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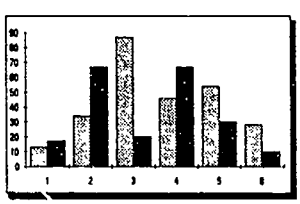
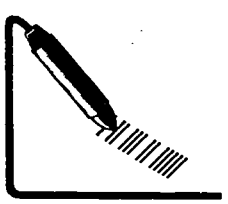
ABSTRACT

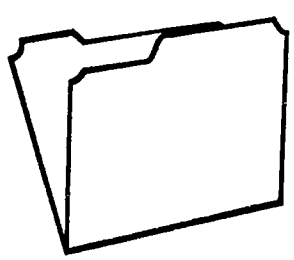
This document, which is intended for use by community and junior colleges throughout Mississippi, contains curriculum frameworks for the course sequences in the health information technology program. Presented in the introductory section are a description of the program and suggested course sequence. Section I lists baseline competencies, and section II consists of outlines for each of the following courses in the sequence: health information technology courses--health record systems I; medical terminology; health care delivery systems; health care law and ethics; disease I; directed practice I; coding systems I; health record systems II; disease II; medical transcription; directed practice II; coding systems II; health care supervision; performance improvement techniques; computers in health care; health statistics; directed practice III; a related vocational-technical course--introduction to computers; and related academic courses in anatomy and physiology I and II. Each course outline contains some/all of the following: course name and abbreviation; course classification; course description; prerequisites; and competencies and suggested objectives. Recommended tools and equipment are listed in section III. Appended are lists of related academic topics and workplace skills for the 21st century and student competency profiles for both courses. (KC)

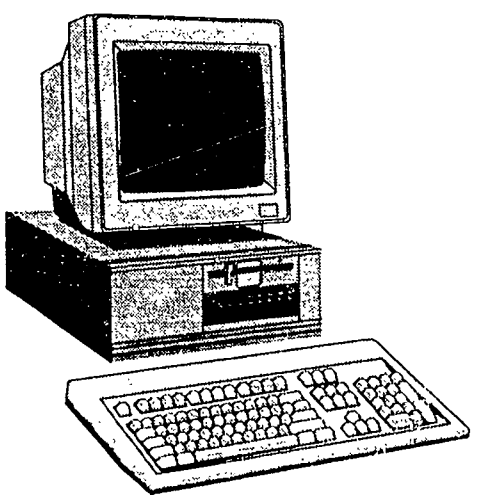
Mississippi Curriculum Framework for

Health Information Technology









Postsecondary Vocational and Technical Education 1995

MISSISSIPPI

CURRICULUM FRAMEWORK

FOR

POSTSECONDARY HEALTH INFORMATION TECHNOLOGY

(CIP: 51.0707 - Medical Records Technol./Tech.)

Direct inquiries to:

State Supervisor
Allied Health and Related Technology
Office of Vocational and Technical Education
P.O. Box 771
Jackson, Mississippi 39205
(601) 359-3461

For copies of this publication, contact:

Research and Curriculum Unit
P. O. Drawer DX
Mississippi State, MS 39762
(601) 325-2510

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FOREWORD

In order to survive in today's global economy, businesses and industries have had to adopt new practices and procedures. Total quality management, statistical process control, participatory management, and other concepts of high performance work organizations are practices by which successful companies survive. Employers now expect their employees to be able to read, write, and communicate effectively; solve problems and make decisions; and interact with the technologies that are prevalent in today's workplace. Vocational-technical education programs must also adopt these practices in order to provide graduates who can enter and advance in the changing work world.

The curriculum framework in this document reflect these changes in the workplace and a number of other factors that impact on local vocational-technical programs. Federal and state legislation calls for articulation between high school and community college programs, integration of academic and vocational skills, and the development of sequential courses of study that provide students with the optimum educational path for achieving successful employment. National skills standards, developed by industry groups and sponsored by the U. S. Departments of Education and Labor, provide vocational educators with the expectations of employers across the United States. All of these factors are reflected in the framework found in this document.

Each postsecondary program of instruction consists of a program description and a suggested sequence of courses which focus on the development of occupational competencies. Each vocational-technical course in this sequence has been written using a common format which includes the following components:

- Course Name - A common name that will be used by all community/junior colleges in reporting students.
- Course Abbreviation - A common abbreviation that will be used by all community/junior colleges in reporting students.
- Classification - Courses may be classified as:
  - Vocational-technical core - A required vocational-technical course for all students.
  - Vocational-technical elective - An elective vocational-technical course.
  - Related academic course - An academic course which provides academic skills and knowledge directly related to the program area.
  - Academic core - An academic course which is required as part of the requirements for an Associate degree.
- Description - A short narrative which includes the major purpose(s) of the course and the recommended number of hours of lecture and laboratory activities to be conducted each week during a regular semester.

- Prerequisites - A listing of any prerequisite courses that must be taken prior to or on enrollment in the course.
- Competencies and Suggested Objectives - A listing of the competencies (major concepts and performances) and of the suggested student objectives that will enable students to demonstrate mastery of these competencies.

The following guidelines were used in developing the program(s) in this document and should be considered in compiling and revising course syllabi and daily lesson plans at the local level:

- The content of the courses in this document reflects approximately 75 percent of the time allocated to each course. For example, in a four semester hour course consisting of 30 hours lecture and 120 hours of laboratory activities, approximately 22 hours of lecture and 90 hours of lab should be taken by the competencies and suggested objectives identified in the course framework. The remaining 25 percent of each course should be developed at the local district level and may reflect:
  - Additional competencies and objectives within the course related to topics not found in the State framework, including activities related to specific needs of industries in the community college district.
  - Activities which develop a higher level of mastery on the existing competencies and suggested objectives.
  - Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed/revised.
  - Activities which implement components of the Mississippi Tech Prep initiative, including integration of academic and vocational-technical skills and coursework, school-to-work transition activities, and articulation of secondary and postsecondary vocational-technical programs.
  - Individualized learning activities, including worksite learning activities, to better prepare individuals in the courses for their chosen occupational area.

- Sequencing of the course within a program is left to the discretion of the local district. Naturally, foundation courses related to topics such as safety, tool and equipment usage, and other fundamental skills should be taught first. Other courses related to specific skill areas and related academics, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors.

- Programs that offer an Associate of Applied Science degree must include a minimum 15 semester credit hour academic core. Specific courses to be taken within this core are to be determined by the local district. Minimum academic core courses are as follows:

- 3 semester credit hours Math/Science Elective
- 3 semester credit hours Written Communications Elective
- 3 semester credit hours Oral Communications Elective
- 3 semester credit hours Humanities/Fine Arts Elective
- 3 semester credit hours Social/Behavioral Science Elective

It is recommended that courses in the academic core be spaced out over the entire length of the program, so that students complete some academic and vocational-technical courses each semester. Each community/junior college has the discretion to select the actual courses that are required to meet this academic core requirement.

- In instances where secondary programs are directly related to community and junior college programs, competencies and suggested objectives from the high school programs are listed as Baseline Competencies. These competencies and objectives reflect skills and knowledge that are directly related to the community and junior college vocational-technical program. In adopting the curriculum framework, each community and junior college is asked to give assurances that:
  - students who can demonstrate mastery of the Baseline Competencies do not receive duplicate instruction, and
  - students who cannot demonstrate mastery of this content will be given the opportunity to do so.

- The roles of the Baseline Competencies are to:
  - Assist community/junior college personnel in developing articulation agreements with high schools, and
  - Ensure that all community and junior college courses provide a higher level of instruction than their secondary counterparts

- The Baseline Competencies may be taught as special "Introduction" courses for 3-6 semester hours of institutional credit which will not count toward Associate degree requirements. Community and junior colleges may choose to integrate the Baseline Competencies into ongoing courses in lieu of offering the "Introduction" courses or may offer the competencies through special projects or individualized instruction methods.

- Technical elective courses have been included to allow community colleges and students to customize programs to meet the needs of industries and employers in their area.

ACKNOWLEDGEMENTS

REVIEW TEAM

Instructors

Robin Allen Jones, Meridian Community College
Judy Moore, Hinds Community College

Academic Instructor

Mary Taylor, Meridian Community College

MDE Staff

Sandra Bates, R.N., State Supervisor, Allied Health and Related Technology

RCU Staff

Darla K. Haines, Ph.D., Research and Curriculum Specialist,
Mississippi State University

Reviewers

Educators:

Judy Moore	Robin Jones	Mary Ferguson
Kathryn E. Piazza	Shirley Nell Goodman	Wayne Stonyfell
Mary A. Jones		

Practitioners:

Deborah Ann Davinger	Greta Moriarty	Kesa Slater
Dell Robertson	Joyce R. Shearry	E. F. Wanen III
Cathy Donald	Gwen Boh	Max L. Chau, MD
Arlene H. Myers		

Technical Committee

Judy Stanford	Mike Higginbotham	Sandra Freeman
June Cotton	Jim Tesar	Deborah Rogers
Sarah C. Sawyer	Rebecca Champion	Lynette Miiler
Monica Stennis	I inda Barrett	Sharon Burch
Barbara Hayman		

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PROGRAM DESCRIPTION

HEALTH INFORMATION TECHNOLOGY

The Health Information Technology program is a two-year technical program leading to an Associate Degree which prepares the individual to work as a technical specialist in Health Record Systems. Accredited by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP) in cooperation with the American Health Information Management Association's Council on Accreditation, the Health Information Technology program prepares graduates to write the national Accreditation examination for the Accredited Record Technician.

A total of 66 semester hours credit is required for an Associate Degree in Health Information Technology. This total includes 48 semester hours of vocational-technical core courses, 15 semester hours of academic core courses, and 3 semester hours of academic related courses.

HEALTH INFORMATION TECHNOLOGY

SUGGESTED COURSE SEQUENCE*

Baseline Competencies for Health Information Technology**

3 SCH INTRODUCTION TO HEALTH INFORMATION TECHNOLOGY

FIRST YEAR

4 sch	Health Record Systems I (HIT 1114)	2 sch	Health Care Law & Ethics (HIT 1322)
3 sch	Medical Terminology (HIT 1213)	3 sch	Disease I (HIT 1413)
1 sch	Health Care Delivery Systems (HIT 1311)	2 sch	Directed Practice I (HIT 1512)
3 sch	Anatomy & Physiology I (BIO 1513)	3 sch	Anatomy & Physiology II (BIO 1523)
3 sch	Written Communications Elective	3 sch	Humanities/Fine Arts Elective
4 sch	Introduction to Computers (CPT 1114)	3 sch	Oral Communications Elective
18 sch		16 sch	

SECOND YEAR

4 sch	Coding Systems I (HIT 2614)	4 sch	Coding Systems II (HIT 2624)
3 sch	Health Record Systems II (HIT 2123)	3 sch	Health Care Supervision (HIT 2713)
3 sch	Disease II (HIT 2423)	1 sch	Performance Improvement Techniques (HIT 2811)
2 sch	Medical Transcription (HIT 2222)	2 sch	Computers in Health Care (HIT 2912)
2 sch	Directed Practice II (HIT 2522)	3 sch	Health Statistics (HIT 2133)
3 sch	Social/Behavioral Science Elective	2 sch	Directed Practice III (HIT 2532)
17 sch		15 sch	

* Students who lack entry level skills in math, English, science, etc., will be provided related studies.

- Baseline competencies are taken from the high school Allied Health program. Students who can document mastery of these competencies should not receive duplicate instruction. Students who cannot demonstrate mastery will be required to do so.

SECTION I:

BASELINE COMPETENCIES

BASELINE COMPETENCIES FOR POSTSECONDARY HEALTH INFORMATION TECHNOLOGY PROGRAMS

The following competencies and suggested objectives are taken from the publication *Mississippi Curriculum Framework for Secondary Allied Health*. These competencies and objectives represent the baseline for entrance into the postsecondary Health Information Technology courses. Students enrolled in postsecondary courses should either (1) have documented mastery of these competencies, or (2) be provided with these competencies before studying the advanced competencies in the Health Information Technology program.

Baseline competencies may be integrated into existing courses in the curriculum or taught as special "Introduction" courses. The "Introduction" courses may be taught for up to six semester hours of institutional credit and may be divided into two courses. If the Baseline Competencies are to be taught as "Introduction" courses, each course should be at least 3 credit hours. The following course number(s) and description should be used:

Course Name: Introduction to Health Information Technology Programs

Course Abbreviation(s): HIT 1003

Classification: Vocational-Technical Core

Description: This course contains the baseline competencies and suggested objectives from the high school Allied Health curriculum which relate directly to the community college Health Information Technology program. The courses are designed for students entering the community college who have no previous training nor documented experiences in the field. (3 sch based upon existing skills for each student)

Competencies and Suggested Objectives:

1. Review material related to course and professional organizations.
   a. Identify student and course expectations.
   b. Demonstrate effective teamwork skills.
   Related Academic Topics (See Appendix A): C1, C6
   Workplace Skills (See Appendix B): WP2
2. Apply communications in health care.
   a. Utilize effective communication skills.
   Related Academic Topics (See Appendix A): C1, C6
   Workplace Skills (See Appendix B): WP2, WP3

3. Explain professional ethics and legal responsibility.
   a. Explain professional ethics and legal responsibility including negligence, malpractice, and health occupation code of conduct.
   b. Define confidentiality.

   Related Academic Topics (See Appendix A): C1, C4, C6
   Workplace Skills (See Appendix B): WP2, WP3
4. Recognize safety procedures and policies.
   a. Describe accident prevention methods and disaster plans.
   b. Follow facility policies.

   Related Academic Topics (See Appendix A): C1, C4, C6, S8
   Workplace Skills (See Appendix B): WP2
5. Recognize and use medical terminology.
   a. Demonstrate the use of medical references to spell medical terms correctly.
   b. Spell designated medical terms correctly.
   c. Define and divide medical terms into root words, prefixes, and suffixes.
   d. Interpret the common medical abbreviations and symbols including meanings, and uses.
   e. Demonstrate the use of medical terms and abbreviations in reading, speaking, interpreting, and writing simulated medical records.

   Related Academic Topics (See Appendix A): C1, C4, C5, C6, S1, S8
   Workplace Skills (See Appendix B): WP2, WP4
6. Demonstrate job seeking and job keeping skills.
   a. Prepare a resume containing essential information.
   b. Complete a job application form.
   c. Explain procedures for job interviews.
   d. Demonstrate the role of an applicant in a job interview.
   e. Describe job interview etiquette.
   f. Maintain positive relations with clients and peers.
   g. Demonstrate job keeping skills.

   Related Academic Topics (See Appendix A): C1, C4, C6
   Workplace Skills (See Appendix B): WP2, WP3

SECTION II:

CURRICULUM GUIDE

FOR

HEALTH INFORMATION TECHNOLOGY

HEALTH INFORMATION TECHNOLOGY COURSES

Course Name: Health Record Systems I

Course Abbreviation: HIT 1114

Classification: Vocational-Technical Core

Description: This course is an introduction to health record systems including admissions procedures; record content, analysis and use, retention requirements; and numbering and filing systems. (4 sch: 3 hr. lecture, 2 hr. lab)

Prerequisites: Admission to the HIT Program

Competencies and Suggested Objectives:

1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
   a. Assemble medical records. (AHIMA 1.1.17)
   b. Retrieve and/or file records. (AHIMA 1.1.27)
   c. Perform concurrent medical record review. (AHIMA1.1.28)
   d. Collect data on the status of incomplete records. (AHIMA 1.1.11)
   e. Collect data on the quality of documentation in the medical record (i.e., timeliness, completeness, accuracy). (AHIMA 1.1.9)
   f. Track location of medical records. (AHIMA 1.1.12)

   Related Academic Topics (See Appendix A): C1, C4, C5, C6, M2
   Workplace Skills (See Appendix B): WP2, WP4

Course Name: Medical Terminology

Course Abbreviation: HIT 1213 (MET 1213)

Classification: Vocational-Technical Core

Description: This course is a study of medical language relating to the various body systems including diseases, procedures, clinical specialties, and abbreviations. In addition to term definitions, emphasis is placed on correct spelling and pronunciation. (3 sch: 3 hr. lecture)

Prerequisites: None

Competencies and Suggested Objectives:

1. Recognize and discuss word components, terms, procedures, and abbreviations related to the various body systems.
   a. Identify combining forms, suffixes, and prefixes related to the various body systems.
   b. Identify and discuss disease terms related to the various body systems.
   c. Identify diagnostic imaging, clinical, surgical, and laboratory procedures related to the various body systems.
   d. Identify abbreviations related to the various body systems.
   e. Define, spell, pronounce, and use terms related to the various body systems.

   Related Academic Topics (See Appendix A): C1, S1
   Workplace Skills (See Appendix B): WP2, WP6

Course Name: Health Care Delivery Systems

Course Abbreviation: HIT 1311

Classification: Vocational-Technical Core

Description: This course is an introduction to the United States health care delivery system with emphasis on the changing role of health care providers, hospitals and other facilities, and governmental agencies. (1 sch: 1 hr. lecture)

Prerequisites: Admission to the HIT program

Competencies and Suggested Objectives:

1. Describe the current United States health care delivery system, its providers, and health service organizations.
   a. Discuss the components of the health care delivery system.
   b. Describe health service organizations in the United States by classification and type.
   c. Discuss current licensure, certification, and registration standards for various caregivers.

   Related Academic Topics (See Appendix A): C1, C4
   Workplace Skills (See Appendix B): WP2, WP4
2. Discuss state and federal regulation of health service organizations and the relationship of accreditation of HSO's by the Joint Commission on Accreditation of Healthcare Organizations to state and federal regulation.
   a. Describe state licensure procedures for health service organizations.
   b. Describe federal regulations applicable to HSO's with specific attention to the federal regulations of the Medicare and Medicaid programs relative to health records.
   c. Discuss the role of the Health Care Financing Administration in federal reimbursement, and explain the impact of this agency on health information departments.
   d. Discuss the accreditation process of the JCAHO for health service organizations and the role of accreditation in meeting state and federal requirements.

   Related Academic Topics (See Appendix A): C1, C4
   Workplace Skills (See Appendix B): WP2, WP4
3. Describe the role of professional associations and educational accreditors in the United States health care system.
   a. Describe professional associations for caregivers including health information professionals.

b. Discuss the various educational accreditors working in the U.S. health care system.

Related Academic Topics (See Appendix A): C1, C4
Workplace Skills (See Appendix B): WP2, WP4

4. Discuss trends and developments that may impact the future of the U.S. health care system.
   a. Discuss changes taking place in the financing of health services.
   b. Discuss developments in technology and other trends that may cause change in the U.S. health care system.
   c. Discuss trends and developments currently affecting the practice of health information management.

Related Academic Topics (See Appendix A): C1, C4, C6
Workplace Skills (See Appendix B): WP2, WP4

Course Name: Health Care Law & Ethics

Course Abbreviation: HIT 1322

Classification: Vocational-Technical Core

Description: This course is a study of the principles of law as applied to health information systems with emphasis on health records, release of information, confidentiality, consents, and authorizations. (2 sch: 2 hr. lecture)

Prerequisites: Health Record Systems I (HIT 1114), Health Care Delivery Systems (HIT 1311)

Competencies and Suggested Objectives:

1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
   a. Monitor changes in federal, state, local laws, regulations, and/or Joint Commission standards. (AHIMA 1.1.4)
   b. Release patient-related data (i. e., reimbursement, research, legal, or patient-care related purposes). (AHIMA 1.1.18)

   Related Academic Topics (See Appendix A): C1, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP4
2. Identify areas of potential ethical concern as related to Health Information Practice.
   a. Monitor the release of information to ensure confidentiality of patient-related data. (AHIMA 1.1.15)

   Related Academic Topics (See Appendix A): C1, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP4

Course Name: Disease I

Course Abbreviation: HIT 1413

Classification: Vocational-Technical Core

Description: This course covers structural and functional changes caused by disease in tissues and organs, clinical manifestations, and principles of treatment with emphasis on general concepts and diseases affecting the body as a whole. (3 sch: 3 hr. lecture)

Prerequisites: Medical Terminology (HIT 1213), Anatomy & Physiology I (BIO 1513)

Competencies and Suggested Objectives:

1. Discuss general concepts of disease and principles of diagnosis.
   a. Describe characteristics of disease processes.
   b. List classifications of disease.
   c. Discuss basic principles of diagnosis.
   d. Discuss the use of diagnostic tests and procedures.
   e. Identify common medications used to treat major disease processes in each body system.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP4
2. Discuss the structure and function of cells and tissues in health and disease.
   a. Describe how cells form the four basic types of tissues.
   b. Discuss the organization of tissues into organ systems.
   c. List processes by which cells adapt to changing conditions.
   d. Explain the ways in which an aging cell becomes increasingly vulnerable to injury.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP6
3. Describe the inflammation process and its role in disease and injury.
   a. List characteristics and clinical manifestations of an acute inflammation.
   b. Describe the possible outcomes of an inflammatory reaction.
   c. Compare inflammation and infection, naming some terms used to describe infections.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP6
4. Discuss cell-mediated and humoral immunity.
   a. Explain the role of lymphocytes in the immune response.
   b. Compare immunity and hypersensitivity.

c. List the classes of antibodies, and explain how they differ from one another.
d. Describe allergic manifestations and methods of treatment.

Related Academic Topics (See Appendix A): C1, C4, S1
Workplace Skills (See Appendix B): WP2, WP6

5. Discuss the role of pathogenic microorganisms and animal parasites in disease.
   a. List and describe the major groups of pathogenic bacteria.
   b. Describe the mechanism by which antibiotics inhibit the growth of bacteria.
   c. Explain the mode of action of virus infections, and describe how the body's response to viral infection leads to recovery.
   d. List common infections caused by chlamydia, mycoplasmas, and rickettsiae.
   e. Discuss the spectrum of infections caused by fungi.
   f. List common parasitic infestations that affect humans and how they are acquired.
   g. Describe clinical manifestations of parasitic infestations and explain their clinical significance.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP6

6. Discuss communicable diseases' transmission and control.
   a. Explain how communicable diseases are transmitted and controlled.
   b. List the common sexually transmitted diseases and describe their major clinical manifestations, complications, and methods of treatment.
   c. Describe symptoms of herpes infection in men and women, and explain the effects on sexual partners or the fetus/newborn of an infected mother.
   d. Discuss the pathogenesis of human immunodeficiency virus infections, groups affected, and the effects of the virus on the immune system.
   e. List the major clinical manifestations of HIV infection, the significance of a positive test for antibody to the virus, and the methods of preventing spread of the infection.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP6

7. Discuss congenital and hereditary diseases' causes and manifestations.
   a. List common causes of congenital malformations.
   b. List abnormalities of sex chromosomes and their clinical manifestations.
   c. Describe some common genetic abnormalities and explain methods of transmission.
   d. Explain multifactorial inheritance, give an example of a multifactorial defect, and describe the relevant factors.

e. List the causes of Down's syndrome and describe its clinical manifestations.

Related Academic Topics (See Appendix A): C1, C4, S1
Workplace Skills (See Appendix B): WP2, WP6

8. Discuss the types and characteristics of neoplasms, principal modalities of treatment, and incidence and survival rates for various types of malignant tumors.
   a. Compare general characteristics of benign and malignant tumors.
   b. Summarize general features of principal types of lymphoma.
   c. Differentiate between infiltrating and in situ carcinoma.
   d. Explain the mechanisms of the body's immunologic defenses against tumor.
   e. Summarize the principal modalities of tumor treatment, including advantages, disadvantages, and common side effects of each technique.
   f. Compare the incidence and survival rates for various types of malignant tumors.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP6

9. Discuss abnormalities of blood coagulation and circulatory disturbances.
   a. List the most common clinically significant disturbances of hemostasis and describe their clinical manifestations.
   b. Describe the causes and effects of venous thrombosis.
   c. Describe the causes and effects of arterial thrombosis.
   d. List factors regulating the circulation of fluid between capillaries and interstitial tissue, and explain the major clinical disturbances leading to edema.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP6

Course Name: Directed Practice I

Course Abbreviation: HIT 1512

Classification: Vocational-Technical Core

Description: In this course, students rotate through health information management areas in hospitals and other health facilities for application of principles and procedural practice to attain competency. Specific content is dependent on placement in curriculum and site availability. (2 sch: 6 hr. clinical)

Prerequisites: Health Record Systems I (HIT 1114), Health Care Delivery Systems (HIT 1311), Medical Terminology (HIT 1213)

Competencies and Suggested Objectives:

1. Perform health information procedures in the health information setting.
   a. Perform patient registration functions in the health information department.
   b. Follow established policies and procedures in storage and retrieval of health records, including filing and retrieving accurately.
   c. Follow established policies and procedures in transcribing medical reports and performing related tasks.
   d. Assist the medical staff with preparation for committee meetings; maintenance of credentials files; delinquent record tabulation and reporting; and maintenance of bylaws, rules, and regulations.
   e. Assist with preparations for a JCAHO survey of the health information department.
   f. Perform performance improvement activities according to JCAHO standards.
   g. Follow departmental procedures in performing utilization management and risk management activities.
   h. Maintain computerized health information system including data entry and report generation.
   i. Perform cancer registry procedures according to guidelines of the Commission on Cancer.
   j. Accurately code medical records of outpatients and inpatients according to departmental policies and procedures.
   k. Correctly assign appropriate DRG to Medicare inpatients according to Federal regulations and departmental policies and procedures.
   l. Assure quality in coding and DRG assignment according to departmental policies and procedures.
   m. Following state statutes and hospital policies and procedures, complete vital records and reports accordingly.

n. Following established policies and procedures, maintain record system for an outpatient department.
o. Release information and handle other correspondence according to state law and departmental policies and procedures.
p. Collect data needed, compute formulas, and compare monthly statistical reports according to procedure.
q. Prepare reportable disease forms according to State Health Department regulations.
r. Identify the role of the manager in payroll, budget, and leadership of employee.
s. Identify problems with work flow and specific procedures; revise as necessary.
t. Conduct oral inservice presentation for departmental employees.
u. Prepare materials for medical staff committee meetings, and take acceptable minutes of the meeting.
v. Interpret organizational structure of the health information department and its relationship to administration and the medical staff.
w. Maintain quantity and quality of departmental work using established standards, and apply existing departmental personnel policy.
x. Report problems with forms usage.

Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M6, S1, S8

Workplace Skills (See Appendix B): WP2, WP3, WP6

Course Name: Coding Systems I

Course Abbreviation: HIT 2614

Classification: Vocational-Technical Core

Description: This course includes principles of coding and classification systems with emphasis on ICD-9-CM including lab application and practice. (4 sch: 3 hr. lecture, 2 hr. lab)

Prerequisites: Medical Terminology (HIT 1213), Disease I (HIT 1413), Health Record Systems I (HIT 1114), Anatomy & Physiology I (BIO 1513) and Anatomy & Physiology II (BIO 1523)

Competencies and Suggested Objectives:

1. Gather data to support patient-related information needs and departmental, informational, service, and operational needs. (AHIMA 1.1)
   a. Abstract information from patient records (concurrently or retrospectively) for disease, procedure, physician, or other indices. (AHIMA 1.1.22)
   b. Assign diagnostic/procedure codes using ICD-9-CM. (AHIMA 1.1.31)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, S1
   Workplace Skills (See Appendix B): WP2, WP4, WP6

Course Name: Health Record Systems II

Course Abbreviation: HIT 2123

Classification: Vocational-Technical Core

Description: This course is a study of health record systems in alternative settings; cancer program records, medical staff organization, and accreditation and licensure standards. (3 sch: 2 hr. lecture, 2 hr. lab)

Prerequisites: Health Record Systems I (HIT 1114), Medical Terminology (HIT 1213), Health Care Delivery Systems (HIT 1311)

Competencies and Suggested Objectives:

1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
   a. Monitor changes in federal, state, and local laws, regulations, and/or Joint Commission standards. (AHIMA 1.1.4)
   b. Monitor accreditation/licensing survey results. (i.e., JCAHO, Medicare, etc.) (AHIMA 1.1.14)
   c. Abstract information from patient records (concurrently or retrospectively) for research studies. (AHIMA 1.1.20)
   d. Abstract information from patient records (concurrently or retrospectively) for compilation of registries. (AHIMA 1.1.23)
   e. Abstract information from patient records (concurrently or retrospectively) to develop user (i.e., physician) profiles. (AHIMA 1.1.25)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP4, WP6
2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
   a. Verify that data have been obtained from valid sources. (AHIMA 1.2.1)
   b. Check data for internal consistency. (AHIMA 1.2.4)
   c. Compare data with other data sources/references to determine consistency. (AHIMA 1.2.6)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP4, WP6
3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)
   a. Prepare data for analysis. (i.e., compile data, develop graphs, tables, etc.) (AHIMA 1.3.1)

b. Analyze patient care/institutional data in relation to regulatory and accreditation standards. (AHIMA 1.3.3)

Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M6, S8
Workplace Skills (See Appendix B): WP2, WP4, WP6

Course Name: Disease II

Course Abbreviation: HIT 2423

Classification: Vocational-Technical Core

Description: This course is a continuation of Disease I with emphasis on conditions relating to specific body systems, manifestations, and principles of treatment. (3 sch: 3 hr. lecture)

Prerequisites: Disease I (HIT 1413), Anatomy & Physiology I (BIO 1513), Anatomy & Physiology II (BIO 1523)

Competencies and Suggested Objectives:

1. Discuss major disease conditions relating to specific body systems and identify drugs most commonly used in treatment.
   a. List and describe common disease conditions affecting the cardiovascular and circulatory systems.
   b. List and describe common disease conditions affecting the respiratory system.
   c. List and describe common disease conditions affecting the breast and female reproductive system, including those occurring during the prenatal period and pregnancy.
   d. List and describe common disease conditions affecting the urinary system.
   e. List and describe common disease conditions affecting the male reproductive system.
   f List and describe common disease conditions affecting the pancreas, liver, and biliary system.
   g. List and describe common disease conditions affecting the gastrointestinal tract.
   h. List and describe common disease conditions affecting the endocrine system.
   i. List and describe common disease conditions affecting the nervous system.
   j. List and describe common disease conditions affecting the musculoskeletal system.

   Related Academic Topics (See Appendix A): C1, C4, S1
   Workplace Skills (See Appendix B): WP2, WP6
2. Discuss the major types of neoplasms and their manifestations, along with methods of treatment for the various body systems.
   a. List the major types of lung carcinoma. Describe the clinical manifestations of lung carcinoma and explain the principles of treatment.

b. Describe the clinical manifestations of breast carcinoma and explain methods of diagnosis and treatment.
c. List the common tumors and cysts of the ovary.
d. Name the more common kinds of tumors affecting the urinary tract.
e. Differentiate between benign prostatic hypertrophy and prostatic carcinoma, describing clinical manifestations and methods of treatment.
f. List the three most common types of testicular cancer; describe their manifestations; and explain the methods of treatment.
g. Discuss the causes, manifestations, and treatments of carcinoma of the colon.
h. Name the types of tumors that affect the central nervous system and explain their origin, pathogenesis, clinical manifestations, and treatment.

Related Academic Topics (See Appendix A): C1, C4, S1
Workplace Skills (See Appendix B): WP2, WP6

Course Name: Medical Transcription

Course Abbreviation: HIT 2222

Classification: Vocational-Technical Core

Description: This course covers concepts in computerized medical transcription in health care facilities with emphasis on content of various medical reports and application of medical transcription standards in a hospital medical transcription center. (2 sch: 1 hr. lecture, 2 hr. lab)

Prerequisites: Medical Terminology (HIT 1213), Introduction to Computers (CPT 1114), Anatomy & Physiology I (BIO 1513), Disease I (HIT 1413)

Competencies and Suggested Objectives:

1. Apply terminology, word processing, language, and health information system skills in transcription of authentic physician dictation.
   a. Transcribe dictation of clinical reports into an accurate and acceptable format.
   b. Utilize appropriate references to locate unfamiliar medical, surgical, and pharmaceutical terms.
   c. Demonstrate utilization of basic rules of punctuation, capitalization, and sentence structure.
   d. Apply proofreading and editing skills to a transcribed report.
   e. Input data into a computerized patient record.

   Related Academic Topics (See Appendix A): C1, C3, C4, C5, C6, S1
   Workplace Skills (See Appendix B): WP2, WP3, WP6

Course Name: Directed Practice II

Course Abbreviation: HIT 2522

Classification: Vocational-Technical Core

Description: In this course, students rotate through health information management areas in hospitals and other health facilities for application of principles and procedural practice to attain competency. Specific content is dependent on placement in curriculum and site availability. (2 sch: 6 hr. clinical)

Prerequisites: Directed Practice I (HIT 1512)

Competencies and Suggested Objectives:

1. Perform health information procedures in the health information setting.
   a. Perform patient registration functions in the health information department.
   b. Follow established policies and procedures in storage and retrieval of health records including filing and retrieving accurately.
   c. Follow established policies and procedures in transcribing medical reports and performing related tasks.
   d. Assist the medical staff with preparation for committee meetings; maintenance of credentials files; delinquent record tabulation and reporting; and maintenance of bylaws, rules and regulations.
   e. Assist with preparations for a JCAHO survey of the health information department.
   f. Perform quality assessment activities according to JCAHO standards.
   g. Follow departmental procedures in performing utilization management and risk management activities.
   h. Maintain computerized health information system, including data entry and report generation.
   i. Perform cancer registry procedures according to guidelines of the Commission on Cancer.
   j. Accurately code medical records of outpatients and inpatients according to departmental policies and procedures.
   k. Correctly assign appropriate DRG to Medicare inpatients according to federal regulations and departmental policies and procedures.
   l. Assure quality in coding and DRG assignment according to departmental policies and procedures.
   m. Following state statutes and hospital policies and procedures, complete vital records and reports accordingly.
   n. Following established policies and procedures, maintain record system for an outpatient department.

o. Release information and handle other correspondence according to state law and departmental policies and procedures.
p. Collect data needed, compute formulas, and compare monthly statistical reports according to procedure.
q. Prepare reportable disease forms according to State Health Department regulations.
r. Identify the role of the manager in payroll, budget, and leadership of employee.
s. Identify problems with work flow and with specific procedures; revise as necessary.
t. Conduct oral inservice presentation for departmental employees.
u. Prepare materials for medical staff committee meetings, and take acceptable minutes of the meeting.
v. Interpret organizational structure of the health information department and its relationship to administration and the medical staff.
w. Maintain quantity and quality of departmental work using established standards, and apply existing departmental personnel policy.
x. Report problems with forms usage.

Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M6, S8
Workplace Skills (See Appendix B): WP2, WP3, WP6

Course Name: Coding Systems II

Course Abbreviation: HIT 2624

Classification: Vocational-Technical Core

Description: This course is a continuation of the study of principles of ICD-9-CM coding; introduction to coding with the Health Care Financing Administration's Common Procedure Coding System (HCPCS) with emphasis on Current Procedure Coding (CPT); and review of current reimbursement mechanisms. (4 sch: 3 hr. lecture, 2 hr. lab)

Prerequisites: Anatomy & Physiology I (BIO1513),Anatomy & Physiology II (BIO 1523), Disease II (HIT 2423), Coding I (HIT 2614)

Competencies and Suggested Objectives:

1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
   a. Compare claims submitted to third-party payers with reimbursement received. (AHIMA 1.1.7)
   b. Abstract information from patient records (concurrently or retrospectively) for disease, procedure, physician, or other indices. (AHIMA 1.1.22)
   c. Assign severity of illness categories. (AHIMA 1.1.30)
   d. Assign diagnostic/procedure codes using ICD-9-CM, CPT, HCPCS, DSM, or other coding systems. (AHIMA 1.1.31)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, S1
   Workplace Skills (See Appendix B): WP2, WP4, WP6
2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
   a. Validate diagnostic and procedure coding (i.e. ICD-9-CM, CPT, HCPCS, or other coding systems). (AHIMA 1.2.7)
   b. Validate DRG assignment. (AHIMA 1.2.8)
   c. Validate output on UB-92 or other billing forms. (AHIMA 1.2.9)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, S1
   Workplace Skills (See Appendix B): WP2, WP4, WP6
3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)
   a. Perform departmental/institutional case-mix analysis. (AHIMA 1.3.2)
   b. Analyze case-mix payment rates (i.e., DRG and others) to determine reimbursement optimization. (AHIMA 1.3.6)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, S1
   Workplace Skills (See Appendix B): WP2, WP4, WP6

Course Name: Health Care Supervision

Course Abbreviation: HIT 2713

Classification: Vocational-Technical Core

Description: This course includes basic principles of management and supervision with emphasis on the health information setting. (3 sch: 3 hr. lecture)

Prerequisites: Health Record Systems I (HIT 1114) and Health Record Systems II (HIT 2123)

Competencies and Suggested Objectives:

1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
   a. Monitor departmental productivity. (AHIMA 1.1.5)
   b. Collect data on employee performance. (AHIMA 1.1.6)
   c. Monitor work flow under your span of control. (AHIMA 1.1.8)
   d. Monitor employee staffing levels. (AHIMA 1.1.13)
   e. Design forms for collection of patient-related and/or other data (i.e., medical record forms, quality assurance, utilization review forms, etc.). (AHIMA 1.1.19)
   f. Confer with peers, providers, and/or users of departmental or institutional services. (AHIMA 1.1.26)
   g. Participate in departmental and/or institutional committees. (AHIMA 1.1.29)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP1, WP3, WP6
2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
   a. Verify timeliness, completeness, accuracy, and appropriateness of data sources (patient care, management, billing reports, and/or databases). (AHIMA 1.2.2)
   b. Compare data with standards (i.e., length of stay norms, Medicare mortality rates, departmental productivity standards, etc.). (AHIMA 1.2.3)
   c. Perform edit checks to monitor data accuracy. (AHIMA 1.2.5)
   d. Compare data with other data sources/references to determine consistency. (AHIMA 1.2.6)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP1, WP3, WP6

3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)
   a. Analyze employee performance data in relation to departmental/institutional performance standards. (AHIMA 1.3.4)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP1, WP3, WP6
4. Design departmental service and operational systems. (AHIMA 2.1)
   a. Develop departmental plans, goals, and objectives for area under your span of control. (AHIMA 2.1.1)
   b. Develop/revise departmental policies. (AHIMA 2.1.2)
   c. Develop/revise departmental procedures. (AHIMA 2.1.3)
   d. Develop/revise job descriptions. (AHIMA 2.1.4)
   e. Develop transition plans for implementation of new or revised systems. (AHIMA 2.1.5)
   f. Develop goals and objectives for computerized information systems (i.e., department or other facility systems). (AHIMA 2.1.6)
   g. Develop inservice education programs for departmental or non-departmental staff. (AHIMA 2.1.7)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP1, WP3, WP6
5. Identify/select resources to support departmental operations and information systems. (AHIMA 2.2)
   a. Determine personnel needs for staffing current and/or new systems. (AHIMA 2.2.1)
   b. Determine equipment and/or supply needs for current and/or new systems. (AHIMA 2.2.2)
   c. Determine space requirements for current and/or new systems. (AHIMA 2.2.3)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M1, M7
   Workplace Skills (See Appendix B): WP1, WP3, WP6
6. Execute plan(s) for implementing departmental service and operational systems, and information systems for patient-related data. (AHIMA 3.1)
   a. Select personnel. (AHIMA 3.1.1)
   b. Train personnel. (AHIMA 3.1.2)
   c. Inform organizational staff of plan(s). (AHIMA 3.1.3)
   d. Implement new/revised policies and procedures. (AHIMA 3.1.4)
   e. Monitor adherence to system specifications. (AHIMA 3.1.5)
   f. Implement new/revised information, and/or service, and/or operational systems. (AHIMA 3.1.6)
   g. Monitor adherence to budget (i.e., determine budget variance, etc.). (AHIMA 3.1.7)
   h. Coordinate on-site review activities (i.e., PRO reviews, etc.). (AHIMA 3.1.8)
   i. Monitor policy/procedure compliance. (AHIMA 3.1.9)

j. Counsel/discipline employees. (AHIMA 3.1.10)
k. Terminate employees. (AHIMA 3.1.11)
l. Design employee staffing schedules. (AHIMA 3.1.12)
m. Maintain equipment (i.e., schedule preventive maintenance, arrange for repairs, etc.). (AHIMA 3.1.13)
n. Educate medical record and/or other students assigned to the facility. (AHIMA 3.1.14)
o. Conduct educational programs for departmental and/or non-departmental staff. (AHIMA 3.1.15)

Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M7
Workplace Skills (See Appendix B): WP1, WP3, WP6

7. Evaluate the effectiveness and efficiency of departmental, operational and service systems, and information systems for patient-related data. (AHIMA 4.1)
   a. Determine variation(s) from established objectives and/or standards of performance. (AHIMA 4.1.1)
   b. Recommend changes and/or improvement(s) in systems. (AHIMA 4.1.2)
   c. Evaluate employee performance. (AHIMA 4.1.3)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M7
   Workplace Skills (See Appendix B): WP1, WP3, WP6

Course Name: Performance Improvement Techniques

Course Abbreviation: HIT 2811

Classification: Vocational-Technical Core

Description: This course covers principles of performance improvement techniques in health care facilities; trends in utilization and risk management; the use of quality monitors in the health information department. (1 sch: 1 hr. lecture)

Prerequisites: Health Record Systems II (HIT 2123)

Competencies and Suggested Objectives:

1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
   a. Tabulate data on the appropriateness and quality of patient care as documented in the medical record (i.e., quality assurance, utilization review activities). (AHIMA 1.1.10)
   b. Abstract information from patient records (concurrently or retrospectively) for quality assurance studies, utilization review, and risk management. (AHIMA 1.1.16)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP3, WP6
2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
   a. Compare data with other data sources/references to determine consistency. (AHIMA 1.2.6)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP3, WP6

Course Name: Computers in Health Care

Course Abbreviation: HIT 2912

Classification: Vocational-Technical Core

Description: This course is an overview of computer use in health care facilities with emphasis on applications for health information services. (2 sch: 2 hr. lecture)

Prerequisites: Introduction to Computers (CPT 1114)

Competencies and Suggested Objectives:

1. Design departmental service and operational systems. (AHIMA 2.1)
   a. Develop transition plans for implementation of new or revised systems. (AHIMA 2.1.5)
   b. Develop goals and objectives for computerized information systems (i.e., department or other facility systems). (AHIMA 2.1.6)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP5

Course Name: Health Statistics

Course Abbreviation: HIT 2133

Classification: Vocational-Technical Core

Description: This course includes sources and use of health data, definitions of statistical terms, and computation of commonly used rates and percentages used by health care facilities. (3 sch: 2 hr. lecture, 2 hr. lab)

Prerequisites: Health Record Systems I (HIT 1114) and/or Health Record Systems I (HIT 1114) and Health Record Systems II (HIT 2123)

Competencies and Suggested Objectives:

1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
   a. Conduct surveys of patients, users of data, healthcare providers, administrators, and/or researchers. (AHIMA 1.1.1)
   b. Conduct interviews with users of data, healthcare providers, administrators, researchers, and/or others. (AHIMA 1.1.2)
   c. Tabulate requests for patient related data. (AHIMA 1.1.3)
   d. Abstract information from patient-related records (concurrently or retrospectively) for compilation of vital statistics. (AHIMA 1.1.24)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6
   Workplace Skills (See Appendix B): WP2, WP6
2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
   a. Compare data with standards (i.e., length of stay norms, Medicare mortality rates, departmental productivity standards, etc.). (AHIMA 1.2.3)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M3, M6
   Workplace Skills (See Appendix B): WP2, WP6
3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)
   a. Prepare data for analysis (i.e., compile data, develop graphs, tables, etc.). (AHIMA 1.3.1)
   b. Calculate institutional statistics (i.e., occupancy rates, census, length of stay). (AHIMA 1.3.5)

   Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M3, M6, M7
   Workplace Skills (See Appendix B): WP2, WP6

Course Name: Directed Practice III

Course Abbreviation: HIT 2532

Classification: Vocational-Technical Core

Description: In this course, students rotate through health information management areas in hospitals and other health facilities for application of principles and procedural practice to attain competency. Specific content is dependent on placement in curriculum and site availability. (2 sch: 6 hr. clinical)

Prerequisites: Directed Practice I (HIT 1512) and Directed Practice II (HIT 2522)

Competencies and Suggested Objectives:

1. Perform health information procedures in the health information setting.
   a. Perform patient registration functions in the health information department.
   b. Follow established policies and procedures in storage and retrieval of health records, including filing and retrieving accurately.
   c. Follow established policies and procedures in transcribing medical reports and performing related tasks.
   d. Assist the medical staff with preparation for committee meetings; maintenance of credentials files; delinquent record tabulation and reporting; and maintenance of bylaws, rules, and regulations.
   e. Assist with preparations for a JCAHO survey of the health information department.
   f. Perform quality assessment activities according to JCAHO standards.
   g. Follow departmental procedures in performing utilization management and risk management activities.
   h. Maintain computerized health information system including data entry and report generation.
   i. Perform cancer registry procedures according to guidelines of the Commission on Cancer.
   j. Accurately code medical records of outpatients and inpatients according to departmental policies and procedures.
   k. Correctly assign appropriate DRG to Medicare inpatients according to Federal regulations and departmental policies and procedures.
   l. Assure quality in coding and DRG assignment according to departmental policies and procedures.
   m. Following state statutes and hospital policies and procedures, complete vital records and reports accordingly.
   n. Following established policies and procedures, maintain record system for an outpatient department.

o. Release information and handle other correspondence according to state law and departmental policies and procedures.
p. Collect data needed, compute formulas, and compare monthly statistical reports according to procedure.
q. Prepare reportable disease forms according to State Health Department regulations.
r. Identify the role of the manager in payroll, budget, and leadership of employee.
s. Identify problems with work flow, specific procedures, and revise as necessary.
t. Conduct oral inservice presentation for departmental employees.
u. Prepare materials for medical staff committee meetings, and take acceptable minutes of the meeting.
v. Interpret organizational structure of the health information department and its relationship to administration and the medical staff.
w. Maintain quantity and quality of departmental work using established standards, and apply existing departmental personnel policy.
x. Report problems with forms usage.

Related Academic Topics (See Appendix A): C1, C2, C3, C4, C5, C6, M6, S8
Workplace Skills (See Appendix B): WP2, WP3, WP6

RELATED VOCATIONAL-TECHNICAL COURSES

Course Name: Introduction to Computers

Course Abbreviation: CPT 1114

Classification: Vocational-Technical Core (From Business and Office and Related Technology)

Description: This course is an introduction to information processing concepts and applications, including operating systems, word processing, electronic spreadsheets, data management, graphics, and BASIC programming. (4 sch: 2 hr. lecture, 4 hr. lab)

Competencies and Suggested Objectives:

1. Identify the advantages and disadvantages of the computer to individuals and businesses.
2. Identify the roles and equipment used for input, processing, and output in an information system.
3. Identify common disk operating system procedures.
4. Identify terms associated with concepts in information processing.
5. Identify skills associated with information processing.
6. Identify correct safety procedures.
7. Develop keyboarding skills to produce mailable documents.
8. Demonstrate the ability to use a dictionary, word book, and a reference manual.
9. Prepare letters using full block and modified block letter styles, and prepare envelopes according to U.S. Postal regulations.
10. Create and print mailable document to include:
    a. Page format
        i. Tabs
        ii. Margins and page length
        iii. Line spacing
    b. Input text
        i. Insert text
        ii. Replace text
        iii. Delete text
        iv. Center
        v. Underline
    c. Edit document.
        i. Insert/delete a blank line
        ii. Find and replace
        iii. Block editing
            (1) Copy
            (2) Move

(3) Delete

d. Spell check document.
e. Save document.
f. Print document.
   i. Print selected text.
   ii. Print entire document.
g. Get an existing file.

11. Complete a files management project on the microcomputer, including:
    a. Design a file.
    b. Add forms to the file.
    c. Edit selected forms.
    d. Delete selected forms.
    e. Generate reports.
    f. Print labels.
12. Design and print a database report.
13. Design and print mailing labels on the microcomputer.
14. Use a spreadsheet program to prepare an appropriate template and insert given data for a personal, business, and education application including the following features:
    a. Column headings.
    b. Row headings.
    c. Delete headings.
    d. Set cell styles.
    e. Type values in cells.
    f. Create formulas.
    g. Recalculate.
    h. Print.
15. Merge a database application and a spreadsheet application with a word processing document.
16. Generate and print graphs from given data.
17. Use available software to input personal, business, and organizational names in proper indexing order, and produce an alphabetical list.
18. Write and run a simple program using BASIC statements including CLS, New, REM, Print, Let, Input, Data, Read, If Then, Go To.

RELATED ACADEMIC COURSES

Course Name: Anatomy and Physiology I

Course Abbreviation: BIO 1513

Classification: Related Academic

Description: This is a lecture/laboratory course dealing with the anatomical and physiological study of the human body, particularly the molecular, cellular, tissue, organs, and systems. Each system is considered in detail regarding both structure and function.

Course Name: Anatomy and Physiology II

Course Abbreviation: BIO 1523

Classification: Related Academic

Description: This is a lecture/laboratory course of the systems listed but not covered in BIO 1513.

SECTION III:

RECOMMENDED TOOLS AND EQUIPMENT

RECOMMENDED TOOLS AND EQUIPMENT FOR HEALTH INFORMATION TECHNOLOGY

CAPITALIZED ITEMS

1. Calculator (Printing) (2 per program)
2. Computer Lab (1 per program: w/minimum 15 computers)
3. Computer Tables/Desks/Workstations (minimum 15 per program)
4. Printers (min. of 1 laser) (1 per 2 computers or 8 per program)
5. Transcriber w/Headphone & Foot Pedal (minimum 15 per program)
6. File Box 3.5" x 5" (1 per program)

INSTRUCTIONAL AIDS

1. Cabinet, File, Lateral (4 per program)
2. Clerical Office Procedures text (1 per program)
3. College Typewriting Book (1 per program)
4. Commonly Computed Rates & Percentages text (1 per program)
5. CPT 4 Code Book (1 per program)
6. Dorlands Medical Dictionary (1 per program)
7. Glossary of Health Care Terms (1 per program)
8. ICD-9-CM Code Book (1 per program)
9. Medical Abbreviations - Dorlands' (1 per program)
10. Medical Office Practice Kit (1 per program)
11. Health Information Management text- Huffman (2 per program)
12. Medical Word Book (1 per program)
13. Mississippi Law Manual (1 per program)
14. The Professional Medical Secretary text (1 per program)
15. Radiological Handbook (1 per program)
16. Records Control Book & Kit (1 per program)
17. Surgical Word Book (1 per program)
18. Terminology Book and Software (1 per program)
19. Transcription Guide (1 per program)
20. Webster's Dictionary (1 per program)
21. Physician's Desk Reference (1 per program)
22. Davis Drug Guide for Nurses (or equivalent) (1 per program)
23. Merck Manual (1 per program)
24. Spreadsheet Software (1 per computer)
25. Database Software (1 per computer)
26. Word Processing Software (1 per computer)
27. Cancer Registry Software (1 per computer)
28. Encoding Software (1 per computer)
29. Health Information System Application Packages (1 per computer)
30. Transcription Tapes (1 set minimum per program)

APPENDIX A:

RELATED ACADEMIC TOPICS

APPENDIX A

RELATED ACADEMIC TOPICS FOR COMMUNICATIONS

C1 Interpret written material.
C2 Interpret visual materials (maps, charts, graphs, tables, etc.).
C3 Listen, comprehend, and take appropriate actions.
C4 Access, organize, and evaluate information.
C5 Use written and/or oral language skills to work cooperatively to solve problems, make decisions, take actions, and reach agreement.
C6 Communicate ideas and information effectively using various oral and written forms for a variety of audiences and purposes.

EXPANDED TOPICS FOR COMMUNICATIONS

TOPIC C1: Interpret written material.

C1.01 Read and follow complex written directions.
C1.02 Recognize common words and meanings associated with a variety of occupations.
C1.03 Adjust reading strategy to purpose and type of reading.
C1.04 Use sections of books and reference sources to obtain information.
C1.05 Compare information from multiple sources and check validity.
C1.06 Interpret items and abbreviations used in multiple forms.
C1.07 Interpret short notes, memos, and letters.
C1.08 Comprehend technical words and concepts.
C1.09 Use various reading techniques depending on purpose for reading.
C1.10 Find, read, understand, and use information from printed matter or electronic sources.

TOPIC C2: Interpret visual materials (maps, charts, graphs, tables, etc.).

C2.01 Use visuals in written and in oral presentations.
C2.02 Recognize visual cues to meaning (layout, typography, etc.).
C2.03 Interpret and apply information using visual materials.

TOPIC C3: Listen, comprehend, and take appropriate action.

C3.01 Identify and evaluate orally-presented messages according to purpose.
C3.02 Recognize barriers to effective listening.
C3.03 Recognize how voice inflection changes meaning.
C3.04 Identify speaker signals requiring a response and respond accordingly.
C3.05 Listen attentively and take accurate notes.
C3.06 Use telephone to receive information.

C3.07 Analyze and distinguish information from formal and informal oral presentations.

TOPIC C4: Access, organize, and evaluate information.

C4.01 Distinguish fact from opinion.
C4.02 Use various print and non-print sources for specialized information.
C4.03 Interpret and distinguish between literal and figurative meaning.
C4.04 Interpret written or oral communication in relation to context and writer's point of view.
C4.05 Use relevant sources to gather information for written or oral communication.

TOPIC C5: Use written and/or oral language skills to work cooperatively to solve problems, make decisions, take actions, and reach agreement.

C5.01 Select appropriate words for communication needs.
C5.02 Use reading, writing, listening, and speaking skills to solve problems.
C5.03 Compose inquiries and requests.
C5.04 Write persuasive letters and memos.
C5.05 Edit written reports, letters, memos, and short notes for clarity, correct grammar, and effective sentences.
C5.06 Write logical and understandable statements, phrases, or sentences for filling out forms, for correspondence or reports.
C5.07 Write directions or summaries of processes, mechanisms, events, or concepts.
C5.08 Select and use appropriate formats for presenting reports.
C5.09 Convey information to audiences in writing.
C5.10 Compose technical reports and correspondence that meet accepted standards for written communications.

TOPIC C6: Communicate ideas and information using oral and written forms for a variety of audiences and purposes.

C6.01 Give complex oral instructions.
C6.02 Describe a business or industrial process/mechanism.
C6.03 Participate effectively in group discussions and decision making.
C6.04 Produce effective oral messages utilizing different media.
C6.05 Explore ideas orally with partners.
C6.06 Participate in conversations by volunteering information when appropriate and asking relevant questions when appropriate.
C6.07 Restate or paraphrase a conversation to confirm one's own understanding.
C6.08 Gather and provide information utilizing different media.

C6.09 Prepare and deliver persuasive, descriptive, and demonstrative oral presentations.

RELATED ACADEMIC TOPICS FOR MATHEMATICS

M1 Relate number relationships, number systems, and number theory.
M2 Explore patterns and functions.
M3 Explore algebraic concepts and processes.
M4 Explore the concepts of measurement.
M5 Explore the geometry of one-, two-, and three-dimensions.
M6 Explore concepts of statistics and probability in real world situations.
M7 Apply mathematical methods, concepts, and properties to solve a variety of real-world problems.

EXPANDED TOPICS FOR MATHEMATICS

TOPIC M1: Relate number relationships, number systems, and number theory.

M1.01 Understand, represent, and use numbers in a variety of equivalent forms (integer, fraction, decimal, percent, exponential, and scientific notation) in real world and mathematical problem situations.
M1.02 Develop number sense for whole numbers, fractions, decimals, integers, and rational numbers.
M1.03 Understand and apply ratios, proportions, and percents in a wide variety of situations.
M1.04 Investigate relationships among fractions, decimals, and percents.
M1.05 Compute with whole numbers, fractions, decimals, integers, and rational numbers.
M1.06 Develop, analyze, and explain procedures for computation and techniques for estimations.
M1.07 Select and use an appropriate method for computing from among mental arithmetic, paper-and-pencil, calculator, and computer methods.
M1.08 Use computation, estimation, and proportions to solve problems.
M1.09 Use estimation to check the reasonableness of results.

TOPIC M2: Explore patterns and functions.

M2.01 Describe, extend, analyze, and create a wide variety of patterns.
M2.02 Describe and represent relationships with tables, graphs, and rules.
M2.03 Analyze functional relationships to explain how a change in one quantity results in a change in another.
M2.04 Use patterns and functions to represent and solve problems.
M2.05 Explore problems and describe results using graphical, numerical, physical, algebraic, and verbal mathematical models or representations.

M2.06 Use a mathematical idea to further their understanding of other mathematical ideas.
M2.07 Apply mathematical thinking and modeling to solve problems that arise in other disciplines, such as art, music, and business.

TOPIC M3: Explore algebraic concepts and processes.

M3.01 Represent situations and explore the interrelationships of number patterns with tables, graphs, verbal rules, and equations.
M3.02 Analyze tables and graphs to identify properties and relationships and to interpret expressions and equations.
M3.03 Apply algebraic methods to solve a variety of real world and mathematical problems.

TOPIC M4: Explore the concepts of measurement.

M4.01 Estimate, make,and use measurements to describe and compare phenomena.
M4.02 Select appropriate units and tools to measure to the degree of accuracy required in a particular situation.
M4.03 Extend understanding of the concepts of perimeter, area, volume, angle measure, capacity, and weight and mass.
M4.04 Understand and apply reasoning processes, with special attention to spatial reasoning and reasoning with proportions and graphs.

TOPIC M5: Explore the geometry of one-, two-, and three-dimensions.

M5.01 Identify, describe, compare, and classify geometric figures.
M5.02 Visualize and represent geometric figures with special attention to developing spatial sense.
M5.03 Explore transformations of geometric figures.
M5.04 Understand and apply geometric properties and relationships.
M5.05 Classify figures in terms of congruence and similarity and apply these relationships.

TOPIC M6: Explore the concepts of statistics and probability in real world situations.

M6.01 Systematically collect, organize, and describe data.
M6.02 Construct, read, and interpret tables, charts, and graphs.
M6.03 Develop an appreciation for statistical methods as powerful means for decision making.
M6.04 Make predictions that are based on exponential or theoretical probabilities.

M6.05 Develop an appreciation for the pervasive use of probability in the real world.

TOPIC M7: Apply mathematical methods, concepts, and properties to solve a variety of real-world problems.

M7.01 Use computers and/or calculators to process information for all mathematical situations.
M7.02 Use problem-solving approaches to investigate and understand mathematical content.
M7.03 Formulate problems from situations within and outside mathematics.
M7.04 Generalize solutions and strategies to new problem situations.

RELATED ACADEMIC TOPICS FOR SCIENCE

S1 Explain the Anatomy and Physiology of the human body.
S2 Apply the basic biological principles of Plants, Viruses and Monerans, Algae, Protista, and Fungi.
S3 Relate the nine major phyla of the kingdom anomaly according to morphology, anatomy, and physiology.
S4 Explore the chemical and physical properties of the earth to include Geology, Meteorology, Oceanography, and the Hydrologic Cycle.
S5 Investigate the properties and reactions of matter to include symbols, formulas and nomenclature, chemical equations, gas laws, chemical bonding, acid-base reactions, equilibrium, oxidation-reduction, nuclear chemistry, and organic chemistry.
S6 Explore the principles and theories related to motion, mechanics, electricity, magnetism, light energy, thermal energy, wave energy, and nuclear physics.
S7 Explore the principles of genetic and molecular Biology to include the relationship between traits and patterns of inheritance, population genetics, the structure and function of DNA, and current applications of DNA technology.
S8 Apply concepts related to the scientific process and method to include safety procedures for classroom and laboratory; use and care of scientific equipment; interrelationships between science, technology and society; and effective communication of scientific results in oral, written, and graphic form.

EXPANDED TOPICS FOR SCIENCE

TOPIC S1: Explain the Anatomy and Physiology of the human body.

S1.01 Recognize common terminology and meanings.
S1.02 Explore the relationship of the cell to more complex systems within the body.

S1.03 Summarize the functional anatomy of all the major body systems.
S1.04 Relate the physiology of the major body systems to its corresponding anatomy.
S1.05 Compare and contrast disease transmission and treatment within each organ system.
S1.06 Explore the usage of medical technology as related to human organs and organ systems.
S1.07 Explain the chemical composition of body tissue.

TOPIC S2: Apply the basic biological principles of Plants, Viruses and Monerans, Algae, Protista, and Fungi.

S2.01 Identify the major types and structures of plants, viruses, monera, algae protista, and fungi.
S2.02 Explain sexual and asexual reproduction.
S2.03 Describe the ecological importance of plants as related to the environment.
S2.04 Analyze the physical chemical and behavioral process of a plant.

TOPIC S3: Relate the nine major phyla of the kingdom anomaly according to morphology, anatomy, and physiology.

S3.01 Explain the morphology, anatomy, and physiology of animals.
S3.02 Describe the characteristics, behaviors, and habitats of selected animals.

TOPIC S4: Explore the chemical and physical properties of the earth to include Geology, Meteorology, Oceanography, and the Hydrologic Cycle.

S4.01 Examine minerals and their identification, products of the rock cycle, byproducts of weathering, and the effects of erosion.
S4.02 Relate the Hydrologic Cycle to include groundwater its zones, movement, and composition; surface water systems, deposits, and runoff.
S4.03 Consider the effects of weather and climate on the environment.
S4.04 Examine the composition of seawater; wave, tides, and currents; organisms, environment, and production of food; energy, food and mineral resources of the oceans.

TOPIC S5: Investigate the properties and reactions of matter to include symbols, formulas and nomenclature, chemical equations, gas laws, chemical bonding, acid-base reactions, equilibrium, oxidation-reduction, nuclear chemistry, and organic chemistry.

S5.01 Examine the science of chemistry to include the nature of matter, symbols, formulas and nomenclature, and chemical equations.

S5.02 Identify chemical reactions including precipitation, acids-bases, and reduction-oxidation.
S5.03 Explore the fundamentals of chemical bonding and principles of equilibrium.
S5.04 Relate the behavior of gases.
S5.05 Investigate the structure, reactions, and uses of organic compounds; and investigate nuclear chemistry and radiochemistry.

TOPIC S6: Explore the principles and theories related to motion, mechanics, electricity, magnetism, light energy, thermal energy, wave energy, and nuclear physics.

S6.01 Examine fundamentals of motion of physical bodies and physical dynamics.
S6.02 Explore the concepts and relationships among work, power, and energy.
S6.03 Explore principles, characteristics, and properties of electricity, magnetism, light energy, thermal energy, and wave energy.
S6.04 Identify principles of modern physics related to nuclear physics.

TOPIC S7: Explore the principles of genetic and molecular Biology to include the relationship between traits and patterns of inheritance; population genetics, the structure and function of DNA, and current applications of DNA technology.

S7.01 Examine principles, techniques, and patterns of traits and inheritance in organisms.
S7.02 Apply the concept of population genetics to both microbial and multicellular organism.
S7.03 Identify the structure and function of DNA and the uses of DNA technology in science, industry, and society.

TOPIC S8: Apply concepts related to the scientific process and method to include safety procedures for classroom and laboratory; use and care of scientific equipment; interrelationships between science, technology and society; and effective communication of scientific results in oral, written, and graphic form.

S8.01 Apply the components of scientific processes and methods in classroom and laboratory investigations.
S8.02 Observe and practice safe procedures in the classroom and laboratory.
S8.03 Demonstrate proper use and care for scientific equipment.
S8.04 Investigate science careers, and advances in technology.
S8.05 Communicate results of scientific investigations in oral, written, and graphic form.

APPENDIX B:

WORKPLACE SKILLS

APPENDIX B
WORKPLACE SKILLS FOR THE 21ST CENTURY

WP1 Allocates resources (time, money, materials and facilities, and human resources).

WP2 Acquires, evaluates, organizes and maintains, and interprets/communicates information, including the use of computers.

WP3 Practices interpersonal skills related to careers including team member participation, teaching other people, serving clients/customers, exercising leadership, negotiation, and working with culturally diverse.

WP4 Applies systems concept including basic understanding, monitoring and correction system performance, and designing and improving systems.

WP5 Selects, applies, and maintains/troubleshoots technology.

WP6 Employs thinking skills including creative thinking, decision making, problem solving, reasoning, and knowing how to learn.

APPENDIX C:

STUDENT COMPETENCY PROFILE

STUDENT COMPETENCY PROFILE

Student: _____

This record is intended to serve as a method of noting student achievement of the competencies in each course. It can be duplicated for each student and serve as a cumulative record of competencies achieved in the program.

In the blank before each competency, place the date on which the student mastered the competency.

Health Record Systems I (HIT 1114)

_____ 1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)

Medical Terminology (HIT 1213)

_____ 1. Recognize and discuss word components, terms, procedures, and abbreviations related to the various body systems.

Health Care Delivery Systems (HIT 1311)

_____ 1. Describe the current United States health care delivery system, its providers, and health service organizations.
_____ 2. Discuss state and federal regulation of health service organizations and the relationship of accreditation of HSO's by the Joint Commission on Accreditation of Healthcare Organizations to state and federal regulation.
_____ 3. Describe the role of professional associations and educational accreditors in the United States health care system.
_____ 4. Discuss trends and developments that may impact the future of the U.S. health care system.

Health Care Law & Ethics (HIT 1322)

_____ 1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
_____ 2. Identify areas of potential ethical concern as related to Health Information Practice.

Disease I (HIT 1413)

_____ 1. Discuss general concepts of disease and principles of diagnosis.
_____ 2. Discuss the structure and function of cells and tissues in health and disease.
_____ 3. Describe the inflammation process and its role in disease and injury.
_____ 4. Discuss cell-mediated and humoral immunity.
_____ 5. Discuss the role of pathogenic microorganisms and animal parasites in disease.
_____ 6. Discuss communicable diseases' transmission and control.
_____ 7. Discuss congenital and hereditary diseases' causes and manifestations.
_____ 8. Discuss the types and characteristics of neoplasms, principal modalities of treatment, and incidence and survival rates for various types of malignant tumors.
_____ 9. Discuss abnormalities of blood coagulation and circulatory disturbances.

Directed Practice I (HIT 1512)

_____ 1. Perform health information procedures in the health information setting.

Coding Systems I (HIT 2614)

_____ 1. Gather data to support patient-related information needs and departmental, informational, service, and operational needs. (AHIMA 1.1)

Health Record Systems II (HIT 2123)

_____ 1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
_____ 2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
_____ 3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)

Disease II (HIT 2423)

_____ 1. Discuss major disease conditions relating to specific body systems and identify drugs most commonly used in treatment.
_____ 2. Discuss the major types of neoplasms and their manifestations, along with methods of treatment for the various body systems.

Medical Transcription (HIT 2222)

_____ 1. Apply terminology, word processing, language, and health information system skills in transcription of authentic physician dictation.

Directed Practice II (HIT 2522)

_____ 1. Perform health information procedures in the health information setting.

Coding Systems II (HIT 2624)

_____ 1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
_____ 2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
_____ 3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)

Health Care Supervision (HIT 2713)

_____ 1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
_____ 2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
_____ 3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)
_____ 4. Design departmental service and operational systems. (AHIMA 2.1)
_____ 5. Identify/select resources to support departmental operations and information systems. (AHIMA 2.2)
_____ 6. Execute plan(s) for implementing departmental service and operational systems, and information systems for patient-related data. (AHIMA 3.1)
_____ 7. Evaluate the effectiveness and efficiency of departmental, operational and service systems, and information systems for patient-related data. (AHIMA 4.1)

Performance Improvement Techniques (HIT 2811)

_____ 1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
_____ 2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)

Computers in Health Care (HIT 2912)

_____ 1. Design departmental service and operational systems. (AHIMA 2.1)

Health Statistics (HIT 2133)

_____ 1. Gather data to support patient-related information system needs and departmental operations and services. (AHIMA 1.1)
_____ 2. Validate data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.2)
_____ 3. Analyze data for patient-related information system needs, or for departmental operations or services. (AHIMA 1.3)

Directed Practice III (HIT 2532)

_____ 1. Perform health information procedures in the health information setting.