describe common infectious diseases and neoplasms.*
*Describe common congenital diseases and mental health disorders.*
*Correlate the pathophysiology with the etiology, clinical manifestations, diagnosis, and treatment of diseases for each human body system.*
*Classify commonly used medications by action and body system.*
*Identify the routes of administration, indications, adverse effects, and related laboratory studies of commonly used medications.*
*College Academic Learning Goal Designation: Scientific Reasoning (SI)*
**4 Credits 4 Weekly Lecture Hours**

**AHM 220 Applied Microbiology**
This is a survey course intended for allied health majors. This 1 credit course contains microbiological information and skills needed for the allied health professions. This course differs from a traditional 4 credit microbiology course in that the 4 credit course emphasizes general microbiology for science majors, whereas the 1 credit applied microbiology course emphasizes concepts for students entering health professions. The concepts of specimen collection and transport, identification of microorganisms, pathogenesis, and control, and treatment of infectious disease are the main emphasis of the course. Clinical laboratory experiences will emphasize application of concepts to skills. NOTE: College Academic Learning Goal Designation: Scientific Inquiry (SI) when taken with AHM 208.
*Upon successful completion of this course, students should be able to:*
*Explain the relationship between the structure and function of microorganisms.*
*Describe techniques of microbial control.*
*Apply principles of sterile technique in specimen collection and performing laboratory procedures in the microbiology lab.*
*Describe the distribution of normal and pathogenic flora for different body sites.*
*Discuss antibiotic treatment for disease.*
*Classify and perform diagnostic procedures of body fluid specimens.*
*College Academic Learning Goal Designation: Scientific Reasoning (SI)*
**1 Credit 0.67 Weekly Lecture Hours**
**0.67 Weekly Lab Hours**

**AHM 231 Introduction to CPT Coding**
The primary focus of this course is to provide students the principles, guidelines and application of The Current Procedural Terminology (CPT) coding system. CPT is the coding system used to describe services provided by physicians. CPT is also used for services provided by hospital outpatient and ancillary departments, hospital emergency departments, and other health care facilities. In addition, students will be introduced to Procedural groupings such as APCs (Ambulatory Payment Classifications) and RUGs (Resource Utilization Groups). This course also addresses reimbursement and compliance issues related to physician-based coding as well as the purpose and application of the CMS (Center for Medicare and Medicaid Services Healthcare Common Procedural Coding System (HCPCS).
*Upon successful completion of this course, students should be able to:*
*Define terms, phrases and abbreviations related to medical coding.*
*Apply specific volumes of Current Procedural Terminology (CPT) and Healthcare Common Procedural Coding Systems as they pertain to the identification of procedures, medications and medical equipment in healthcare facilities.*
*Apply Current Procedural Terminology (CPT) coding as they pertain to identification of procedures, medications, and medical equipment in a variety of medical specialties, including but not limited to: Evaluation and Management Coding, Surgery Coding, Pathology and Laboratory Coding, and Radiology coding.*
*Describe insurance carrier reimbursement systems, such as APCs, RUGs, Outpatient Prospective Payment System (OPPS), Fee-For-Service Payments and Capitation payments.*
*Apply legal concepts to issues of medical coding.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 232 Advanced CPT Coding**
This course is designed for students who plan to work in the variety of healthcare facilities in departments including medical records, medical coding, medical billing, or other reimbursement and documentation departments. It is intended to provide additional in depth study of coding principles, clinical topics, and case studies to increase knowledge and skills in CPT (Current Procedural Terminology) coding. The use of CMS Healthcare Common Procedural Coding System (HCPCS) is also addressed. Extensive coding of case studies from various medical specialties will be completed in this course.
*Upon successful completion of this course, students should be able to:*
*Code accurately a medical or surgical operative report, physician office visit (Evaluation and Management) or outpatient procedural case study.*
*Recognize the economic and ethical implications of coding assignment on reimbursement, and how these are impacted by reimbursement systems such as APC's (Ambulatory Payment Classifications, ASC's (Ambulatory Surgery Center) and RBRVS (Resource Based Relative Value Scale).*
*Determine if coded data is of optimal quality and evaluate if coded cases require a single code or multiple codes (both CPT and HCPCS codes) as well as analyze sequencing of these codes.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 233 Medical Terminology**
This course is designed to introduce the skills and knowledge needed to develop an understanding of the language of medicine. The basic structure of medical terms and the rules for word building will be discussed in the context of how the body works in health and disease. Upon completion, students should be able to pronounce, spell, and define accepted medical terms. In addition to medical terms, common medical abbreviations applicable to each system will be interpreted.
*Upon successful completion of this course, students should be able to:*
*Identify word parts and their meanings in medical terms.*
*Utilize reference materials to determine meaning, usage, and spelling of medical terms.*
*Describe the main functions of each body system.*
*Define diagnostic, symptomatic, and therapeutic terms related to each system.*
*Identify terms describing pathology affecting body systems.*
*Define anatomical landmarks, directional, positional, and numeric medical terms.*
*Recognize common classes of drugs and their actions.*
*Recognize the correct spelling of medical terms.*
*Develop a medical vocabulary.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 239 Introduction to ICD-10-CM Coding**
This course is designed to teach those interested in learning ICD-10-CM diagnosis coding, the basic skills required to accurately code diagnosis in ICD-10-CM. Students will learn how to interpret and apply the ICD-10-CM guidelines to properly assign diagnosis codes to patient encounters. The ICD-10-CM codebook, textbook class-work, homework activities, and lectures will provide students with hands-on experience in assigning accurate diagnosis codes in ICD-10-CM. NOTE: Students must obtain a grade of "C" or better in this course to successfully complete their program.
*Upon successful completion of this course, students should be able to:*
*Understand the format, convention and chapter specific guidelines to correctly assign ICD-10-CM codes.*
*Apply general guidelines and chapter specific guidelines to correctly assign ICD-10-CM codes.*
*Understand the code of ethics for coders.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 240 Hospital Coding and Case Studies**
This course is designed for students who plan to work in the Health Information Management (HIM) department of a hospital. It is intended to provide additional in-depth study of inpatient medical record case studies to increase knowledge and skills in ICD-10-CM diagnosis coding. This course will also provide students the opportunities to use and apply ICD-10-PCS coding classification system. Students will learn coding characteristics, conventions and apply guidelines to identify and accurately assign codes to inpatient hospital procedures. NOTE: Students must achieve an overall grade of "C" (70% or above) to receive credit for this course for Allied Health Programs or certificates.
*Upon successful completion of this course, students should be able to:*
*Given a scenario, extract the relevant diagnoses and/or procedures and then accurately and completely code them according to ICD-10-CM guidelines and ICD-10-PCS guidelines.*
*Apply coding guidelines to accurately code principal diagnoses and procedures to determine the correct diagnosis related group assignments.*
*Demonstrate the use of ICD-10-CM coding and ICD-10-PCS coding in DRG assignment.*
*Recognize the economic and ethical implications of coding assignment on reimbursement.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 241 Revenue Cycle Management and Reimbursement Methodologies**
This course is designed for students to learn the general principles of revenue cycle management and reimbursement methodologies. Students will learn how to complete and use insurance claim forms and insurance related forms (referrals, pre-authorizations, registration forms). The class will provide students with hands-on experiences with a variety of insurance related issues as well as compliance strategies and reporting. Reimbursement systems including fee-for-service payments and capitation payments will be covered in detail as well as regulatory guidelines, management of denials of claims and chargemaster maintenance.
*Upon successful completion of this course, students should be able to:*
*Describe legal and ethical issues involved in revenue cycle management and compliance and identifying potential abuse and fraudulent trends through data analysis.*
*Describe and explain different types of health insurance carriers and reimbursement systems as well as rules and regulations for each (private insurance, managed care, Medicare, Medicaid, Workers Compensation, Military insurance).*
*Recognize the economic and ethical implications of coding assignment on reimbursement, and how these are impacted by reimbursement systems such as APC's (Ambulatory Payment Classifications, ASC's (Ambulatory Surgery Center) and RBRVS (Resource Based Relative Value Scale).*
*Accurately complete referral, preauthorization, registration and encounter forms.*
*Submit claims in paper and electronic format.*
*Document billing information using correct medical terminology and perform an internal and external chart audit.*
*Accurately complete referral, preauthorization, registration forms, encounter forms, EOB (explanation of benefits review and analysis) and ABN forms (Advanced Beneficiary Notices).*
*and ensure appropriate coding as per CMS (Center for Medicare and Medicaid Guidelines).*
*Resolve claim errors and learn how to resubmit claims that have been rejected.*
*Generate patient bills when needed through interpretation of explanations of benefits/remittance advice statements.*
*Describe the process of how to follow up with insurance companies and patients regarding unpaid bills.*
*Record changes, payments and adjustments for patient scenarios provided.*
**3 Credits 3 Weekly Lecture Hours**

**AHM 242 Virtual Professional Practice Experience Capstone Course**
This course is designed to have students apply knowledge and skills from their medical coding and billing classes in a comprehensive hands-on experiential learning setting using authentic patient cases and patient case scenarios. Through this AHIMA virtual practicum, students will have the opportunity to use various software application programs including 3M coding and reimbursement encoder software, Nuance Clintegrity 360 encoder software, Find-A-Code software which includes an introduction to Hierarchical Condition Category Coding (HCC) and Computer Assisted Coding (CAC), Clinical Documentation Improvement (CDI). Various experts in the field will lecture on their specific subject areas. This course will also provide students with an opportunity to create a portfolio which will demonstrate employment skills to future employers. This course may require approximately 4 on-campus class meetings at the Marple Campus.
*Upon successful completion of this course, students should be able to:*
*Demonstrate the ability to use computer applications and technology related to Medical Billing and Coding.*
*Analyze, interpret and evaluate data in the medical record to determine correct clinical documentation to support codes used.*
*Evaluate data from electronic medical records and code these records with appropriate ICD, CPT-4 and HCPCS codes and coding from source documents.*

*Describe how compliance standards correlate with medical records and documentation guidelines.*
*Evaluate various specialties of coding and compare and contrast the different specialties.*
*Create a portfolio to demonstrate professional skills to enhance marketability for employment.*
**3 Credits 1 Weekly Lecture Hour**
**4 Weekly Lab Hours**

## AHN - Allied Health Nursing

**AHN 106 Patient Care Assisting Techniques**

This course is designed to teach the student the skills necessary to function as a patient care assistant in hospitals and ambulatory care facilities. The role of the patient care assistant has evolved and expanded to include diagnostic testing skills that are performed under the supervision of the professional nurse or other licensed health professional. These skills include phlebotomy, recording electrocardiography, applying basic oxygen therapy, pulse oximetry, measuring blood glucose levels, and collection and processing various body fluids for testing.

*Upon successful completion of this course, students should be able to:*
*Explain the purpose of electrocardiography as it is related to the basic anatomy and physiology of the heart.*
*Perform the skills necessary to complete an electrocardiogram.*
*Describe basic hematology laboratory tests and the components and function of the blood.*
*Perform phlebotomy skills, including venipuncture and skin puncture correctly and successfully.*
*Demonstrate proper technique in obtaining blood glucose measurements and other components of blood obtained through skin puncture.*
*Explain the reasons for the collection of urine, stool and sputum specimens in assessing health status and diagnosing disease.*
*Perform procedures for collecting, measuring and testing urine, stool and sputum specimens appropriately.*
*Describe basic anatomy and physiology of the respiratory system and the underlying principles associated with respiration.*
*Demonstrate skills in administration of low-flow oxygen therapy, reservoir systems, hyperinflations therapy, and oxygen assessment.*

**4 Credits 2 Weekly Lecture Hours**
**4 Weekly Lab Hours**

**AHN 200 Excellence in Care-Nursing Assistant Program**

Delaware County Community College's "Excellence in Care" Nursing Assistant Program is a 133-hour intensive course in accordance with the regulatory guidelines established by the Commonwealth of Pennsylvania. It includes, 48 hours of didactic, 25 hours of simulation laboratory activities, and 60 hours of clinical experience at an approved long term care facility. This course prepares students for employment in acute care, acute rehab, hospice, home health care and long-term care facilities. In addition to preparing students clinically, this course emphasizes leadership skills, service excellence values, problem solving/decision making, cultural sensitivity, interpersonal and civility skills in the workplace, professionalism/employability skills, conflict resolution, and time and stress management. Students completing this course are qualified to test with the American Red Cross and placed on the Pennsylvania Nurse Aide Registry. Departmental approval is required to enroll in the course to comply with federal and state legislative requirements- OBRA and Act 14, respectively. NOTE Prerequisites: High School diploma or GED. Students must meet DCCC's clinical and physical program requirements and therefore departmental approval is required. INT 100 is strongly encouraged.

*Upon successful completion of this course, students should be able to:*
*Function as an unlicensed individual in the role of a nurse aide within the legal and ethical standards set forth by the profession nursing as regulated by the State Board of Nursing for the Commonwealth of Pennsylvania.*
*Demonstrate use of appropriate and effective communication skills.*
*Apply the basic principles of infection control.*
*Assist with basic emergency procedures.*
*Demonstrate behavior that maintains client and/or client rights.*
*Demonstrate behaviors and skills that promote client and clients independence and prevents abuseDemonstrate knowledge and applies the principles of basic nutrition to prevent neglect and exploitationIdentify and report abnormal signs and symptoms of common diseases and conditions of the body systems.*
*Provide for a safe, clean environment.*
*Provide personal care as directed by the licensed professional/practitioner/supervisor.*
*Provide care to client when death is imminent.*
*Demonstrate skills that incorporate principles of restorative care under the direction of a licensed professional/practitioner/supervisor.*
*Demonstrate basic skills by identifying the psychosocial characteristics of the populations being served in the nursing facility and/or by the health care agency including persons affected by intellectual disabilities, mental illness, Alzheimer's disease and related disorders that cause cognitive impairment.*
*Explain how to anticipate and manage crises and identifies alternative solutions when appropriate interventions fail.*
*Plan problem-solving strategies using critical thinking to improve the health care delivery process.*
*Employ leadership and peer mentoring skills in the clinical setting.*

**6 Credits 48 Weekly Lecture Hours**
**25 Weekly Lab Hours**

## AHS - Surgical Technology

**AHS 100 Surgical Technology I**

The basic knowledge and fundamental techniques necessary for assuming the responsibilities of a surgical technologist are highlighted. Preoperative and intraoperative patient care concepts, with both nonsterile and sterile responsibilities, are emphasized. Workplace management concepts, such as medical-legal aspects, ethics, cultural sensitivity, the hospital and operating room environment, and scope of practice are introduced. This course also includes study and skill development relating to surgical instrumentation, devices and equipment; modes of patient transport and safety precautions; variations and precautions in surgical positioning and care of surgical patients; preoperative patient preparation including surgical site antisepsis; consent for surgery; use of the Universal Protocol for surgical procedure, patient and site verification; and other important intraoperative risk management processes and procedures. Related patient care procedures such as taking vital signs, laboratory study review, wound healing, specimen management, intraoperative medication management; anesthesia, sterilization and disinfection are included.

*Upon successful completion of this course, students should be able to:*
*Describe the role, function and relationship of the surgical technologist to other members of the surgical team.*
*Utilize a vocabulary of medical terms related to surgical patient care.*
*Identify microbiological principles underlying the prevention and control of infection, sterilization and disinfection methods, and aseptic technique.*
*Review common safety risks for surgical patients and the strategies to manage them before and during a surgical intervention.*
*Discuss the preoperative nonsterile and sterile responsibilities of the surgical technologist in the preparation of a patient for a surgical procedure.*
*Discuss the case management responsibilities of the surgical technologist in the preparation of the operating room for a surgical procedure.*
*Describe the intraoperative responsibilities of the surgical technologist in performing the role of the scrubbed team member during a surgical procedure.*

**5 Credits 5 Weekly Lecture Hours**

**AHS 101 Surgical Technology Practicum I**

This course includes clinical assignment in operating room of affiliating health agencies. Selected learning experience in the application of preoperative and intraoperative patient care concepts, with both nonsterile and sterile responsibilities, are emphasized as the student integrates theory with practice during assignment to surgical patients undergoing basic surgical interventions. NOTE Prerequisite: Clearance card from College Health Office

*Upon successful completion of this course, students should be able to:*
*Demonstrate correct opening and preparation of supplies used in the operating room.*
*Demonstrate competency in handling basic surgical instruments and devices.*
*Establish a safe operating room environment for the surgical patient.*
*Utilize sterile technique when creating and maintaining surgical field.*
*Demonstrate competency in hand and surgical site antisepsis, gowning and gloving the self and members of the surgical team.*
*Participate in intraoperative activities such as surgical counts, suture preparation, and involvement in other basic intraoperative case management activities.*
*Participate in preoperative case management activities such as patient transport and positioning patients in the surgical position designated by surgeon.*
*Participate in the terminal cleaning, sterilization, and packaging of sterile instruments and supplies.*

**5 Credits**
**10 Weekly Lab Hours**

**AHS 102 Surgical Technology II**

This course is a continuation of Surgical Technology I. Knowledge and techniques basic to effective performance as a scrubbed team member in the operating room will be stressed. An intense review of the surgical specialties focuses on pathophysiology, diagnostic interventions, the surgical intervention (special considerations, position/positioning aids, incisions, supplies, equipment, instrumentation, procedural steps, counts and specimen care) and complications. The responsibilities of the surgical technologist in intraoperative case management during intermediate surgical interventions are emphasized. The role of the unsterile circulating team member is reviewed as the concepts of teamwork, consideration and cooperation of the surgical team are explored.

*Upon successful completion of this course, students should be able to:*
*Describe the responsibilities of the surgical technologist in assisting the registered nurse circulator during a surgical procedure.*
*Identify surgical interventions, instruments, sutures and accessory items used during intermediate surgical interventions such as the following: hernia repair; breast surgery; thyroid and parathyroid surgery; surgery of the biliary tract, pancreas and spleen; gastrointestinal surgery; gynecological surgery;genitourinary surgery; thoracic surgery; vascular surgery; cardiac surgery; neurosurgery; ENT; and orthopedic surgery.*

**4 Credits 4 Weekly Lecture Hours**

**AHS 103 Surgical Technology Practicum II**
Clinical assignment in operating room of affiliating agency. Knowledge and techniques basic to effective performance as a scrubbed member of general surgery and specialty surgery will be stressed. Developing and improving skills as the scrub person and in the organization of work is emphasized. Progression to solo scrub experiences is expected, enabling the student to focus on anticipating the needs of the surgical team. Students will be expected to display manual and mental dexterity in the use of surgical instruments in a step-by-step fashion for specific surgical interventions. Assignments will also be made with the anesthesia department and in the post anesthesia care unit (PACU), during which the student will correlate the actions and uses of anesthetic agents and recovery from them and as a second assistant to the registered nurse circulator, during which the student will focus on providing a safe, efficient environment for the surgical patient and respecting the patient's inherent right to privacy, dignity, and culturally competent care.
*Upon successful completion of this course, students should be able to:*
*Choose and assemble the instruments, supplies and accessory items used during intermediate surgical interventions such as hernia repair; breast surgery; thyroid and parathyroid surgery; surgery of the biliary tract, liver, pancreas and spleen; gastrointestinal surgery; gynecological surgery; genitourinary surgery; thoracic surgery; vascular surgery; cardiac surgery; neurosurgery; ENT; and orthopedic surgery.*
*Demonstrate ability to function as a scrubbed member of the surgical team during intermediate surgical interventions such as hernia repair; breast surgery; thyroid and parathyroid surgery; surgery of biliary tract, liver pancreas and spleen; gastrointestinal surgery; gynecological surgery; genitourinary surgery; thoracic surgery; vascular surgery; cardiac surgery; neurosurgery; ENT; and orthopedic surgery.*
*Collaborate with the registered nurse circulator and anesthesia team in providing a safe, efficient patient care environment.*
**6 Credits**
**12 Weekly Lab Hours**

**AHS 200 Surgical Technology III**
This course is a continuation of Surgical Technology II. Knowledge and techniques basic to effective performance as a scrubbed member in the operating room are stressed. The responsibilities of the surgical technologist in the care and safety of the patient during and after the surgical intervention, in the general and specialty fields of surgery, are reviewed.
*Upon successful completion of this course, students should be able to:*
*Identify operative procedures, surgical instruments, accessory items and suture materials used in advanced surgical interventions such as surgery of the eye, plastic and reconstructive surgery, pediatric surgery, and surgery of the burn, trauma and transplant patient.*
**1 Credit 3 Weekly Lecture Hours**

**AHS 201 Surgical Technology Practicum III**
Clinical assignment in the operating room of an affiliating agency. Selected learning experiences in advanced surgical interventions in general and specialty surgery are included. Focus is directed on independent role assumption as a surgical technologist to facilitate transition from student to graduate.
*Upon successful completion of this course, students should be able to:*
*Assemble the instruments and supplies necessary for advanced surgical interventions such as surgery of the eye; plastic and reconstructive surgery; pediatric surgery; burn surgery; trauma surgery, and transplant surgery.*
*Demonstrate the ability to function as a member of the sterile surgical team during advanced surgical interventions such as surgery of the eye; plastic and reconstructive surgery, pediatric surgery, burn surgery; trauma surgery; and transplant surgery.*
**6 Credits**
**24 Weekly Lab Hours**