

## HEALTHCARE INFORMATICS

FALL 2006

## IS HEALTHCARE INFORMATICS THE RIGHT CHOICE FOR YOU?

**What is healthcare informatics?**

Healthcare informatics is the integration of computer technology into health care. As a scientific discipline, it deals with the collection, storage, retrieval, communication, and optimal use of health related data information and knowledge. This data is used for health care problem solving and decision making.

**What is the role of the healthcare information professional?**

Information professionals play many roles in healthcare informatics. They help develop, program, install and manage clinical information systems; maintain and modify clinical information systems at hospitals or clinics; train health professionals to use data collection and decision management software; and provide ongoing customer support.

**Where do healthcare information professionals work?**

Jobs in healthcare informatics

can be found in a wide variety of settings, from hospitals and clinics, to software development vendors, the U.S. government, and health care consulting firms.

Jobs for entry level graduates with bachelor's degrees are generally at the assistant or support staff level and may have titles such as network support personnel, clinical informatics specialist, customer support/training personnel, data entry clerk, or health records assistant.

Some of the best opportunities for entry into healthcare informatics can be found in large teaching hospitals because they employ information professionals in several departments.

**Is there a demand for healthcare information professionals?**

Healthcare informatics is considered one of the fastest growing specialties in health care, according to a recent forecast in *U.S. News and World Report*. Some students, especially those who

complete internships, are hired before they graduate.

The U. S. Department of Labor also lists the growth rate for this field as being above average, with growth expected to continue for the next decade.

**What is the salary range?**

Entry level salaries for people with bachelor's degrees range from \$35,000 to \$50,000 depending on the degree major and related work experience or internships.

**What else should I know?**

The opportunity to advance within the healthcare information profession is significant. Experience and continuing education both play important roles in career development.

Healthcare informaticians with master's degrees or PhDs can earn up to \$150,000 annually, especially if they have clinical backgrounds in addition to information technology skills.



*“Recently the U.S. entered ‘The Decade of Health Information Technology’ by establishing a National Coordinator for Health Information Technology for the first time in its history. The mission: To get the majority of Americans, in both the public and private sector, interoperable electronic health records within the next 10 years in order to improve the exchange of information and treat emergent health care issues.”*

- Craig Lehmann, Ph.D.,  
Dean, School of Health  
Technology and Management,  
Stony Brook University

## HEALTHCARE INFORMATICS

**What are the requirements of the Healthcare Informatics concentration?**

Health Science majors must successfully complete the fall semester coursework before enrolling for the spring courses in the concentration. The following courses are strongly recommended for students enrolling in the concentration: CSE 101, CSE 113 and CSE 114.

Coursework during the spring semester provides students with the foundation for processing and managing healthcare data via computer and communication technology.

Required courses include:

- **Utilization and Outcomes Research Methods** - provides the tools to evaluate and implement research methods and utilize outcomes within the health care

system.

- **Developing Health Information Systems** - provides the fundamental hardware and software concepts, operating systems, GUI environments and the system development life cycle.
- **Applied Healthcare Informatics** - provides an overview of the role of information systems in health care organizations.
- **Health Information Systems Management** - includes the organizational changes in health care, resource management and the role of policy formulation.
- Internships may be available.

All spring courses culminate in a senior team project designed to give students real life experience in the

informatics field.

Each team is charged with addressing an information technology problem relevant to the healthcare environment. This multi-faceted project relates to information problems taken from real situations including, but not limited to, mission-integrated use of information in a clinical, educational, administrative and/or research-based environment, and addressing data collection and distribution, information management and administration, systems analysis, regulatory compliance and/or information security and access.

Advising sessions are conducted on both campuses, as early as possible, to assess student interest and provide information on prerequisites. For additional information about the major please contact:

|                         |                            |
|-------------------------|----------------------------|
| Traci Thompson—Advising | Régine Verrier—Advising    |
| HSC, Level 2, Room 453  | • Mon/Fri, HSC, L2, Rm 453 |
| Phone: 631.444.2407     | Phone: 631.444.6858        |
| Fax: 631.444.1515       | • Tu/Wed/Thur              |
|                         | Academic Advising Office   |
|                         | Melville Library           |
|                         | Phone: 631.632.4689        |

**OR VISIT OUR WEBSITE AT:**

[www.uhmc.sunysb.edu/shtm](http://www.uhmc.sunysb.edu/shtm)

## HOW TO BECOME A HEALTH SCIENCE STUDENT

Students can declare the Health Science major at any time during their academic career. All major courses are taken during the senior year.

- In order to begin your senior year courses in the major, you must have a G.P.A. of at least 2.0 and have successfully completed 91 credits.
- You must also have met all D.E.C. requirements, including at least 16 credits in natural sciences (D.E.C. E), 21 credits of related electives, and 10 upper division credits.
- Successful completion of the following courses during the fall semester of your senior year is required:

**Healthcare Issues**

**Professional Ethics**

**Communication Skills**

**Professional Writing**

**Health Informatics**

**Medical Terminology** (2 credit elective may also be taken)

**Strongly recommended courses for the Informatics Concentration include CSE 101, CSE 113 and CSE 114.**



**PLEASE VISIT THE FOLLOWING WEBSITES FOR ADDITIONAL INFORMATION**

**Professional Organization:**

American Medical Informatics Association (AMIA)

[www.amia.org](http://www.amia.org)

**Occupational and Employment Information**

[www.labor.state.ny.us](http://www.labor.state.ny.us)

[www.amia.org/jobexch/jobs/jobs.html](http://www.amia.org/jobexch/jobs/jobs.html)

[www.nycareerzone.org](http://www.nycareerzone.org)

[www.dol.gov](http://www.dol.gov)

[www.salary.com](http://www.salary.com)

[www.salary.monster.com](http://www.salary.monster.com)