Psychology is the scientific study of behavior and the physiological and cognitive processes involved. Psychologists study behavior at all levels, from the actions of large groups to the chemical processes occurring in individual cells. Psychology is an exciting field that applies, directly or indirectly, to all parts of the human experience. Psychology is also much more diverse than most people realize. For instance, the American Psychological Association has more than 50 divisions, including Developmental Psychology, School Psychology, Counseling Psychology, Health Psychology, and more. The research being conducted by the faculty in the Psychology Department also reflects the breadth and diversity within the field. Current research in Eastern's Psychology Department includes training for parents of children with attention deficit hyperactivity disorder; work values of Generation Y employees; HIV/AIDS prevention; perceptions of affirmative action policies; adolescent social and emotional development; evolutionary factors in attraction; job attitudes of nonprofit employees; situational influences on masculinity and femininity; impulsive or maladaptive choices; visual cognition, attention, and lifeguard surveillance; encouraging healthy eating behavior with environmental interventions; behavior disorders and teaching creativity and problem solving; and treatment of anxiety disorders in adults.

Students in the program receive a firm grounding in the science of psychology including research methods and statistics. Consistent with the University’s liberal arts mission, written work is a requirement of all psychology courses. Students can choose from three tracks of study. The General Psychology concentration offers broad training in psychology. This concentration...
tion is appropriate for students who hope to continue their education at the graduate level. The Child and Youth concentration offers a strong foundation in current theory and research in child psychology. This concentration is appropriate for students planning careers in areas such as child therapy, child advocacy, education, or school psychology as well as students planning to pursue graduate study in child psychology or related areas. The third concentration, in the Psychology of Work, is designed to prepare students planning to enter organizations where knowledge of industrial-organizational psychology is useful (e.g., human resources, organizational research, market research) or attend graduate school in industrial-organizational psychology. Students also can take courses leading to certification in applied behavior analysis at the associate level, or complete an individualized major in cognitive neuroscience. Many students gain valuable experience working with faculty as teaching or research assistants and/or working with psychologists in field placements in a variety of settings.

Recent technological advances have yielded a surge in activity in the field of cognitive neuroscience, where psychologists collaborate with biologists, mathematicians, computer scientists and others. Education-related legislation has also created greater demand for school psychologists, child psychologists and behavior analysts. Demographic shifts have created increased demand for psychologists focusing on aging and gerontology as well. Organizations have consistently increased their use of industrial-organizational psychologists to help address workplace challenges such as discrimination and work-life balance.
Biochemistry is the study of chemical compounds and processes occurring in living organisms. With new developments and current topics such as stem cell research and cloning, biochemistry is everywhere in today's society. In response to these trends, Eastern Connecticut State University has developed a biochemistry major and minor, meeting standards set forth by the American Chemical Society (ACS) and the American Society of Biochemistry and Molecular Biology.

The biochemistry program begins with introductory courses common to the biological and chemical sciences. Biochemistry majors then take a rigorous yearlong lecture and laboratory course sequence that familiarizes students with the most significant aspects of biochemistry and biochemical research. In addition, upper-level biochemistry courses examine aspects of modern biochemistry as well as the molecular and cellular techniques used in industrial and academic research facilities. Students are required to take additional courses in biology and physical biochemistry to further their quantitative knowledge of biological processes and bio-macromolecular structure and function.

“Biotechnological research and development should continue to drive much faster than average employment growth.”

“Employment of biological scientists is projected to grow 21 percent over the 2008-18 decade, much faster than the average for all occupations, as biotechnological research and development continues to drive job growth.” (2010-11 Bureau of Labor Statistics, Occupational Outlook Handbook)

CAREER OPTIONS

The biochemistry program provides a solid scientific background for students seeking a research, teaching or service career in the life sciences. Biochemistry coursework and extensive hands-on laboratory experience provide the knowledge and training necessary for students seeking a future in:

- Medical school
- Biochemical research
- Dental school
- Biotechnology
- Veterinary school
- Biopharmaceuticals
- Graduate school (life science programs)
- Genetics
- Forensic science
- Proteomic research
STUDENT SUCCESS

Recent Eastern students who have received either a bachelor’s degree or a minor in biochemistry are currently pursuing their future at the following professional/graduate schools and Connecticut-based companies:

- Dartmouth College
- Yale University
- University of Connecticut
- Phoenix Environmental Laboratories
- Pfizer
- University of Connecticut School of Medicine
- Alexion Pharmaceuticals
- Tufts University of Veterinary Medicine
- Virginia Tech University
- Cubist Pharmaceuticals
- Wesleyan University
- Pharmalytica Services
- Protein Science
- University of Chicago
- Dana Farber Cancer Institute
SUSTAINABLE ENERGY SCIENCE

Sustainable Energy Science includes introductory classes for all students, as well as advanced courses and internships for students interested in specializing in this field. Opportunities in the renewable energy field range from installing solar collectors to being a financial consultant for an energy start-up company.

- Energy efficiency consultant/Energy auditor
- Energy system engineer
- LEED certification specialist
- Science educator
- Sustainable building architect
- Corporate sustainable manager
- Energy manager
- Energy financial analyst
- Energy measurement and verification specialist
- Energy systems analyst
- Green building consultant
- Photovoltaic system installer

CAREER OPTIONS

We are all concerned about energy costs, global climate impacts, and access to energy supplies. Entering the energy field is a way of becoming part of the energy solution. Opportunities in the renewable energy field range from installing solar collectors to being a financial consultant for an energy start-up company.

The Sustainable Energy Science track within the Environmental Earth Science major is a program of study with a foundation in Environmental Earth Science and a concentration in Energy Science. Both the major and the Sustainable Energy Science minor prepare students for work and further study in the emerging fields of Sustainable Energy policy, Sustainable Energy research and Sustainable Energy application. Students benefit from hands-on activities and fieldwork and make use of campus facilities as a laboratory for research and learning, both in the classroom and in online study. Students may have opportunities for internships and research on campus.
The production and consumption of energy, especially energy based on fossil fuels, is a major source of environmental and social problems in the United States and the world. Such problems include climate change, air pollution, ecosystem destruction and economic instability. Continued growth in conventional energy consumption is not sustainable, and a transition to an economy based on renewable energy technologies such as hydroelectric, solar and wind energy is underway.

**STUDENT SUCCESS**

Our students have gone on to graduate school, taken jobs in the energy industry, began working in education, and have been employed as financial analysts. Current students are planning to enter the workforce after graduation or may continue on to graduate school.
Eastern Connecticut State University’s biology major is designed to enable students to learn the basic principles that govern processes at all levels of biological organization and to develop the critical thinking skills needed to understand the consequences of those processes. The biology program at Eastern stresses an undergraduate “hands-on” approach to education. Eastern biology undergraduates receive the full-time attention of their professors, all of whom have Ph.D. degrees from top universities. Unlike larger universities where graduate students teach many of the classes, biology professors at Eastern teach both the lectures and the laboratories. Biology faculty members believe that students should spend as much time working in the laboratory or field as they do in lectures. Therefore, virtually all biology courses include a laboratory or field component. Students are also encouraged to undertake an independent research project.

The program allows students to acquire hands-on experience with current techniques such as DNA and protein analysis and scientific instrumentation. Students have the opportunity to use fieldwork techniques in a variety of career options. The universe is the limit. Find a cure for cancer! Study orchids in the Brazilian rainforest! Conduct experiments in space as a biologist-astronaut! These are just some of the exciting career opportunities that could start with a bachelor’s degree in biology. Others include:

- Physician
- Physician’s assistant
- Nurse
- Dentist
- Veterinarian
- Lab technician
- Optometrist
- Secondary school educator
- College educator
- Biotechnologist
- Forensic biologist
- Microbiologist
- Marine biologist
- Computational biologist
- Cell biologist
- Ecologist
- Wildlife biologist

The comprehensive program provides students with the background required for graduate studies in biology; medical, dental and veterinary schools; and programs in other health-related areas.
of terrestrial, freshwater and marine environments. Each year, the department offers a course in tropical biology, alternating between Costa Rica and the Bahamas.

Eastern’s 174,000-square foot science building opened in fall 2008. It achieved LEED Silver Certification for its advanced environmental design and construction. It houses modern laboratories with state-of-the-art scientific equipment for instruction and research.

**STUDENT SUCCESS**

Graduates of Eastern’s biology program are currently employed by such organizations as Alexion Pharmaceuticals, Bristol-Meyers-Squibb, Harvard University, Kinetic Biomedical, Pfizer, Sacred Heart University, State of Connecticut Departments of Environmental Protection and Public Health, University of Connecticut Health Center, and Windham Community Memorial Hospital.

Our graduates have been accepted at such graduate schools as Boston College, Dartmouth, Duke University, Tufts University, University of Connecticut, University of Massachusetts Medical School, University of Michigan, University of North Carolina-Chapel Hill, Wesleyan University, Yale University and the Karolinska Institute in Sweden.
The Communication Department at Eastern Connecticut State University educates undergraduates for excellence in mass media. Theory and practice are integrated in a program stressing creativity, intellectual rigor and professional competence in a global communication environment.

The Communication Department fosters creativity, positive attitudes, and close relationships. The world of communication is about sharing our stories and connecting learning to life. Communication majors complete a common core of classes that emphasize intellectual inquiry, breadth of knowledge, critical thinking, and an understanding of the ethical dilemmas faced by communication specialists. In addition, students develop in-depth knowledge in one or more subfields of the discipline. Each concentration incorporates a sequence of classes designed to provide students with the practical skills and theoretical background to transform them into exemplary professionals. Concentrations are available in:

- Advertising and Public Relations
- Digital Media and Journalism
- Interpersonal Communication
- Media Production (Video-Television and Radio-Audio)

Professors in the Communication Department know the field inside and out because they come to Eastern with solid professional experience as well as a rigorous academic background. They’ve published books and produced award-winning documentaries, but teaching is their passion. Classes are small (most have about 20 students) and interactive; many incorporate hands-on learning. Our state-of-the-art radio station, television studio,
audio and video editing labs, and digital media labs provide students with a rich learning environment that equips them for success in today’s competitive marketplace. Students may also choose to participate in Global Field Studies classes. Small groups have explored media organizations in China, Mexico, Eastern Europe, Turkey, London, and Paris in recent years.

Student clubs provide opportunities for students to obtain valuable experience outside the classroom as well as build a sense of community with other communication majors. These student-run groups often participate in regional and national conferences and competitions, including the Broadcast Education Association, National Communication Association, Public Relations Society, College Media Association, and more.

American Advertising Federation – Advertising Club
Campus Lantern – Weekly print newspaper covering the campus and beyond
Lambda Pi Eta – National Communication Honor Society chapter
Public Relations Student Society of America – PR Professional Networking Group
TV-22 – Cable television club broadcasting student-produced news and entertainment programs
WECS 90.1 FM – Radio station hosting NPR and student-produced programming

STUDENT SUCCESS

Graduates of Eastern’s communication program are currently employed by such companies as ESPN, NBC-30, WFSB Channel 3, and Mystic Aquarium. Other graduates have been accepted to graduate programs at Boston University, the University of Connecticut and Emerson College, among others.
Eastern Connecticut State University’s history program encourages students to understand the historical background of modern society, politics, economics and culture. It also cultivates active skills in research and writing that help prepare students for graduate school or careers in education, law, government, journalism and a variety of other professions. The department offers courses in the history of the United States, Canada, Africa, Latin America, Medieval, Early Modern, Modern Europe, Ancient Rome and East and Southeast Asia as well as thematic areas such as military history, immigration history and women’s history.

Eastern students can choose from two history majors and one history minor. History majors complete 38 credits in History courses and are encouraged to complete a minor in another field. Students can also choose History major with a concentration in American Studies, which focuses on an interdisciplinary approach to the study of the society and culture in the United States. The History and Social Sciences major is specifically designed for students pursuing teaching certification in secondary education, but is open to all students. They are exposed to a variety of interrelated disciplines by taking additional courses in sociology, psychology, women’s studies, economics, political science, and geography. The History Department participates in interdisciplinary minors, including Asian Studies, Peace and Human Rights, African American/Third World Studies, New England Studies, and Canadian Studies.
History majors are eligible for membership in the Phi Alpha Theta national honor society. They can also participate in the University honors program. Every spring semester some history students present their research at the annual Arts and Sciences Research Conference. Additionally, the History department acknowledges best senior papers with a number of departmental awards. In 2013, the Department of History established a Victoria Soto Award, which recognizes an outstanding graduating history major with a strong dedication to teaching at the elementary or secondary level.

History students have an opportunity to engage in professional experience by taking Internships in Historical Research, which include work in local museums and historical societies. Occasionally, History faculty lead groups of students in travel abroad to places of historical interest, combining course work and educational travel opportunities. So far, History students traveled to a number of different European countries, to the Middle East, North Africa, and Asia. Some History students look for further educational travel opportunities through Eastern’s international study programs.

The History Department has an active Student History Club that allows students to expand their exposure to the world of history beyond the classroom, practice leadership skills, and enjoy the company of others with similar interests. The club runs a popular Trivia Night each semester, organizes trips to local historical sites and museums, and volunteers at the Windham Textile and History Museum in Willimantic. History students have also a very strong record in the College Bowl competition. The History team won the highest trophies nine times since 1980, most recently taking the championship in 2012.

STUDENT SUCCESS

Eastern History majors have gone to graduate schools at a number of prestigious universities in New England and the nation, as well as abroad, for example Trinity College in Dublin, Ireland.

Graduates of Eastern’s History program are currently employed by public and private schools throughout Connecticut and the region. In 2012, David Bosso, a 1997 graduate, was recognized as a Connecticut Teacher of the Year. He teaches history and social studies at Berlin High School, Berlin, CT. Recent History graduates also developed successful careers in government, business, journalism, as well as public history settings and libraries.
Eastern Connecticut State University’s Physical Science Department is growing on all levels. We offer a variety of courses in biochemistry, chemistry, astronomy, meteorology and physics and five minor programs in astronomy outreach and public presentation, biochemistry, chemistry, physics and physical science. Minor programs are recognized for their unique emphasis on hands-on learning experiences for students as faculty members concentrate on the practical applications of what they teach in the classroom. The department’s one major, biochemistry, is detailed in a separate publication.

The astronomy outreach and public presentation minor is designed to give students the necessary skills to present astronomy in a K–12 or public setting. The chemistry minor offers students an opportunity to broaden their knowledge of chemistry and laboratory techniques in preparation for a career in their chosen field or prior to entering a graduate school program in the sciences.

The physical science minor is designed to give students a foundation in the physical sciences and to enhance their career opportunities in an increasingly technical world. It is also useful for students planning to enter teaching.

The physics minor is offered for students who want to pursue a study of
physics beyond the introductory level and who want to gain experience in the uses of applied mathematics in physics. The biochemistry minor provides a solid background for students seeking a research, teaching or service career in the life sciences.

The Physical Science Department offers small classes that allow students to ask questions and encourage discussions with knowledgeable and dedicated faculty members. Students have an opportunity to collaborate with and get to know their professors during independent study projects. In addition, the Robert K. Wickware Planetarium provides an on-campus “star theatre” with a 30-foot dome and a Spitz A4 Star Projector for demonstrations of phenomena essential to our astronomy courses and useful for physics classes. Students can observe, calculate and interpret the positions, distribution, motion, and composition of celestial bodies beneath a simulated sky.

The department is now located in Eastern’s new 174,000-square foot science building. The building provides modern, state-of-the-art space for math and science instruction and research; promotes cross-disciplinary interaction; and provides a facility that attracts the best faculty and students.

**STUDENT SUCCESS**

Graduates of Eastern’s physical science program have been accepted to graduate programs at the University of New Haven, Iowa State University, University of Connecticut, Wesleyan University and Texas A & M University, among others.
Computing technology has been a major driving force behind the widespread digital transformation. Eastern offers a bachelor’s degree in computer science that seeks to develop students who have the professional and technical skills needed to adapt and succeed in the fast-changing global landscape. Foundational knowledge in computing is coupled with intellectual capabilities to apply computing to problem-solving in the real world. Critical thinking and adaptive learning are fostered both inside and outside the classroom.

The computer science program is built around a set of the core foundational subjects based on the most recent recommendation from the IEEE Computer Society and the Association for Computing Machinery (ACM), the two most prominent organizations for computing professionals. In addition to this foundation, students can concentrate on a focused area such as computational science, hardware architecture, net-centric computing or software development. Through participation in various internship programs, students practice what they learn from their classes while acquiring invaluable job experience.

The computer science faculty has a strong commitment to teaching and professional development. An active research program has been maintained in diverse areas including bioinformatics; computer gaming; data engineer-

CAREER OPTIONS

According to the U.S. Bureau of Labor Statistics (www.bls.gov/emp/), the demand for computing and information technology professionals will grow by nearly 25 percent through 2020. Connecticut Labor Department data released in summer 2006 (www.ctdol.state.ct.us/lmi/misc/fastest.htm), indicates that the second fastest growing occupation for 2006-16 to be in computer software development. The data also indicates that eight of the fastest growing occupations within the State of Connecticut for 2006-16 require postsecondary education in the computing field. Some of the technical opportunities in computing include:

- Computer, data, and network security
- Programming
- Systems administration
- Systems analysis
- Data and information engineering
- Database design and administration
- Digital media production
- Network administration
- Network systems or data communications analysis
- Software engineering
- Web design and development
- Cloud Computing
- Embedded and mobile apps
- Bioinformaticians
ing; data mining; distributed computing; embedded computing; Internet computing; medical imaging; modeling and simulation; networking; signal and image processing; operating systems; software architecture; software engineering; software reliability; and video compression. Students have many opportunities to benefit from faculty research work and expertise throughout their program of study.

Regardless of the discipline, knowledge and skills in computing offer students a competitive advantage in a world where digital technology is pervasive. Emerging interdisciplinary fields such as bioinformatics, healthcare information systems, computer forensics, eCommerce and digital media rely heavily on computing. In recent years, students have pursued individualized majors in computer and graphics design, computer engineering sciences and cognitive neuroscience.

**STUDENT SUCCESS**

Graduates from the computer science program have established a well-deserved reputation among employers in the region over the years. They can be found in local businesses, such as Computer Sciences Corporation, IBM, Sonalyst, Pfizer and United Technologies. Computer science students from Eastern have also continued their undergraduate or graduate studies at other universities such as University of California Berkley, University of Connecticut, Rensselaer Polytechnic Institute and Rochester Institute of Technology.

In the fall semester of 2011 Cigna partnered with Eastern Connecticut State University to create an on-campus internship available to Computer Science and Business Information Systems majors. In the program, students have the opportunity to work with Cigna professionals from a variety of different areas within Cigna’s IT organization. Through this work, students get the chance to apply what they’ve learned in class to real world problems.

The program has been a success because of the dedication of the Cigna employees and the quality candidates from Eastern. Many of the graduated students who have been involved with the program now work full-time for Cigna. In today’s economy, a solid education and meaningful work experience are essential for success, both of which are provided at Eastern.
To help students better understand the historical factors that play a key role in the status of gender in America, and the means by which women and other social groups have tried to achieve equality, Eastern is offering a new major in Women’s and Gender Studies.

The program is being offered by faculty across several academic disciplines. Grounded in the liberal arts, the Women’s and Gender Studies major provides an interdisciplinary approach to stimulate the examination and analysis of how factors such as race, class, culture and sexuality work together to impact the complexity and challenges of women and other groups in the United States. The new major is rigorous, requiring students to take 36 credits from a wide range of academic departments, and weaves in a research and experiential learning component. Over twenty faculty members teach Women’s and Gender Studies courses.

The demanding gateway course and prerequisite to the major is Introduction to Women Studies, which gives students a sound theoretical overview and orientation to women and gender studies. The capstone course is a senior project, an intensive writing 400-level independent study course. The program provides structure for the assessment of student learning outcomes.

Women’s and gender studies students graduate with skills that prepare them for future careers in such fields as:

- Law
- Social work
- Public health
- Media
- Public policy
- Creative arts
- Nonprofit organizations
- Academia
- Grant development
- Public relations
- Journalism

CAREER OPTIONS
The mission of the Women’s and Gender Studies Department at Eastern is to offer our students a quality undergraduate education in gender scholarship. Our students learn about the achievements and activism of women and other historically underrepresented groups as they consider the ways in which gender and other identities shape social experiences in a liberal arts context.

Women’s and Gender Studies has grown into an interdisciplinary academic program that analyzes how all our lives are shaped by the significance of gender and other forms of identity, like sex, sexuality, race, ethnicity, class, nationality, and location.

Eastern is the only public university in Connecticut with a major in Women’s and Gender Studies. Both a major and minor are offered in this field. These academic offerings allow our students ways to think about social change in informed ways, and to develop an intellectual community that integrates a range of experiences.

The field of Women’s Studies includes activism and academic work in areas that include social inequalities. For some scholars, this work can include looking at issues of representation to understand how various people and populations are presented through cultural artifacts and products, as well as in academic settings. Others are interested in how the lives women and other historically disenfranchised groups are shaped by environmental, social, economic, political, and cultural debates.

**STUDENT SUCCESS**

Current grads work at youth development agencies, women’s centers, community wellness programs, as well as in information studies, academic settings, the legal field, and in the media. A number of our graduates have chosen to continue their training by pursuing master’s degrees in Women’s Studies at Southern Connecticut State University.