## Department Master Syllabus

## Camden County College

## Blackwood, New Jersey

**Course Title:** Introduction to Information and Computer Systems

**Course Number**: EHR 104

**Department/Program Affiliation:** Health Information Technology

**Date of Review:** New course Fall 2010

(This Department Master Syllabus has been examined by the program/department faculty members and it is decided that no revision is necessary at this time.)

**Date of Last Revision**: New course Fall 2010

(This Department Master Syllabus has been examined by the program/department faculty members and it is decided a change requiring a revision is necessary at this time.)

**N.B.** A change to the course materials alone (textbooks and/or supplementary materials) may not constitute a revision. Any other change to the items listed below on this form is considered a revision and requires approval by the program faculty at a Program/Department Meeting and by the division at a Chairs and Coordinator Meeting.

**Credits: 2**

# Contact Hours: Lecture 2 Lab\_\_\_\_ Other \_\_\_\_

**Prerequisites: None**

**Co-requisites: None**

**Course Description:** This course provides a basic overview of computer architecture, data organization, representation and structure, structure of programming languages, networking and data communication. Also included in the course is the basic terminology of computing.

**Course Student Learning Outcomes: (**Cognitive, Psychomotor, Affective Domains)

Upon completion of this course, the student will be able to:

Use proper hardware, network, Internet and software computer terminology in written and verbal communication.

Write simple computer programs including constructs such as conditional statements, loops, functions, objects and simple data structures.

Design a simple data base and develop querying statements for it.

Describe network computing, its benefits and risks and identify commonly used communications hardware and software components.

Identify security risks for computing systems and discuss potential solutions.

Explain the design and development process of a large system such as an EHR.

**General Education Student Learning Outcomes (if applicable) N/A**

**Content Outline**

**Course Outline:**

Unit 1 – Basic computing concepts, including history

Unit 2 – Internet and the World Wide Web

Unit 3 - Computer hardware and architecture

Unit 4 – Application and system software

Unit 5- Overview of programming languages, including basic programming concepts

Unit 6 – Data bases and SQL

Unit 7 – Networks

Unit 8 – Security

Unit 9 – Components and development of large scale systems

Unit 10 – Future of computing

**Course Activities:** Each unit will consist of a lecture, discussion questions and a test. Each lecture will include voice-over PowerPoint, handouts, suggested reading material, discussion elements and an exam. A computer classroom is needed for many of the class activities.

**Assessment of Student Learning Outcomes:** The student will be evaluated on the degree to which student learning outcomes are achieved. A variety of methods may be used such as tests, class participation, projects, homework assignments, etc.

In addition to unit tests there will be a final exam.

**Course Materials:**

**Textbook(s):** Health Information Management Technology: An Applied Approach, Merida L. Johns, latest edition, AHIMA

**Supplemental Materials:** Provided by instructor or via the Internet; see attached list that will be used throughout the program**.**

**HEALTHCARE WEB LINKS** (If the link does not work, search the Internet by name of the journal, organization or article title.

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| Gerontology [The American Geriatrics Society](http://www.americangeriatrics.org) [First Gov for Seniors](http://www.usa.gov/Topics/Seniors.shtml) [Centre for Policy on Aging](http://www.cpa.org.uk) [The National Council on the Aging](http://www.ncoa.org)  Government [Agency for Healthcare Research and Quality (AHQR)](http://www.ahrq.gov)  [Centers for Disease Control and Prevention](http://www.cdc.gov) [Centers for Medicare & Medicaid Services](http://cms.hhs.gov/default.asp?fromhcfadotgov=true) [Department of Labor](http://www.dol.gov) [Federal Interagency Forum on Aging Related Statistics](http://www.agingstats.gov) [Guide to Government Databases](http://www.fedworld.gov)  [Healthy People 2010](http://www.healthypeople.gov)  [Medicare](http://www.medicare.gov) [Medicare Frequently Asked Questions](http://medicare.custhelp.com/cgi-bin/medicare.cfg/php/enduser/std_alp.php)  [National Center for Health Statistics](http://www.cdc.gov/nchs)  [National Guidelines Clearing House](http://www.guidelines.gov)  [National Library of Medicine](http://www.nlm.nih.gov)  [Occupational Safety & Health Administration (OSHA)](http://www.osha.gov)  [President’s Advisory Commission on Consumer Protection & Quality in the Health Care Industry](http://www.hcqualitycommission.gov)  [President's Council on Physical Fitness and Sports](http://www.fitness.gov) [U.S. Department of Health & Human Services](http://www.hhs.gov)  [U.S. Department of Health & Human Services – Administration for Children and Families](http://www.acf.hhs.gov)  [U.S. Food & Drug Administration (FDA)](http://www.fda.gov)  [U.S. House of Representatives](http://www.house.gov)  [U.S. Senate](http://www.senate.gov) | Health Care Organizations [American Accreditation Health Care Commission (URAC)](http://www.urac.org)  [American Association of Retired Persons (AARP)](http://www.aarp.org)  [American College of Health Care Administrators](http://www.achca.org)  [American College of Healthcare Executives](http://www.ache.org)  [American Health Care Association](http://www.ahca.org)  [American Hospital Association (AHA)](http://www.aha.org)  [Atlantic Information Services](http://www.aishealth.com) [Center for Practical Bioethics](http://www.practicalbioethics.org/)  [Council on Health Care Economics and Policy](http://sihp.brandeis.edu/council/index_content.htm)  [Health Leaders Media](http://www.healthleadersmedia.com/index.cfm?s=EE64667C) [HealthFinder](http://www.healthfinder.gov)  [Institute for Healthcare Improvement](http://www.ihi.org)  [Joint Commission on Accreditation of Healthcare Organizations](http://www.jcaho.org) [National Association for Healthcare Quality](http://www.nahq.org)  [National Committee for Quality Assurance](http://www.ncqa.org/index.htm) [Society for Human Resource Management](http://www.shrm.org) [University of Minnesota Center for Bioethics](http://www.bioethics.umn.edu)  Health Information Systems  [Cerner-Health Care Information Technology](http://www.cerner.com)  Health Organizations  [Alzheimer's Association](http://alz.org/)  [American Association of Homes & Services for the Aging (AAHSA)](http://aahsa.org/)  [American Diabetes Association](http://www.diabetes.org) [American Heart Association](http://www.americanheart.org)  [American Lung Association](http://www.lungusa.org) [American Medical Association (AMA)](http://www.ama-assn.org) [American Public Health Association](http://www.apha.org) [American Stroke Association](http://www.strokeassociation.org) [National Cancer Institute](http://cancer.gov/) [National Organization for Human Services](http://www.nationalhumanservices.org/)  [World Health Organization](http://www.who.int/en/) | Journals and Articles  Articles [Ethical problems of physicians in relationship with pharmaceutical representatives in Denizli, Turkey](http://www.ispub.com/ostia/index.php?xmlFilePath=journals/ijlhe/vol1n1/ethics.xml) [Healthy People 2010: Physical Activity and Fitness](http://www.fitness.gov/activity/activity2/digest_march2001/digest_march2001.html)[Organizational and administrative ethics in health care: An ethics gap](http://www.nursingworld.org/ojin/topic8/topic8_1.htm) [Questions and answers about employer responsibilities concerning the employment of Muslims, Arabs, South Asians, and Sikhs](http://www.eeoc.gov/facts/backlash-employer.html)  Online Journals[*Modern Healthcare*](http://www.modernhealthcare.com)  University Library [American Journal of Public Health: Washington](http://web.ebscohost.com/ehost/detail?vid=1&hid=7&sid=ef2da55e-383c-411f-a58f-a332d355508a%40sessionmgr9) [Journal of American College Health](http://web.ebscohost.com/ehost/detail?vid=1&hid=106&sid=7275819a-6aea-4271-8908-730a9f9b0811%40sessionmgr107) [Journal of Community Health](http://find.galegroup.com.ezproxy.apollolibrary.com/itx/infomark.do?&serQuery=Locale%28en%2CUS%2C%29%3AFQE%3D%28jx%2CNone%2C29%29%22Journal+of+Community+Health%22%24&type=pubIssues&queryType=PH&prodId=ITOF&userGroupName=uphoenixcustom&version=1.0) [The Journal of School Health](http://find.galegroup.com.ezproxy.apollolibrary.com/itx/infomark.do?&serQuery=Locale%28en%2CUS%2C%29%3AFQE%3D%28jx%2CNone%2C26%29%22Journal+of+School+Health%22%24&type=pubIssues&queryType=PH&prodId=ITOF&userGroupName=uphoenixcustom&version=1.0)  Student Resources and Research Tools  [Agency Directory](http://www.lib.lsu.edu/gov/fedgov.html) [American Psychological Association – APA Online (APA)](http://www.apa.org/) [Center for the Study of Ethics in the Professions](http://ethics.iit.edu/codes/) [Critical Thinking Consortium](http://www.criticalthinking.org) [Directory of State Home Pages](http://www.globalcomputing.com/states.html) [Glossary of Terms Commonly Used in Health Care](http://www.hcfo.net/glossary.htm) [Graduate Research Online Journals](http://www.graduateresearch.com) [Healthcare Publications, Journals and News](http://www.pohly.com/admin2.shtml) [The Heart: An Online Exploration](http://sln.fi.edu/biosci/heart.html)  [KaiserEDU](http://www.kaiseredu.org)  [National Association of Community Health Centers](http://www.nachc.com)  [National Association of Insurance Commissioners](http://www.naic.org)  [National Information Center on Health Services Research and Health Care Technology (NICHSR)](http://www.nlm.nih.gov/nichsr/nichsr.html)  [National Institutes of Health](http://www.nih.gov)  [The Rand Corporation](http://www.rand.org/index.html) |