What is emergency and critical care?

This concentration will meet the needs of students who want to learn more about care provided in the prehospital, emergency department, and critical care unit settings and their role in healthcare. Students can further their studies in clinical education in other professions that play a large role in emergency and critical care medicine such as, physician assistant (PA), registered nurse (RN), physician (MD), and nurse practitioner (NP).

Emphasis is placed in providing knowledge of the most frequently encountered emergencies, including trauma and resuscitation. In addition, due to the changing global environment, coursework on hazardous materials and weapons of mass destruction will also be provided.

Are there employment opportunities upon successful completion of a clinical graduate program?

According to the Bureau of Labor Statistics, the health care industry is expected to grow from 30% - 70%, depending on the professional field of work.

What are the requirements for the Emergency and Critical Care concentration?

Health Science students take the major's core courses during the fall semester of their senior year. During the spring semester, students will take specialized courses including:

- **Special Issues in Emergency Care & Resuscitation**: Explores issues in special patient populations and areas in emergency care. Covers pediatric emergencies, obstetric emergencies, neonatology, and geriatric emergencies. Restricted to students approved for appropriate senior year track in the Health Science major.

- **Cardiac Emergencies**: Exposes students to concepts and issues critical to assessment and care of patients presenting with cardiac emergencies. Covers cardiovascular pathophysiology; cardiac patient assessment and management; cardiac electrophysiology; cardiopulmonary resuscitation; and advanced cardiac life support. Restricted to students approved for appropriate senior year track in the Health Science major.

- **Trauma and Trauma Systems**: Explores concepts and issues that are critical to the assessment and care of trauma patients. Covers kinematics, pathophysiology, trauma patient assessment and management, and trauma system development. Restricted to students approved for appropriate senior year track in the Health Science major.

- **Medical Emergencies**: Presents concepts and issues critical to assessment and care of patients presenting with medical emergencies. Covers pathophysiology, medical patient assessment, and management of medical emergencies. Restricted to students approved for appropriate senior year track in the Health Science major.

- **Emergency Response to Hazardous Materials and Terrorism**: Students will learn how healthcare providers recognize and respond to hazardous materials (HAZMAT) and terrorist incidents. Includes management strategies for hazardous materials incidents; identification of on-scene indicators of a suspicious incident; recognition of the tactics and objectives of terrorism; and scene/perimeter control issues unique to a terrorist incident. Restricted to students approved for appropriate senior year track in the Health Science major.
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 and have met all D.E.C/S.B.C requirements except TECH SBC requirement which will be satisfied during the senior year
- at least 16 credits in sciences, which must include HAN 200 and HAN 202 sequence, or equivalent sequence (ask advisor for information)
- 21 credits of related electives, which must include HAN 251 and HAN 312
- 10 upper division credits

Successful completion of the following courses during the fall semester of your senior year is required:

- Health Care Issues
- Professional Ethics
- Communication Skills
- Professional Writing
- Health Informatics

To declare Health Science as your major, you are required to attend an Advising Workshop. To schedule an appointment, please email Jennifer Jimenez at jennifer.jimenez.1@stonybrook.edu.

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OR VISIT OUR WEBSITE AT:

http://healthtechnology.stonybrookmedicine.edu/programs/hs

FOR PROFESSIONAL ORGANIZATIONS AND JOB LISTINGS
PLEASE VISIT THE FOLLOWING WEBSITES:

Professional Organizations (for information on graduate programs):

- American Academy of Physician Assistants (AAPA)  
  www.aapa.org
- American Nurses Association (ANA)  
  www.nursingworld.org
- American Medical Association (AMA)  
  www.ama-assn.org

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