

**UNIVERSITY SENATE**

UNIVERSITY AT ALBANY  
STATE UNIVERSITY OF NEW YORK

Introduced by: Undergraduate Academic Council  
University Policy and Planning Council

Date: March 18, 2016

**PROPOSAL TO ESTABLISH A BACHELOR OF ARTS AND A BACHELOR OF SCIENCE IN  
EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY**

IT IS HEREBY PROPOSED THAT THE FOLLOWING BE ADOPTED:

1. That the University Senate approve the attached program proposal to create a Bachelor of Arts degree and a Bachelor of Science degree in Emergency Preparedness, Homeland Security and Cybersecurity, as recommended by the Undergraduate Academic Council and University Planning and Policy Council.
2. That the proposed program begin with the Fall 2016 semester.
3. That this proposal be forwarded to the President for approval.

This form should be used to seek SUNY’s approval and New York State Education Department’s (SED) registration of a proposed new academic program leading to an associate’s and/or bachelor’s degree. Approval and registration are both required before a proposed program can be promoted or advertised, or can enroll students. The campus Chief Executive or Chief Academic Officer should send a signed cover letter and this completed form (unless a different form applies<sup>1</sup>), which should include appended items that may be required for Sections 1 through 6, 9 and 10 and MPA-1 of this form, to the SUNY Provost at [program.review@suny.edu](mailto:program.review@suny.edu). The completed form and appended items should be sent as a single, continuously paginated document.<sup>2</sup> If Sections 7 and 8 of this form apply, External Evaluation Reports and a single Institutional Response should also be sent, but in a separate electronic document. Guidance on academic program planning is available [here](#).

## Table of Contents

**NOTE:** *Please update this Table of Contents automatically after the form has been completed. To do this, put the cursor anywhere over the Table of Contents, right click, and, on the pop-up menus, select “Update Field” and then “Update Page Numbers Only.” The last item in the Table of Contents is the List of Appended and/or Accompanying Items, but the actual appended items should continue the pagination.*

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<sup>1</sup>Use a **different form** if the proposed new program will lead to a graduate degree or any credit-bearing certificate; be a combination of existing registered programs (i.e. for a multi-award or multi-institution program); be a breakout of a registered track or option in an existing registered program; or **lead to certification as a classroom teacher, school or district leader, or pupil personnel services professional** (e.g., school counselor).

<sup>2</sup>This email address limits attachments to 25 MB. If a file with the proposal and appended materials exceeds that limit, it should be emailed in parts.

Section 1. General Information	
<b>a) Institutional Information</b>	Date of Proposal: March 17, 2016
	Institution's 6-digit <a href="#">SED Code</a> : <b>210500</b>
	Institution's Name: University at Albany
	Address: 1400 Washington Ave. Albany, NY 12202
	Dept of Labor/ <a href="#">Regent's Region</a> : Capital Region (7)
<b>b) Program Locations</b>	List each campus where the entire program will be offered (with each institutional or branch campus 6-digit <a href="#">SED Code</a> ):
	List the name and address of <a href="#">off-campus locations</a> (i.e., <a href="#">extension sites or extension centers</a> ) where courses will offered, <b>or check here [ x ] if not applicable:</b>
<b>c) Proposed Program Information</b>	Program Title: Emergency Preparedness, Homeland Security and Cybersecurity
	<a href="#">Award</a> (s) (e.g., A.A., B.S.): B.A., B.S.
	Number of Required Credits: Minimum [ 120 ] If tracks or options, largest minimum [    ]
	Proposed <a href="#">HEGIS Code</a> : 2102
	Proposed 6-digit <a href="#">CIP 2010 Code</a> : 43.0301
	If the program will be accredited, list the accrediting agency and expected date of accreditation: n/a
	If applicable, list the SED <a href="#">professional licensure title(s)</a> <sup>3</sup> to which the program leads: n/a
<b>d) Campus Contact</b>	Name and title: Celine Forsyth Assistant to the Vice Provost for Undergraduate Education Telephone: 518-442-3950 E-mail: cforsyth@albany.edu
	<b>If the program will be registered jointly<sup>4</sup> with one or more other institutions, provide the following information for <u>each</u> institution:</b>
	Partner institution's name and 6-digit <a href="#">SED Code</a> :  Name, title, and signature of partner institution's CEO (or <b>append</b> a signed letter indicating approval of this proposal):

<sup>3</sup> If the proposed program leads to a professional license, a [specialized form for the specific profession](#) may need to accompany this proposal.

<sup>4</sup> If the partner institution is non-degree-granting, see SED's [CEO Memo 94-04](#).

## Section 2. Program Information

### 2.1. Program Format

Check all SED-defined [formats, mode and other program features](#) that apply to the **entire program**.

- a) **Format(s):** ☐ Day ☐ Evening ☐ Weekend ☐ Evening/Weekend ☐ Not Full-Time
- b) **Modes:** ☒ Standard ☐ Independent Study ☐ External ☐ Accelerated ☐ Distance Education  
*NOTE: If the program is designed to enable students to complete 50% or more of the course requirements through distance education, check Distance Education, see Section 10, and **append** a [Distance Education Format Proposal](#).*
- c) **Other:** ☐ Bilingual ☐ Language Other Than English ☐ Upper Division ☐ Cooperative ☐ 4.5 year ☐ 5 year

### 2.2. Related Degree Program

*NOTE: This section is not applicable to a program leading to an associate's or a bachelor's degree.*

### 2.3. Program Description, Purposes and Planning

- a) What is the description of the program as it will appear in the institution's catalog?

The major in Emergency Preparedness, Homeland Security and Cybersecurity is designed to provide students with broad overview of these three critical fields, as well as help students develop critical thinking skills and subject area knowledge of public policy, management and risk analysis. The major program provides both four-year and transfer students with a solid liberal arts education that emphasizes critical thinking, oral and written communication, creativity and innovation, problem solving skills, cultural literacy, and interpersonal and teamwork skills. In addition to these general skills, the major will also emphasize leadership, public administration, management, risk analysis, ethics, policy making, planning, strategic communication, and systemic thinking. One of the unique and central elements of this major is the focus on experiential learning. The courses in this major are designed to be an ideal setting for intellectual growth as students take what they have learned in the classroom and apply it to solve complex social problems in the real world.

Students will be given the option of pursuing a B.S. degree or a B.A. degree. The determination for which degree is awarded will be driven by the number of Liberal Arts and Sciences credits a student completes during their planned course of study, based on courses selected for their concentration. Students with a concentration in Emergency Preparedness or Homeland Security will be awarded a B.A. degree; students with a concentration in Cybersecurity will be awarded a B.S. degree.

Students with a major in Emergency Preparedness, Homeland Security and Cybersecurity are required to complete a minimum of 39 graduation credits, including a core of six specifically required courses, four courses in one of three concentrations (at least two at the 300 level or above), three experiential learning courses, and 100 hours of non-credit training.

- A) All students will take **six** courses as a core, including:

1. Introduction to Emergency Preparedness, Homeland Security and Cybersecurity (CEHC/RPAD 101)
2. Emergency Preparedness (CEHC/RPAD 344)
3. Homeland Security (CEHC/RPAD/RPOS 343)
4. Cybersecurity (CEHC 242)
5. Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity (CEHC 210)
6. Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity (CEHC 345)

- B) Student will take **four** courses in one of three concentrations:

1. Emergency Preparedness



2. Homeland Security
3. Cybersecurity

C) Student will take **three** courses which support applied or experiential learning including:

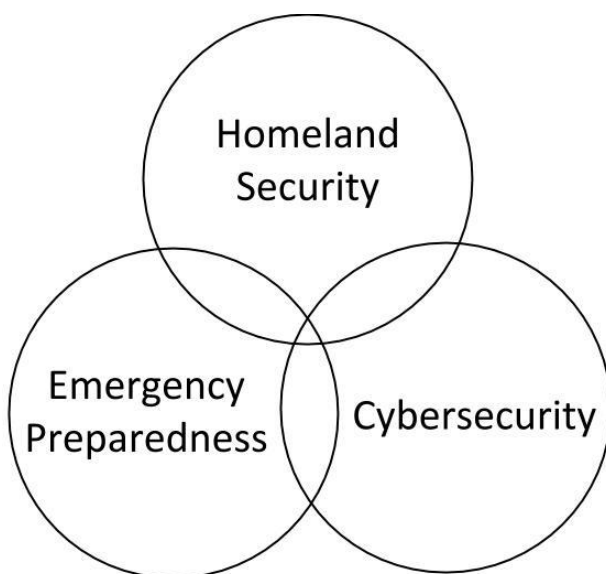
1. Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity (CEHC 310)
2. Internship Experience in Emergency Preparedness, Homeland Security and Cybersecurity (CEHC 390)
3. Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity (CEHC 410)

D) Student will complete 100 hours of non-credit training in Emergency Preparedness, Homeland Security and Cybersecurity

The field of emergency preparedness includes issues such as health preparedness, emergency medicine, first responder management and training, hazardous materials, pandemic planning and response, environmental health, disaster communication, disaster mental health, resilience, continuity of government and business, infrastructure restoration, and recovery and economic development. The field of homeland security explores a wide range of issue areas including national defense, intelligence, terrorism, counter-terrorism, weapons of mass destruction, critical infrastructure, border security, immigration, civil liberties, ethics, federalism, cybersecurity, health preparedness, and disaster management and recovery. Finally, the field of cybersecurity addresses technical challenges including authentication and access control, network security, mobile security, intrusion detection and prevention, incident response, digital forensics, and cryptography, as well as organizational and social challenges such as information security policy, cyber intelligence, social media privacy, cyber warfare, cybercrime, risk management and compliance.

Although the fields of Emergency Preparedness, Homeland Security and Cybersecurity emerged independently, they are highly related and overlapping fields of study (see Figure 1). In part, the overlap exists because each of these fields require leaders and managers to identify a vast array of hazards and risks, to measure, assess and compare risks, to prepare for and mitigate risk, and to respond to incidents that do occur. In addition, leadership, strategic planning, strategic communication, management, and ethics play a central role in all three fields. The overlap also exists when the scale of the threat, attack or disaster becomes a fundamental threat to the political, social or economic fabric of a society. For example, a cyberattack for monetary gain on a single bank falls squarely within the field of cybersecurity. In contrast, a systemic cyberattack on the banking system of a country falls within the overlap of cybersecurity and homeland security. Similarly, local flooding would typically be handled by local emergency responders and thus would fall within the emergency preparedness sphere. However, massive storms that severely damage a wide geographic area such as Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy would fall within the overlap of emergency preparedness and homeland security. The courses that have been selected for the concentrations represent these diverse and overlapping areas of study.

Figure 1: The Relationship between Emergency Preparedness, Homeland Security and Cybersecurity



This major will prepare students for a wide range of careers from risk management and business continuity operations in the private sector to intelligence analysis and public health emergency management in the public sector. It will also prepare students for graduate work in a wide range of areas including public administration, public policy, public health, informatics, business administration, law, criminal justice, and regional planning.

- b) What are the program's educational and, if appropriate, career objectives, and the program's primary student learning outcomes (SLOs)? **NOTE:** *SLOs are defined by the Middle States Commission on Higher Education in the [Characteristics of Excellence in Higher Education](#) (2006) as "clearly articulated written statements, expressed in observable terms, of key learning outcomes: the knowledge, skills and competencies that students are expected to exhibit upon completion of the program."*

Upon successful completion of the undergraduate major in Emergency Preparedness, Homeland Security and Cybersecurity, students will obtain skills in:

1. **Risk Analysis:** Conduct a comprehensive assessment of risks, generate an analysis of options for mitigating risks, select the most appropriate mitigating actions for each risk, develop contingency and crisis response plans, communicate the risk assessment to a variety of audiences, and evaluate risk management plans.
  2. **Critical Thinking:** Critically analyze arguments by identifying assumptions, understanding claims, evaluating evidence, and drawing a conclusion.
  3. **Communication:** Recognize and formulate effective written and oral communication, giving appropriate consideration to audience, context, format, and textual evidence.
  4. **Problem Solving:** Design and implement strategic plans and creative solutions in novel and evolving circumstances.
  5. **Ethical Analysis:** Demonstrate understanding of ethical principles in general and the ability to recognize, articulate, and apply ethical principles in concrete situations related to emergency preparedness, homeland security, and cybersecurity.
  6. **Diversity:** Demonstrate an understanding of diversity and the ability to assess social equity in management and policy decisions through courses that focus on topics such as race, ethnicity, gender, sexuality, religion, language, social class, and/or disability, which includes physical, sensory, systemic, cognitive, learning and psychiatric disabilities.
  7. **Teamwork and Project Management:** Work effectively in teams in evaluating policies, managing projects, and implementing programs as well as effectively managing conflicts, optimizing resources and meeting deadlines.
  8. **Emergency Preparedness:** Understand the theoretical and practical principles of emergency preparedness for both natural disasters and terrorist incidents and be able to analyze key topics related to natural disasters, extreme events, emergency planning, all-hazard management, and ethics.
  9. **Homeland Security:** Comprehend the theory and practice of homeland security and be able to analyze policy and synthesize information in five key areas: risk and vulnerability analysis, terrorism, intelligence and counter-terrorism, intergovernmental coordination, and ethics.
  10. **Cybersecurity:** Review and understand the legal, regulatory, policy, and ethical issues related to securing cyberspace; identify and evaluate cybersecurity threats to organizations; and analyze the effectiveness of cybersecurity in an organization by performing vulnerability assessments, risk mitigation, auditing, certification and accreditation of information systems.
- c) How does the program relate to the institution's and SUNY's mission and strategic goals and priorities? What is the program's importance to the institution, and its relationship to existing and/or projected programs and its expected impact on them? As applicable, how does the program reflect diversity and/or international perspectives? For doctoral programs, what is this program's potential to achieve national and/or international prominence and

distinction?

In his January 2015 *State of the State* address, Governor Andrew Cuomo announced that the University at Albany would be home to SUNY's new College of Emergency Preparedness, Homeland Security, and Cybersecurity. The University at Albany was chosen for its emergency management and health preparedness training initiatives, extensive educational and research programs in homeland security and cybersecurity, and its collaborations with, and proximity to, state agencies responsible for security and preparedness. Governor Cuomo, SUNY Chancellor Zimpher, and University at Albany President Jones all believe that this is a unique opportunity to be the first to build the very best academic program focusing on the critical and overlapping areas of emergency preparedness, homeland security and cybersecurity. The academic institution has been charged with training the leaders of tomorrow and assisting the leaders of today as they prepare for, respond to, and recover from both natural and human caused disasters.

The major has been designed with the following governing principles in mind which are directly in support of UAlbany and SUNY goals and priorities:

1) interdisciplinary teaching, training and research; 2) experiential learning in all academic programs; 3) accessible educational and training programs taught in online, blended and face-to-face formats; 4) connections with other academic institutions; 5) integration with public, private and nonprofit organizations; 6) a comparative and international perspective; and 7) lifelong learning for individual professional development.

More specifically, this initiative is expected to support the SUNY Excels and Completion Goals by expanding funded research in growing areas; developing and leveraging new partnerships with public, private, and non-profit entities; increasing student applied learning experiences; and having a positive impact on graduation through the development of new degrees in an area with growing demand. The major is expected to attract and retain students in support of SUNY's 2020 goal to grant 150,000 degrees. Based on our conversations with recruiters, advisors, program directors, prospective students, and professionals in the field, we understand that there is significant student and employer demand for higher education in these areas, and programs have been designed to maximize access for non-traditional students, facilitate seamless transfer for students studying at community colleges, meet students' interests and curricular needs to improve retention, and support positive employment outcomes. The significant applied learning focus of the proposed programs – including a required internship, applied research seminar, a capstone project with a real-world client, and a professional training program – will support SUNY's goal to ensure that every student have an applied learning opportunity.

The proposed program will also support President Jones' Four Stakes (from the Spring 2014 State of the University Address):

- *Expand our portfolio of degree-granting programs with a focus on high need areas:* adding this new degree will help to fill a high demand niche for students looking for highly relevant and applied programming in these areas. There is a growing interest in degrees in these topic areas, and growing employer demand for individuals with higher levels of academic background.
- *Recruit more out-of-state and international students:* as a highly comprehensive program in the first college of its kind in the nation, we expect significant interest from students across the country. We have already received many inquiries from prospective out-of-state students interested in the college and asking about a major.
- *Broaden our role as a University engaged in the community:* with a highly engaged External Advisory Committee and the general "outward facing" design of the college and academic programming this major will connect students and faculty with practitioners working in this field. Through the annual "setting the agenda" meeting, faculty and administrators will work with community partners to curricula, internships, experiential learning opportunities, careers, research programs, strategies to support to the New York State emergency response and homeland security enterprise, as well as other related matters.
- *Find ways to grow our resources to fulfill our ambition:* we expect that this program will attract a significant number of new-to-program students, helping to grow overall enrollment and bring in additional revenue. Faculty hired for this major will also attract research dollars, especially those working in growing areas like big data analytics and cybersecurity.

The EHC major directly supports UAlbany's strategic initiative #4 - Public Service and Policy: Improving the Human Condition through Research on Policy and Practice. Specifically, according to *UAlbany Impact* (pg. 13):

*UAlbany is positioned to expand its public service and policy programs to address research and workforce training and development requirements in many critical areas. There are urgent needs as government and public services are being reshaped and reformed in response to changes in the national and local economies, increased global competition for*

*development, demographic shifts in New York State's population, and rapidly changing technologies. Homeland and international security, efforts to improve the criminal justice system and crime prevention, initiatives to address disparities in the delivery of social services and health care, and interventions to lower barriers to economic success and reduce violence and addiction are all examples of areas in which there are important issues that require study and concentrated attention.*

The proposed program will also increase opportunities for students at the local, national and international levels through interdisciplinary training to strengthen their experience and training in the growing and critically important fields of emergency preparedness, homeland security, and cybersecurity, highlighting the University at Albany as a leader in these fields. The major will concentrate on different aspects of emergency preparedness, homeland security, and cybersecurity and draw on the expertise of University faculty as well as practitioners from a wide variety of backgrounds. The program will build upon and support other programs offered at the University at Albany, including at the College of Engineering and Applied Sciences, School of Public Health, College of Arts and Science, Rockefeller College, School of Criminal Justice, School of Social Welfare and School of Business.

In terms of diversity and/or international perspectives, we expect the major to attract students and potential faculty from a wide variety of backgrounds. Through partnering schools and colleges at UAlbany, as well as external academic and non-academic partners, the EHC program will tap into an already established global network. By supporting various international projects and partnerships, this major will create additional research opportunities for motivated students and allow them to gain practical experience while emphasizing the connectedness and importance of emergency preparedness, homeland security, and cybersecurity at many levels – nationally and internationally.

**d)** How were faculty involved in the program's design? Describe input by external partners, if any (e.g., employers and institutions offering further education)?

Upon establishing the College, two advisory committees were formed to assist in the establishment and implementation of the college's strategic mission and vision, and the development of academic programming.

### **Steering Committee**

The Steering Committee is a small group of select faculty members from across the University who work very closely with the Dean to design curriculum, establish institutional mission and plans, develop relationships with external partners, recruit faculty, etc. These members were strategically chosen in collaboration with University administration and the University Senate as a broad group of faculty with expertise in these areas from a range of departments.

The Steering Committee has met monthly since its establishment, and has focused its discussion largely on the details of the major. This Committee helped select courses, identify trainings and evaluate the training requirement, choose hosts for internships, and determine the learning outcomes that the major should achieve. They also are serving as the search committee for the to-be-hired faculty. The members are:

Asal, Victor

Associate Professor

Political Science

Research Interests: Reasons organizations choose to start using violence, why some organizations choose certain tactics instead of others, the relationship between governmental behavior and the choice of violence

Berg, George

Associate Professor

Computer Science

Research Interests: Machine learning, computational biology, natural language processing

Gallant, Mary

Associate Professor

Health Policy, Management and Behavior

Research Interests: Public health and aging, older adults as a vulnerable population in relation to public health preparedness

Goel, Sanjay  
Associate Professor  
Information Technology Management  
Research Interests: Behavioral Information Security, Cyber Physical Systems, Complex Systems, Cyber Warfare, Hacking, Smart Grid, Connected Vehicles

Gray, Elizabeth Q.  
Assistant to the Dean  
Research Interests: Education start-up initiatives, extending educational opportunities, education in developing countries, higher education administration, community-based program development, not-for-profit management

Kiorpes, Karen  
Associate Librarian  
Research Interests: Protection and prevention of damage or loss to cultural collections and cultural properties

Lawson, Catherine  
Associate Professor  
Geography and Planning  
Research Interests: Urban Transportation Data and Information Systems, freight planning, travel behavior and time use, water transport, hazardous materials transport, microsimulation and GIS applications, Big Data

Mathews, Rick  
Director, National Center for Security and Preparedness  
Research Interests: Homeland security, infrastructure protection, intelligence, counter-terrorism and terrorism interdiction, information sharing, weapons of mass destruction, critical decision making, facility and systems security, and emergency preparedness

Nussbaum, Brian  
Assistant Professor  
Public Administration and Policy  
Research Interests: Terrorism and counterterrorism, homeland security, cyber threats, infrastructure protection, intelligence analysis and risk assessment, state and local homeland security

Rethemeyer, Karl  
Associate Professor  
Public Administration and Policy  
Interim Dean, Rockefeller College of Public Affairs and Policy  
Research Interests: Terrorism, terrorist networks, terrorist organizations, network analysis, stochastic network analysis

Rousseau, David L.  
Interim Dean, College of Emergency Preparedness, Homeland Security and Cybersecurity  
Research Interests: Military conflict, shared identity, political development, and foreign policy

Steiner, James E.  
Program Coordinator for Homeland Security, Cyber Security, and Emergency Management and Public Service Professor  
Public Administration and Policy  
Research Interests: National, state, local, and private sector intelligence, including intelligence analysis for homeland security and for national security policymaking. Professor Steiner is a retired senior CIA officer and the author of Homeland Security Intelligence (Sage/CQ Press)

Thorncroft, Christopher D.  
Chair and Professor  
Atmospheric and Environmental Sciences  
Research Interests: Variability of extreme weather including how this is changing in association with climate change

## Affiliated Faculty

Another broader advisory group is the Affiliated Faculty which includes approximately 50 members with teaching and research interests in the areas of emergency preparedness, homeland security and cybersecurity, who are also drawn from schools and colleges across campus. This group meets quarterly to provide general feedback on the general structure and content of the developing programming, identify potential synergies with their departments, and serve as liaisons to their units. The Affiliated Faculty are:

Victor Asal,  
Rockefeller College of Public Affairs and Policy

Pradeep Atrey,  
College of Engineering and Applied Sciences  
Computer Science

Fabio Auffant, II  
School of Business  
Information Technology Management

George Berg,  
College of Engineering and Applied Sciences  
Computer Science

Dawn Bleyenbergh,  
School of Public Health  
Center for Public Health Continuing Education

Petko Bogdanov,  
College of Engineering and Applied Sciences  
Computer Science

Katherine Briar-Lawson,  
School of Social Welfare  
Dean Emeritus

Bob Bullock,  
Rockefeller College of Public Affairs and Policy  
Office of the Dean, Rockefeller College

Feng Chen,  
College of Engineering and Applied Sciences  
Computer Science

Swati Desai,  
Bryan Early,  
Rockefeller College of Public Affairs and Policy  
Political Science

James Fossett,  
Rockefeller College of Public Affairs and Policy  
Public Administration & Policy

Mary Gallant,  
School of Public Health  
Health Policy, Management, & Behavior

Justin Giboney,  
School of Business  
Information Technology Management

Sanjay Goel,  
School of Business  
Information Technology Management

Jennifer Goodall,  
College of Engineering and Applied Sciences  
Informatics

Eric R. Hardiman,  
School of Social Welfare  
Social Welfare

Heather Larkin Holloway,  
School of Social Welfare  
Social Welfare

Yuan Hong,  
School of Business  
Information Technology Management

Jeong-Hyon Hwang,  
College of Engineering and Applied Sciences

Everette Joseph,  
College of Arts and Sciences  
Atmospheric Sciences Research Center

Janine Jurkowski,  
School of Public Health  
Health Policy, Management, & Behavior

Karen Kiorpes,  
University Libraries  
Libraries

Rey Koslowski,  
Rockefeller College of Public Affairs and Policy  
Political Science

Catherine Lawson,  
College of Arts and Sciences  
Geography and Planning

Giza Lopes,  
School of Criminal Justice  
Criminal Justice

Siwei Lyu,  
College of Engineering and Applied Sciences  
Computer Science

Amir Masoumzadeh,  
College of Engineering and Applied Sciences  
Informatics

Rick Mathews,  
College of Emergency Preparedness, Homeland Security  
and Cybersecurity

Graeme Newman,  
School of Criminal Justice  
Criminal Justice

Brian Nussbaum,  
Rockefeller College of Public Affairs and Policy  
Public Administration & Policy

Don Orokos,  
College of Arts and Sciences  
Biology

Damira Pon,  
School of Business  
Information Technology Management

Blanca Ramos,  
School of Social Welfare  
Social Welfare

Sekharipuram S. Ravi,  
College of Engineering and Applied Sciences  
Computer Science

Karl Rethemeyer,  
Rockefeller College of Public Affairs and Policy  
Public Administration & Policy

Robert Rosenswig,  
College of Arts and Sciences  
Anthropology

Mariya Zheleva,  
College of Engineering and Applied Sciences  
Computer Science

Lawrence Schell,  
College of Arts and Sciences  
Anthropology

F. David Sheppard,  
Rockefeller College of Public Affairs and Policy  
Public Administration & Policy

James Steiner,  
Rockefeller College of Public Affairs and Policy  
Public Administration & Policy

Tomek Strzalkowski,  
College of Engineering and Applied Sciences  
Computer Science

Christopher D. Thorncroft,  
College of Arts and Sciences  
Atmospheric and Environmental Sciences

Kevin Williams,  
Office of the Provost  
Dean for Graduate Studies

Robert Worden,  
School of Criminal Justice

Both of these groups have been involved on an ongoing basis with the development of the major, have seen the structure and content of the proposed major, and have approved of its design and content.

e) How did input, if any, from external partners (e.g., educational institutions and employers) or standards influence the program's design? If the program is designed to meet specialized accreditation or other external standards, such as the educational requirements in [Commissioner's Regulations for the Profession](#), **append** a side-by-side chart to show how the program's components meet those external standards. If SED's Office of the Professions requires a [specialized form](#) for the profession to which the proposed program leads, **append** a completed form at the end of this document.

There is no external accrediting body for this area of study. Nonetheless, the leadership at CEHC has consulted significantly with external bodies over the course of the program's development to ensure that the content and structure of the program meets the needs of employers, as well as prepares students for future academic study. We have met with a number of external agencies, including not-for-profit organizations like American Red Cross and Habitat for Humanity, NYS and local government agencies like the Department of Health and Department of Transportation, and private companies like IBM and Accenture. These organizations provided feedback on the various drafts of the major, shared specific areas of need within their industries, and indicated the skills that they expect from qualified candidates as they come out of their undergraduate program. In addition to the standard meetings we have had with those organizations listed above and others, we have also had continued bi-weekly meetings with representatives from the Department of Homeland Security and Emergency Services who have helped to provide ongoing feedback on the structure of the program, specific topic areas, and skills sets that are expected within these fields. Many elements of the program grew out of these consultations with external entities, including but not limited to: the emphasis on experiential learning; student learning objectives emphasizing ethics, strategic planning and collaborative teamwork; and the interdisciplinary subject area content.

f) Enter anticipated enrollments for Years 1 through 5 in the table below. How were they determined, and what assumptions were used? What contingencies exist if anticipated enrollments are not achieved?

Year	Anticipated Headcount Enrollment			Estimated FTE
	Full-time	Part-time	Total	
<b>1</b>	30		30	30
<b>2</b>	70		70	70
<b>3</b>	110		110	110
<b>4</b>	150		150	150
<b>5</b>	200		200	200

These estimates were based on the following information:

The program is expected to grow over the course of five years as incoming freshman and transfer students begin entering into the major. Based on conversations with administrators at community colleges and other four-year programs, advisors and recruiters here at UAlbany, and deans of related UAlbany programs, it was determined that we can expect to have approximately 200 majors when it is fully ramped up. This growth is expected to happen linearly from the time that it is established until it reaches full capacity.

To provide some evidence for whether these numbers were realistic we examined some data from SAT test takers to get a sense of the interest in programs of this kind. When a student sits for the SAT, the national exam required by a majority of colleges and universities including UAlbany as part of the admissions process, they have the opportunity to indicate the area of interest they wish to pursue in college at that particular time. While this interest can and will change, it provides one of the first opportunities to identify students based on their intended major.

The area of interest in the College Board SAT taker most aligned with the content of the new college was identified as **Security and Protective Services**, which includes: Computer Forensics, Criminal Justice and Corrections, Criminal Justice/Law Enforcement Administration, Financial Forensics and Fraud Investigation, Fire Protection, Forensic Sciences and Technology, Homeland Security, and Security and Protective Services. Although this does not perfectly overlap with



the major, it is likely to be a reasonable indicator.

5% of the College Bound SAT takers in 2014 in NY indicated an interest in the broad category of **Security and Protective Services**. To envision how this interest might translate to UAlbany enrollments and its ability to attract new students to the Homeland Security College, in 2014, 5% of the same NY SAT test takers indicated an interest in pursuing a major in Psychology and that year our new freshmen entering UAlbany interested in Psychology made up 6% of our 2550 enrollment or 153 students. In other words, other programs with a similar level of interest among SAT takers resulted in 153 students coming to UAlbany interested in that topic. Although this is not a perfect analogy, it indicates that there will likely be substantial demand for the program and there should be no difficulty meeting the targets set above. The University also expects to attract students as do other majors at UAlbany who are undecided at the time of their application. For the past several years, new freshmen entering UAlbany as Undecided or Open represent over 20%, or approximately 500 students, and it is reasonable to expect that some portion of those students might select this major.

*Note that 2014 data is the most recent summary data for NY put out by the College Board.*

The classes included in the EHC major are designed to be small, interactive and intensive. The enrollment projections keep in mind the number of sections to be offered, and from anticipating both freshman and transfer admissions. Additionally, retention of students will be a priority for program administrators, and keeping sections smaller will aid in student retention. At a minimum we would expect a retention rate comparable to the University retention rate. Both the program and student performance will be assessed regularly. This will allow the program to offer additional targeted assistance and support as necessary. The University is committed to the development and growth of Emergency Preparedness, Homeland Security and Cybersecurity. If the anticipated enrollments are lower than expected, University personnel will collaborate to identify if the enrollments reflect a programmatic issue or environmental issues. Any programmatic issues will be quickly addressed.

**g)** Outline all curricular requirements for the proposed program, including prerequisite, core, specialization (track, concentration), internship, capstone, and any other relevant component requirements, but do not list each General Education course.

Please See **Appendix 1** for curricular requirements.

**h)** Program Impact on SUNY and New York State

**h)(1) Need:** What is the need for the proposed program in terms of the clientele it will serve and the educational and/or economic needs of the area and New York State? How was need determined? Why are similar programs, if any, not meeting the need?

There are several indicators of growing and/or unmet need:

- The College of Emergency Preparedness, Homeland Security and Cybersecurity was created in direct response to Governor Cuomo's determination that there is a growing need for well-prepared individuals working in these areas and that there are not sufficient educational opportunities focusing specifically on these fields.
- Governor Cuomo has convened several conferences on resilience and the need to improve emergency preparedness in the wake of Superstorm Sandy.
- Reviews conducted by the College's National Center for Security Preparedness (NCSP) suggested that response to Sandy was hampered by "staffing, technology, and doctrine" (see pages 4 and 11 of <http://projectdisaster.com/media/205727357-Sandy-Draft-After-Action-Report.pdf>), particularly the lack of "trained staff" (page 11).
- New York State is adding cybersecurity requirements to bank examination processes (see <http://www.forbes.com/sites/gregorymcneal/2014/05/26/banks-challenged-by-cybersecurity-threats-state-regulators-acting/>).
- Governor Cuomo established the Cyber Advisory Board to address growing cyber threats in NYS (see <http://www.governor.ny.gov/press/100102013-cybersecurity-advisory-board>).
- NYS Dept. of Labor had a presentation recently related to cybersecurity workforce needs, indicating significant support for growth and development of the cybersecurity workforce (see

<http://www.labor.ny.gov/workforce/swib/docs/7-15presentation.pdf> – Agenda is at <http://www.labor.ny.gov/workforce/swib/docs/7-15agenda.pdf>

- Information security analyst in top 10 best jobs according to U.S. News & World Report  
<http://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs>

In addition to the hiring that is specific to NYS efforts, there is significant growth in these areas throughout the country. Federal Department of Homeland Security alone employs around 240,000<sup>1</sup> people as well as at least 200,000 private contractors.<sup>2</sup> This includes many previous government employees from DHS's constituent agencies (Customs and Border Patrol, the Federal Emergency Management Agency, etc.), but also many new employees in areas like intelligence analysis, critical infrastructure protection, risk management, cybersecurity, and others. Beyond this growth at DHS, a number of related areas are seeing growth – the intelligence community (including intelligence gathering and analysis), the military (throughout the various branches in both preventive and tactical areas), and other federal agencies have also hired massively in these areas, thus creating this increase in workforce demand.

The overall size and scope of the United States' national security and homeland security bureaucracies are enormous. By utilizing the possession of a security clearance as a metric of total workforce in this area – the prerequisite for most federal homeland security and intelligence work – a 2010 report from the General Accountability Office (GAO) suggests more than 2 million people work or are employed in this area of federal responsibility, with many working as private contractors.<sup>3</sup> Since 2001, CNN reports that the United States spent “hundreds of billions of dollars” on homeland security.<sup>4</sup>

The next growth period in emergency preparedness, homeland security, and cybersecurity employment is anticipated largely to occur in the private sector. There are rapidly expanding opportunities becoming available in the private sector in areas such as enterprise continuity of operations, critical infrastructure protection, and especially cybersecurity. The increase in cybersecurity needs can be closely related to the ever-changing technological advancements and the realization that cybersecurity needs to be a critical part of any industry's risk mitigation plan. In the private sector the number of security personnel has grown dramatically nationwide to upwards of 1.5 million people as of 2008.<sup>5</sup> These statistics include only those involved in traditional “police” or “law enforcement” functions – investigations, physical security, and loss prevention activities – and there are certainly more involved in broader risk management activities. This force of 1.5 million security personnel is nearly twice the number of sworn police officers in the United States,<sup>6</sup> a ratio that is likely to grow given the broader move toward privatizing functions formerly provided by government. The same trend, according to the United Nations, is true internationally.<sup>7</sup> Perhaps equally important to those employed in “traditional” security roles is the increasing and expanding importance of risk management in the private sector. Emerging and expanding fields in the corporate and nonprofit sectors include areas such as competitive intelligence<sup>8</sup>, enterprise risk management<sup>9</sup>, continuity of operations<sup>10</sup>, and strategic risk management.<sup>11</sup>

Additionally, there is very strong evidence that corporate leaders are increasingly taking a risk management approach to dealing with threats like terrorism<sup>12</sup>, cyber security<sup>13</sup>, pandemic influenza<sup>14</sup>, and other threats to their operations.<sup>15</sup> To effectively take this approach, these corporations will require a trained workforce.

Finally, both the public and private sectors are undersupplied in the area of cybersecurity. Informal communications with UAlbany alumni working in cybersecurity and related fields suggest that there are currently at least 10,000 jobs unfilled in Washington, DC alone for lack of properly trained workers.<sup>16</sup> The Center for Strategic & International Studies issued a report in 2010, *A Human Capital Crisis in Cybersecurity*, that estimated “near term” demand at 10,000 to 30,000 in Federal and critical cyber infrastructure alone, with much greater demand generally because cybersecurity is embedded throughout our economy and society.<sup>17</sup> The US Bureau of Labor Statistics (BLS) anticipates an overall 3.9% annual growth in career opportunities in “Computer Systems Design and Related Services.” This is in their top 20 areas of growth.<sup>18</sup> As cybersecurity is an acknowledged area of growth within this larger segment, it is reasonable to assume even higher rates of employment. Similarly, the BLS expects high growth (22% over the period) in “Computer and Mathematical Occupations,” with a median salary of \$73,720 in this segment.<sup>19</sup> High projected salaries often drive high student interest in a field. Areas of high demand, such as cybersecurity, command commensurately higher salaries within the field.

The relevant career areas assigned to graduates at the technical end of the cybersecurity spectrum (*i.e.* computer scientists; network, system and database administrators; computer systems analysts; computer and information system managers) are all expected to grow: “Employment growth is expected to be much faster than the average,<sup>20</sup> and job prospects should be excellent.”<sup>21</sup>

Thus the fields of emergency preparedness, homeland security, and cybersecurity are expanding rapidly, changing dynamically, and creating jobs. The growth in spending and workforce in the Department of Homeland Security represents the largest reshaping and molding of the federal government since World War II. This change may be

dramatically exceeded by the private investment in security and enterprise continuity that is still ramping up. So far, this change in prioritization and expenditure has simply not been reflected in public policy and criminal justice programs nationwide. As the first college of its kind, with comprehensive and diverse offerings, and with an interdisciplinary network throughout the University at Albany, this program will be able to provide students the background they need to excel in these growing fields. In addition to this subject specific job growth we also plan to prepare students with a solid liberal arts education that emphasizes critical thinking, oral and written communication, creativity and innovation, problem solving skills, cultural literacy, and interpersonal and teamwork skills. In addition to these general skills, the major will also emphasize leadership, public administration, management, risk management, ethics, policy making, planning, strategic communication, and systemic thinking. Just as political science and economics majors find careers in a wide variety of areas in the public, private, and nonprofit sectors, we expect to prepare students for a wide range of careers from risk management and business continuity operations in the private sector to intelligence analysis and public health emergency management in the public sector. We also expect that the new undergraduate major would prepare students for graduate work in a wide range of areas including public administration, public policy, public health, informatics, business administration, law, criminal justice, and regional planning.

For more information on sample jobs in these fields:

#### Information Security Analysts:

Job skills <http://www.onetonline.org/link/summary/15-1122.00> “Bright Outlook”

Job status <http://www.bls.gov/oes/current/oes151122.htm>

Job outlook <http://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm#tab-6>

#### Emergency Management Directors:

Job skills <http://www.onetonline.org/link/summary/11-9161.00>

Job status <http://www.bls.gov/oes/current/oes119161.htm>

Job outlook <http://www.bls.gov/ooh/management/emergency-management-directors.htm#tab-6>

#### First-Line Supervisors of Protective Service Workers, All Other

Job skills <http://www.onetonline.org/link/summary/33-1099.00>

Job status <http://www.bls.gov/oes/current/oes331099.htm>

#### First-Line Supervisors of Police and Detectives

Job skills <http://www.onetonline.org/link/summary/33-1012.00>

Job status <http://www.bls.gov/oes/current/oes331012.htm>

1. <http://www.dhs.gov/about-dhs>
2. <http://www.govexec.com/dailyfed/0210/022410e1.htm>
3. <http://www.fas.org/sgp/gao/gao-09-488.pdf>
4. [http://money.cnn.com/2011/05/02/news/economy/security\\_spending/index.htm](http://money.cnn.com/2011/05/02/news/economy/security_spending/index.htm)
5. North American Industry Classification System (NAICS) codes 5616-56162 at [http://www2.census.gov/econ/susb/data/2008/us\\_state\\_totals\\_2008.xls](http://www2.census.gov/econ/susb/data/2008/us_state_totals_2008.xls)
6. <http://bjs.ojp.usdoj.gov/content/pub/pdf/cs1lea08.pdf>
7. <http://www.un.org/apps/news/story.asp?NewsID=38957>
8. <http://www.scip.org/>
9. <http://poole.ncsu.edu/erm/> and <http://www.erm-symposium.org/2012/index.php>
10. [http://www.nextgov.com/the\\_basics/tb\\_20080623\\_2687.php](http://www.nextgov.com/the_basics/tb_20080623_2687.php)
11. <http://www.nonprofitrisk.org/>
12. Lloyds of London. Under Attack: Global Business and the Threat of Political Violence. <http://www.lloyds.com/News-and-Insight/Risk-Insight/Reports/Terrorism/Threat-of-Political-Violence>
13. Ernst and Young. 2011 Information Security Survey. <http://www.ey.com/GL/en/Services/Advisory/2011-Global-Information-Security-Survey---Into-the-cloud--out-of-the-fog> and Deloitte. Cyber Crime: A Clear and Present Danger. [http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/AERS/us\\_aers\\_Deloitte%20Cyber%20Crime%20POV%20Jan252010.pdf](http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/AERS/us_aers_Deloitte%20Cyber%20Crime%20POV%20Jan252010.pdf)
14. Deloitte. Two Year Pandemic Preparedness Survey. [http://www.deloitte.com/assets/Dcom-Turkey/Local%20Assets/Documents/turkey\\_en-lshc-year2wopandemicsurvey130307.pdf](http://www.deloitte.com/assets/Dcom-Turkey/Local%20Assets/Documents/turkey_en-lshc-year2wopandemicsurvey130307.pdf)

15. World Economic Forum/Wharton Business School. Global Risks 2011. <http://riskreport.weforum.org/> and Aon Risk Global Risk Management Survey. [http://www.aon.com/risk-services/thought-leadership/reportspubs\\_2011\\_grms.jsp](http://www.aon.com/risk-services/thought-leadership/reportspubs_2011_grms.jsp)
16. Private communication with MPA alum working at Booz, Allen, Hamilton in cybersecurity who also has a National Guard billet in cybersecurity.
17. <http://csis.org/publication/prepublication-a-human-capital-crisis-in-cyber-security>
18. <http://www.bls.gov/news.release/ecopro.t03.htm>
19. <http://www.bls.gov/news.release/ecopro.t05.htm>
20. <http://www.bls.gov/oco/oco20016.htm>
21. <http://www.bls.gov/oco/oco20016.htm>

**h)(2) *Employment:*** For programs designed to prepare graduates for immediate employment, use the table below to list potential employers of graduates that have requested establishment of the program and state their specific number of positions needed. If letters from employers support the program, they may be **appended** at the end of this form.

Please see **Appendix 2** for letters of support from collaborative agencies.

**h)(3) *Similar Programs:*** Use the table below to list similar programs at other institutions, public and independent, in the service area, region and state, as appropriate. Expand the table as needed. **NOTE:** *Detailed program-level information for SUNY institutions is available in the [Academic Program Enterprise System \(APES\)](#) or [Academic Program Dashboards](#). Institutional research and information security officers at your campus should be able to help provide access to these password-protected sites. For non-SUNY programs, program titles and degree information – but no enrollment data – is available from [SED's Inventory of Registered Programs](#).*

Institution	Program Title	Degree	Enrollment
Alfred State	Cyber Security	B. Tech	16
SUNY – Broome Community College	Computer Security & Forensics	AAS	55
SUNY – Broome Community College	Homeland Security	AS	42
Canton State University of New York	Emergency Management – B. Tech	B. Tech	53
Canton State University of New York	Homeland Security – B. Tech	B. Tech	65
Columbia Greene Community College	Computer Security & Forensics	AAS	9
Erie Community College	Emergency Management	AS	23
Herkimer County Community College	Cybersecurity A.S.	AS	30
Mohawk Valley Community College	Computer Science: Cybersecurity AS	AS	96
Nassau Community College	Emergency Management (A.S.)	AS	28
Niagara County Community College	Homeland Security & Emergency Management, A.A.S	AAS	14
Onondaga Community College Public Safety Training Center	Emergency Management A.A.S.	AAS	11
SUNY Orange County Community College	Cyber Security	AAS	56
Rockland Community College	Cyber Security	AAS	46
Rockland Community College	Emergency Management	AAS	10

Schenectady County Community College	Computer Networking Systems & Cybersecurity	AAS	82
Schenectady County Community College	Emergency Management	AAS	15
Sullivan County Community College	Cyber Security	AAS	5
Sullivan County Community College	Emergency Management	AAS	2
Westchester Community College	Cybersecurity A.A.S.	AAS	65
Metropolitan College of New York	Associate of Arts In Emergency Management & Business Continuity	AA	8
Metropolitan College of New York	Bachelor of Arts in Emergency Management & Business Continuity	BA	51
Cazenovia College (Cazenovia, NY)	Bachelor of Science – Criminology & Homeland Security	BS	150
Mercy College (Dobbs Ferry, NY)	Corporate and Homeland Security B.S.	BS	100
Mercy College (Dobbs Ferry, NY)	Cybersecurity B.S./M.S	BS/MS	not available
Adelphi University	Bachelor of Science in Emergency Management	BS	not available
Massachusetts Maritime Academy	Bachelor of Science in Emergency Management	BS	not available

**h)(4) Collaboration:** Did this program’s design benefit from consultation with other SUNY campuses? If so, what was that consultation and its result?

The College consulted with a large number of SUNY campuses in order to achieve two goals: 1) improve efficiency of the program by reducing duplication of courses offered elsewhere, and 2) improving access to the new major. The College seeks to build robust academic partnerships with community colleges, four-year colleges, and universities within the SUNY system. Relationships with community colleges will be developed to align the programs in such a way that students completing an associate degree can easily transfer into the College of Emergency Preparedness, Homeland Security and Cybersecurity. We have begun meeting with several community colleges (e.g., Hudson Valley, Herkimer, and Mohawk) in order to establish articulation agreements and align curriculum. We assume that approximately half of our new majors will transfer into the University at Albany and we are ensuring that our associate degree transfer students can easily complete our degree requirements in two years. The College will also collaborate with four-year college and university partners to provide innovative and specialized programming across the State. The goal is to increase accessibility to the expertise and programming that already exists on campuses throughout New York State by explicitly linking programs through memorandums of understanding that facilitate cross-registration, joint degree programs, events, research and more. For example, we are working with New Paltz to connect their outstanding disaster mental health program to our curriculum. Similarly, we are working with Empire State College to align their online homeland security courses with our course offerings and SUNY Canton to align their emergency management courses with our curriculum to be able to provide more courses within the concentrations online. Our goal is to avoid duplication in the same semester and offer courses which complement those offered by our system partners.

The program was also distributed to all SUNY campuses for a 30 day comment period to solicit feedback and potential concerns or objections.

- h)(5) *Concerns or Objections:*** If concerns and/or objections were raised by other SUNY campuses, how were they resolved?

During the formal 30 day comment period no concerns were expressed. In addition to the formal comment period we have had several meetings with representatives from other SUNY campuses and in general, feedback has been quite positive, and any specific suggestions that we received we incorporated into the proposed program.

- h)(6) *Undergraduate Transfer:*** The State University views as one of its highest priorities the facilitation of transfer for undergraduate students. To demonstrate adequate planning for transfer under [SUNY's student mobility policy](#), **Section 9** of this form on **SUNY Undergraduate Transfer** must be completed for programs leading to Associate in Arts (A.A.) and Associate in Science (A.S.) and for baccalaureate programs anticipating transfer enrollment.

## 2.4. Admissions

- a)** What are all admission requirements for students in this program? Please note those that differ from the institution's minimum admissions requirements and explain why they differ.

All students eligible for admission to the University at Albany may opt to major in Emergency Preparedness, Homeland Security and Cybersecurity.

- b)** What is the process for evaluating exceptions to those requirements?

N/A

- c)** How will the institution encourage enrollment in this program by persons from groups historically underrepresented in the institution, discipline or occupation?

University at Albany is a minority serving institution with approximately 40% of students belonging to historically underrepresented racial/ethnic groups and we expect that our major will represent a similar breakdown (as an indication of that, the students currently enrolled in our minor represent a comparable distribution, 38%). We also have a near equal balance of males and females in the minor. Given the fact that these fields have significant underrepresentation by women and minorities this distribution demonstrates some success in efforts toward correcting that disparity. The college is also working with the Educational Opportunities Program, University in the High School, and other UAlbany programs to reach out to students from underrepresented groups and make them aware of opportunities for study in these areas.

## 2.5. Academic and Other Support Services

Summarize the academic advising and support services available to help students succeed in the program.

The Advisement Services Center and Educational Opportunities Program at the University at Albany provide mandatory academic advising for all students until they have completed their first year and/or are admitted into their academic major of choice – whichever comes later. Each student is assigned an individual academic advisor and is encouraged to meet regularly with that advisor. The advisor will provide assistance in making a successful transition to college-level studies.

Once a student decides to major in Emergency Preparedness, Homeland Security and Cybersecurity, and has completed at least one year of study, that student will be advised by the CEHC academic advisor. Students in the Educational Opportunities Program will also receive continued advisement from their Educational Opportunities Program advisor throughout their undergraduate career. The CEHC advisor will be hired in 2016 to support the program. This dedicated advisor, in conjunction with the department faculty, will perform all the traditional functions of advisement: general mentoring, orientation to the major, and substantive and procedural advisement in the major. In the year 2017 a Staff Assistant Experiential Learning Coordinator will be hired to supervise the internships, trainings, orientation to the career world, and any other activities focused on experiential learning.

Advising PLUS is a university-wide service that offers “the help you need, when you need it.” Students in academic difficulty receive personal consultation in which the source of the difficulty is identified, and a strategy for addressing it is



created. Advising PLUS sponsors review sessions, individual tutoring, facilitates referrals and follow up to services such as departmental tutoring, university counseling, and the full range of student appeals and services available on campus.

Through the efforts of the Division of Student Affairs, Educational Opportunities Program, and partnering Schools and Colleges on campus, students will have the opportunity to participate in group activities, community engagement experiences, and student clubs and organizations focused on emergency preparedness, homeland security and cybersecurity. Career Services will create career fairs where students can interact with industry representatives to learn about employment options and arrange internship opportunities. A Student Association student group is currently being formed by students which will help to build community, connect with mentors and advisors, and support student oriented programming and events.

## 2.6. Prior Learning Assessment

If this program will grant credit based on Prior Learning Assessment, describe the methods of evaluating the learning and the maximum number of credits allowed, **or check here [ X ] if not applicable.**

## 2.7. Program Assessment and Improvement

Describe how this program's achievement of its objectives will be assessed, in accordance with [SUNY policy](#), including the date of the program's initial assessment and the length (in years) of the assessment cycle. Explain plans for assessing achievement of students learning outcomes during the program and success after completion of the program. **Append** at the end of this form, **a plan or curriculum map** showing the courses in which the program's educational and, if appropriate, career objectives – from Item 2.3(b) of this form – will be taught and assessed. **NOTE:** *The University Faculty Senate's [Guide for the Evaluation of Undergraduate Programs](#) is a helpful reference.* Please see **Appendix 3** for Curriculum Map

As with all programs at the University at Albany, the review of the CEHC major is considered an essential component of the academic planning process. The first official program review is expected to occur in the sixth full semester of the major's existence (end of year 3) and will be conducted on a seven-year cycle from that point forward. Program review will include the preparation of a self-study document, a site visit by external reviewers, an external reviewer report, administrative and governance review of the documents and recommendations, a departmental response, and a faculty-driven plan for ongoing program improvement.

The process will be as follows:

Task
Director of Academic Assessment (DAA) notifies CEHC of review, and holds orientation meeting.
CEHC organizes working groups, makes plans for beginning to write self-study
Compilation of data for self-study (some provided by IRPE, some compiled by CEHC)
CEHC submits the names and contact information for six potential external reviewers to DAA for Provost's consideration
CEHC committees continue to write self-study
Provost approves potential external reviewers;
DAA extends invitations; once reviewer slate is final, dept. chair contacts reviewers to set dates for the site visit.
CEHC submits draft of self-study document to DAA
Feedback from DAA on draft self-study given to CEHC

DAA makes travel arrangements for reviewers after seeing a complete or nearly complete self-study draft.
CEHC committees continue to revise self-study
CEHC prepares and submits final self-study document to DAA – at least 30 days prior to site visit.
Self-study document distributed to external reviewers and administrators (Vice Provost for Undergraduate Education, Vice Provost and Dean for Graduate Studies)
External reviewer site visit
External reviewer report submitted 30 days after site visit
CEHC prepares a departmental response to the report
Self-study, external reviewer report, and CEHC response are reviewed by the Academic Program Review Committee of the Council on Academic Assessment

The content of the review will include:

#### Program Curriculum and Design

- Course listings
- Internships and service opportunities
- Student societies associated with program
- Peer institutions

#### Undergraduate Student Quality

- Number of undergraduates in the program
- Retention and graduation rates for rising juniors
- Five-year summary of course grades in undergraduate courses
- Time of graduation
- Awards and honors received by students
- Department-level survey data for undergraduates, recent graduates and graduate students

#### Faculty Quality

- Numeric trends in faculty, professional and clerical staff
- Governance information will come partly from the Senate, partly from School or College, and partly from Department.
- SIRS results

#### Assessment Report

- Most recent Annual Student Learning Outcomes Activity Report, including assessment matrix, curriculum map, assessment examples, and detailed explanations of assessment results and changes made based on them

#### Support, Resources, and Facilities

- Budget Summary
- Sources of revenue and expenditures by major categories
- Library holdings

### **Section 3. Program Schedule and Curriculum**

Complete the **SUNY Undergraduate Program Schedule** to show how a typical student may progress through the program. This is the registered curriculum, so please be precise. Enter required courses where applicable, and enter generic course types for electives or options. Either complete the blank Schedule that appears in this section, or complete an Excel equivalent that computes all sums for you, and can be found [here](#). Rows for terms that are not required can be deleted.

Please see **Appendix 4** for SUNY Undergraduate Sample Program Schedule



- a) If the program will be offered through a nontraditional schedule (i.e., not on a semester calendar), what is the schedule and how does it impact financial aid eligibility? **NOTE:** *Consult with your campus financial aid administrator for information about nontraditional schedules and financial aid eligibility.*

N/A

- b) For **each existing course** that is part of the proposed undergraduate major (including cognates and restricted electives, but not including general education), **append a catalog description** at the end of this document.

Please see **Appendix 5** for Existing Course Descriptions

- c) For **each new course** in the undergraduate program, **append a syllabus** at the end of this document. **NOTE:** Syllabi for all courses should be available upon request. Each syllabus should show that all work for credit is college level and of the appropriate rigor. Syllabi generally include a course description, prerequisites and corequisites, the number of lecture and/or other contact hours per week, credits allocated (consistent with [SUNY policy on credit/contact hours](#)), general course requirements, and expected student learning outcomes.

Please see **Appendix 6** for New Course Syllabi

- d) If the program requires external instruction, such as clinical or field experience, agency placement, an internship, fieldwork, or cooperative education, **append** a completed [External Instruction](#) form at the end of this document.

Please see **Appendix 7** for External Instruction form

#### Section 4. Faculty

- a) Complete the **SUNY Faculty Table** on the next page to describe current faculty and to-be-hired (TBH) faculty.
- b) **Append** at the end of this document position descriptions or announcements for each to-be-hired faculty member.

Please see **Appendix 8** for Vacancy Announcements

**NOTE:** *CVs for all faculty should be available upon request. Faculty CVs should include rank and employment status, educational and employment background, professional affiliations and activities, important awards and recognition, publications (noting refereed journal articles), and brief descriptions of research and other externally funded projects. New York State's requirements for faculty qualifications are in [Part 52.2\(b\) of the Regulations of the Commissioner of Education](#).*

- c) What is the institution's definition of "full-time" faculty?

A full time faculty member is one who holds an appointment with a 100% time commitment.

## SUNY Faculty Table

Provide information on current and prospective faculty members (identifying those at off-campus locations) who will be expected to teach any course in the major. Expand the table as needed. Use a separate Faculty Table for each institution if the program is a multi-institution program.

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
<b>PART 1. Full-Time Faculty</b>					
James Acker, <i>Distinguished Teaching Professor, Criminal Justice</i>	12.50%	<b>RCRJ202</b> Intro to Law and Criminal Justice	PhD University at Albany	Criminal Justice	
Arash Alaei, <i>Clinical Associate Professor, Health Policy</i>	12.50%	<b>TSPH272</b> Health and Human Rights: an Interdisciplinary Approach	MD Isfahan University	Medical Sciences	
Victor Asal, <i>Chair of Public Administration; Associate Professor, Political Science</i>	25%	<b>CEHC320</b> Psychology of Terrorism; <b>TPOS 260</b> Political Violence; <b>TPOS261Y</b> Comparative Ethnicity; <b>RPOS360</b> Violent Political Conflicts; <b>RPOS361</b> Comparative Ethnicity	PhD University of Maryland	Government & Politics	<b>Research Interests:</b> The reasons organizations choose to start using violence. Why some organizations choose certain tactics instead of others. The relationship between governmental behavior and the choice of violence.
Erin M. Bell, <i>Associate Professor, Environmental Health Sciences</i>	12.50%	<b>HSPH321</b> Global Environmental Issues and Their Effect on Human Health	PhD University of North Carolina at Chapel Hill	Epidemiology	
George Berg, <i>Associate Professor, Computer Science; Chair of Informatics</i>	12.50%	<b>IINF306</b> Information Security Assurance	PhD Northwestern University	Computer Science	
Alexander Buyantuev, <i>Assistant Professor, Geography and Planning</i>	12.50%	<b>AGOG484</b> Remote Sensing I	PhD Arizona State University	Plant Biology	
Gang Chen, <i>Assistant Professor, Political Science</i>	12.50%	<b>RPAD316/RPOS316</b> Methodological Tools for Public Policy	PhD University of Nebraska	Public Administration	
Ashley Fox, <i>Assistant Professor, Public Administration and Policy</i>	12.50%	<b>PAD/POS 140</b> Intro to Public Policy	PhD Columbia University	Sociomedical Sciences	
Justin Giboney, <i>Assistant Professor, Information Technology Management</i>	12.50%	<b>BFOR 300</b> Databases in Digital Forensics	PhD University of Arizona	Management Information	

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
				Systems	
Sanjay Goel, <i>Associate Professor, Information Technology Management</i>	25%	<b>BFOR100</b> Intro to Information Systems; <b>BFOR412</b> Cyber Incident Analysis; <b>BFOR410</b> International Cyber Conflicts	PhD Rensselaer Polytechnic Institute	Mechanical Engineering	<b>Research Interests:</b> Behavioral Information Security, Cyber Physical Systems, Complex Systems, Cyber Warfare, Hacking, Smart Grid, Connected Vehicles
Yuan Hong, <i>Assistant Professor, Information Technology Management</i>	12.50%	<b>BFOR202</b> Cyber Crime Investigations; <b>BFOR203</b> Networking: Data Communication	PhD Rutgers University	Information Technology	
Vincent Idone, <i>Associate Professor, Atmospheric and Environmental Science</i>	12.50%	<b>AATM 100</b> The Atmosphere	PhD University at Albany	Atmospheric Sciences	
Janine Jurkowski, <i>Associate Professor, Health Policy</i>	12.50%	<b>HSPH341</b> Promoting Healthy People and Communities	Ph.D. University of Illinois at Chicago School of Public Health	Community Health Sciences	
Robert Keese, <i>Associate Professor, Atmospheric and Environmental Science</i>	12.50%	<b>AENV 105</b> Intro to Environmental Science	PhD University of Colorado	Physical Chemistry	
Andrea Kordzek, <i>Lecturer, Criminal Justice</i>	12.50%	<b>RCRJ351</b> Policing in a Free Society; <b>RCRJ353/RPOS363</b> American Criminal Courts	PhD University at Albany	Criminal Justice	
Rey Koslowski, <i>Associate Professor, Political Science</i>	12.50%	<b>CEHC355</b> Comparative Homeland Security	PhD University of Pennsylvania	Political Science	
Megan Kurlychek, <i>Associate Professor, Criminal Justice</i>	12.50%	<b>RCRJ203</b> Criminology	PhD Penn State University	Crime, Law and Justice	
Michael Landin, <i>Lecturer, Atmospheric and Environmental Science</i>	12.50%	<b>AATM 107</b> The Oceans; <b>AATM200</b> Natural Disasters	MS University at Albany	Synoptic Meteorology	
David Lewis, <i>Associate Professor, Geography and Planning</i>	12.50%	<b>AGOG430/AUSP430</b> Environmental Planning	PhD Rutgers University	Urban Planning and Policy Development	

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
Rui Li, <i>Assistant Professor, Geography and Planning</i>	12.50%	<b>AGOG290</b> Intro to Cartography	PhD The Pennsylvania State University	Geography	
Jonathan Muckell, <i>Lecturer, Informatics</i>	12.50%	<b>IINF202</b> Intro to Data and Databases	PhD University at Albany	Informatics	
Cynthia Najdowski, <i>Assistant Professor, Criminal Justice</i>	12.50%	<b>RCRJ203</b> Criminology	PhD University of Illinois	Social Psychology	
Graeme Newman, <i>Distinguished Teaching Professor, Criminal Justice</i>	12.50%	<b>RCRJ401</b> Crime Deviation and Conformity	PhD University of Pennsylvania	Sociology	
Brian Nussbaum, <i>Associate Professor, Public Administration and Policy</i>	25%	<b>CEHC459</b> Homeland Security: Building Preparedness Capabilities; <b>CEHC321</b> Human Trafficking; <b>CEHC325</b> Critical Infrastructure; <b>CEHC/PAD445</b> Principles and Practices of Cybersecurity; <b>CEHC/RPAD101</b> Intro to Emergency Preparedness, Homeland Security and Cybersecurity	PhD University at Albany	Political Science	<b>Research Interests:</b> Terrorism and Counterterrorism, Homeland Security, Cyber Threats, Infrastructure Protection, Intelligence Analysis and Risk Assessment, State and Local Homeland Security
Patrick J Parsons, <i>Chair of Environmental Health Sciences</i>	12.50%	<b>HSPH323</b> Env Lab Perspectives Public Health	PhD University of London	National Institute of Health	
John Pipkin, <i>Distinguished Service Professor, Geography and Planning</i>	12.50%	<b>AUSP475</b> Urban Design	PhD Northwestern University	Geography	
*David L. Rousseau, <i>Associate Professor; Interim Dean, College of Emergency Preparedness, Homeland Security and Cybersecurity</i>	25%	<b>CEHC210</b> Critical Inquiry and Communication; <b>CEHC242</b> Cybersecurity; <b>CEHC310</b> Research Seminar in Emergency Preparedness, Homeland Security and	PhD University of Michigan	Political Science	

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
		Cybersecurity; <b>CEHC345</b> Leadership and Ethics in EHC; <b>CEHC 410</b> Capstone Project in EHC			
Walter Shelley, <i>Lecturer, Criminal Justice</i>	12.50%	<b>RCRJ281</b> Intro to Statistics in Criminal Justice	PhD Student University at Albany	Criminal Justice	
Fredric Sheppard, <i>Public Service Professor, Public Administration and Policy</i>	12.50%	<b>RPAD471</b> Military Support Civil Authority	M.A The United States Army War College	Strategic Studies	
James Steiner, <i>Program Coordinator for Homeland Security, Cyber Security, and Emergency Management; Public Service Professor</i>	25%	<b>CEHC/RPAD456</b> Homeland Security Intelligence; <b>CEHC/RPAD457</b> Intelligence Analysis for Homeland Security; <b>CEHC/RPAD459</b> Homeland Security: Building Preparedness Capabilities	PhD Georgetown University	Economics	Professional experience: Intelligence Advisor to the Director of New York State's Office of Homeland Security; senior advisor to the Undersecretary for Intelligence at DHS; over 30 years at the CIA Research Interests: National, state, local, and private sector intelligence, including intelligence analysis for homeland security and for national security policymaking. Professor Steiner is a retired senior CIA officer and the author of Homeland Security Intelligence.
Stephan Stohler, <i>Assistant Professor, Political Science</i>	12.50%	<b>CEHC324</b> Civil Liberties in Context: EHC; <b>RPOS336</b> Civil Liberties	PhD University of Pennsylvania	Political Science	
Christopher Thorncroft, <i>Associate</i>	12.50%	<b>AATM 103</b> Intro to	PhD University of Reading	Meteorology	

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Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
<i>Professor; Chair of Atmospheric and Environmental Sciences</i>		Climate Change			
Elizabeth Vasquez, <i>Assistant Professor, Epidemiology and Biostatistics</i>	12.50%	<b>HSPH231</b> Concepts in Epidemiology	Dr. PH New York Medical College	Epidemiology	
Jospeh Zimmerman, <i>Professor Emeritus, Political Science</i>	12.50%	<b>RPOS320</b> American Federalism	Ph.D. Maxwell School at Syracuse University	Political Science	
<b>Part 2. Part-Time Faculty</b>					
Ian Anderson, <i>Research Associate</i>	12.50%	<b>CEHC/PAD 343</b> Homeland Security	MPA University at Albany	Public Administration and Policy Concentration in Homeland Security	
Fabio Auffant II, <i>Lecturer, Information Technology Management</i>	12.50%	<b>BFOR201</b> Intro to Digital Forensics	MS Champlain College	Digital Forensics Management	
Catherine M Bohn, <i>Lecturer</i>	12.50%	<b>HSPH201</b> Intro to Public Health	MPH University of California	Health Policy and Management	
Todd Fabozzi, <i>Adjunct Professor, Geography and Planning</i>	12.50%	<b>AUSP456/AGOG496</b> Geographic Information Systems	MRP University at Albany	Regional Planning	
Rocco A Ferraro, <i>Adjunct Professor, Geography and Planning</i>	12.50%	<b>AUSP201</b> Introductory Urban Planning	MA Ohio State University	City & Regional Planning	
Terry Hastings, <i>Adjunct Professor, Public Administration and Policy</i>	12.50%	<b>CEHC/RPAD472</b> Disaster and Crisis Management	MPA Marist College	Public Administration	Certificate in executive leadership from the Naval Post Graduate School Center for Homeland Defense and Security
Bryan Haynes, <i>Associate Professor, Public Administration and Policy</i>	12.50%	<b>CEHC445</b> Principles and Practices of Cybersecurity; Cybercrime; <b>CEHC/RPAD449</b> Cybersecurity: Long Term Planning and Risk Management	MPA University at Albany	Public Administration and Policy	Associate with Booz Allen Hamilton and First Lieutenant, Cyber Operations Officer with the New York Air National Guard
Ian MacDonald, <i>Lecturer, Computer Science</i>		<b>ICSI124</b> Computer Security Basics	PhD University at Albany	Computer Science	
Rick Mathews, <i>Director of National Preparedness, Homeland Security and Cybersecurity</i>	12.50%	<b>CEHC 393</b> Simulation Building Security and Management;	M.S. Indiana State University	Health and Safety (Administrative emphasis)	<b>Research Interests:</b> Homeland

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
		<b>CEHC/RPAD455</b> Disaster, Crisis, and Emergency Management and Policy; <b>CEHC459</b> Homeland Security: Building Preparedness Capabilities; <b>CEHC/PAD344</b> Emergency Preparedness			security, infrastructure protection, intelligence, counter-terrorism and terrorism interdiction, information sharing, weapons of mass destruction, critical decision making, facility and systems security, and emergency preparedness
Frank Mauro, <i>Public Service Professor, Adjunct Lecturer, Political Science</i>	12.50%	<b>RPAD/POS321</b> State and Local Government	MPA Syracuse University	Public Administration	
Dennis McCarty, <i>Adjunct Professor, Criminal Justice</i>	12.50%	<b>RCRJ201</b> Intro to Crim Justice Process	PhD University at Albany	Criminal Justice	
Damira Pon, <i>Lecturer, Information Technology Management</i>	12.50%	<b>RCRJ418</b> Information Use and Misuse in Criminal Justice; <b>BFOR204</b> Fund Info and Cybersecurity	PhD Student University at Albany	Information Science	
Sambamurthy Thyagarajan, <i>Adjunct Professor, Geography and Planning</i>	12.50%	<b>AUSP474</b> Site Planning	MCRP Ohio State University	City & Regional Planning	
Stacey Wright, <i>Lecturer, Public Administration and Policy</i>	12.50%	<b>CEHC/RPAD469</b> Cyber Threats and Intelligence	MBA University of Massachusetts	Business Administration	
<b>Part 3. Faculty To-Be-Hired (List as TBH1, TBH2, etc., and provide title/rank and expected hiring date.)</b>					
TBH 1, Interviews in Progress, Open Rank	100%	<b>CEHC/RPAD 101</b> Introduction to Emergency Preparedness, Homeland Security and Cybersecurity <b>CEHC210</b> Critical Inquiry and Communication <b>CEHC355</b> Comparative Homeland Security <b>CEHC 356</b> Transnational Crime			

(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
		<b>CEHC310</b> Research Seminar in EHC <b>CEHC410</b> Capstone Project in EHC			
TBH 2, Interviews in Progress, Open Rank	100%	<b>CEHC/RPAD344</b> Emergency Preparedness <b>CEHC325</b> Critical Infrastructure <b>CEHC345</b> Leadership and Ethics in EHC <b>CEHC324</b> Civil Liberties in Context: EHC <b>CEHC310</b> Research Seminar in EHC <b>CEHC410</b> Capstone Project in EHC			
TBH 3, Interviews in Progress, Open Rank	100%	<b>CEHC/RPAD/RPOS 343</b> Homeland Security <b>CEHC320</b> Psychology of Terrorism <b>CEHC321</b> Human Trafficking <b>CEHC310</b> Research Seminar <b>CEHC410</b> Capstone Project			
TBH 4, Interviews in Progress, Open Rank	100%	<b>CEHC242</b> Cybersecurity <b>CEHC/RPAD449</b> Cybersecurity: Long Term Planning and Risk Management <b>CEHC445</b> Principles and Practices of Cybersecurity <b>CEHC/RPAD469</b> Cyber Threats and Intelligence			



(a)	(b)	(c)	(d)	(e)	(f)
Faculty Member Name and Title/Rank (Include and identify Program Director with an asterisk.)	% of Time Dedicated to This Program	Program Courses Which May Be Taught (Number and Title)	Highest and Other Applicable Earned Degrees (include College or University)	Discipline(s) of Highest and Other Applicable Earned Degrees	Additional Qualifications: List related certifications, licenses and professional experience in field.
		CEHC310 Research Seminar in EHC CEHC410 Capstone Project in EHC			

## Section 5. Financial Resources and Instructional Facilities

- a) What is the resource plan for ensuring the success of the proposed program over time? Summarize the instructional facilities and equipment committed to ensure the success of the program. Please explain new and/or reallocated resources over the first five years for operations, including faculty and other personnel, the library, equipment, laboratories, and supplies. Also include resources for capital projects and other expenses.

The College of Emergency Preparedness, Homeland Security and Cybersecurity was officially created in 2015. An undergraduate minor was created on the University at Albany campus in the spring of 2015 and we began offering the four required classes in the minor in 2015-16 academic year. Given that three of the four required classes in the minor are also required in the major, as well as the majority of the courses in the concentrations, we already offer a significant portion of the major. Currently, the required classes and selected electives are offered with the assistance of two tenure track faculty (four courses), one public service professor (two courses), and one adjunct professor (one course). We are in the process of hiring four tenure track faculty who will have a 2/2 teaching load (i.e., two classes in the fall and two in the spring). This means we will be able to offer 16 additional classes per year starting in 2016-17 (for a total of 23 courses given existing capacity). Given that students can fulfill their concentration courses by selecting courses from over 50 classes taught across the University, we will have sufficient personnel to offer the major.

In terms of instructional facilities and equipment, our courses will be taught in existing classrooms. According to the University at Albany space planning group, the campus has adequate classroom capacity to offer an additional 16 courses per year. The courses do not require any specialized equipment (e.g., specialized labs) and most of the faculty hired will be from disciplines that traditionally do not require extensive equipment (e.g., homeland security and emergency management). The one exception to this statement would be the cybersecurity faculty that will receive startup packages similar to those found in a department of engineering or computer science. Most of the cybersecurity hires will be jointly appointed in the College of Engineering and Applied Sciences or the School of Business and the Provost has committed to providing standard startup packages for these faculty.

The Table in Section 5(b) lists the projected costs for the first five years of the program. The personnel costs "Before Start" include the current staff members: Assistant to the Dean and Office Coordinator, totaling \$105,000. These staff members will continue to support the broad administrative needs of the College, while the staff members who are to be hired will be assigned to work on the administration and implementation of the undergraduate major.

In Academic Year 1 there will be two professional staff hires and four faculty hires. The staff will include an Experiential Learning Coordinator (\$65,000) and an Undergraduate Student Services Coordinator (\$60,000), totaling \$125,000, who will be hired at the SL3/4 level. The college will hire four faculty members (\$110,000), totaling \$440,000. There will also be up to three courses taught by adjunct teaching faculty each year at \$5,000 each, totaling \$15,000. These staff and faculty will be sufficient to run the major and support all of the related student support and administrative needs of the major for up to 200 students, which is the expected enrollment target in 5 years. All salaries include a 3% increase per year for planning purposes.

University Libraries has been consulted, as has the Faculty Steering Committee, to determine appropriate journal subscriptions and other library resource needs for the new college. The draft list of resources has been determined to carry a cost of \$15,000 annually for increased journal access and other resources (see attached letter from Rebecca Mugridge, Interim Dean and Director, University Libraries).

The equipment needs for the new major will occur with the six hires in Academic Year 1. This figure includes: data jack activation at \$200 x 6; phone activation at \$102 x 6; furniture at \$5,000 x 6; and computers, printers and software for staff members at \$2,000 x 2; totaling a one-time equipment cost of \$35,812.

Supplies have been estimated at \$2,500 annually, based on supplies costs for similarly sized units.

Capital expenses has been determined based on six new offices resulting in 936 square feet (six offices at 120 square feet plus 30% circulation) at a cost of \$100 renovation costs per square foot, totaling \$93,600. This has been calculated in coordination with facilities and has been reserved in the campus wide planning budget (see attached letter from John Giarrusso, Associate Vice President for Finance and Administration, Facilities Management).

The University at Albany has been allocated \$15 million in capital funding from the State of New York for the home of the new college. Current plans call for the new emergency technologies (or ETEC) building to be expanded with this funding and it will become the permanent home of the new college in 2019 or 2020.

- b) Complete the five-year SUNY Program Expenses Table, below, consistent with the resource plan summary. Enter the anticipated academic years in the top row of this table. List all resources that will be engaged specifically as a result of the proposed program (e.g., a new faculty position or additional library resources). If they represent a continuing cost, new resources for a given year should be included in the subsequent year(s), with adjustments for inflation or negotiated compensation. Include explanatory notes as needed.

**SUNY Program Expenses Table**

Program Expense Categories	Expenses (in dollars)					
	Before Start	Academic Year 2016/2017	Academic Year 2017/2018	Academic Year 2018/2019	Academic Year 2019/2020	Academic Year 2020/2021
(a) <i>Personnel (including faculty and all others)</i>	\$105,000	\$670,000	\$690,100	\$710,803	\$732,127	\$754,090
(b) <i>Library</i>		\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
(c) <i>Equipment</i>		\$35,812				
(d) <i>Laboratories</i>						
(e) <i>Supplies</i>		\$2,500	\$2,500	\$2,500	\$2,500	\$2,500
(f) <i>Capital Expenses</i>		\$93,600				
(g) <i>Other (Specify):</i>						
(h) <b>Sum of Rows Above</b>	<b>\$105,000</b>	<b>\$816,912</b>	<b>\$692,615</b>	<b>\$728,303</b>	<b>\$749,627</b>	<b>\$771,590</b>

## Section 6. Library Resources

- a) Summarize the analysis of library collection resources and needs *for this program* by the collection librarian and program faculty. Include an assessment of existing library resources and accessibility to those resources for students enrolled in the program in all formats, including the institution's implementation of SUNY Connect, the SUNY-wide electronic library program.

The University Libraries collect, house, and provide access to all types of published materials in support of the research and teaching of the schools, colleges, and academic departments of the University. This evaluation considers those portions of the libraries' collections and services that would support a degree in Emergency Preparedness, Homeland Security and Cybersecurity.

### Library Collections

The University Libraries are among the top 115 research libraries in the country. The University Library, the Science Library, and the Dewey Graduate Library contain more than two million volumes and over 2.9 million microforms. The Libraries provide access to more than 75,000 online journals and over 117,000 online books.

Whenever possible, current subscriptions are available online. Online resources (journals, databases, e-books, digital libraries) are available on and off campus, all hours of the day. Because the proposed program is multidisciplinary, relevant materials are housed at all three libraries.

The Science Library, which opened in September 1999, occupies 61,124 square feet on four floors. The Science Library serves the entire University at Albany community, but contains collections supporting the departments of Atmospheric and Environmental Sciences, Biological Sciences, Chemistry, Computer Science, Mathematics and Statistics, Physics, Psychology, and the College of Engineering and Applied Sciences. Approximately 600,000 volumes in the science and technology subject areas (Q-TP of the Library of Congress classification scheme) are housed in this library.

The Thomas E. Dewey Graduate Library is located on the downtown campus in the Hawley Building. The collection contains approximately 138,000 volumes. Topical strengths include: public administration; public policy; federal and state case and statutory law; social welfare policy, service, and practice; social gerontology; information science; information policy; library and archive development and management; criminology; legal processes and policy; and the criminal justice system.

### Books

The University Libraries acquire books on approval using the services of Yankee Book Peddler (YBP). Most academic subjects have approval plans. The approval plan is used to obtain from selected major publishers and university presses newly published English language books written at the university level. Books are acquired according to a profile, which outlines subject areas to be included or excluded.

Books appropriate for the proposed major do not fall neatly into the Library of Congress Classification subject categories. Titles could be found in BF (Psychology) HM (Sociology), HV (Social Pathology, Social and Public Welfare, Criminology), Q (General Science), QA (Computer Science), and U (Military Science) sections. Many of these subject categories are covered in the approval plan already, but as the major develops in the future it is likely that the approval plan may need to be modified to include additional subjects.

The Libraries have a demand driven acquisition plan for electronic books, also through YBP. Under this plan, electronic records for books meeting certain profile criteria are loaded into the online catalog. If these eBooks are accessed by library users, they are loaned or purchased, resulting in additional cost to the libraries. While the existing profile is sufficient, it may need to be broadened in the future, resulting in the loan or purchase of more eBooks.

Books not received on approval may be selected by the subject specialist and acquired through the direct order process. This includes books and other materials from publishers not covered by the approval plan. It is recommended that \$5,200 be provided annually for purchasing material not covered by the existing approval plan.

## Reference Collection

The Libraries have reference collections that house many reference resources for Homeland Security, Emergency Preparedness and Cybersecurity. These include guides to the literature, dictionaries, encyclopedias, biographical sources, handbooks, and style guides. Some of the resources applicable to the program are:

*Computer security handbook*. (2009); *Cyber warfare and cyber terrorism* (2008); *Encyclopedia of disaster relief* (2011); *Encyclopedia of cybercrime* (2009); *Encyclopedia of cyber behavior* (2012); *Encyclopedia of cybercrime* (2008); *Encyclopedia of information ethics and security* (2008); *McGraw-Hill homeland security handbook* (2006); *Wiley handbook of science and technology for homeland security*, (2010).

There are also several online reference books, such as:

*Dictionary of computing* (2008); *Emergency management: A reference handbook* (2008); *Encyclopedia of database systems* (2009); *Military balance* (1964-present); *Organized crime: From trafficking to terrorism* (2008); *9/11 Encyclopedia* (2008)

While the existing reference collection is adequate to support the program, future reference resources will be needed, preferably in electronic format.

## Journals and Magazines

The University Libraries' subscriptions to the *ACM (Association for Computing Machinery) Digital Library* and the *IEEE Computer Society Digital Library* provide access to nearly 60 scholarly journals. The Libraries participate in the SUNY-wide ScienceDirect contract, which provides access to the majority of Elsevier journals. The Libraries have subscriptions to individual Wiley titles, but not to the entire Wiley Online package.

Existing journal subscriptions in the fields of computer science, criminal justice, public affairs and policy and the social sciences will serve to support the major.

The following journals have been identified as being important to the program and subscriptions should be initiated, in consultation with the faculty:

Journals	ISSN	Publisher	Annual Subscription
Cryptography and Communications	1936-2447	Springer	575
Journal of Applied Security Research	1936-1629	Taylor & Francis	705
Designs, Codes and	0925-1022	Springer	2,700

Cryptography			
Disasters	1467-7717	Wiley	850
International Journal of Information Security	1615-5262	Springer	900
Journal of Cryptology	0933-2790	Springer	800
Security and Communication Networks	1939-0114	Wiley	2,100
Survival: Global Politics and Strategy	1468-2699	Intl. Inst. for Strategic Studies	683
Disaster Medicine and Public Health Preparedness	1938-744X	Cambridge	483
<b>Total</b>			<b>\$9,796</b>

Note that journal subscriptions have an annual cost of \$9,796. In addition, with the hiring of new faculty, it should be anticipated that they will require additional journal subscriptions corresponding with their research interests. This accounts for the resulting \$15,000 estimate annually.

### Conference Proceedings

Conferences are an important means for communicating the latest developments, particularly in the field of computer science and cybersecurity. Major associations sponsor numerous conferences each year. Those associations include the Association for Computing Machinery (ACM), the IEEE Computer Society, the British Computer Society, and the IET (Institution of Engineering and Technology). Several discipline-specific databases, which are described below, index conference proceedings. The University Libraries subscribe to the *ACM Digital Library* and the *IEEE Computer Society Digital Library*. These collections include the conferences proceedings of the ACM, IEEE Computer Society, and related organizations. The British Computer Society conference proceedings (and workshops) are open access and are available in a resource called *Electronic Workshops in Computing (eWiC)*. Conference proceedings are also indexed in the Web of Science Core Collection. No new resources are required.

### Databases and Digital Collections

The University Libraries currently subscribe to many databases and digital collections important to Emergency Preparedness, Homeland Security and Cybersecurity. Those databases are listed and described below. Due to the interdisciplinary nature of the proposed major, this list is not exhaustive.

Published by the Institution of Engineering and Technology (IET), *Inspec* provides comprehensive indexing of the world's scientific literature for computers and computing, information technology, and communications. It covers journal articles, conference proceedings, reports, dissertations, and books.

The *(ACM) Guide to Computing Literature* is a comprehensive database that contains citations from the major English language publishers in computing. Coverage, which dates as far back as 1947, includes books, journal articles, conference proceedings, doctoral dissertations, master's theses, and technical reports.

The *ACM (Association for Computing Machinery) Digital Library* is a full text database that provides access to all of the association's journals, magazines, special interest group newsletters, and conference proceedings.

The *IEEE Computer Society Digital Library* is a full text database that contains the scholarly journals, magazines, and conference proceedings and workshops published by the IEEE Computer Society.

*Applied Science and Technology Source* provides access to the full text from more than 1,400 journals and magazines, including scholarly journals, trade magazines, professional society journals, and conference proceedings. Three of the broad subjects covered are engineering, computing, and information technology.

Providing access to nearly 300 full text academic journals, magazines, and trade publications, *Computer Source* covers subjects like information systems and robotics. An additional 150 periodicals are also indexed and abstracted.

*Criminal Justice Abstracts With Full Text* provides comprehensive coverage of the journal literature of criminal justice including full text of 270 journals and abstracts for 130 additional journals.

*Criminal Justice Periodicals Index* provides access to the literature of criminal justice including full text coverage of 65 journals and abstracts of 155 additional journals

*PolicyMap* is a fully web-based Geographic Information System (GIS) and mapping product. Data includes demographics, home sale statistics, health data and facilities, FEMA disaster declarations, labor data, unemployment, crime statistics and city crime rates.

*PAIS International* provides references to books, journal articles, government documents, and privately published research reports on almost any topic that has a public affairs dimension. It is international in coverage

*WestlawNext* is a database of legal information that includes full-text of state and federal court decisions, state and federal statutes, law reviews and reference material.

#### Related Databases

*Scopus* is a citation database covering 21,000+ journal titles from 5,000 publishers, with strongest coverage in technical disciplines. It also covers conference proceedings.

*Web of Science* indexes the core journals for all science and technology subjects. Besides keyword and author searching, one of its key features is the ability to track an author's citation and determine who has cited that work. Our subscription to the Web of Science Core Collection also includes Data Citation Index which tracks data sets from a wide range of international data repositories to connect them with the scientific literature

At this time, no new databases are recommended. However, as this program grows and research expands at the University, it may become necessary to subscribe to additional databases, including *International Security & Counter Terrorism Reference Center* and *Jane's Terrorism and Insurgency Center*. It may also be necessary to subscribe to *Gartner Research*, a research and advisory service providing information on information technology (IT) technologies, practices, and strategies which will be particularly important for cybersecurity topics.

#### **Government Documents**

Government agencies publish reports and other publications in the areas of emergency preparedness. These documents are generally freely available and can be searched through the Libraries' online catalog. The University at Albany is a selective U.S. depository library. No resources are needed.

## Patents

U.S. patents and patent applications are freely available from the United States Patent and Trademark Office (USPTO) Website as well as several other patent websites. Patents from other countries and international organizations are also freely available on the web. In addition, our subscription to Web of Science includes Derwent Innovations Index, a patent citation database. No additional resources are recommended.

## Standards

Engineers depend on industrial standards for their work. Currently, the University Libraries rely on the New York State Library for standards, which has a large collection along with related publications. This includes standards from the American National Standards Institute (ANSI), the National Institute of Standards and Technology (NIST), and the International Organization for Standardization (ISO). The Websites of these organizations and others provide free standards searching capabilities. No resources are recommended. As the program grows, the University Libraries may need to revisit the acquisition of standards, if the need exists. A purchase on demand model may work best.

## Technical Reports

Published by academic departments, companies, and government agencies, technical reports describe successful and unsuccessful research. They are intended for rapid dissemination before being presented at conferences or published in scholarly journals. Most organizations make their technical reports available on their Websites. However, the “technical report system” is changing. Many technical reports are being migrated to institutional repositories or subject repositories like the *Computing Research Repository (CoRR)* (<http://arxiv.org/corr/home>). Therefore, search engines are needed to track down older as well as current reports. *Google* and *Google Scholar* are often very helpful. In addition, *TRAIL: The Technical Report Archive & Image Library* (<http://technicalreports.org/>), *National Technical Information Service (NTIS)* (<http://ntis.gov/>), *NCSTRL: Networked Computer Science Technical Reports Library* (<http://csetechrep.ucsd.edu/Dienst/htdocs/Welcome.html>), and the Google custom search engine (<http://www.opendoar.org/search.php>) at *OpenDOAR* (Directory of Open Access Repositories) are useful. No resources are recommended.

## Interlibrary Loan and Delivery Services

The University Libraries' Interlibrary Loan (ILL) Department borrows books and microforms, and obtains digital copies of journal articles and other materials not owned by the Libraries from sources locally, statewide, nationally, and internationally. ILL services are available at no cost to the user for faculty, staff, and students currently enrolled at the University at Albany. Users can manage their requests through the use of ILLiad, the University Libraries' automated interlibrary loan system, which is available through a Web interface at <https://illiad.albany.edu/>.

The University Libraries also provide delivery services for books and articles housed in any of the three libraries. Books can be delivered to one of the libraries or for faculty, to departmental addresses. Articles are scanned and delivered electronically via email. The Libraries also provide free delivery services to the home addresses of online learners and people with disabilities. Delivery services are managed through ILLiad as well.

## Access to Research Collections

Library memberships provide access to many other libraries in the Capital District region, in New York State, and throughout the United States and Canada. In the Capital District, the Capital District Library Council (CDLC) sponsors the Direct Access Program (DAP). Upon presentation of a CDLC DAP card, students and faculty may borrow from or use 47 academic, public, law, medical, and technology libraries, including the Rensselaer Polytechnic Institute Libraries, which has excellent



science and technology collections. Students and faculty may also use the collections of the New York State Library. Statewide, students and faculty may use and borrow materials from most of the SUNY-affiliated institutions.

### Summary

The University Libraries have been committed to build and maintain collections in support of Emergency Preparedness, Homeland Security and Cybersecurity. Given the interdisciplinary nature of the program, many existing resources will be directly applicable. However, additional resources will be needed. Those are:

Direct order of books and other resources (annual) --\$5,200 Journals to support the program (annual) - \$9,796.

- b) Describe the institution's response to identified collection needs and its plan for library development.

All recommended library resources have been included in the program budget.

## Section 7. External Evaluation

SUNY requires external evaluation of all proposed bachelor's degree programs, and may request an evaluation for a proposed associate degree or certificate program in a new or emerging field or for other reasons.

Is an external evaluation required? [ ] No [X] Yes

If yes, list below all SUNY-approved evaluators who conducted evaluations (adding rows as needed), and **append at the end of this document** each original, signed [External Evaluation Report](#). **NOTE:** *To select external evaluators, a campus sends 3-5 proposed evaluators' names, titles and CVs to the assigned SUNY Program Reviewer, expresses its preferences and requests approval.*

<b><u>Evaluator #1</u></b> Name: Daniel Klenow Title: Head-Department of Emergency Management, Full Professor-Department of Emergency Management, Director-Center for Disaster Studies and Emergency Management Institution: North Dakota State University	<b><u>Evaluator #2</u></b> Name: Warren Eller Title: Associate Professor, Department of Health Policy, Management and Leadership Institution: West Virginia University
---	---

## Section 8. Institutional Response to External Evaluator Reports

As applicable, **append** at the end of this document a single *Institutional Response* to all *External Evaluation Reports*.

## Section 9. SUNY Undergraduate Transfer

The State University views as one of its highest priorities the [facilitation of transfer](#).

- a) For a **proposed Associate in Arts (A.A.) or an Associate in Science (A.S.) degree**, demonstrate that the program's graduates will be able to transfer into at least two parallel SUNY baccalaureate programs and

complete them within two additional years of full-time study, per [SUNY policy](#), by listing the transfer institutions below and **appending** at the end of this document:

- two completed [SUNY Transfer Course Equivalency Tables](#), one for each transfer institution; and
- a letter from the Chief Academic Officer of each transfer institution asserting acceptance of the completed Transfer Course Equivalency Table.

- b) For a **proposed baccalaureate program**, document articulation with at least two parallel SUNY associate degree programs for seamless transfer, by **appending documentation of articulation**, such as [SUNY Transfer Course Equivalency Tables](#) and/or letters of support from Chief Academic Officers at associate degree institutions or their designees. **If transfer does not apply to this program, please explain why.**

Associate Degree Institution	Associate Program SED Code and Title	Degree
Hudson Valley Community College	34134 Criminal Justice	AS
SUNY Adirondack Community College	92247 Criminal Justice: Police Science	AS
Columbia-Greene Community College	83270 Computer Science	AS
Schenectady County Community College	33705 Criminal Justice	AS

**NOTE:** Transfer course equivalency tables are needed, despite SUNY Transfer Paths, to ensure that all courses in an A.A. or A.S. program will be accepted for transfer. Official SED program titles and codes can be found on NYSED's Inventory of Registered Programs [here](#).

Please see **Appendix 9** for Transfer Course Equivalency Tables

## Section 10. Application for Distance Education

- a) Does the program's design enable students to complete 50% or more of the course requirements through distance education? [ X ] No [ ] Yes. If yes, **append** a completed [SUNY Distance Education Format Proposal](#) at the end of this proposal to apply for the program to be registered for the distance education format.
- b) Does the program's design enable students to complete 100% of the course requirements through distance education? [ X ] No [ ] Yes

## Section MPA-1. Need for Master Plan Amendment and/or Degree Authorization

- a) Based on guidance on [Master Plan Amendments](#), please indicate if this proposal requires a Master Plan Amendment.  
[ X ] No [ ] Yes, a completed [Master Plan Amendment Form](#) is **appended** at the end of this proposal.
- b) Based on *SUNY Guidance on Degree Authorizations* (below), please indicate if this proposal requires degree authorization.  
[ X ] No [ ] Yes, once the program is approved by the SUNY Provost, the campus will work with its Campus Reviewer to draft a resolution that the SUNY Chancellor will recommend to the SUNY Board of Trustees.

**SUNY Guidance on Degree Authorization.** Degree authorization is required when a proposed program will lead to a [new degree](#) (e.g., B.F.A., M.P.H.) at an existing level of study (i.e., associate, baccalaureate, first-professional, master's, and doctoral) in an existing disciplinary area at an institution. Disciplinary areas are defined by the [New York State Taxonomy of Academic Programs](#). Degree authorization requires approval by the SUNY Provost, the SUNY Board of Trustees and the Board of Regents.

### List of Appended and/or Accompanying Items

- a) **Appended Items:** If materials required in selected items in Sections 1 through 4 and Sections 9, 10 and MPA-1 of this form apply to this proposal, they should be appended as part of this document, after this page, with continued pagination. In the first column of the chart below, please number the appended items, and append them in number order.

Number	Appended Items	Reference Items
	<i>For multi-institution programs, a letter of approval from partner institution(s)</i>	Section 1, Item (e)
	<i>For programs leading to professional licensure, a side-by-side chart showing how the program's components meet the requirements of specialized accreditation, <a href="#">Commissioner's Regulations for the Profession</a>, or other applicable external standards</i>	Section 2.3, Item (e)
	<i>For programs leading to licensure in selected professions for which the SED Office of Professions (OP) requires a specialized form, a completed version of that form</i>	Section 2.3, Item (e)
1	<i>Curricular Requirements</i>	Section 2, Item 2.3 (g)
2	<i>OPTIONAL: For programs leading directly to employment, letters of support from employers, if available</i>	Section 2, Item 2.3 (h)(2)
3	<i>For all programs, a plan or curriculum map showing the courses in which the program's educational and (if appropriate) career objectives will be taught and assessed</i>	Section 2, Item 7
4	<i>Sample Program and Curriculum for each of the three Emergency Preparedness, Homeland Security and Cybersecurity Concentrations</i>	Section 3
5	<i>For all programs, a catalog description for each existing course that is part of the proposed undergraduate major (including cognates and restricted electives)</i>	Section 3, Item (b)
6	<i>For all programs with new courses in the major, syllabi for all new courses in a proposed undergraduate major</i>	Section 3, Item (c)
7	<i>For programs requiring external instruction, a completed <a href="#">External Instruction Form</a> and documentation required on that form</i>	Section 3, Item (d)
8	<i>For programs that will depend on new faculty, position descriptions or announcements for faculty to-be-hired</i>	Section 4, Item (b)
9	<i>For all A.A. and A.S. programs, Transfer Equivalency Tables and letters of support from at least two SUNY baccalaureate institutions; for baccalaureate programs that anticipate transfer student enrollment, documentation of seamless transfer with at least two SUNY two-year programs</i>	Section 9
	<i>For programs designed to enable students to complete at least 50% of the course requirements at a distance, a <a href="#">Distance Education Format Proposal</a></i>	Section 10
	<i>For programs requiring an MPA, a <a href="#">Master Plan Amendment Form</a></i>	Section MPA-1

- b) Accompanying Items - External Evaluations and Institutional Response:** If Sections 7 and 8 of this form indicate that external evaluation is required as part of this proposal, please send a separate electronic document to [program.review@suny.edu](mailto:program.review@suny.edu) that contains the original, signed *External Evaluation Reports* and a single *Institutional Response* to all reports. The file name should indicate the campus, program title, award and content of the file (e.g., BuffaloU-English-PhD-ExEval).

**University at Albany**  
**New Program Proposal**  
**Emergency Preparedness, Homeland Security and Cybersecurity**

**Appendix 1 Curricular Requirements**

Course Title	Credits
<b>Emergency Preparedness, Homeland Security and Cybersecurity Core</b>	<b>Total 18</b>
CEHC/RPAD 101 Introduction to Emergency Preparedness, Homeland Security & Cybersecurity	3
CEHC 210 Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity	3
CEHC 242 Cybersecurity	3
CEHC/RPAD/RPOS 343 Homeland Security	3
CEHC/RPAD 344 Emergency Preparedness	3
CEHC 345 Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity	3
<b>Experiential or Applied Learning</b>	<b>Total 9</b>
CEHC 310 Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity	3
CEHC 390 Internship in Emergency Preparedness, Homeland Security and Cybersecurity	3
CEHC 410 Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity	3
Milestone: 100 hours non-credit training	0
<b>Emergency Preparedness, Homeland Security and Cybersecurity Concentrations (choose one)</b>	<b>Total 12</b>
<b>Emergency Preparedness Concentration</b>	<b>12 credits from</b>
CEHC 393 Simulation: Building Security and Preparedness	3
CEHC/RPAD 455 Disaster, Crisis and Emergency Management and Policy	3
CEHC/RPAD 471 Military Forces in Support of Civil Authorities	3
CEHC/RPAD 472 Disaster and Crisis Management in the Public, Private and Non-profit	3
AATM 100 The Atmosphere	3
AATM 103 Introduction to Climate Change	3
AATM 107 The Oceans	3
AATM 200 Natural Disasters	3

Course Title	Credits
Emergency Preparedness Concentration continued	
AENV/AGEO 105 Introduction to Environmental Science	3
AUSP 201 Introductory Urban Planning	3
AUSP 315Z State and Regional Planning	3
AUSP/AGOG 430 Environmental Planning	3
AUSP 456/AGOG 496 Geographic Information Systems	3
AUSP 474 Site Planning	3
AUSP 475 Urban Design	3
AGOG 290 Introduction to Cartography	3
AGOG 484 Remote Sensing I	3
HSPH 201 Introduction to Public Health	3
HSPH 231 Concepts in Epidemiology	3
TSPH/RPOS/RPAD 272 Health and Human Rights	3
HSPH 321 Global Environmental Issues and Their Effect on Human Health	3
HSPH 323 Environmental Laboratory Perspectives in Public Health	3
HSPH 341 Promoting Healthy People and Communities	3
RPAD/RPOS 140 Introduction to Public Policy	3
RPOS/RPAD 321 State and Local Government	3
RPOS 336 Civil Liberties	3

<b>Homeland Security Concentration</b>	<b>12 credits from</b>
CEHC 320 Psychology of Terrorism	3
CEHC 321 Human Trafficking	3
CEHC 324 Civil Liberties in Context: Emergency Preparedness, Homeland Security & Cybersecurity	3
CEHC 325 Critical Infrastructure	3
CEHC 355 Comparative Homeland Security	3
CEHC 356 Transnational Crime	3
CEHC 393 Simulation: Building Security and Preparedness	3
CEHC/RPAD 456 Homeland Security Intelligence	3
CEHC/RPAD 457 Intelligence Analysis for Homeland Security	3
CEHC/RPAD 459 Homeland Security: Building Preparedness Capabilities	3
RCRJ 201 Introduction to Criminal Justice Process	3
RCRJ 202 Introduction to Law and Criminal Justice	3
RCRJ/ASOC 203 Criminology	3
RCRJ 281 Introduction to Statistics in Criminal Justice	3
RCRJ 351 Policing in a Free Society	3
RCRJ 353/RPOS 363 American Criminal Courts	3
RCRJ 401 Crime Deviation and Conformity	3
RCRJ 417 Cross-National Crime	3
RCRJ 418 Information and Misuse in Criminal Justice	3
RPOS/RPAD 140 Introduction to Public Policy	3
TPOS 260 Political Violence	3
TPOS 261Y/RPOS 361 Comparative Ethnicity	3
RPOS/RPAD 316 Methodological Tools for Public Policy	3
RPOS 320 American Federalism	3
RPOS 360 Violent Political Conflict	3

<b>Cybersecurity Concentration</b>	<b>12 credits from</b>
CEHC/RPAD 445 Principles and Practices of Cyber Security	3
CEHC/RPAD 449 Cyber Security: Long Term Planning and Risk Management	3
CEHC/RPAD 469 Cyber Threats and Intelligence	3
BFOR 100 Introduction to Information Systems	3
BFOR 201 Introduction to Digital Forensics	3
BFOR 202 Cyber Crime Investigations	3
BFOR 203 Networking: Introduction to Data Communication	3
BFOR 204 Fundamentals of Information and Cybersecurity <b>or</b> ICSI 124X Computer Security	3
BFOR 300 Databases for Digital Forensics	3
BFOR 410 International Cyber Conflicts	3
BFOR 412 Cyber Incident Analysis	3
IINF 202 Introduction to Data and Databases	3
IINF 306 Information Security and Assurance	3
<b>Total required credits:</b>	<b>39</b>

**University at Albany**  
**New Program Proposal**  
**Emergency Preparedness, Homeland Security and Cybersecurity**

**Appendix 2 Letters of Support**

Albany County Executive Office

Albany County Sheriff's Office

Albany Medical Center

American Red Cross





DANIEL P. MCCOY  
COUNTY EXECUTIVE

COUNTY OF ALBANY  
OFFICE OF THE EXECUTIVE  
112 STATE STREET, ROOM 900  
ALBANY, NEW YORK 12207-2021  
(518) 447-7040 - FAX (518) 447-5589  
WWW.ALBANYCOUNTY.COM

PHILIP F. CALDERONE, ESQ.  
DEPUTY COUNTY EXECUTIVE

December 21, 2015

Interim Dean David L. Rousseau  
College of Emergency Preparedness, Homeland Security and Cybersecurity  
University at Albany, State University of New York (SUNY)  
135 Western Ave., Albany, NY 12222

Dear Dean Rousseau:

I am delighted to write this letter in support of the College of Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany. I believe that the mission of the new college overlaps with the mission of our organization in many important ways. I was particularly interested to learn about the creation of the new undergraduate major and minor. I understand that students in the proposed major will be required to complete a research seminar, an internship, and senior year capstone course. I believe that we could be a valuable partner in all of these activities.

The highest priority of County government, and any form of local government, is to ensure public safety and quality of life for our residents. Our mission overlaps with the mission of the College of Emergency Preparedness, Homeland Security and Cybersecurity in many ways.

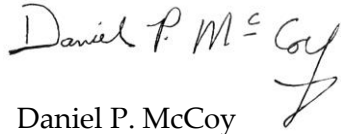
One central element of the curriculum for the new major is the focus on applied learning. We are excited about the opportunity to work with faculty and students in the new major on activities such as research seminars, internships, and capstone classes. A steady flow of high quality interns would assist us in our current projects and would allow us to identify the best students for future employment. We would be able to use interns in a variety of ways and across multiple County departments.

The research seminars would give us an opportunity to suggest critical gaps in the existing knowledge base and could help shape policy and administration in the future.

Finally, we are very excited about the capstone class idea. Having multiple teams of students working on a project for an external client, such as Albany County, would expand the capacity of our agency and provide a great learning experience for the students.

In sum, we are looking forward to partnering with the new college on a host of research, teaching, and service projects. In particular, we look forward to working with students in the new major through internships, research seminars, and senior capstone classes. If you have questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Daniel P. McCoy". The signature is written in a cursive style with a large, stylized "M" and "C".

Daniel P. McCoy  
Albany County Executive



**WILLIAM C. COX**  
UNDERSHERIFF  
**MICHAEL S. MONTELEONE**  
CHIEF DEPUTY

## **ALBANY COUNTY SHERIFF'S OFFICE**

County Court House Albany, New York 12207 (518) 487-5400

[WWW.ALBANYCOUNTYSHERIFF.COM](http://WWW.ALBANYCOUNTYSHERIFF.COM)

**CRAIG D. APPLE, SR.**  
SHERIFF



**PAUL M. COURCELLE**  
CHIEF DEPUTY  
**KERRY B. THOMPSON**  
CHIEF DEPUTY

December 21, 2015

Interim Dean David L. Rousseau  
College of Emergency Preparedness, Homeland Security and Cybersecurity  
University at Albany, State University of New York (SUNY)  
135 Western Ave., Albany, NY 12222

Dear Dean Rousseau:

I am delighted to write a letter in support of the College of Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany. I believe that the mission of the new college overlaps with the mission of our organization in many important ways. I was particularly interested to learn about the creation of the new undergraduate major and minor. I understand that students in the proposed major will be required to complete a research seminar, an internship, and senior year capstone course. I believe that we could be a valuable partner in all of these activities.

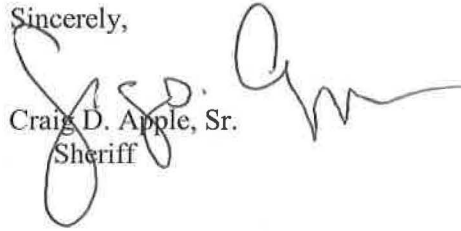
The mission of the Albany County Sheriff's Office is to protect and serve those who live or visit our jurisdiction. Our mission overlaps with the mission of the College of Emergency Preparedness, Homeland Security and Cybersecurity in many ways. First, and foremost, our agencies Office of Emergency Management coordinates training, services, assets and manages all types of emergencies by working very closely with all municipal leaders and emergency services to assure we are as prepared as possible should a disaster strike. Secondly, as it relates to Homeland Security, with the City of Albany being the state capital, there are obvious security concerns. In addition, Albany County has several major transportation routes within its jurisdiction. We are the lead law enforcement agency at the Albany International Airport. The county is bordered by the Hudson River, and serves as a port of call for many cargo ships from foreign countries at both the Port of Coeymans and Port of Albany. There is a major national railroad (CSX) which travels through a significant portion of the county and The New York State Thruway transverses the county, and serves as a major link with the City of New York. Additionally, there are several major water supply reservoirs which we are tasked to protect. As a result, security of these areas is paramount. One central element of the curriculum for the new major is the focus on applied learning. We are excited about the opportunity to work with faculty and students in the new major on activities such as research seminars, internships, and capstone classes. A steady flow of high quality interns would assist us in our current projects and would allow us to identify the best students for future employment. We would be able to use interns in a variety of ways to assisting with several tasks within our Office of Emergency Management.

The research seminars would give us an opportunity to suggest critical gaps in the existing knowledge base and could help shape policy and administration in the future. Our organization is interested in any research that would assist us with making our citizens better prepared in the event of an emergency.

Finally, we are very excited about the capstone class idea. Having multiple teams of students working on a project for an external client such as the Albany County Sheriff's Office would expand the capacity of our agency and provide a great learning experience for the students. Our staff would be interested in capstone courses that examined a variety of issues that we face on a daily basis.

In sum, we are looking forward to partnering with the new college on a host of research, teaching, and service projects. In particular, we look forward to working with students in the new major through internships, research seminars, and senior capstone classes. If you have questions, please do not hesitate to contact me.

Sincerely,

  
Craig D. Apple, Sr.  
Sheriff



## Albany Medical Center

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43 New Scotland Avenue, Albany, New York 12208-3478

Interim Dean David L. Rousseau  
College of Emergency Preparedness, Homeland Security and Cybersecurity  
University at Albany, State University of New York (SUNY)  
135 Western Ave.  
Albany, NY 12222

Dear Dean Rousseau:

It is my privilege to write this letter in support of the College of Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany. I believe that the mission of the new college overlaps with the mission of our organization in many important ways. As an academic institution, Albany Medical Center, including Albany Medical College, is committed to excellence in biomedical research, medical education, and patient care. I was particularly interested to learn about the creation of the new undergraduate major and minor. I understand that students in the proposed major will be required to complete a research seminar, an internship, and senior year capstone course. I believe that we could be a valuable partner in all of these activities.

One central element of the curriculum for the new major is the focus on applied learning. We are excited about the opportunity to work with faculty and students in the new major on activities such as research seminars, internships, and capstone classes. A steady flow of high quality interns would assist us in our current projects and would allow us to identify the best students for future employment.

The research seminars would give us an opportunity to suggest critical gaps in the existing knowledge base and could help shape policy and administration in the future.

Finally, we are very excited about the capstone class idea. Having multiple teams of students working on a project for an external client such as Albany Medical Center would expand the capacity of our organization and provide a great learning experience for the students.

In sum, we are looking forward to partnering with the new college on a host of research, teaching, and service projects. In particular, we look forward to working with students in the new major through internships, research seminars, and senior capstone classes. If you have questions, please do not hesitate to contact Scott Heller, AMC's Director of Emergency Management at (518)262-1071.

Sincerely,

James J. Barba, Esq.  
President and CEO  
Albany Medical Center





**Northeastern New York**  
33 Everett Road  
Albany, NY 12205  
Tel (518) 458-8111  
Fax (518) 459-8268  
[www.redcross.neny.org](http://www.redcross.neny.org)

January 4, 2016

Interim Dean David L. Rousseau  
College of Emergency Preparedness, Homeland Security and Cybersecurity  
University at Albany, State University of New York (SUNY)  
135 Western Avenue  
Albany, NY 12222

Dear Dean Rousseau:

I am delighted to write a letter in support of the College of Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany. I believe that the mission of the new college overlaps with the mission of our organization in many important ways. I was particularly interested to learn about the creation of the new undergraduate major and minor. I understand that students in the proposed major will be required to complete a research seminar, an internship, and senior year capstone course. I believe that we could be a valuable partner in all of these activities.

The mission of our organization is to help people and communities prepare for disasters and to respond when disasters occur. Our mission overlaps strongly with the mission of the proposed College. We are the primary not for profit disaster preparedness and response agency in New York State. We are constantly striving to find better ways to prepare both our organization and the public for disasters and looking at new and better ways of responding.

The three Red Cross regions in New York State work closely to ensure a coordinated response to any incidents taking part in our State. The diversity of the Red Cross regions in New York would allow students to experience how disaster planning and responses work from Manhattan to Plattsburgh. We also work within a national and divisional organizational structure. Opportunities for collaboration may exist beyond the boundaries of this region and state.

One central element of the curriculum for the new major is the focus on applied learning. We are excited about the opportunity to work with faculty and students in the new major on activities such as research seminars, internships, and capstone classes. A steady flow of high quality interns would assist us in our current projects and would allow us to identify the best students for future employment. A number of our current employees began work with us as college students.

Over 90 percent of our workforce is made up of volunteers so we are well equipped to utilize student volunteers. We would be able to use interns in a variety of ways including development of disaster plans, implementation of training programs and participation in actual responses.

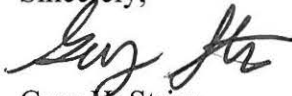
The research seminars would give us an opportunity to address critical gaps in the existing knowledge base and could help shape policy in the future. Our organization is interested in research questions such as ways to more effectively recruit, train and retain disaster volunteers, ways to measure the effectiveness of our work and ways to encourage disaster preparedness when disasters aren't top of mind.

Finally, we are very excited about the capstone class idea. Having multiple teams of students working on a project would expand the capacity of our agency and provide a great learning experience for the students. Our staff would be interested in capstone courses that examined a variety of issues such as grant opportunities to fund disaster work, the effectiveness of various training and preparedness techniques and best practices in our responses.

In sum, we are looking forward to partnering with the new college on a host of research, teaching, and service projects. In particular, we look forward to working with students in the new major through internships, research seminars, and senior capstone classes.

If you have questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "Gary Striar", written in a cursive style.

Gary H. Striar  
Regional Chief Executive Officer

**University at Albany**  
**New Program Proposal**  
**Emergency Preparedness, Homeland Security and Cybersecurity**

**Appendix 3 Curriculum Map**



Appendix 3 Curriculum Map		Student Learning Outcomes Evaluation Rubric – Major in Emergency Preparedness, Homeland Security and Cybersecurity								
	Risk Analysis	Critical Thinking	Communication	Problem Solving	Ethics	Diversity	Teamwork & Project Development	Homeland Security	Emergency Preparedness	Cybersecurity
CEHC 101: Intro to EP, HS & C	Debate Classroom participation	Debate Papers Exams	Debate Papers Exams	Debate Papers Exams	Debate Paper Exams	Debate Paper	Debate Classroom participation	Debate Papers Exams	Debate Papers Exams	Debate Papers Exams
CEHC 242: Cybersecurity	Paper; exam Qs; response papers; participation	Exam Qs; response papers; participation	Exam Qs; participation	Participation	Response papers; exam Qs					Exam Qs; response essays; paper; participation
CEHC 343: Homeland Security	RATs; exam Qs	Debate; papers; RAT; exam Qs	Debate; RAT; exam Qs	Debate; RATs; exam Qs	Debate; exam Qs	Exam Qs	tRATs; debates	Papers; RATs; exam Qs		
CEHC 344: Emergency Preparedness	Exam Qs; quizzes; simulation	Exam Qs; quizzes; paper	Exam Qs; quizzes; paper	Exam Qs; quizzes; simulation	Exam Qs; paper; simulation		Simulation		Quizzes; simulation; exam Qs; paper	
CEHC 210: Critical Inquiry and Communication in EHC	Exam Qs; papers; debates; participation	Exam Qs; papers; debates; participation	Exam Qs; papers; debates; participation	Exam Qs; papers; debates; participation	Exam Qs		Debates			
CEHC 345: Leadership and Ethics in EHC		Response essays; case studies; exam Qs	Response essays; case studies	Exam Qs; case studies	Response essays; case studies; participation; exam Qs	Response essays; case studies; participation; exam Qs	Case studies	Exam Qs; case studies	Exam Qs; case studies	Exam Qs; case studies
CEHC 310: Research Seminar in EHC		Exam Qs; report; research design; lit review	Exam Qs; report; research design; lit review	Exam Qs			Team eval; report; research design; lit review	All, if HS topic chosen	All, if EP topic chosen	All, if Cyber topic chosen
CEHC 390: Internship Experience in EHC	Vision statement and response	Posts	Guest speaker Qs; reading Q; presentation; posts	Outcome form; supervisor eval; student eval; posts	Supervisor eval; student eval; vision statement and response	Supervisor eval; student eval; vision statement and response	Supervisor eval; student eval; vision statement and response; presentation	All, if HS internship chosen	All, if EP internship chosen	All, if Cyber internship chosen
CEHC 410: Capstone Project in EHC	Lit review; oral presentation; written project	Lit review; oral presentation; written project	Lit review; oral presentation; written project	Lit review; oral presentation; written project			Lit review; oral presentation; written project; team evals			

**University at Albany**  
**New Program Proposal**  
**Emergency Preparedness, Homeland Security and Cybersecurity**

**Appendix 4    Sample program schedules and curriculum**

BA in Emergency Preparedness, Homeland Security and Cybersecurity with a  
Concentration in Emergency Preparedness

BA in Emergency Preparedness, Homeland Security and Cybersecurity with a  
Concentration in Homeland Security

BS in Emergency Preparedness, Homeland Security and Cybersecurity with a  
Concentration in Cybersecurity

## SUNY Undergraduate Sample Program Schedule

Campus Name	University at Albany, State University of New York								
Program/Track Title and Award	BA Emergency Preparedness, Homeland Security and Cybersecurity - Emergency Preparedness Concentration								
Calendar Type	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Semester</td> <td style="width: 25%;">Quarter</td> <td style="width: 25%;">Trimester</td> <td style="width: 25%;">Other</td> </tr> <tr> <td style="text-align: center;">X</td> <td></td> <td></td> <td></td> </tr> </table>	Semester	Quarter	Trimester	Other	X			
Semester	Quarter	Trimester	Other						
X									
SUNY Transfer Path Name (if one exists)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="height: 20px;"></td> </tr> </table>								

<----- Use Dropdown Arrow.

Use the table to show how a typical student may progress through the program. Check all columns that apply to a course or enter credits where applicable.

**KEY** Course Type: Required (R), Restricted Elective (RE), Free Elective (FE). Course Credits: Number of Credits for individual course (Enter number.) GER Area: SUNY General Education Requirement Area (Enter Area Abbreviation from the drop-down menu.) GER Credits: (Enter number of course credits.) LAS: Liberal Arts & Sciences Credits (Enter X if course is an LAS course.) Major: Major requirement (Enter X.) TPath: SUNY Transfer Path Major & Cognate Courses (Enter X.) Elective/Other: Electives or courses other than specified categories (Enter X.) Upper Div: Courses intended primarily for juniors and seniors outside of the major (Enter X.) Upper Div Major: Courses intended primarily for juniors and seniors within the major (Enter X.) New: new course (Enter X.) Co/Prerequisite(s): List co/prerequisite(s) for the noted courses. SUNY GER Area Abbreviations (the first five listed in order of their frequency of being required by SUNY campuses): Basic Communication (BC), Math (M), Natural Sciences (NS), Social Science (SS), Humanities (H), American History (AH), The Arts (AR), Other World Civilizations (OW), Western Civilization (WC), Foreign Language (FL).

The table will automatically update the number of credits, courses and categories in the program totals table at the bottom of the chart.

Label each term in sequence, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2).

Fall 1:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC/RPAD 101 Introduction to Emergency Preparedness, Homeland Security & Cybersecurity - R	3	SS	X	X	X						
Arts Gen Ed Elective - RE	3	AR	X	X							
Natural Science Gen Ed Elective - RE	3	NS	X	X							
Liberal Arts - RE	3			X		X					
Free Elective - FE	3					X					
<b>Term Totals</b>	<b>15</b>	<b>3</b>	<b>9</b>	<b>12</b>	<b>3</b>	<b>6</b>					<b>(X)</b>
Spring 1:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
Emergency Preparedness Concentration Elective* - RE	3			X	X						
Basic Communication Gen Ed - RE	3	BC	3	X							
US Historical Perspectives Gen Ed Elective - RE	3	AH	3	X							
Gen Ed Elective - RE	3		3	X							
Free Elective - FE	3					X					
<b>Term Totals</b>	<b>15</b>	<b>2</b>	<b>9</b>	<b>12</b>	<b>3</b>	<b>3</b>					<b>(X)</b>
Fall 2:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 210 Critical Inquiry and Communication in Emergency Preparedness, Homeland Security & Cybersecurity - R	3			X	X					X	
Emergency Preparedness Concentration Elective* - RE	3			X	X						
Math Gen Ed Elective - RE	3	M	3	X							
Foreign Language Gen Ed Elective- RE	3	FL	3	X							
Humanities Gen Ed Elective - RE	3	H	3	X							
<b>Term Totals</b>	<b>15</b>	<b>3</b>	<b>9</b>	<b>15</b>	<b>6</b>					<b>1</b>	<b>(X)</b>
Spring 2:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 242 Cybersecurity - R	3			X	X					X	
CEHC/RPAD/RPOS 343 Homeland Security - R	3			X	X		X	X			
Minor Course (Minor required) - RE	3					X					
International Perspectives Gen Ed Elective - RE	3	OW	3	X							
Free Elective - FE	3					X					
<b>Term Totals</b>	<b>15</b>	<b>1</b>	<b>3</b>	<b>9</b>	<b>6</b>	<b>6</b>	<b>3</b>	<b>3</b>		<b>1</b>	<b>(X)</b>

Fall 3:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
Emergency Preparedness Concentration Elective* - RE	3			X	X		X	X			
CEHC/RPAD 344 Emergency Preparedness - R	3			X	X		X	X			
Minor Course - RE	3					X					
Liberal Arts Elective - RE	3			X		X					
Liberal Arts Elective - RE	3			X		X					
<b>Term Totals</b>	<b>15</b>			<b>12</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>6</b>			<b>(X)</b>

Spring 3:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 390 Internship in Emergency Preparedness,Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC101; Junior/Senior Standing
CEHC 345 Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	
Emergency Preparedness Concentration Elective* - RE	3			X	X		X	X			
Minor Course - RE	3					X					
Liberal Arts Elective - RE	3			X		X					
<b>Term Totals</b>	<b>15</b>			<b>12</b>	<b>9</b>	<b>6</b>	<b>9</b>	<b>9</b>		<b>2</b>	<b>(X)</b>

Fall 4:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 310 Research Seminar Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC 101, CEHC 210
Minor Course - RE	3					X	X				
Minor Course - RE	3					X	X				
Liberal Arts Elective - RE	3			X		X					
Upper level Elective - RE	3					X	X				
<b>Term Totals</b>	<b>15</b>			<b>6</b>	<b>3</b>	<b>12</b>	<b>12</b>	<b>3</b>		<b>1</b>	<b>(X)</b>

Spring 4:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 410 Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC 210, CEHC 310
Minor Course	3					X	X				
Upper level Liberal Arts Elective - RE	3			X		X	X				
Upper level Liberal Arts Elective - RE	3			X		X	X				
Upper level Liberal Arts Elective - RE	3			X		X	X				
Non-Credit Training Portfolio - R					X					X	
<b>Term Totals</b>	<b>15</b>			<b>12</b>	<b>3</b>	<b>12</b>	<b>15</b>	<b>3</b>		<b>2</b>	<b>(X)</b>

*Emergency Preparedness Concentration Electives:											
CEHC 393 Simulation: Building Security and Preparedness			AUSP/AGOG 430 Environmental Planning			HSPH 341 Promoting Healthy People and Communities					
CEHC/RPAD 455 Disaster, Crisis and Emergency Management and Policy			AUSP 456/AGOG 496 Geographic Information Systems			RPAD/RPOS 140 Introduction to Public Policy					
CEHC/RPAD 471 Military Forces in Support of Civil Authorities			AUSP 474 Site Planning			RPOS/RPAD 321 State and Local Government					
RPAD/CEHC 472 Disaster and Crisis Management in the Public,Private and Non profit Sectors			AUSP 475 Urban Design			RPOS 336 Civil Liberties					
AATM 100 The Atmosphere			AGOG 290 Introduction to Cartography								
AATM 103 Introduction to Climate Change			AGOG 484 Remote Sensing I								
AATM 107 The Oceans			HSPH 201 Introduction to Public Health								
AATM 200 Natural Disasters			HSPH 231 Concepts in Epidemiology								
AENV/AGEO 105 Introduction to Environmental Science			TSPH/RPOS/RPAD 272 Health and Human Rights: An Interdisciplinary Approach								
AUSP 201 Introductory Urban Planning			HSPH 321 Global Environmental Issues and Their Effect on Human Health								
AUSP 3152 State and Regional Planning			HSPH 323 Environmental Laboratory Perspectives in Public Health								

Program Total Summary

Total Credits	SUNY GER Areas	SUNY GER Credits	Liberal Arts & Sciences Credits	Major Credits	Elective and Other Credits	Upper Division Credits	Upper Division Major Credits	Total TPath Courses	New Courses
120	9	30	90	39	54	45	24		7

GER Area Summary

Basic Communication (BC)		The Arts (AR)	1
Mathematics (M)	1	American History (AH)	1
Natural Sciences (NS)	1	Western Civilization (WC)	
Social Sciences (SS)	1	Other World Civilizations (OW)	
Humanities (H)	1	Foreign Language (FL)	7

## SUNY Undergraduate Sample Program Schedule

Campus Name	University at Albany, State University of New York
Program/Track Title and Award	BA Emergency Preparedness, Homeland Security and Cybersecurity - Homeland Security Concentration

Semester	Quarter	Trimester	Other
X			

Calendar Type	
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SUNY Transfer Path Name (if one exists)	
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<----- Use Dropdown Arrow.

Use the table to show how a typical student may progress through the program. Check all columns that apply to a course or enter credits where applicable.

**KEY** Course Type: Required (R), Restricted Elective (RE), Free Elective (FE). Course Credits: Number of Credits for individual course (Enter number.) GER Area: SUNY General Education Requirement Area (Enter Area Abbreviation from the drop-down menu.) GER Credits: (Enter number of course credits.) LAS: Liberal Arts & Sciences Credits (Enter X if course is an LAS course.) Major: Major requirement (Enter X.) TPath: SUNY Transfer Path Major & Cognate Courses (Enter X.) Elective/Other: Electives or courses other than specified categories (Enter X.) Upper Div: Courses intended primarily for juniors and seniors outside of the major (Enter X.) Upper Div Major: Courses intended primarily for juniors and seniors within the major (Enter X.) New: new course (Enter X.) Co/Prerequisite(s): List co/prerequisite(s) for the noted courses. SUNY GER Area Abbreviations (the first five listed in order of their frequency of being required by SUNY campuses): Basic Communication (BC), Math (M), Natural Sciences (NS), Social Science (SS), Humanities (H), American History (AH), The Arts (AR), Other World Civilizations (OW), Western Civilization (WC), Foreign Language (FL).

The table will automatically update the number of credits, courses and categories in the program totals table at the bottom of the chart.

Label each term in sequence, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2).

Fall 1:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC/RPAD 101 Introduction to Emergency Preparedness, Homeland Security & Cybersecurity - R	3	SS	X	X	X						
Arts Gen Ed Elective - RE	3	AR	X	X							
Natural Science Gen Ed Elective - RE	3	NS	X	X							
Free Elective - FE	3					X					
Liberal Arts Elective - RE	3			X		X					
<b>Term Totals</b>	<b>15</b>	<b>3</b>	<b>9</b>	<b>12</b>	<b>3</b>	<b>6</b>					<b>(X)</b>
Spring 1:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
Homeland Security Concentration Elective* - RE	3			X	X						
Basic Communication Gen Ed - RE	3	BC	3	X							
US Historical Perspectives Gen Ed - RE	3	AH	3	X							
Gen Ed Elective - RE	3		3	X							
Liberal Arts Elective - RE	3			X		X					
<b>Term Totals</b>	<b>15</b>	<b>2</b>	<b>9</b>	<b>15</b>	<b>3</b>	<b>3</b>					<b>(X)</b>
Fall 2:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 210 Critical Inquiry and Communication in Emergency Preparedness, Homeland Security & Cybersecurity - R	3			X	X					X	
Homeland Security Concentration Elective* - RE	3			X	X						
Math Gen Ed Elective - RE	3	M	3	X							
Foreign Language Gen Ed Elective - RE	3	FL	3	X							
Humanities Gen Ed - RE	3	H	3	X							
<b>Term Totals</b>	<b>15</b>	<b>3</b>	<b>9</b>	<b>15</b>	<b>6</b>					<b>1</b>	<b>(X)</b>
Spring 2:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 242 Cybersecurity - R	3			X	X					X	
CEHC/RPAD 343 Homeland Security - R	3			X	X		X	X			
Minor Course (Minor required) - RE	3					X					
International Perspectives Gen Ed Elective - RE	3	OW	3	X							
Liberal Arts Elective - RE	3			X		X					
<b>Term Totals</b>	<b>15</b>	<b>1</b>	<b>3</b>	<b>12</b>	<b>6</b>	<b>6</b>	<b>3</b>	<b>3</b>		<b>1</b>	<b>(X)</b>

Fall 3:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
Homeland Security Concentration Elective* - RE	3			X	X		X	X			
CEHC/RPAD 344 Emergency Preparedness - R	3			X	X		X	X			
Minor Course - RE	3					X					
Free Elective - FE	3					X					
Free Elective - RE	3					X					
<b>Term Totals</b>	<b>15</b>			<b>6</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>6</b>			<b>(X)</b>

Spring 3:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 390 Internship in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC101; Junior/Senior Standing
CEHC 345 Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	
Homeland Security Concentration Elective* - RE	3			X	X		X	X			
Minor Course - RE	3					X					
Liberal Arts Elective - RE	3			X		X					
<b>Term Totals</b>	<b>15</b>			<b>12</b>	<b>9</b>	<b>6</b>	<b>9</b>	<b>9</b>		<b>2</b>	<b>(X)</b>

Fall 4:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 310 Research Seminar Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC 101, CEHC 210
Minor Course - RE	3					X	X				
Minor Course - RE	3					X	X				
Free Elective - FE	3					X					
Upper level Liberal Arts Elective - RE	3			X		X	X				
<b>Term Totals</b>	<b>15</b>			<b>6</b>	<b>3</b>	<b>12</b>	<b>12</b>	<b>3</b>		<b>1</b>	<b>(X)</b>

Spring 4:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 410 Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC 210, CEHC 310
Minor Course	3					X	X				
Upper level Liberal Arts Elective - RE	3			X		X	X				
Upper level Liberal Arts Elective - RE	3			X		X	X				
Upper level Liberal Arts Elective - RE	3			X		X	X				
Non-Credit Training Portfolio - R					X					X	
<b>Term Totals</b>	<b>15</b>			<b>12</b>	<b>3</b>	<b>12</b>	<b>15</b>	<b>3</b>		<b>2</b>	<b>(X)</b>

\*Homeland Security Concentration Electives: new courses in Italics

CEHC 320 *Psychology of Terrorism*  
CEHC 321 *Human Trafficking*  
CEHC 325 *Critical Infrastructure*  
CEHC 324 *Civil Liberties in Context: Emergency Preparedness, Homeland Security & Cybersecurity*  
CEHC 355 *Comparative Homeland Security*  
CEHC 356 *Transnational Crime*  
CEHC 393 *Simulation: Building Security and Preparedness*  
CEHC/RPAD 456 *Homeland Security Intelligence*  
CEHC/RPAD 457 *Intelligence Analysis for Homeland Security*  
CEHC/RPAD 459 *Homeland Security:Building Preparedness Capabilities*

RCRJ 201 Introduction to Criminal Justice Process  
RCRJ 202 Introduction to Law and Criminal Justice  
RCRJ/ASOC 203 Criminology  
RCRJ 281 Introduction to Statistics in Criminal Justice  
RCRJ 351 Policing in a Free Society  
RCRJ 353/RPOS 363 American Criminal Courts  
RCRJ 401 Crime Deviation and Conformity  
RCRJ 417 Cross-National Crime  
RCRJ 418 Information and Misuse in Criminal Justice  
RPOS/RPAD 140 Introduction to Public Policy  
TPOS 260 Political Violence

TPOS 261Y/ RPOS 361 Comparative Ethnicity  
RPOS/RPAD 316 Methodological Tools for Public Policy  
RPOS 320 American Federalism  
RPOS 360 Violent Political Conflict

Program Total Summary

GER Area Summary

Total Credits	SUNY GER Areas	SUNY GER Credits	Liberal Arts & Sciences Credits	Major Credits	Elective and Other Credits	Upper Division Credits	Upper Division Major Credits	Total TPath Courses	New Courses
120	9	30	90	39	54	45	24		13
Basic Communication (BC)					The Arts (AR)		1		
Mathematics (M)					American History (AH)		1		
Natural Sciences (NS)					Western Civilization (WC)				
Social Sciences (SS)					Other World Civilizations (OW)		1		
Humanities (H)					Foreign Language (FL)		1		

## SUNY Undergraduate Sample Program Schedule

<b>Campus Name</b>	University at Albany, State University of New York
<b>Program/Track Title and Award</b>	BS Emergency Preparedness, Homeland Security and Cybersecurity - Cybersecurity Concentration

Semester	Quarter	Trimester	Other
X			

**Calendar Type**

**SUNY Transfer Path Name (if one exists)**

<----- Use Dropdown Arrow.

Use the table to show how a typical student may progress through the program. Check all columns that apply to a course or enter credits where applicable.

**KEY** Course Type: Required (R), Restricted Elective (RE), Free Elective (FE). Course Credits: Number of Credits for individual course (Enter number.) GER Area: SUNY General Education Requirement Area (Enter Area Abbreviation from the drop-down menu.) GER Credits: (Enter number of course credits.) LAS: Liberal Arts & Sciences Credits (Enter X if course is an LAS course.) Major: Major requirement (Enter X.) TPath: SUNY Transfer Path Major & Cognate Courses (Enter X.) Elective/Other: Electives or courses other than specified categories (Enter X.) Upper Div: Courses intended primarily for juniors and seniors outside of the major (Enter X.) Upper Div Major: Courses intended primarily for juniors and seniors within the major (Enter X.) New: new course (Enter X.) Co/Prerequisite(s): List co/prerequisite(s) for the noted courses. SUNY GER Area Abbreviations (the first five listed in order of their frequency of being required by SUNY campuses): Basic Communication (BC), Math (M), Natural Sciences (NS), Social Science (SS), Humanities (H), American History (AH), The Arts (AR), Other World Civilizations (OW), Western Civilization (WC), Foreign Language (FL).

The table will automatically update the number of credits, courses and categories in the program totals table at the bottom of the chart.

Label each term in sequence, consistent with the institution's academic calendar (e.g., Fall 1, Spring 1, Fall 2).

Fall 1:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC/RPAD 101 Introduction to Emergency Preparedness, Homeland Security & Cybersecurity - R	3	SS	X	X	X						
Arts Gen Ed Elective - RE	3	AR	X	X							
Natural Science Gen Ed Elective - RE	3	NS	X	X							
Liberal Arts Elective - RE	3			X		X					
Free Elective - FE	3					X					
<b>Term Totals</b>	<b>15</b>	<b>3</b>	<b>9</b>	<b>12</b>	<b>3</b>	<b>6</b>					(X)
Spring 1:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
Cybersecurity Concentration Elective * - RE	3				X						
Basic Communication Gen Ed - RE	3	BC	3	X							
US Historical Perspectives Gen Ed Elective - RE	3	AH	3	X							
Gen Ed Elective - RE	3		3	X							
Free Elective - FE	3					X					
<b>Term Totals</b>	<b>15</b>	<b>2</b>	<b>9</b>	<b>9</b>	<b>3</b>	<b>3</b>					(X)
Fall 2:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 210 Critical Inquiry and Communication in Emergency Preparedness, Homeland Security & Cybersecurity - R	3			X	X					X	
Cybersecurity Concentration Elective * - RE	3				X						
Math Gen Ed Elective - RE	3	M	3	X							
Foreign Language Gen Ed Elective - RE	3	FL	3	X							
Humanities Gen Ed Elective- RE	3	H	3	X							
<b>Term Totals</b>	<b>15</b>	<b>3</b>	<b>9</b>	<b>12</b>	<b>6</b>					<b>1</b>	(X)
Spring 2:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 242 Cybersecurity - R	3			X	X					X	
CEHC/RPAD/RPOS 343 Homeland Security - R	3			X	X		X	X			
Minor Course (Minor required) - RE	3					X					
International Perspectives Gen Ed Elective - RE	3	OW	3	X							
Liberal Arts Elective - RE	3			X		X					
<b>Term Totals</b>	<b>15</b>	<b>1</b>	<b>3</b>	<b>12</b>	<b>6</b>	<b>6</b>	<b>3</b>	<b>3</b>		<b>1</b>	(X)

Fall 3:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
Cybersecurity Concentration Elective *- RE	3				X		X	X			
CEHC/RPAD 344 Emergency Preparedness - R	3			X	X		X	X			
Minor Course - RE	3					X					
Free Elective - FE	3					X					
Free Elective - FE	3					X					
Term Totals	15			3	6	9	6	6			(X)
Spring 3:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 390 Internship in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC101; Junior/Senior Standing
CEHC 345 Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	
Cybersecurity Concentration Elective *- RE	3				X		X	X			
Minor Course - RE	3					X					
Free Elective - FE	3					X					
Term Totals	15			6	9	6	9	9		2	(X)
Fall 4:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 310 Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC 101, CEHC 210
Minor Course - RE	3					X	X				
Minor Course - RE	3					X	X				
Free Elective - FE	3					X					
Upper Level Elective - RE	3					X	X				
Term Totals	15			3	3	12	12	3		1	(X)
Spring 4:											
Course Number & Title (& Type)	Number of Credits	GER Area	GE Credits	LAS	Major	Elective/Other	Upper Div	Upper Div Major	TPath	New Course	Co/Prerequisite
CEHC 410 Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity - R	3			X	X		X	X		X	CEHC 210, CEHC 310
Minor Course	3					X	X				
Upper Level Elective - RE	3					X	X				
Upper Level Elective - RE	3					X	X				
Upper Level Elective - RE	3					X	X				
Non-Credit Training Portfolio - R					X					X	
Term Totals	15			3	3	12	15	3		2	(X)
*Cybersecurity Concentration Electives: BFOR 100 Introduction to Information Systems BFOR 201 Introduction to Digital Forensics BFOR 202 Cyber Crime Investigations BFOR 203 Networking: Introduction to Data Communication BFOR 204 Fundamentals of Information and Cybersecurity											
			BFOR 300 Databases for Digital Forensics BFOR 410 International Cyber Conflicts BFOR 412 Cyber Incident Analysis ICSI 124X Computer Security Basics			IINF 202 Introduction to Data and Databases IINF 306 Information Security and Assurance CEHC/RPAD 445 Principles and Practices of Cyber Security CEHC/RPAD 449 Cyber Security: Long Term Planning and Risk Management CEHC/RPAD 469 Cyber Threats and Intelligence					

Program Total Summary

Total Credits	SUNY GER Areas	SUNY GER Credits	Liberal Arts & Sciences Credits	Major Credits	Elective and Other Credits	Upper Division Credits	Upper Division Major Credits	Total TPath Courses	New Courses
120	9	30	60	39	54	45	24		7
Basic Communication (BC)			1	The Arts (AR)			1		
Mathematics (M)			1	American History (AH)			1		
Natural Sciences (NS)			1	Western Civilization (WC)					
Social Sciences (SS)			1	Other World Civilizations (OW) 1					
Humanities (H)			1	Foreign Language (FL)			1		



**University at Albany**  
**New Program Proposal**  
**Emergency Preparedness, Homeland Security and Cybersecurity**

**Appendix 5**

**Course Catalog Descriptions for Existing Courses in the Emergency  
Preparedness, Homeland Security and Cybersecurity Major**

**AATM 100 The Atmosphere (3)**

Non-technical survey of the atmosphere; the physical environment of society and its historical development; intentional and unintentional modifications of the environment; cloud types and structure; severe storms; weather forecasting; air pollution; major wind and weather systems. Does not yield credit toward the B.S. in atmospheric science. Three lectures per week.

**AATM 103 Introduction to Climate Change (3)**

An introduction to the current scientific understanding of Earth's climate, climate change and climate variability; factors that determine climate, climate in the past, and Earth system connections; exposition of scientific observation, theory, and modelling that are used to make scientific predictions of climate outcomes and potential societal choices; examination of climate change impacts at local, regional, and global scales including environmental, societal and economic impacts; consideration of different approaches to deal with climate change, including mitigation and adaptation. Does not yield credit toward the B.S. in atmospheric science.

**AATM 107 The Oceans (3)**

Introductory survey of the physical, chemical, geological, and biological processes in the marine environment; promise and problems of the oceans as a natural resource. Does not yield credit toward the B.S. in atmospheric science. Three lectures each week. Offered fall semester only.

**AATM 200 Natural Disasters (3)**

Disasters due to natural phenomena such as climate change, hurricanes, tornadoes, earthquakes, tsunami, volcanic eruptions, asteroid/comet impacts, and mass extinctions are examined from an environmental perspective; each type of event will be characterized in terms of its origin, evolution, warning potential, range of significant environmental impacts and possible mitigation strategies; historical case studies will be analyzed; additional student selected topics may include ice storms, blizzards, landslides, avalanches, floods, drought, fire, heat and cold waves. Does not yield credit toward the B.S. in atmospheric science. Three lectures per week.

**AENV 105 (=AGEO 105) Introduction to Environmental Science (3)**

Survey of contemporary environmental issues related to health and disease, nuclear waste disposal, water resources, energy use and conservation, land reclamation, global climate change, and industrial pollution. Scientific principles and data needed for gaining an understanding of environmental challenges on local, regional, and global scales will be emphasized. Three lectures per week. Only one version of A ENV 105 may be taken for credit. Offered spring semester only.

**AGOG 290 Introduction to Cartography**

An introductory course in the theory and techniques of map production. Reviews and discusses the elements of cartographic theory including the relationships between human perception and map symbology. Students will produce a series of hand-drafted maps over the duration of the course.

**AGOG 484 (formerly AGOG 385) Remote Sensing I (3)**

Introduction to the concepts and interdisciplinary applications of remote sensing. The basic principles of theory and practice are presented for earth resource management. Photographic and non-photographic sensors are examined. Visual and digital image analysis techniques are introduced. Students will interpret color infrared, multispectral, and other sensor imagery for a variety of purposes. May not be taken by students with credit for A GOG 385. Prerequisite(s):

junior or senior standing, or permission of instructor.

**AGOG 496 (= A USP 456) Geographic Information Systems (3)**

Introduction to the structure, design, and application of data base management systems designed to accept large volumes of spatial data derived from various sources. The student will learn how to efficiently store, retrieve, manipulate, analyze, and display these data according to a variety of user-defined specifications. Prerequisite(s): familiarity with maps and coordinate systems.

**A USP 201 (formerly APLN 220) Introductory Urban Planning (3)**

Introduces the basic concepts and techniques of urban planning and provides an overview of planning history. Covers land use, transportation, environment, urban design, economic development, and social issues. Explores the connections between planning and politics, economic restructuring, social change, and competing ideologies of urban form.

**A USP 315Z (formerly APLN 315Z) State and Regional Planning (3)**

Reviews the theory and practice of state and regional planning in the United States, evaluating a range of contemporary examples. Covers metropolitan regional planning, river basin planning, regional water resource management, state planning and growth management, and environmental impact assessment. Prerequisite(s): A USP 201.

**A USP 430/430Z (formerly APLN 430/430Z) (= A GOG 430/430Z) Environmental Planning (3)**

Environmental planning is much more than preservation of pristine land. Through the examination of environmental movements, energy policy, the land use-transportation nexus, environmental justice, and environmental policy formation, at the end of this course, students will be able to: (1) identify how normative bias influences planning and policy choices; (2) describe major conflicts in environmental planning and policy; and (3) understand the relationship of scale and environmental planning/policy options. Only one version of A USP 430 may be taken for credit. Prerequisite(s): A USP 201 or permission of instructor.

**A USP 474 (formerly APLN 474) Site Planning (3)**

This course is designed as a workshop for students to be introduced to the practical aspects of site planning – a specific site in the region is studied and plans developed for future new use or renewal of the site. Experience is gained in recording site conditions, use; influence of microclimate, landform; condition of existing building on the site and adjacent to it. The site is analyzed for future potential within the context of existing community policies and regulations. Alternative proposals for future use are drawn up and evaluated for appropriateness, context, and design quality. During the course students will record, photograph, annotate site information, draw up plans to scale, develop a concise planning report incorporating data, analysis, and plan. Team work is encouraged, with small teams organized to develop projects.

**A USP 475 (formerly APLN 475) Urban Design (3)**

Urban design focuses on “the space between the buildings.” Effective treatment of this space in projects and their environs is important for a host of aesthetic, social, and functional reasons, but above all because it is linked to something more abstract and more important: the public realm of civil, political, and social interaction. This course provides a broad theoretical introduction to urban design integrating three perspectives: historical patterns and practices in architecture and planning; findings in the social and behavioral sciences relevant to small urban spaces; and

contemporary design criteria and practice. Analytical writing, design proposals, and a field trip are required. Prerequisite(s): AGOG/AUSP 125 or AGOG/AUSP 220 or AUSP 201.

### **BFOR 100 Introduction to Information Systems (3)**

This course provides a foundation of information systems concepts that can be applied to future learning in advanced topics. The course will include background in the history and social implications of computing including cyber ethics; emergent and contemporary information technology and its nomenclature; information and data abstraction, representation, manipulation and storage; operating systems; networking and the Internet, programming languages, logic, and algorithms; database systems; digital graphics and multimedia; and information security.

### **BFOR 201 (formerly BITM 201) Introduction to Digital Forensics (3)**

In this course, students will learn the fundamental process of analyzing data collected from electronic devices (including computers, media, and other digital evidence). Students will become familiar with proper techniques and tools utilized for securing, handling and preserving digital and multimedia evidence at physical crime scenes. Students will utilize examination and chain of custody forms, as well as prepare crime scene and digital acquisition reports related to administrative, civil and criminal investigations. Only one version of B FOR 201 may be taken for credit. Offered fall and spring semesters.

### **BFOR 202 (formerly BITM 202) Cyber Crime Investigations (3)**

This course will teach students forensic investigative techniques specifically for managing cyber crimes including collection and preservation of data from different sources, such as the Internet and "cloud" computing environments. Students will learn the legal processes available for collecting and preserving such evidence in conducting cyber investigations. Only one version of B FOR 202 may be taken for credit. Offered fall semester only.

### **BFOR 203 Networking: Introduction to Data Communication (3)**

The past couple of decades have witnessed the digital revolution profoundly altering our society. Most of the business affairs have been linked to communication and networking technologies. With tremendous advances in networking, it is now feasible to connect all the devices such as computers, tablets, smart phones, and mainframes together. However, the newly innovative communication and networking technologies pose additional challenges to business and IT management. Nowadays, IT professionals must have an elementary understanding of those technologies that facilitate them better impose management in the organization or perform advanced analysis such as for network forensics. Balanced technical and managerial contents are incorporated to enable students to learn from various perspectives. This course will introduce the student to the organization and design of data networks. Topics include networking media, Ethernet technology, the TCP/IP protocol suite, subnets, routers and routing protocols, Wide Area Networks (WANs), and fundamentals of network management. This course includes hands-on experience of networking techniques. Offered fall semester only.

### **BFOR 204 Fundamentals of Information and Cybersecurity (3)**

This course covers computer and network security. This course will examine general security concepts that include: communication security, infrastructure security, operation/organizational security, basic cryptography and steganography. Students will learn and apply de facto security best practices administering clients, servers and firewalls in a dedicated computer network

laboratory. Students will have the opportunity to assess vulnerabilities and administer information security. Offered spring semester only.

### **BFOR 300 Databases for Digital Forensics (3)**

A large part of digital forensics deals with extraction and collection of data across electronic devices each of which has different architecture. In this class students learn the traditional relational database design and then understand the architecture of data storage in mobile electronic devices. The class also discusses in depth the storage of data on the cloud and the ramifications of that on digital forensics. Students also learn the basic techniques for analyzing data including use of Structured Query Language, data mining techniques and social network analysis. Students will also use scripting languages to efficiently clean up data from text files and extract information from files. Prerequisite(s): B FOR 100 or permission of instructor. Offered fall semester only.

### **BFOR 410 International Cyber Conflicts (3)**

Cybersecurity is an international problem where the perpetrators and victims of attacks may be in completely disparate locations. Cyber-attacks have morphed from cybercrime and amateur display of prowess into cyber warfare and espionage among nations. While the issues are international there is little consensus on how to investigate them, create universally acceptable norms, and create international laws across multiple countries to manage them. This course discusses some of these sensitive issues regarding information security and cyber warfare. The hope is to improve understanding between professionals and students across countries in order to foster cooperation in resolving cyber conflicts. The class will include cases and discussions that will touch on the sensitive security related topics.

### **BFOR 412 Cyber Incident Analysis (3)**

This course will discuss detection, management, and recovery from different types of incidents. The goal of this course is to provide students with a method for performing cyber incident analysis. Real incident data will be used to illustrate different incident analysis techniques. Students will learn to identify the data sources, e.g. log files, and how to process the data into a meaningful analysis format. The class will cover analysis of individual files as well as techniques to correlate information across multiple log sources to build a chain of evidence across those log files. Prerequisite(s): B FOR 100 and B FOR 204 or permission of the instructor.

### **CEHC 101 (= RPAD 101) Introduction to Emergency Preparedness, Homeland Security and Cybersecurity (3)**

From hackers to hurricanes, suicide bombing to supply chain interruptions, infrastructure failures to infectious disease outbreaks, the nation's governments, companies and non-profits must prepare for, protect against, respond to, and recover from a growing array of risks and threats. The fields of emergency preparedness, homeland security and cybersecurity are central to those efforts, and there is an ever growing demand for individuals prepared in these areas. Through lectures, discussion, and case studies, students in this course will develop a broad theoretical, substantive, and practical understanding of the fields of emergency preparedness, homeland security and cybersecurity. Students will be exposed to various ways to think about, measure, assess and compare risks, as well as how to mitigate them and respond to incidents that do occur. The three disciplines will be explored through the crosscutting themes that tie them together, including prevention, incident management and response, crisis communication, recovery and resiliency.

**CEHC 343 (= RPAD 343 & RPOS 343) Homeland Security (3)**

This undergraduate survey course introduces students to the US government response to the attacks of September 11, 2001, specifically, the second largest reorganization of the executive branch that produced the US Department of Homeland Security. Topics examined include border and transportation security, customs, immigration policy and enforcement; preparedness and capabilities building, response and resilience; critical infrastructure protection; threat and vulnerability assessment and risk management; cyber security; counter-terrorism. Although the course is primarily focused on US federal government activities, it will also examine state and local dimensions of homeland security as well as US government interactions with other countries in the homeland security domain. Only one version may be taken for credit.

**CEHC 344 (= RPAD 344) Emergency Preparedness (3)**

This course provides a study of applicable policies, protocols, and laws that impact the practice of emergency preparedness at the federal, state, and local levels of government. The study includes a brief review of the history of emergency management setting the stage for an examination of "best practices" and philosophies. These drive the nation's preparedness, response, recovery, and mitigation efforts of various levels of emergencies and disasters which in turn helps facilitate a community's resilience in the face of disasters. The methodology used in this course includes classroom discussions and activities, studies of applicable case studies, and individual exploration resulting in a well crafted paper. Where applicable, simulation activities provide opportunities for the student to "experience" realistic situations similar to real-world emergencies and disaster operations. Prerequisite(s): R PAD/C EHE 101, Introduction to Emergency Preparedness, Homeland Security and Cybersecurity, recommended.

**CEHC 393 Simulation: Building Security and Preparedness (3)** Play the role of emergency manager in this unique simulation-based course. This intensive course provides the student with an opportunity to blend "practice" with "theory" through a mix of high-end simulations and other blended learning activities. The course will focus on incident command and control, emergency operations center activities, and catastrophic event policy level decision-making. It is being developed and delivered in close partnership with the National Center for Security and Preparedness (NCSP). It will be a blended course, with ~75% online and ~25% in person. Prerequisite(s): junior or senior class standing or permission of instructor.

**CEHC 445 (= RPAD 445) Principles and Practices of Cyber Security (3)**

This course provides a broad introduction to cybersecurity and the way in which cybersecurity is viewed, studied, or executed by professionals in industry, government, the military, and academia. For students that approach the topic from a policy management perspective, this class will enhance their understanding of the interaction between social, technical, policy, and management factors that affect the creation and management of secure cyber infrastructure. A brief introduction to the technical side of cybersecurity will be provided. The course will offer technically advanced students an opportunity to better understand management, policy, and political equities involved in cybersecurity. Students approaching the subject from either the technical or policy/management perspective will be equipped to take more advanced technical courses in a multitude of disciplines that make up cybersecurity. Prerequisite(s): junior or senior class standing or permission of instructor.

**CEHC 449 (= RPAD 449) Cyber Security: Long Term Planning and Risk Management (3)**

The goal of this course is to equip decision makers with the principles and methods that will allow for more informed budget decisions as it relates to cybersecurity. First this class will review budgeting basics as well as the core of budgeting for information technology and cybersecurity. Then the class will examine risk management as a total program component of cybersecurity as well as apply it to the budgeting process. Finally the class will take a comprehensive approach to managing IT/IS projects from a risk management, budgeting, and procurement point of view. Prerequisite(s): junior or senior standing or permission of instructor.

**CEHC 455 (= RPAD 455) Disaster, Crisis and Emergency Management and Policy (3)**

The course studies the policies, statutes and priorities established by federal, state, and local governments to plan and prepare for emergencies, disasters, and catastrophic events caused by nature, technology, or humans. The course's scope will include all mission areas established by the U.S. Department of Homeland Security and prioritized by the the New York State Division of Homeland Security and Emergency Services as an example of state policies. The course will rely heavily upon primary source documents, and will involve simulations. Prerequisite(s): junior or senior class standing or permission of instructor.

**CEHC 456 (= RPAD 456) Homeland Security Intelligence (3)**

This course examines homeland security intelligence at the Federal, State, and local levels. It begins with an overview of the U.S. foreign intelligence community, its mission, history, structure, and capabilities. The course will examine how this community's composition and structure have changed as its mission was fundamentally altered twice, first with the end of the Cold War and then with the rise of terrorism. Next, it looks at the capabilities of new producers of terrorism related intelligence at Federal law enforcement agencies and at the Department of Homeland Security. The main thrust of the course is intelligence at the State and local levels. The Federal government has worked with the states to create significant intelligence capabilities outside the beltway since the events of 9/11/2001. This course identifies and discusses the State and local customers for homeland security intelligence and examines the degree to which these intelligence requirements are being met. Prerequisite(s): junior or senior class standing or permission of instructor.

**CEHC 457 (= RPAD 457) Intelligence Analysis for Homeland Security (3)**

This course provides instruction in conducting intelligence analysis, with emphasis on homeland security issues at the State and local levels. After an overview of the history and structure of the U.S. foreign intelligence community, the class will review the fundamentals of intelligence analysis tradecraft as practiced within the CIA and other Federal intelligence agencies. Extensive time is devoted to learning and using structured analytic techniques through student-led analytic exercises on terrorism and major crimes. Prerequisite(s): junior or senior class standing or permission of instructor.

**CEHC 459 (= RPAD 459) Homeland Security: Building Preparedness Capabilities (3)**

The short but significant history of the creation of the U.S. Department of Homeland Security (DHS) will serve as the starting point for this course which will provide a comprehensive and functional approach to understanding this department and its role. The preponderance of time will be spent in developing an understanding of the nation's effort, led by DHS, to develop preparedness capabilities to prevent, protect from, respond to, and recover from high consequence events caused by acts of terrorism, natural disasters, and accidents. The course will

rely heavily upon scenario-based activities and case studies to guide the student through the DHS maze and the nation's preparedness efforts at the Federal, State, and local levels. Prerequisite(s): junior or senior class standing or permission of instructor.

### **CEHC 469 (= RPAD 469) Cyber Threats and Intelligence (3)**

Cyber threats currently are posed by state and non-state actors whose motivations include financial gain, notoriety, social activism, espionage, and even revenge. This course will examine cyber threats from different angles to introduce students to today's actors; motivations; tactics, techniques, and procedures (TTPs); and mitigation techniques, while providing insight into the impact of cyber crimes on victim organizations and employees. A variety of case studies will be used to study how TTPs are applied, and aid students in understanding attack consequences, responding agency abilities, and the various protection, mitigation, and remediation measures. The course will also examine models of cyber activity, as well as how models from other fields can be applied to thinking about cyber threats. The objective of the course is to provide students with a foundation for leading their organization in prevention, mitigation, and remediation of cyber attacks. Prerequisite(s): junior or senior standing or permission of the instructor.

### **CEHC 471 (= RPAD 471) Military Forces in Support of Civil Authorities (3)**

This on-line course provides a comprehensive strategic level examination of the Homeland Security Enterprise and the methodology for integrating Federal and State military forces in support of civil authorities during the planning, training and response phases of emergency operations. Federal, State and Local civilian authorities are responsible for preparing for and responding to natural and man-made emergency incidents and disasters. Emergency managers often include military forces in their emergency management planning and training programs as necessary to support potentially overwhelmed civilian first-responders during an incident. This course examines various agencies associated with homeland security and focuses on specialized military forces mission support sets such as Weapons of Mass Destruction, Critical Infrastructure Protection and defense of the homeland. Prerequisite(s): junior or senior standing or permission of instructor.

### **CEHC 472 (= RPAD 472) Disaster and Crisis Management in the Public, Private, and Nonprofit Sectors (3)**

This course will examine how disaster and crisis management has evolved over time in the public, private, and nonprofit sectors. We begin by identifying key issues and challenges facing emergency managers and other crisis management professionals. We will then systematically examine the similarities and differences across the various sectors and analyze contemporary trends and common challenges, to include risk management, crisis communication and crisis leadership. Through the use of conceptual models and real-world case studies, we will further explore the application of theory and practice within the field. We will examine specific events, how organizations responded to those events, and how those events changed and shaped the various organizations, and the discipline itself. Prerequisite(s): junior or senior class standing or permission of instructor.

### **HSPH 201 Introduction to Public Health (3)**

A general introduction to what public health is, its importance for everybody's health, and how it functions as a combination of science and politics. The role of the public health system will be illustrated by describing issues confronting New York State and what is being done about them.



**HSPH 231 Concepts in Epidemiology (3)**

This course is designed to introduce students to the science of epidemiology. Specific subjects will include causal thinking, the epidemiologic framework, and study designs utilized in epidemiologic studies and the role of epidemiology in public health. Prerequisite(s): A MAT 108.

**HSPH 272 (= TPAD 272 & TPOS 272) Health and Human Rights: an Interdisciplinary Approach (3)**

This course takes an interdisciplinary approach to health and human rights and the contemporary challenges and solutions associated with them. The course will be taught by physicians and human rights champions Kamiar Alaei and Arash Alaei, with guest lectures from experts in public health, philosophy, social welfare, law, gender studies, public administration and the United Nations, among others. Through lectures, discussion and case studies, students will develop a broad theoretical understanding of health as a human right, become familiar with legal and policy frameworks to support public health, and acquire skills in the application of these concepts and the implementation and evaluation of solutions to our modern health challenges. Only one version may be taken for credit. Open to Honors College students only.

**HSPH 321 Global Environmental Issues and Their Effect on Human Health (3)**

Globalization has made the earth a much smaller place so that we can no longer focus merely on issues in the United States. This course will address global environmental concerns and their impact on human change, atmospheric pollution, sanitation, etc., within the context of their impacts on populations throughout the world. Faculty and invited lecturers will be guest presenters. Prerequisite(s): one semester of college-level course in biology or chemistry.

**HSPH 323 (= HEHS 323) Environmental Laboratory Perspectives in Public Health (3)**

The course will define current public health issues in environmental health sciences, highlighting emerging concerns faced by researchers and practitioners. This course will explore environmental agents of disease, including elemental, organic and biological current and emerging contaminants from an environmental laboratory perspective. The course will define characteristics of and describe toxicological and analytical considerations of disease derived from environmental agents. Heavy emphasis will be placed on how laboratory techniques have driven policy and regulation. Prerequisite(s): one year of college-level biology.

**HSPH 341 Promoting Healthy People and Communities (3)**

This course focuses on how health promotion strategies influence healthy behaviors, healthy people, and healthy communities. Current public health issues will guide us in examining key health promotion concepts, health concerns at different ages, and the causes of different health behaviors. Health inequalities and mass media's role will also be highlighted.

**ICSI 124X Computer Security Basics (3)**

An introduction to security in computers and networks for a general audience. The operation of computers and networks is explained to show how they are the basis for attacks. The course will confer a basic but comprehensive understanding of how computer and network attacks (e.g., viruses, worms, denial of service) work. Also, how general users of computers can defend themselves from current and future attacks.

**IINF 202 Introduction to Data and Databases (3)**

This course introduces students to data and databases. It covers both long-standing relational (SQL) databases and newly emerging non-relational (NoSQL) data stores. The nature of data, Big Data, intellectual property, system lifecycle, and development collaboration are also explored. Team-based activities alternate with hands-on exercises. Prerequisite(s): I CSI 101, 105, 110 or 201 or B ITM 215; not open to students who are taking or have completed I CSI 410 or 411 or B ITM 331.

**IINF 306 Information Security and Assurance (3)**

Technical aspects of cybersecurity in computer and network systems. The nature of attacks and defense in digital systems; models of vulnerabilities, threats and security; cryptography; forensics; security policies and procedures; software and network security. Prerequisite(s): I INF 202.

**RCRJ 201 Introduction to the Criminal Justice Process (3)**

Analysis of the decisions made in the process whereby citizens become suspects, suspects become defendants, some defendants are convicted and in turn become probationers, inmates and parolees. Analysis of operational practices at the major criminal justice decision stages. Analysis of innovative programs and the dilemmas of change in policing, diversion, court administration, sentencing, and community correctional programs.

**RCRJ 202 Introduction to Law and Criminal Justice (3)**

Students will study judicial decisions involving constitutional and other legal issues relevant to criminal justice, including the government's power to define conduct as criminal, procedural rights, defenses, the rights of juveniles, and punishment. In addition to class meetings, students will enroll in a discussion section where they will engage in legal writing and moot court exercises.

**RCRJ 203 (= A SOC 203) Criminology (3)**

Introduction to the study of crime, including the development of criminal law, the relationship between crime and social structure, and the individual and social causes of crime. Only one of A SOC 203, A SOC 381, R CRJ 203, or T CRJ 203 can be taken for credit. Prerequisite(s): A SOC 115.

**RCRJ 281 Introduction to Statistics in Criminal Justice (3)**

Provides an introduction to statistical methods useful for analyzing the types of data most often encountered in criminal justice research, and it is intended primarily for criminal justice undergraduates. The course has a "practitioner" orientation, emphasizing how to understand and use statistics rather than how to create them. A variety of widely used statistical methods will be considered, including descriptive statistics, correlation and regression, hypothesis testing (inferential statistics), and contingency tables. A working knowledge of high school algebra will be assumed. May not be taken for credit by students with credit for A SOC 221.

**RCRJ 351 Policing in a Free Society (3)**

Introduction to the study of the local police in the United States, which provides the basis for a continuing study of policing. Also for the individual whose concern is to be an informed citizen dealing effectively with the problems which policing in America does raise. Policing is seen from three perspectives: the police -officer-citizen interaction, the agency-community relationship, and the legal and ethical questions of policing in a democratic society. Considers

the background of policing, the problems it must meet in the future, the police task, the major kinds of police work, and the system relationships that tie the police to the community and the criminal justice system. Prerequisite(s): junior or senior standing.

### **RCRJ 353 (= R POS 363) American Criminal Courts (3)**

Examines the organization and operations of state and local criminal court systems from the perspective of social science research and public policy analysis. Major issues include: the role of courts in American society; bail and pre-trial procedures; the roles and decisions of prosecutors, judges and the defense bar; selection and operation of grand juries and trial juries; sentencing of criminal defendants; and others. The operations of juvenile and adult courts are compared, and efforts directed toward court reform are assessed. Prerequisite(s): junior or senior standing.

### **RCRJ 401 Crime Deviation and Conformity (3)**

Crime and criminal behavior is viewed as one of the many forms of deviation from political, moral and conduct norms of the majority culture. Studies the parallel genesis of crime and other parallel forms of deviance, and the relationship between some forms of deviance (such as mental illness and political extremism) and some forms of criminality. Studies the forces that produce conformity and indirectly promote deviation. Prerequisite(s): R CRJ 203.

### **RCRJ 417 Cross-National Crime (3)**

The purpose of this course is to describe and understand geographic and temporal variations in the amounts and types of crime across countries. Students will critically examine the data, methods, and theories used to measure and explain crime across nations and over time.

### **RCRJ 418 Information Use and Misuse in Criminal Justice (3)**

The information technology revolution has had a large impact on the criminal justice system. This course will use contemporary examples to explore the ways in which criminal justice information is used for different purposes and to examine some common mistakes made when interpreting such information.

### **RPAD 140 (= RPOS 140; formerly RPUB 140) Introduction to Public Policy (3)**

Introduction to theories of how democracies make public policy. Describes the roles of government institutions, the media, and interest groups in the policy process. Reviews current theories of how problems are identified and how policies are formulated, enacted, and implemented to address public problems. Only one version of R POS 140 may be taken for credit

### **RPAD 316 (= RPOS 316; formerly RPUB 316) Methodological Tools for Public Policy (3)**

Introduction to research design, statistics, and computer usage in public policy with an emphasis on the interpretation of results. Students examine experimental, quasi-experimental, and non-experimental research designs, summarize and present univariate distributions, perform bivariate and multivariate analyses including simple cross-tabulations and multiple regression analysis, and learn to use a computer to perform statistical and data management operations. Only one version of R PAD 316 may be taken for credit.

### **RPOS 320 American Federalism (3)**

This course focuses on the theoretical, constitutional, and political dimensions of American federalism, including the tensions between the planes of government, interstate relations, and the

problem-solving capabilities of the federal system. Particular emphasis is placed upon the formal powers of each plane of government and the limitations upon these powers. The reasons for and the political significance of the increasing use of preemption powers by the Congress will be examined.

### **RPOS 321 (= RPAD 321; formerly RPUB 321) State and Local Government (3)**

Course focus is on intergovernmental relations; the interdependent roles of governors, legislatures, and courts in policymaking and implementation; the organization, functions, and jurisdiction of local governments; interaction of political parties and interest groups with formal institutions and processes; and problems in selected functional areas. Emphasis will be placed upon socio-economic trends leading to change in state and local governments, consequent issues raised, and proposals made in response to such issues. Only one of R POS 321 may be taken for credit. Prerequisite(s): R POS 101.

### **RPOS 336 Civil Liberties (3)**

The ways in which the courts have interpreted the Constitution with respect to individual freedoms. Examines a range of source materials to assess the role of the judiciary in arbitrating between the individual and the state, and its implications in American political life.

### **RPOS 360 Violent Political Conflicts (3)**

This course is designed to introduce students to the study of violent political conflict. We will examine the how, why, and when of violent political conflict both domestic and international. The course will focus on the key empirical and normative questions raised by violent political conflict and what answers to these questions the existing literature offers. In this course, in addition to studying the theories that have been developed to explain the politics and history of violent political conflict, students will have an opportunity to participate in simulation exercises designed to sharpen their analytic skills in the subject.

### **RPOS 361 Comparative Ethnicity (3)**

The composition and problems of various ethnic and religious minorities: their origins, characteristics, political mobilization, and degree of integration into the social and political systems of the new post-colonial nations of Asia, Africa, and Latin America examined against a background of European, American, and Russian experience. T POS 261 is the Honors College version of R POS 361. Only one may be taken for credit.

### **TPOS 260 Political Violence: Honors Course (3)**

This course is designed to introduce students to the study of violent political conflict. We will examine the how, why, and when of violent political conflict both domestic and international. What are the key empirical and normative questions raised by violent political conflict and what answers to these questions does the literature offer? What other strategies, like nonviolence and negotiation are available to actors instead of political violence? In this course, in addition to studying the theories that have been developed to explain the politics and history of violent political conflict, students will have an opportunity to participate in simulation exercises designed to sharpen their analytic skills in the subject area. Open to Honors College students only.

### **TPOS 261Y Comparative Ethnicity (3)**

The composition and problems of various ethnic and religious minorities: their origins, characteristics, political mobilization, and degree of integration into the social and political

systems of the new post-colonial nations of Asia, Africa, and Latin America examined against a background of European, American, and Russian experience. T POS 261 is the Honors College version of R POS 361. Only one may be taken for credit. Open to Honors College students only.

**University at Albany**  
**New Program Proposal**  
**Emergency Preparedness, Homeland Security and Cybersecurity**

**Appendix 6 Syllabi for New Courses**

CEHC 210 Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity

CEHC 242 Cybersecurity

CEHC 310 Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity

CEHC 320 Psychology of Terrorism

CEHC 321 Human Trafficking

CEHC 324 Civil Liberties in Context: Emergency Preparedness, Homeland Security and Cybersecurity

CEHC 325 Critical Infrastructure

CEHC 345 Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity

CEHC 355 Comparative Homeland Security

CEHC 356 Transnational Crime

CEHC 390 Internship in Emergency Preparedness, Homeland Security and Cybersecurity

CEHC 410 Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity

CEHC Non-credit Training Requirement



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 210: Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity

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**Day/Time:**

**Location:**

**Instructor:**

**Teaching Assistant:**

**Contact:** [phone number/email]

**Office Location and Hours:**

### Course Information:

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#### Course Description:

This course is designed as an introduction to argumentation and analysis. Students will learn to evaluate arguments, build arguments, evaluate evidence, generate evidence, and present conclusions within the context of public policy and administration. Students will be introduced to a wide range of methods of inquiry (e.g., qualitative case studies, large-N statistical analysis, and survey research) and will explore the strengths and weaknesses of individual approaches. Students will also will explore ethical considerations in policy analysis and research. Finally, students will have multiple opportunities to communicate arguments in both written and oral forms.

#### Course Structure and Requirements:

Required readings, chapters and articles:

Booth, Wayne C., Gregory G. Colomb, and Joseph M. Williams. 2003. *The Craft of Research*. 3<sup>rd</sup> Edition. Chicago, IL: University of Chicago Press.

Chapman, Audrey. 2015. "The Foundations of a Human Right to Health: Human Rights and Bioethics in Dialogue." *Health and Human Rights* 17/1: 6–18.

Fink, Sheri. 2009. "The Deadly Choices at Memorial." *New York Times*, 25 August 2009.

Landau, Susan. 2013. *Surveillance or Security? The Risks Posed by New Wiretapping Technologies*. Cambridge, MA: MIT Press.

Perrow, Charles. 2011. *The Next Catastrophe: Reducing Our Vulnerabilities to Natural, Industrial, and Terrorist Disasters*. Princeton, NJ: Princeton University Press.

Rousseau, David L. 2008. "Argumentation Across the Social Sciences: Using Critical Thinking to Connect Theory, Evidence, and Policy." Unpublished Manuscript on Blackboard.

Silva, Diego S., and Maxwell J. Smith. 2015. "Limiting Rights and Freedoms in the Context of Ebola and Other Public Health Emergencies: How the Principle of Reciprocity Can Enrich the Application of the Siracusa Principles." *Health and Human Rights* 17/1: 52–57.

Students will be assessed in several ways. First, there will be an in-class midterm exam and a final exam scheduled during the regular exam period. The exams will be 40% short answer and 60% essay in which students will argue in favor or opposition to a proposition (e.g., the U.S. should ban encryption for social media apps). The examinations will be cumulative. Make-up exams are only available to students providing documentation signed by a doctor of a serious medical situation (i.e., dentist appointments do not count).

Second, students will complete two written assignments. Each writing assignment will be in the form of a proposition (e.g., the United States should permit wiretaps without warrants in cases of terrorism). Students will make a persuasive argument in support or opposition to the proposition. The essays, which should be about five pages in length, must be posted to Blackboard prior to the start of class on the due date. All assignments will be checked for plagiarism using Turnitin (or a similar antiplagiarism software). Late assignments will not be accepted and there will be no makeup assignments.

Third, all students will participate in one policy debate as part of a team. Developing the ability to express ideas and persuade others in an oral argument is essential to any career. In fact, whether you are an investment banker on Wall Street or a legislative aid on Capitol Hill, many if not most of your arguments will be oral rather than written. Given that there will be six teams in the class, there will be three policy debates (with two teams in each debate). Debate topics will be selected by the instructor in consultation with the teams. Each team will prepare a 20-30 page briefing book that will include arguments in favor of the proposition, arguments against the proposition, refutations to these arguments, and counter-refutations to the refutations. On the day of the debate, a coin toss will determine which side of the proposition each team will defend. The debates will be videotaped and placed on the class web page for viewing by students in the future.

### **Course Learning Objectives:**

Upon completion of this course, you should be able to accomplish the following activities:

1. Develop persuasive arguments that include claims, counter-claims, and evidence.
2. Assess the strengths and weakness of arguments.
3. Communicate arguments in both written and oral forms.
4. Understand the link between policy analysis and social science research.
5. Conduct a comprehensive assessment of risks, generate an analysis of options for mitigating risks, select the most appropriate mitigating actions for each risk, develop contingency and crisis response plans, communicate the risk assessment to a variety of audiences, and evaluate risk management plans.



6. Evaluate policies and procedures related to emergency preparedness, homeland security and/or cybersecurity.
7. Demonstrate critical ethical reflection and evaluation skills
8. Work effectively with others to design a creative solution to a pressing policy issue.

**Prerequisites:** There are no prerequisites for this class. Although it is not required, we recommend that students currently enrolled in the undergraduate major in Emergency Preparedness, Homeland Security and Cybersecurity enroll in CEHC101 Introduction to Emergency Preparedness, Homeland Security and Cybersecurity before taking this class.

**Grading:**

This course is A-E graded and the grades are determined based on the following criteria:

Midterm Exam: 20%

Final Exam: 30%

Paper #1: 10%

Paper #2: 10%

Team Debate: 20%

Attendance/Participation: 10%

**Lecture and Reading Schedule:**

Dates	Lecture Title	Readings	Notes
<b>Week 1</b>	Introduction to Arguments	Booth et al. Chapters 1 & 2	
<b>Week 2</b>	Claims	Rousseau Chapters 1 & 2; Booth et al. Chapters 7 & 8.	Complete Plagiarism Tutorial
<b>Week 3</b>	Evidence	Booth et al. Chapters 9 & 10.	
<b>Week 4</b>	Hypotheses and Arguments	Rousseau Chapters 3 & 4.	
<b>Week 5</b>	Arguing About Terrorism	Frontline: Inside the Terror Network; Perrow Chapter 8	Paper #1 Due
<b>Week 6</b>	Model Debate: Closing Indian Point	Perrow Chapter 5	
<b>Week 7</b>	Dirty Bombs	Nova: Dirty Bombs	Midterm Exam
<b>Week 8</b>	Evaluating Flood Protection	Perrow Chapters 3 & 4	
<b>Week 9</b>	Arguing About Privacy	Landau	Paper #2 Due
<b>Week 10</b>	Assessing Risks to Critical Infrastructure	Perrow Chapter 7	
<b>Week 11</b>	Containing Ebola	Silva and Smith; Chapman; Booth et al. Chapters 13 & 14.	
<b>Week 12</b>	Debating Torture	Frontline: The Torture Question	Student Debate #1
<b>Week 13</b>	Debating Immigration	Frontline: Immigration Battle	Student Debate #2
<b>Week 14</b>	Debating the	Fink	Student Debate #3

	Evacuation of Vulnerable Populations		
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## Policies:

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**Attendance and Participation Policy:** At the college level of education, the expectation is that students will attend **every** class session and **actively** participate in class every discussion each week. I expect students to have read and thought about the material assigned for that week. If language or some other barrier inhibits you from participating actively, you should meet with the instructor during the first two weeks of class to devise a solution. Attendance is not participation. Students missing a class session without prior approval of the instructor (or documentation of an emergency medical situation) will be penalized. UAlbany's medial excuse policy can be reviewed at: [http://www.albany.edu/health\\_center/medicalexcuse.shtml](http://www.albany.edu/health_center/medicalexcuse.shtml).

**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

**Academic Dishonesty Policy:** Students are expected to comply with the University at Albany's Community Rights and Responsibilities. An incident of unethical conduct (e.g. cheating, plagiarism) or classroom disruption will result in a Fail and referral to the appropriate Departmental and University Committees. More information on academic integrity is available at the following website: [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html). Students will be asked to sign a statement of honor, promising to act with academic integrity.

**Grade Complaint Policy:** Students that feel their exams have been graded incorrectly should follow a three-step procedure. First, the student should carefully read the exam or assignment and identify the precise problem with the grading. Second, the student must send a written appeal explaining why their answer was appropriate to the instructor. Third, the instructor will meet with the student to discuss the appeal and resolve the conflict.



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 242: Cybersecurity

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**Day/Time:**

**Location:**

**Instructor:**

**Teaching Assistant:**

**Contact:** [phone number/email]

**Office Location and Hours:**

### **Course Information:**

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#### **Course Description:**

The purpose of this class is to acquaint students with the policy issues associated with cyber security, this includes issues like cyber-attacks, network security, incident response, cyber-crime, cyber espionage, and cyber conflict. While much has been made of “cyber war” and high profile cyber-attacks like STUXNET, there are actually a broad spectrum of cyber threats and cyber threat actors that present problems for organizations and policy makers. We will look at how government agencies and private sector entities assess and respond to the changing cyber security landscape – how they assess the risks they face, how they manage those risks through security procedures and practices, and how they mitigate the impact of attacks that do happen on their systems.

This class begins with an overview of the many cyber security problems facing organizations today, ranging from data breaches to computer crime, and from website defacements to cyber-attacks on critical infrastructure. Next we examine the various stages or elements of a computer network intrusion, as well as how such intrusions are investigated or mitigated, using an in depth case study based on Cliff Stoll’s book *The Cuckoo’s Egg*. From there, the course goes on to look at the diversity of cyber threat actors, and the vulnerabilities to, and consequences of, cyber-attacks. We then will look at the history of two veins of cyber security - cyber-crime and cyber conflict - and how those have changed since the early years of computer networking. Next we will look at how various organizations and agencies (the Federal government, State and Local Governments, the Private Sector) respond to cyber threats and to cyber incidents. Finally we will examine some special topics including the importance of cyber security for critical infrastructure protection, the economics of cyber security, the coordination of public and private cyber security issues, and some potential future directions for cyber security.

#### **Course Structure and Requirements:**

Required readings, chapters and articles:

Brenner, Joel. (2011) *America the Vulnerable: Inside the New Threat Matrix of Digital Espionage, Crime and Warfare*. Penguin Press.

Healey, Jason. Ed. (2013) *A Fierce Domain: Conflict in Cyberspace 1986-2012*. Atlantic Council.

Menn, Joseph. *Fatal System Error: The Hunt for the New Crime Lords Who are Bringing Down the Internet*. PublicAffairs.

Rice, David. (2008) *Geekonomics: The Real Cost of Insecure Software*. Pearson.

Schneier, Bruce. (2004) *Secrets and Lies: Digital Security in a Networked World*.

Stoll, Clifford. (1989) *The Cuckoo's Nest: Tracking a Spy Through the Maze of Computer Espionage*. Doubleday.

Students will be assessed in several ways. First, there will be an in-class midterm exam and a final exam scheduled during the regular exam period. The exams will be 40% short answer and 60% essay. The examinations will be cumulative. Make-up exams are only available to students providing documentation signed by a doctor of a serious medical situation (i.e., dentist appointments do not count).

Second, students will complete a research paper on a topic discussed in the class and approved by the instructor. Student will prepare a one page proposal in week 3 and produce a final paper in the last week of class. The research paper, which should be about 10-12 pages in length, must be posted to Blackboard prior to the start of class on the due date. All papers will be checked for plagiarism using Turnitin (or a similar antiplagiarism software). Late papers will not be accepted and there will be no makeup assignments.

Third, students will produce reading response papers which should include list of discussion questions and major comments (1-2 pages, double-spaced, 11-point font, one inch margins) and which should address to some degree all the readings for that day (i.e., some questions drawn from each of the readings). The discussion questions serve three purposes. First, they ensure that students have completed and reflected upon the reading prior to discussion. Second, they give the instructor a sense of the student's understanding of the material and its relation to the field. Finally, the questions and comments will facilitate the discussion of the material. The reading response papers must be e-mailed to the instructor by noon of the day of seminar so they can be reviewed prior to class in order to shape that day's discussion. No credit will be given for late responses. Although students are encouraged to submit a reading response paper each week, only six papers are required across the semester. (If students submit more than six reading response papers, the six highest scoring papers will be used to calculate the grade.)

### **Course Learning Objectives:**

Upon completion of this course, you should be able to accomplish the following activities:

1. Conduct a comprehensive assessment of cyber risks, generate an analysis of options for mitigating cyber risks, select the most appropriate mitigating actions for cyber risk,

- develop contingency and crisis response plans, communicate the risk assessment to a variety of audiences, and evaluate risk management plans.
2. Review and understand the legal, regulatory, policy, and ethical issues related to securing cyberspace; identify and evaluate cybersecurity threats to organizations; and analyze the effectiveness of cybersecurity in an organization by performing vulnerability assessments, risk mitigation, auditing, certification and accreditation of information systems.
  3. Demonstrate understanding of the ethical principles in general and the ability to recognize, articulate, and apply ethical principles in concrete situations related to cybersecurity.

**Prerequisites:** There are no prerequisites for this class. Although it is not required, we recommend that students currently enrolled in the undergraduate major in Emergency Preparedness, Homeland Security and Cybersecurity enroll in CEHC101 Introduction to Emergency Preparedness, Homeland Security and Cybersecurity before taking this class.

### Grading:

This course is A-E graded and the grades are determined based on the following criteria:

Midterm: 20%

Final: 20%

Term Paper: 25%

- Further details later
- 10-12 pages
- 1 page proposal due in week 3
- Paper due at second to last class

Reading Response Papers: 25%

- 2 page synthesis of the week's readings
- 5 required – i.e. 5% each

Participation: 10%

- I expect that all are - Present, Prepared, Contributing and Engaged

### Lecture and Reading Schedule:

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	Subject	Readings
1	What is cybersecurity?	<ul style="list-style-type: none"> <li>- CSIS. Significant Cyber Events Since 2006. <a href="http://csis.org/publication/cyber-events-2006">http://csis.org/publication/cyber-events-2006</a></li> <li>- CRS. (2008) Botnets, Cybercrime and Cyberterrorism: Vulnerabilities and Policy Issues for Congress. <a href="http://www.fas.org/sgp/crs/terror/RL32114.pdf">http://www.fas.org/sgp/crs/terror/RL32114.pdf</a></li> <li>- CRS. (2013) Cybercrime: Conceptual Issues for Congress and US Law Enforcement. <a href="http://www.fas.org/sgp/crs/misc/R42547.pdf">http://www.fas.org/sgp/crs/misc/R42547.pdf</a></li> <li>- Ernst and Young. (2013) Under Cyber Attack: EY's Global Information Security Survey 2013. <a href="http://www.ey.com/Publication/vwLUAssets/EY_-_2013_Global_Information_Security_Survey/\$FILE/EY-GISS-Under-cyber-attack.pdf">http://www.ey.com/Publication/vwLUAssets/EY_-_2013_Global_Information_Security_Survey/\$FILE/EY-GISS-Under-cyber-attack.pdf</a></li> </ul>

2	What is a cyber intrusion, and how does it happen?	<ul style="list-style-type: none"> <li>- Book: Stoll, Clifford. (1989) The Cuckoo's Nest: Tracking a Spy Through the Maze of Computer Espionage. Doubleday.</li> <li>- Hutchins, et al. Intelligence Driven Computer Network Defense Informed by Analysis of Adversary Campaigns and Intrusion Kill Chains. <a href="http://www.lockheedmartin.com/content/dam/lockheed/data/corporate/documents/LM-White-Paper-Intel-Driven-Defense.pdf">http://www.lockheedmartin.com/content/dam/lockheed/data/corporate/documents/LM-White-Paper-Intel-Driven-Defense.pdf</a></li> <li>- Department of Justice. (2011) The Federal Bureau of Investigation's Ability to Address the National Security Cyber Intrusion Threat. <a href="http://www.justice.gov/oig/reports/FBI/a1122r.pdf">http://www.justice.gov/oig/reports/FBI/a1122r.pdf</a></li> </ul>
3	Cyber Threats and Threat Actors	<ul style="list-style-type: none"> <li>- Book: Brenner, Joel. (2011) America the Vulnerable: Inside the New Threat Matrix of Digital Espionage, Crime and Warfare. Penguin Press.</li> <li>- Libicki, Martin. (2012) The Specter of Non-Obvious Warfare. <a href="http://www.au.af.mil/au/ssq/2012/fall/libicki.pdf">http://www.au.af.mil/au/ssq/2012/fall/libicki.pdf</a></li> <li>- Mandiant. (2013) APT1: Exposing One of China's Cyber Espionage Units. <a href="http://intelreport.mandiant.com/Mandiant_APT1_Report.pdf">http://intelreport.mandiant.com/Mandiant_APT1_Report.pdf</a></li> </ul>
4	Cyber Vulnerabilities and Consequences	<ul style="list-style-type: none"> <li>- Book: Schneier, Bruce. (2004) Secrets and Lies: Digital Security in a Networked World.</li> <li>- Ponemon (2013) 2013 Cost of Cyber Crime Study: United States. <a href="http://media.scmagazine.com/documents/54/2013_us_ccc_report_final_6-1_13455.pdf">http://media.scmagazine.com/documents/54/2013_us_ccc_report_final_6-1_13455.pdf</a></li> <li>- Langner, Ralph and Pederson, Perry. (2013) Bound to Fail: Why Cyber Security Risk Cannot Simply be Managed Away. Brookings. <a href="http://www.brookings.edu/~media/research/files/papers/2013/02/cyber%20security%20langner%20pederson/cybersecurity_langner_pederson_0225.pdf">http://www.brookings.edu/~media/research/files/papers/2013/02/cyber%20security%20langner%20pederson/cybersecurity_langner_pederson_0225.pdf</a></li> </ul>
5	History of Cyber Crime and Cyber Conflict Part 1 (early years)	<ul style="list-style-type: none"> <li>- Book: Healey, Jason. Ed. (2013) A Fierce Domain: Conflict in Cyberspace 1986-2012. Atlantic Council. Parts 1-3</li> <li>- Book: Menn, Joseph. Fatal System Error: The Hunt for the New Crime Lords Who are Bringing Down the Internet. PublicAffairs. Part 1.</li> <li>- Lewis, James. (2002) Assessing the Risk of Cyber Terrorism, Cyber War and Other Cyber Threats. CSIS. <a href="http://www.steptoe.com/publications/231a.pdf">http://www.steptoe.com/publications/231a.pdf</a></li> </ul>

6	History of Cyber Crime and Cyber Conflict Part 2 (recent history)	<ul style="list-style-type: none"> <li>- Book: Healey, Jason. Ed. (2013) A Fierce Domain: Conflict in Cyberspace 1986-2012. Atlantic Council. Parts 4-6</li> <li>- Book: Menn, Joseph. Fatal System Error: The Hunt for the New Crime Lords Who are Bringing Down the Internet. PublicAffairs. Part 2.</li> </ul>
7	Who? Public Sector (Federal)	<ul style="list-style-type: none"> <li>- White House (2010) Comprehensive National Cybersecurity Initiative (CNCI). <a href="http://www.whitehouse.gov/sites/default/files/cybersecurity.pdf">http://www.whitehouse.gov/sites/default/files/cybersecurity.pdf</a> News coverage <a href="http://www.washingtonpost.com/wp-dyn/content/article/2010/03/02/AR2010030202113.html">http://www.washingtonpost.com/wp-dyn/content/article/2010/03/02/AR2010030202113.html</a></li> <li>- White House. (2009) Cyberspace Policy Review. <a href="http://www.whitehouse.gov/assets/documents/Cyberspace_Policy_Review_final.pdf">http://www.whitehouse.gov/assets/documents/Cyberspace_Policy_Review_final.pdf</a></li> <li>- DHS. (2010) National Cyber Incident Response Plan – Interim Version. <a href="http://www.federalnewsradio.com/pdfs/NCIRP_Interim_Version_September_2010.pdf">http://www.federalnewsradio.com/pdfs/NCIRP_Interim_Version_September_2010.pdf</a></li> <li>- Department of Defense. (2011) Department of Defense Strategy for Operating in Cyberspace. <a href="http://www.defense.gov/news/d20110714cyber.pdf">http://www.defense.gov/news/d20110714cyber.pdf</a></li> <li>- FEMA (2004) National Response Framework, Cyber Incident Annex. <a href="http://www.fema.gov/media-library-data/20130726-1825-25045-8307/cyber_incident_annex_2004.pdf">http://www.fema.gov/media-library-data/20130726-1825-25045-8307/cyber_incident_annex_2004.pdf</a></li> </ul>
8	Who? Public Sector (State and Local)	<ul style="list-style-type: none"> <li>- Glennon, Michael. (2012) State-level Cybersecurity. Policy Review. The Hoover Institution. <a href="http://www.hoover.org/publications/policy-review/article/106621">http://www.hoover.org/publications/policy-review/article/106621</a></li> <li>- National Governors Association – NGA. (2013) Act and Adjust: A Call to Action for Governors for Cyber Security. <a href="http://www.nga.org/files/live/sites/NGA/files/pdf/2013/1309_Act_and_Adjust_Paper.pdf">http://www.nga.org/files/live/sites/NGA/files/pdf/2013/1309_Act_and_Adjust_Paper.pdf</a></li> <li>- Deloitte and National Association of State Chief Information Security Officers - NASCIO. (2012) State Governments at Risk: A Call for Collaboration and Compliance. <a href="http://csrc.nist.gov/cyberframework/rfi_comments/040913_nascio_deloitte.pdf">http://csrc.nist.gov/cyberframework/rfi_comments/040913_nascio_deloitte.pdf</a></li> <li>- CRS. (2012) Data Security Breach Notification Laws. <a href="http://www.fas.org/sgp/crs/misc/R42475.pdf">http://www.fas.org/sgp/crs/misc/R42475.pdf</a></li> </ul>

		<ul style="list-style-type: none"> <li>- Office of the Manhattan Borough President. (2013) Cybercrime NYC: How Residents, Business and Government Can Tackle this Growing Threat. <a href="http://www.mbpo.org/uploads/CybercrimeNYC.pdf">http://www.mbpo.org/uploads/CybercrimeNYC.pdf</a></li> </ul>
9	Who? Private Sector	<ul style="list-style-type: none"> <li>- Etzioni, Amitai. (2011) Cybersecurity in the Private Sector. Issues in Science and Technology. <a href="http://icps.gwu.edu/files/2011/10/cyber.pdf">http://icps.gwu.edu/files/2011/10/cyber.pdf</a></li> <li>- Price Waterhouse Coopers. (2013) Key Findings of the 2013 US State of Cybercrime Survey. <a href="https://www.pwc.com/en_US/us/increasing-it-effectiveness/publications/assets/us-state-of-cybercrime.pdf">https://www.pwc.com/en_US/us/increasing-it-effectiveness/publications/assets/us-state-of-cybercrime.pdf</a></li> <li>- Verizon. (2013) 2013 Data Breach Investigations Report. <a href="http://www.verizonenterprise.com/DBIR/2013/">http://www.verizonenterprise.com/DBIR/2013/</a></li> </ul>
10	What? Cyber Security, Infrastructure and Industrial Control Systems (ICS)	<ul style="list-style-type: none"> <li>- Miller, Bill and Rowe, Dale. (2012) A Survey of SCADA and Critical Infrastructure Incidents. <a href="http://sigite2012.sigite.org/wp-content/uploads/2012/08/session17-paper01.pdf">http://sigite2012.sigite.org/wp-content/uploads/2012/08/session17-paper01.pdf</a></li> <li>- Cornish, et al. (2011) Cyber Security and the UK's Critical National Infrastructure. Chatham House. <a href="http://www.chathamhouse.org/sites/default/files/public/Research/International%20Security/r0911cyber.pdf">http://www.chathamhouse.org/sites/default/files/public/Research/International%20Security/r0911cyber.pdf</a></li> <li>- McAfee. (2010) In the Crossfire: Critical infrastructure in the Age of Cyber War. <a href="http://www.mcafee.com/uk/resources/reports/rp-in-crossfire-critical-infrastructure-cyber-war.pdf">http://www.mcafee.com/uk/resources/reports/rp-in-crossfire-critical-infrastructure-cyber-war.pdf</a></li> <li>- McAfee. (2011) In the Dark: Crucial Industries Confront Cyber Attacks. <a href="http://www.mcafee.com/uk/resources/reports/rp-critical-infrastructure-protection.pdf">http://www.mcafee.com/uk/resources/reports/rp-critical-infrastructure-protection.pdf</a></li> </ul> <p>STUXNET:</p> <ul style="list-style-type: none"> <li>- CRS. (2010) The Stuxnet Computer Worm: Harbinger of an Emerging Warfare Capability. <a href="http://www.fas.org/sgp/crs/natsec/R41524.pdf">http://www.fas.org/sgp/crs/natsec/R41524.pdf</a></li> <li>- NY Times Coverage:</li> <li>- <a href="http://www.nytimes.com/2011/01/16/world/middleeast/16stuxnet.html?pagewanted=all">http://www.nytimes.com/2011/01/16/world/middleeast/16stuxnet.html?pagewanted=all</a></li> <li>- <a href="http://www.nytimes.com/imagepages/2011/01/16/world/16stuxnet_g.html?ref=middleeast">http://www.nytimes.com/imagepages/2011/01/16/world/16stuxnet_g.html?ref=middleeast</a></li> <li>- <a href="http://www.nytimes.com/2012/06/01/world/middleeast/obama-ordered-wave-of-cyberattacks-against-iran.html">http://www.nytimes.com/2012/06/01/world/middleeast/obama-ordered-wave-of-cyberattacks-against-iran.html</a></li> <li>- <a href="http://www.nytimes.com/interactive/2012/06/01/world/middleeast/how-a-secret-cyberwar-program-worked.html?ref=middleeast">http://www.nytimes.com/interactive/2012/06/01/world/middleeast/how-a-secret-cyberwar-program-worked.html?ref=middleeast</a></li> </ul>



11	Why? Economics	<ul style="list-style-type: none"> <li>- Book: Rice, David. (2008) Geekonomics: The Real Cost of Insecure Software. Pearson.</li> <li>- Moore, Tyler. Introducing the Economics of Cybersecurity: Principles and Policy Options. Proceedings of a Workshop on Deterring Cyber Attacks: Informing Strategies and Developing Options for U.S. Policy. <a href="http://sites.nationalacademies.org/CSTB/CSTB_059344">http://sites.nationalacademies.org/CSTB/CSTB_059344</a> or <a href="http://cs.brown.edu/courses/csci1800/sources/lec27/Moore.pdf">http://cs.brown.edu/courses/csci1800/sources/lec27/Moore.pdf</a></li> </ul>
12	Why? Public-Private Sector Coordination	<ul style="list-style-type: none"> <li>- White House. (2013) Executive Order on Improving Critical Infrastructure Cybersecurity.</li> <li>- Press Release: <a href="http://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity-0">http://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity-0</a></li> <li>- EO: <a href="http://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity">http://www.whitehouse.gov/the-press-office/2013/02/12/executive-order-improving-critical-infrastructure-cybersecurity</a></li> <li>- Rosenzweig, Paul. (2011) Cybersecurity and Public Goods: The Public/Private “Partnership.” <a href="http://media.hoover.org/sites/default/files/documents/EmergingThreats_Rosenzweig.pdf">http://media.hoover.org/sites/default/files/documents/EmergingThreats_Rosenzweig.pdf</a></li> <li>- Thomas, Rachel Nyswander. (2013) Securing Cyberspace Through Public-Private Partnership: A Comparative Analysis of Partnership Models. <a href="http://csis.org/files/publication/130819_tech_summary.pdf">http://csis.org/files/publication/130819_tech_summary.pdf</a></li> <li>- Bipartisan Policy Center. (2012) Cyber Security Task Force: Public-Private Information Sharing. <a href="http://bipartisanpolicy.org/sites/default/files/Public-Private%20Information%20Sharing.pdf">http://bipartisanpolicy.org/sites/default/files/Public-Private%20Information%20Sharing.pdf</a></li> </ul>
13	The Future	<ul style="list-style-type: none"> <li>- Europol. Project 2020: Scenarios for the Future of Cybercrime – White Paper for Decision Makers. <a href="https://www.europol.europa.eu/sites/default/files/publications/2020_white_paper.pdf">https://www.europol.europa.eu/sites/default/files/publications/2020_white_paper.pdf</a></li> <li>- Geer, Daniel. (2011) How Government Can Access Innovative Technology. In CNAS. America’s Cyber Future: Security and Prosperity in the Information Age. <a href="http://www.cnas.org/files/documents/publications/CNAS_Cyber_Volume%20II_2.pdf">http://www.cnas.org/files/documents/publications/CNAS_Cyber_Volume%20II_2.pdf</a></li> <li>- Schwartz, Peter. (2011) Scenarios for the Future of Cyber Security. In CNAS. America’s Cyber Future: Security and Prosperity in the Information Age. <a href="http://www.cnas.org/files/documents/publications/CNAS_Cyber_Volume%20II_2.pdf">http://www.cnas.org/files/documents/publications/CNAS_Cyber_Volume%20II_2.pdf</a></li> </ul>

		<ul style="list-style-type: none"> <li>- Sulek, David and Moran, Ned. What Analogies Can Tell Us About the Future of Cyber Security. <a href="http://www.ccdcoe.org/publications/virtualbattlefield/08_SULEK_What%20Cyber%20Analogies%20Can%20Tell%20Us.pdf">http://www.ccdcoe.org/publications/virtualbattlefield/08_SULEK_What%20Cyber%20Analogies%20Can%20Tell%20Us.pdf</a></li> <li>- Slides: DHS. (2012) Capabilities for Cybersecurity Resilience in the Homeland Security Enterprise. <a href="https://register.mitre.org/sr/files/fonash.pdf">https://register.mitre.org/sr/files/fonash.pdf</a></li> </ul>
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### **Policies:**

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**Attendance and Participation Policy:** At the college level of education, the expectation is that students will attend **every** class session and **actively** participate in class every discussion each week. I expect students to have read and thought about the material assigned for that week. If language or some other barrier inhibits you from participating actively, you should meet with the instructor during the first two weeks of class to devise a solution. Attendance is not participation. Students missing a class session without prior approval of the instructor (or documentation of an emergency medical situation) will be penalized. UAlbany's medial excuse policy can be reviewed at: [http://www.albany.edu/health\\_center/medicalexcuse.shtml](http://www.albany.edu/health_center/medicalexcuse.shtml).

**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

**Academic Dishonesty Policy:** Students are expected to comply with the University at Albany's Community Rights and Responsibilities. An incident of unethical conduct (e.g. cheating, plagiarism) or classroom disruption will result in a Fail and referral to the appropriate Departmental and University Committees. More information on academic integrity is available at the following website: [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html). Students will be asked to sign a statement of honor, promising to act with academic integrity.

**Grade Complaint Policy:** Students that feel their exams have been graded incorrectly should follow a three-step procedure. First, the student should carefully read the exam or assignment and identify the precise problem with the grading. Second, the student must send a written appeal explaining why their answer was appropriate to the instructor. Third, the instructor will meet with the student to discuss the appeal and resolve the conflict.



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## **CEHC 310: Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity**

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**Day/Time:**

**Location:**

**Instructor:**

**Contact:** [phone number/email]

**Office Location and Hours:**

### **Course Information:**

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#### **Course Description:**

In most undergraduate classes, students are consumers of research created by others. Students read historical cases studies of disasters, examine regression results probing the relationship between democracy and terrorism, peruse interviews with government officials from homeland security, and scrutinize surveys of public opinion of privacy and security. What is often unclear is the research process lurking behind these final results. The mission of this course is to shed light on the research process in the areas emergency preparedness, homeland security and cybersecurity.

The course has four goals. First, students will develop the skills of a social scientist. Over the course of the semester students will be developing hypotheses, constructing research designs, testing hypotheses, and communicating findings. Second, students will become intelligent users and consumers of a wide variety of investigatory techniques such as experiments, surveys, large-N statistical studies, content analysis, historical case studies, and interviews. We will explore the strengths and weaknesses of these methods in order to identify when and where each is most appropriate. Third, students will develop the statistical skills necessary to analyze the quantitative data. Students will become familiar with several basic descriptive statistics and statistical techniques such as means, standard deviations, correlation analysis, contingency tables, regression analysis, and hypothesis testing. Fourth, students will apply the research skills and knowledge to address a real world question in the areas of emergency preparedness, homeland security, and cybersecurity. The research topic will be selected by the instructor in consultation with an external client (e.g., Department of Health or the Office of Emergency Management). Students will work on the research projects in small teams.

#### **Course Structure and Requirements:**

Required books, chapters and articles:

Arce, Daniel, Rachel Croson, and Catherine Eckel. 2007. "Terrorism Experiments." *Journal of Peace Research* 48/3, 373-382.

Babbie, Earl R. 2012. *The Practice of Social Research*, 13th Edition. Belmont, CA: Wadsworth Publishing.

Goertz, Gary. 2006. *Social Science Concepts: A User's Guide*. Princeton, NJ: Princeton University Press. Chapter 2 (on Blackboard)

Rousseau, David L. 2008. "Argumentation Across the Social Sciences: Using Critical Thinking to Connect Theory, Evidence, and Policy." Unpublished Manuscript on Blackboard.

Schwarz, Norbert. 1999. "Self-Reports: How the Questions Shape the Answers." *American Psychologist* 54/2 (February), 93-105.

Students will work in teams on a research project throughout the semester. The teams will prepare a review of the literature surrounding the topic, a research design explaining how they will investigate the topic, and a final report describing the result of this investigation. The research team will receive a single letter grade for the final project. Students will also take a midterm and final exam probing their understanding of research concepts, methods, and findings.

#### **Course Learning Objectives:**

Upon completion of this course, students should be able to demonstrate:

- use library and other tools to search for existing body of research relevant to their topic,
- articulate a clear research question or problem and formulate a hypothesis or claim,
- create a research design to evaluate the hypothesis or claim,
- identify and demonstrate appropriate research methodologies and know the strengths and weaknesses of different methodologies,
- collect data and information to test a hypothesis or probe a claim,
- identify and practice research ethics and responsible conduct in research,
- work effectively in research teams using listening and communication skills, effectively managing conflicts, optimizing resources and meeting deadlines,
- reflect on their own research, identifying lessons learned, strengths, and ways to improve, and
- explain their research to others in the field and to broader audiences through research presentations.

**Prerequisites:** CEHC 101 Introduction to Emergency Preparedness, Homeland Security and Cybersecurity and CEHC 210 Critical Inquiry and Communication. This course is required for students majoring in Emergency Preparedness, Homeland Security and Cybersecurity and the expectation is that they will take this course during their junior or senior years.

#### **Grading:**

This course is A-E graded and the grades are determined based on the following criteria:

Midterm Exam: 20%

Final Exam: 25%  
 Assignment #1: Literature Review: 10%  
 Assignment #2: Research Design: 10%  
 Final Report: 25%  
 Attendance/Participation: 10%

*Evaluation of Team Members:* Twice during the semester students will rate the performance of their fellow teammates. Based on these evaluations, the grade for the final research project will be adjusted to account for an overall assessment of superior and inferior teamwork. This provision is designed to minimize free riding in teams.

#### Lecture and Reading Schedule:

Dates	Lecture Title	Readings	Notes
Week 1	Introduction	Babbie Chapter 1	
Week 2	Arguments and Hypotheses	Babbie Chapter 3; Rousseau Chapters 1 & 2	
Week 3	Research Ethics	Babbie Chapter 3	Complete Human Subjects Training
Week 4	Research Design	Babbie Chapter 4	
Week 5	Conceptualization and Measurement	Babbie Chapter 5; Goertz Chapter 2	Assignment #1
Week 6	Sampling	Babbie Chapter 7	
Week 7	Experiments	Babbie Chapter 8; Arce et al.	Assignment #2
Week 8	Survey Research	Babbie Chapter 9; Schwartz	Midterm Exam
Week 9	Qualitative Field Research	Babbie Chapter 10	
Week 10	Unobtrusive Research	Babbie Chapter 11	
Week 11	Evaluation Research	Babbie Chapter 12	
Week 12	Quantitative Data Analysis	Babbie Chapter 14, 16	
Week 13	Qualitative Data Analysis	Babbie Chapter 13	
Week 14	Conclusions		Final Presentation

#### Policies:

**Attendance Policy:** At the college level of education, the expectation is that students will attend **every** class session and **actively** participate in class every discussion each week. I expect students to have read and thought about the material assigned for that week. If language or some other barrier inhibits you from participating actively, you should meet with the instructor during the first two weeks of class to devise a solution. Attendance is not participation. Students missing a class session without prior approval of the instructor (or documentation of an emergency medical situation) will be penalized. UAlbany's medical excuse policy can be reviewed at: [http://www.albany.edu/health\\_center/medicalexcuse.shtml](http://www.albany.edu/health_center/medicalexcuse.shtml).

**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

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# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 320 Psychology of Terrorism

**Day/Time:** TBD

**Location:** TBD

**Instructor:** To Be Hired

**Teaching Assistant:** TBD

**Contact:** TBD

**Office Location and Hours:** TBD

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**Course Description:** This course looks at the challenging problem of terrorism from a psychological and social psychological perspective both in terms of how terrorism can be explained at the individual and group level and how psychological factors can interact with other factors to impact when terrorism starts and how terrorist campaigns might end. What are the key empirical and normative questions raised by terrorism and what answers does the psychological literature offer? In this course, in addition to studying the theories that have been developed to explain the politics and history of violent political conflict, students will have an opportunity to participate in simulation exercises designed to sharpen their analytic skills in the subject area and to allow them to examine the psychological determinants of behavior in experimental environments. The reading that is assigned is required and **you need to read it and read it carefully in order to do well in the class and on quizzes and the final.**

**Prerequisites:** There are no prerequisites for this course.

### **Course Learning Objectives:**

Upon completion of this course, students should be able to demonstrate:

- An understanding of psychological and social psychological theories of terrorism
- An understanding and an ability to apply psychological theories of terrorism analytically to various cases that will be discussed in class.
- A basic understanding of psychological and experimental research as it applies to terrorism.
- An understanding of the difference between rigorous and systematic thinking and uncritical thinking about social phenomena

## **Grading and Description of Course Requirements:**

This course is A-E graded and the grades are determined based on the following criteria: Each student will be evaluated using four criteria.

### **1) Participation and attendance (20%):**

Participation is more than attendance, it includes **active and thoughtful participation in discussions in class as well as in all the exercises, games and simulations and home assignments** that are part of the course. Home assignments will be 1 to 2 page reaction **or preparation papers (that could be up to 5 pages) for simulations** that will count as part of your participation grade. Active and thoughtful participation is dependent on a **thorough reading** of the material as well as preparation for exercises and games to be conducted in class as well as debriefing or analysis reports. I try very hard not to assign reading for the sake of reading. **Some classes will NOT have assigned readings. For you to perform well in these classes you need to do the reading when it is assigned.**

NOTE: For every class you need to be prepared to answer the following questions:

- Does the author make a compelling argument?
- What are its strong points?
- What are its weaknesses?
- What is missing?

For some classes you will need to prep material beyond the reading which may or may not need to be turned in. If it needs to be turned in I will tell you. This will be marked on the syllabus as homework (HW)

**More than one unexcused absence will affect this portion of the grade.**

**Additionally, if you miss class three times or more without an approved excuse you will automatically have your grade reduced to a C+ at best. Consistent lateness will also affect your grade.** Given the importance of the participation grade I will give you feedback on your participation level throughout the semester. If you are unsure of what your participation grade is at any point in the semester please come and talk to me. **If you are sick**, in order to make up an exam or to remove an absence, please bring in a note from the **dean of undergraduate studies** who is responsible for excused absence certification. Without such a note any absence from class or missed exams will count against you.

**2) Participation in exercises (20%)** – We will factor in peer review into this component of the grade.

**3) Pop quizzes (20%)** - All quizzes will be unannounced and will focus on readings and past analysis. Quizzes will vary from short answer to short essay style. Some of these quizzes may be take home. 6+ with bottom 20% of quizzes (rounding up) will be dropped.

**5) A final, which will cover all the material in the class will be worth 20% of your grade and a midterm that will be worth 20%.**



### Grades summary

Assignment	Points
Participation in Lectures	200
Participation in simulations	200
Quizzes	200
Midterm	200
Final	200

### Grades:

Grades will be given according to effort and accomplishments. There is no curve and if you deserve an A, you will get one. A level work means exceptional effort and results. Similarly, average work will receive a C and so on.

**\*CAUTION - anyone caught cheating will fail. On this particular issue, there will be no second chances. It is assumed that all students understand the requirements of Academic Integrity. If you are unclear on what this entails you should read the following web page: [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html)**

### Grading Rubric:

Start of grade range	0	60	63	67	70	73	77	80	83	87	90	93
Letter	E	D-	D	D+	C-	C	C+	B-	B	B+	A-	A

### Questions:

Education is about learning. This class is about material you have probably not covered before in this context. If you have questions or things are unclear – ask questions. Ask them in lecture and feel free to email the TA's or call (if I am in my office at 10pm I will answer the phone) or email the instructor whenever to ask for further clarification. This includes any problems you might have about material on Dropbox or any other technical aspect of the course.

### **Email**

- Please include your name – I don't know who sr46723@albany.edu is
- Please send me your phone number – I will call you back and whatever question you have will probably be resolved more quickly

**Accommodations:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please go here <http://www.albany.edu/disability/current.shtml> and arrange for an academic accommodation letter to be sent to me. If you wish to discuss academic accommodations for this course please also inform me as soon as possible. I will also make every effort to accommodate difficulties arising from religious observance or sickness. You are asked to bring any possible conflicts to my attention as soon as possible. Students should not expect that, if they do poorly on an exam or other assignment, to claim, at that time, the need of an accommodation. This statement is to preclude that problem, and allow people with a need for accommodations to be treated fairly and appropriately.

### **Plagiarism:**

Please familiarize yourself with the description in the undergraduate bulletin

[http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html) if you are involved in plagiarism the penalty will be failure in the course and you will be reported to judicial affairs. **In this one regard there are no second chances.** If you are not sure if something violates standards – ask. If you are not sure whether to cite or not to cite – cite. Every student is expected to go through the following tutorial

<http://library.albany.edu/usered/plagiarism/index.html>

**Late Assignments:** Unless you have gotten prior approval from me through email or have a note from the undergraduate dean, all late work will be penalized. All grade appeals should be made in email and should explain exactly why you think the grading was mistaken.

**Office hours:** Office hours are your opportunity to get personalized guidance for assignments as well as to help you better understand the course material. Take advantage of it. If office hour times are not good then please email me your phone number and we will call you to set up a time that works in order to meet.

**Ombudsperson-** “A government official, especially in Scandinavian countries, who investigates citizens' complaints against the government or its functionaries ([www.answers.com](http://www.answers.com)).” One student will be asked to volunteer to act as an ombudsperson and will meet with me on a regular basis to offer feedback from students in terms of the direction the course is going and bring to my attention any problems with reading, assignments or other material.

### Textbook to purchase:

Horgan, John. *The psychology of terrorism*. Routledge, 2014.

### Lecture and Reading Schedule:

Dates	Lecture Title	Readings
Week 1	An intro to the Psychology of Terrorism	None
Week 2	What is terrorism?	Asal, V., De la Calle, L., Findley, M., & Young, J. (2012). Killing Civilians or Holding Territory? How to Think about Terrorism. <i>International Studies Review</i> , 14(3), 475-497.
Week 3	An overview of the general terrorism literature	LaFree, Gary, and Gary Ackerman. "The empirical study of terrorism: Social and legal research." (2009).
Week 4	An overview of the Psychological literature	Borum, Randy. <i>Psychology of terrorism</i> . University Of South Florida Tampa Dept Of Mental Health Law And Policy, 2007.
Week 5	Psychological warfare	<b>Horgan: Introduction and chapter 1</b> Crenshaw, Martha. "The psychology of terrorism: An agenda for the 21st century." <i>Political psychology</i> (2000): 405-420.
Week 6	Understanding	<b>Horgan: Chapter 2</b>

	<b>Terrorism</b>	Victoroff, Jeff. "The Mind of the Terrorist A Review and Critique of Psychological Approaches." <i>Journal of conflict resolution</i> 49.1 (2005): 3-42.
<b>Week 7</b>	<b>Terrorist Minds</b>	<b>Horgan Chapter 3</b> Juergensmeyer, Mark. "Terror mandated by God." <i>Terrorism and Political Violence</i> 9.2 (1997): 16-23.
<b>Week 8</b>	<b>Midterm</b>	<b>Midterm prep and review – and midterm</b>
<b>Week 9</b>	<b>Involvement</b>	<b>Horgan Chapter 4</b> <b>The School by C. J. Chivers</b>
<b>Week 10</b>	<b>Engagement</b>	<b>Horgan Chapter 5</b> Taylor, Max, and John Horgan. "A conceptual framework for addressing psychological process in the development of the terrorist." <i>Terrorism and political violence</i> 18.4 (2006): 585-601.
<b>Week 11</b>	<b>A “staircase approach”</b>	Moghaddam, Fathali M. "The staircase to terrorism: a psychological exploration." <i>American Psychologist</i> 60.2 (2005): 161.
<b>Week 12</b>	<b>Application to cases</b>	<b>Different readings to be assigned to different students</b>
<b>Week 13</b>	<b>Simulation</b>	
<b>Week 14</b>	<b>Simulation</b>	
<b>Week 15</b>	<b>Disengagement</b>	<b>Horgan Chapter 6</b>
<b>Week 16</b>	<b>Science of Terrorist Behavior</b>	<b>Horgan Chapter 7</b>
<b>Week 17</b>	<b>Summary Discussion</b>	<b>Review readings</b>



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 321 Human Trafficking

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Day/Time: TBD

Location: TBD

Instructor: To Be Hired

Teaching Assistant: TBD

Contact: TBD

Office Location and Hours: TBD

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### Course Information:

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**Course Description:** This course looks at the challenging problem of Human Trafficking from a comparative politics and international perspective both in terms of how Human Trafficking can be explained and how Human Trafficking impacts people as well as the efforts governments are taking to try to stop Human Trafficking. In this course, in addition to studying the theories that have been developed to explain the politics and history of Human Trafficking, students will have an opportunity to participate in data collection designed to sharpen their analytic skills in the subject area. The reading that is assigned is required and **you need to read it and read it carefully in order to do well in the class and on quizzes and the final.**

**Prerequisites:** There are no prerequisites for this course.

### Course Learning Objectives:

Upon completion of this course, students should be able to demonstrate:

- An understanding of comparative and international relations theories of Human Trafficking
- An understanding and ability to apply these theories about Human Trafficking analytically to various cases that will be discussed in class.
- A basic understanding of data collection as it applies to Human Trafficking.

- An understanding of the difference between rigorous and systematic thinking and uncritical thinking about social phenomena

## Grading and Description of Course Requirements:

This course is A-E graded and the grades are determined based on the following criteria:  
Each student will be evaluated using four criteria.

### 1) Participation & Attendance (20%):

#### A) Participation in class discussions and attendance will be worth 20% of your grade.

Participation is more than attendance, it includes **active and thoughtful participation in discussions in class as well as in all the exercises, games and simulations and home assignments** that are part of the course. Home assignments will be 1 to 2 page reactions **or preparation papers (that could be up to 5 pages) for simulations** that will count as part of your participation grade. Active and thoughtful participation is dependent on a **thorough reading** of the material as well as preparation for exercises and games to be conducted in class as well as debriefing or analysis reports. I try very hard not to assign reading for the sake of reading. **There will be SOME classes that will NOT require reading. For you to perform well in these classes you need to do the reading when it is assigned.**

NOTE: for every class you need to be prepared to answer the following questions:

- Does the author make a compelling argument?
- What are its strong points?
- What are its weaknesses?
- What is missing?

For some classes you will need to prep material beyond the reading which may or may not need to be turned in. If it needs to be turned in I will tell you. This will be marked on the syllabus as homework (HW)

#### B) Attendance

**More than one unexcused absence will affect this portion of the grade.**

**Additionally, if you miss class three times or more without an approved excuse you will automatically have your grade reduced to a C+ at best. Consistent lateness will also affect your grade.** Given the importance of the participation grade I will give you feedback on your participation level throughout the semester. If you are unsure of what your participation grade is at any point in the semester please come and talk to me. **If you are sick**, in order to make up an exam or to remove an absence, please bring in a note from the **dean of undergraduate studies** who is responsible for excused absence certification. Without such a note any absence from class or missed exams will count against you.

### 2) Data collection efforts (20%)

### 3) Quizzes, Midterms & Finals (60%):

You will have **pop quizzes (6+ with bottom 20% of quizzes (rounding up) dropped) will be worth a total of 20% of your grade.** All Quizzes will be unannounced and will focus on readings and past analysis. Quizzes will vary from short answer to short essay style. Some of these quizzes may be take home.

In the middle of the year you will receive a **midterm which will count towards 20%** of your grade.

At the end of the semester you will also receive a **final, which will cover all the material in the class. The final is worth 20%** of your grade.

#### Grades summary

Assignment	Points
Participation in Lectures	200
Data collection efforts	200
Quizzes	200
Midterm	200
Final	200

#### **Grades:**

Grades will be given according to effort and accomplishments. There is no curve and if you deserve an A, you will get one. A level work means exceptional effort and results. Similarly, average work will receive a C and so on.

**\*CAUTION - anyone caught cheating will fail! On this particular issue, there will be no second chances. It is assumed that all students understand the requirements of Academic Integrity. If you are unclear on what this entails you should read the following web page:** [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html)

#### **Grading Rubric**

Start of grade range	0	60	63	67	70	73	77	80	83	87	90	93
Letter	E	D-	D	D+	C-	C	C+	B-	B	B+	A-	A

#### **Questions:**

Education is about learning. This class is about material you have probably not covered before in this context. If you have questions or if anything is unclear – ask questions. Ask them in lecture and feel free to email the TA or call (if I am in my office at 10pm I will answer the phone) or email the instructor whenever you need further clarification. This includes any problems you might have about material on Dropbox or any other technical aspect of the course.

#### **Email:**

- Please include your name – I don't know who sr46723@albany.edu is
- Please send me your phone number – I will call you back and whatever question you have will probably be resolved more quickly

#### **Accommodations:**

Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please go here

<http://www.albany.edu/disability/current.shtml> and arrange for an academic accommodation letter to be sent to me. If you wish to discuss academic accommodations for this course please also inform me as soon as possible. I will also make every effort to accommodate difficulties arising from religious observance or sickness. You are asked to bring any possible conflicts to my attention as soon as possible. Students should not

expect that, if they do poorly on an exam or other assignment, to claim, at that time, the need of an accommodation. This statement is to preclude that problem, and allow people with a need for accommodations to be treated fairly and appropriately.

### **Plagiarism:**

Please familiarize yourself with the description in the undergraduate bulletin [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html) if you are involved in plagiarism the penalty will be failure in the course and you will be reported to judicial affairs. **In this one regard there are no second chances.** If you are not sure if something violates standards – **ask**. If you are not sure whether to cite or not to cite – **cite**. Every Student is expected to go through the following tutorial <http://library.albany.edu/usered/plagiarism/index.html>

### **Late Assignments:**

Unless you have gotten prior approval from me through email or have a note from the undergraduate dean, all late work will be penalized. All grade appeals should be made in email and should explain exactly why you think the grading was mistaken.

- **Office hours:** Office hours are your opportunity to get personalized guidance for assignments as well as help yourself get better understanding of the course material. Take advantage of it. If office hour times are not good then please email me your phone number and we will call you to set up a time that works in order to meet.

**Ombudsperson-** “A government official, especially in Scandinavian countries, who investigates citizens' complaints against the government or its functionaries ([www.answers.com](http://www.answers.com)).” One student will be asked to volunteer to act as an ombudsperson and will meet with me on a regular basis to offer feedback from students in terms of the direction the course is going and bring to my attention any problems with reading, assignments or other material.

### **Textbook to purchase:**

Shelley, Louise. 2010. Human Trafficking, A Global Perspective. New York, New York: Cambridge University Press.

### **Lecture and Reading Schedule:**

Dates	Lecture Title	Readings
Week 1	Introduction to the topic of Human Trafficking	None
Week 2	What is human trafficking	<a href="http://www.unodc.org/unodc/en/human-trafficking/what-is-human-trafficking.html">http://www.unodc.org/unodc/en/human-trafficking/what-is-human-trafficking.html</a>
Week 3	The human impact of human trafficking	Watch Red Leaves Falling Shelley introduction

Week 4	What has made human trafficking so pervasive	Shelley 1
Week 5	Training on collecting data on human trafficking	To be announced
Week 6	Gender and human trafficking	Catharine A. MacKinnon “Crimes of War, Crimes of Peace” and Martha C. Nussbaum “Women and Cultural Universal” in Sex and Social Justice. Human Trafficking – a Woman’s Issue
Week 7	Consequences	Shelley 2
Week 8	Connection to organized crime	Shelley 3
Week 9	human trafficking as a business	Shelley 4
Week 10	Asian Trafficking	Shelley 5
Week 11	Human trafficking in Eurasia and Eastern Europe	Shelley 6
Week 12	Trafficking in Europe	Shelley 7
Week 13	Discussion of data on human trafficking	
Week 14	Trafficking in the United States	Shelley 8
Week 15	Human trafficking in Latin America and Africa	Shelley 9
Week 16	The political debate on human trafficking	Joyce Outshoorn, “The Political Debates on Prostitution and Trafficking of Women,” Social Politics 12: 1 (2005)
Week 17	Review	Shelley conclusion

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# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 324 Civil Liberties in Context: Emergency Preparedness, Homeland Security and Cybersecurity

**Day/Time:** TBD

**Location:** TBD

**Instructor:** Matthew C. Ingram [mingram@albany.edu](mailto:mingram@albany.edu)  
Stephan Stohler [sstohler@albany.edu](mailto:sstohler@albany.edu)

**Teaching Assistant:** TBD

**Contact:** TBD

**Office Location and Hours:** TBD

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**Course Description:** Over the past 15 years, the U.S. government has responded to new security challenges in ways that potentially conflicted with established civil rights and civil liberties guaranteed by the U.S. Constitution. In this course, students will examine the tensions between civil liberties and government responses to cybersecurity, homeland security, and emergency preparedness. Students will draw from contemporary and historical case studies and a range of legal materials to develop their own analytical and normative views about the appropriate balance between civil liberties and security. Students will be asked to evaluate how the law governing relevant topics has changed and whether it has changed in desirable ways. Students will also be asked to determine what relevant information we do not yet possess to answer these questions.

**Prerequisites:** None

### Course Learning Objectives:

- Demonstrate understanding of ethical principles in general and the ability to recognize, articulate, and apply ethical principles in concrete situations related to emergency preparedness, homeland security, and cybersecurity (i.e., ethical analysis).
- Demonstrate an understanding of diversity and the ability to assess social equity in management and policy decisions through courses that focus on topics such as

- race ethnicity, gender, sexuality, religion, physical ability, language, and/or social class (i.e., diversity).
- Understand the theoretical and practical principles of emergency preparedness for both natural disasters and terrorist incidents and be able to analyze key topics related to natural disasters extreme events, emergency planning, all-hazard management and ethics.

### **Grading and Description of Course Requirements:**

This course is A-E graded and the grades are determined based on the following criteria: Each student will be evaluated using four criteria.

#### **Grades summary**

Assignment	Percentage
Case Studies Reviews	25%
Participation in Class Discussions	25%
Pop Quizzes	25%
At home Assignments	25%
Final	100%

#### **Grades:**

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#### **Grading Rubric:**

Start of grade range	0	60%	63%	67%	70%	73%	77%	80%	83%	87%	90%	93%
Letter	E	D-	D	D+	C-	C	C+	B-	B	B+	A-	A

#### **Policies:**

**Attendance Policy:** You are expected to attend all classes and all examinations and to complete all course requirements on time. Exceptions are made only for legitimate, documentable reasons including: (a) illness, tragedy, or other personal emergency; (b) foreseeable time conflicts resulting from required appointments or events; and (c) religious observance. It is your responsibility to provide sufficient documentation to support any request. There are three types of missed classes – Approved Absences, Excused Absences, and Unexcused Absences. Approved and excused absences will have no impact on your grade provided that you follow the policies below, including notification, documentation, and the make-up of missed work. For each unexcused absence you will lose 10% of your participation grade. Three or more unexcused absences will result in a failing grade for the course.

#### **1. Approved Absences**

**Defined:** Scheduled, college-approved events that require students to miss class. Examples include: musical performances, academic conferences, class field trips, athletic competitions, and class-required attendance at special campus events.

**Policy:** For approved absences, you are expected to personally inform me in advance of the planned absence and provide appropriate documentation. This notice should be given as early as possible and no later than the last class before the anticipated absence. You are required to complete any scheduled assignments, papers, quizzes and exams before the missed class. If you miss unique in-class learning experiences, you will be required to submit a substitute assignment. If you fail to notify me in advance of approved absences, the absence will be considered unexcused.

## 2. Excused Absences

**Defined:** Unexpected events that result in missed classes. Examples may include: significant illness or injury, death in the immediate family, doctor's appointments and severe weather conditions.

**Policy:** If you are unexpectedly absent from class you are expected to contact me as soon as is reasonably possible. This contact may include voice mail messages and email messages. If your absence exceeds one calendar week, you may inform the Vice Provost for Undergraduate Education of an unexpected extended absence and the notice will be forwarded to affected faculty members. In all cases, you should contact me upon your return to campus. In all cases, it is your responsibility to initiate contact with me or the Vice Provost's office. For excused absences, we will determine a plan to make up missed work upon your return. Failure to

## 3. Unexcused Absences

**Defined:** Absences which are not "approved" or "excused" shall be considered unexcused.

**Policy:** For each unexcused absence you will lose 10% of your participation grade. Three or more unexcused absences will result in a failing grade for the course.

**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

**Academic Dishonesty Policy:** Students are expected to comply with the University at Albany's Community Rights and Responsibilities. An incident of unethical conduct (e.g. cheating, plagiarism) or classroom disruption will result in a Fail and referral to the appropriate Departmental and University Committees. More information on academic integrity is available at the following website:

[http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html). Students will be asked to sign a statement of honor, promising to act with academic integrity.

**Lecture Schedule:**

<b>Dates</b>	<b>Lecture Title</b>	<b>Readings/ Lecture</b>
<b>Week 1</b>	<b>PART I: Civil Liberties &amp; Homeland Security -</b>	Lecture on Civil Liberties & Homeland Security
<b>Week 2</b>	<b>Civil Liberties &amp; Homeland Security – Habeas Corpus &amp; Government Detentions</b>	<u>Case Study:</u> Guantanamo Bay and Foreign Wars  Wert, Justin. 2011. <i>Habeas Corpus in America: The Politics of Individual Rights</i> . Lawrence: University of Kansas Press.
<b>Week 3</b>	<b>Fourth Amendment Search &amp; Seizure – Authorization of the Use of Military Force</b>	<i>Ex Parte Milligan</i> <i>Ex Parte McCardle</i> <i>Ex Parte Quirin</i> <i>Hamdi v. Rumsfeld</i> <i>Hamdan v. Rumsfeld</i> <i>Rasul v. Bush</i>
<b>Week 4</b>	<b>Fourth Amendment Search &amp; Seizure</b>	<u>Case Study:</u> Racial Profiling in American Law: <i>United States v. Armstrong</i> . Students will be asked to evaluate the legal arguments related to racial profiling. While this is not a case directly related to the War on Terror, <i>Armstrong</i> has significant implications for government behavior in the area of Homeland security. See also Arizona's S.B. 1070. Students will learn about the basic constitutional framework protecting against unreasonable search and seizure established under the Fourth Amendment.
<b>Week 5</b>	<b>Fourth Amendment Search &amp; Seizure</b>	U.S. Constitution, amend IV. <i>Chimel v. California</i> <i>Arizona v. Hicks</i> <i>Terry v. Ohio</i> <i>Bond v. United States</i> , <i>Mapp v. Ohio</i> <i>Nix v. Williams</i> <i>United States v. Leon</i> <i>Massachusetts v. Sheppard</i> <i>Arizona v. Evans</i> <i>Stop and Frisk Cases</i> <i>Riley v. California</i> (smartphones and privacy) <i>Kyllo v. U.S.</i> (infrared searches) <i>U.S. v Jones and/or Torrey Dale Grady v. North Carolina</i> (GPS tracking) <i>Florida v Jardines and/or Rodriguez v U.S.</i> (use of drug-sniffing

		dogs outside home and at traffic stop, respectively)
<b>Week 6</b>	<b>Torture: Due Process &amp; Cruel and Unusual Punishment</b>	<b>Case Study:</b> While prosecuting the War on Terror, members of the U.S. Government used interrogation techniques that raised questions about its obligations under the Fifth Amendment, Sixth Amendment, and international conventions. In this section of the course, we examine the government's internal justifications for "enhanced interrogation techniques."
<b>Week 7</b>	<b>Torture: Due Process &amp; Cruel and Unusual Punishment</b>	"Background for Torture Memo and Questions", A Short Introduction. Office of Legal Counsel (OLC). 2002. Memorandum. (Often referred to as the "Torture Memo"). Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment U.S. Constitution, amend. V, VI.
<b>Week 8</b>	<b>PART II Civil Liberties &amp; Cybersecurity</b>	Lecture on Civil Liberties and Cybersecurity
<b>Week 9</b>	<b>Unreasonable Search &amp; Seizure in a New Age</b>	Greenwald, Glen. 2014. <i>No Place to Hide: Edward Snowden, the NSA, and the U.S. Surveillance State</i> . New York: Metropolitan Books.  Gilliom, John and Torin Manahan. 2012. <i>SuperVision: An Introduction to the Surveillance Society</i> . Chicago: University of Chicago Press.
<b>Week 10</b>	<b>Reasonable Expectation of Privacy</b>	<i>Olmstead v. United States</i> <i>Katz v. United States</i> <i>United States v. Jones</i> <b>Bigger Picture:</b> Clarke, Richard, et al. 2014. <i>The NSA Report: Liberty and Security in a Changing World</i> . Princeton: Princeton University Press (especially Ch2, "Lessons of History").
<b>Week 11</b>	<b>PART III Civil Liberties &amp; Emergency Preparedness</b> Natural Disasters and Civil Liberties: Preventing Legal Disasters	Lecture on Civil Liberties & Emergency Preparedness
<b>Week 12</b>	<b>Civil Liberties &amp; Emergency Preparedness</b> Natural	<b>Case Study:</b> Hurricane Katrina tested the limits of the federal government's capacity to respond to natural disasters. The Class V hurricane killed nearly two thousand residents of New Orleans and displaced many more. Most agree that the government's

	Disasters and Civil Liberties: Preventing Legal Disasters	response to the storm was inadequate. In this case study, we examine the legal and constitutional issues -- if any -- which emerged in the response to Hurricane Katrina. Students will be asked to identify issues and recommend best practices which better protect the legal and constitutional rights of American citizens during emergencies. Students will also be asked to analogize between natural disasters and man-made disasters, e.g., crime waves and financial crises, and to examine the intersection of man-made and natural disasters in the phenomenon of climate change.
<b>Week 13</b>	<b>Natural Disasters and Civil Liberties:</b> Disease & Quarantines	<p>Somers, Margaret. 2008. <i>Genealogies of Citizenship: Markets, Statelessness, and the Right to Have Rights</i>. Cambridge: Cambridge University Press.</p> <p>Department of Defense (DOD). 2014. <i>Climate Change Adaptation Roadmap</i>. (pdf)</p> <ul style="list-style-type: none"> <li>• See also: Peter Schwartz and Doug Randall (2003), <i>An Abrupt Climate Change Scenario and Its Implications for United States National Security</i> (pdf)</li> </ul>
<b>Week 14</b>	<b>Natural Disasters and Civil Liberties:</b> Disease & Quarantines	<b>Case Study:</b> In October 2014, a nurse in Dallas began to exhibit symptoms of Ebola. While she herself had not traveled to infected areas in Liberia, she had cared for a patient who had. Shortly thereafter, it was discovered that a second nurse, who presented symptoms, had boarded a commercial airliner. Fear spread quickly. Some northeastern states with large international airports considered mandatory quarantines for anyone who had travelled to outbreak areas in western Africa. In this section, we consider the legal public health and civil liberties considerations surrounding quarantines, and the role they play in rapid response to disease.
<b>Week 15</b>	<b>Natural Disasters and Civil Liberties:</b> Disease & Quarantines	Helen Epstein. 2014. Ebola in Liberia: An Epidemic of Rumors. <i>New York Review of Books</i> . December 18th. Available: <a href="http://bit.ly/1LaBB2j">http://bit.ly/1LaBB2j</a> .
<b>Week 16</b>	<b>Natural Disasters and Civil Liberties:</b> Disease & Quarantines	<p><i>Ex parte Hardcastle</i></p> <p>Memorandum for the President, Office of the Attorney General, "Summary of Legal Authorities for Use in Response to an Outbreak of Pandemic Influenza" (Apr. 25, 2009), available at <a href="http://www.ncsl.org/Portals/1/Documents/health/attorneygeneral_flu.pdf">www.ncsl.org/Portals/1/Documents/health/attorneygeneral_flu.pdf</a></p>
<b>Week 17</b>		<b>Review readings</b>



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 325 Critical Infrastructure

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**Day/Time:** TBD

**Location:** TBD

**Instructor:** To Be Hired

**Teaching Assistant:** TBD

**Contact:** TBD

**Office Location and Hours:** TBD

### **Course Information:**

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#### **Course Description:**

Students will be able to gain understanding of what the critical infrastructure sectors are and why they are so vital to the United States. They will obtain knowledge on each sector's assets, systems, and networks, both physical and virtual. Learning that critical infrastructure is a shared responsibility, they will also understand how the Federal, State, local, tribal, and territorial governments; private companies; and individual citizens play a role in keeping it strong, secure, and resilient.

#### **Required Texts:**

- Flynn, Stephen. (2007) Edge of Disaster. Random House.
- Norman, Thomas. (2009) Risk Analysis and Security Countermeasure Selection. CRC Press.
- Amoroso, Edward. (2010) Cyber Attacks: Protecting National Infrastructure. Butterworth-Heinemann.

#### **Course Learning Objectives:**

Upon completion of this course, students should be able to demonstrate:

- Familiarity with critical infrastructure sectors - including the US DHS defined sectors – as well as various typologies for grouping infrastructure, and various definitions of “criticality”
- Knowledge of critical infrastructure policy issues, including the selection and prioritization processes of what is “critical” at various levels of analysis (asset level, system level, industry level, and jurisdictional level) as well as at various levels of government (local, state, national)

- Understanding of the various kinds of security – physical security, information/cyber security, and operational security – that are involved in infrastructure protection
- Understand how the various kinds of security are operationalized in security programs, how they interact, and how a broader security program is built encompassing all three.
- Understanding the general risk management process, and specifically the National Infrastructure Protection Plan (NIPP) and its Risk Management Framework

### **Grading:**

This course is A-E graded and the grades are determined based on the following criteria:

**Exams:** 40% - 4 exams at 10% each

**Essays:** 40% - 4 policy memos at 10% each

**Attendance/Participation:** 20%

### **Description of Course Requirements:**

### **Lecture and Reading Schedule:**

<b>Dates</b>	<b>Lecture Title</b>	<b>Readings</b>	<b>Notes</b>
<b>Topic 1</b>	<b>What is Critical Infrastructure</b>	<b>Flynn 1-3</b>	
<b>Topic 2</b>	<b>Infrastructure</b>	<b>Flynn 4-5</b>	
<b>Topic 3</b>	<b>Critical Infrastructure Risk</b>	<b>Norman 1, 2, 3</b> <b>DHS Risk Lexicon</b>	
<b>Topic 4</b>	<b>Criticality</b>	<b>Norman 5, 6</b>	
<b>Topic 5</b>	<b>Levels of Analysis: Assets, Systems and Jurisdictions</b>	<b>Amoroso 1</b> <b>DHS: The National Infrastructure Protection Program (NIPP)</b>	
<b>Topic 6</b>	<b>Critical Infrastructure Risk Management</b>	<b>Norman 10, 11</b>	
<b>Topic 7</b>	<b>Security</b>	<b>Norman 12-14</b>	
<b>Topic 8</b>	<b>Security I: Physical Security</b>	<b>Norman 15, 16</b>	
<b>Topic 9</b>	<b>Security I: A Physical Security Program</b>	<b>Norman 17, 18</b>	
<b>Topic 10</b>	<b>Security II: Cyber Security</b>	<b>Amoroso 2-6</b>	
<b>Topic 11</b>	<b>Security II: Cyber Security Threats</b>	<b>Amoroso 7-10</b>	



	<b>and Industrial Control Systems</b>		
<b>Topic 12</b>	<b>Security II: A Cyber Security Program</b>	<b>Amoroso 11</b>	
<b>Topic 13</b>	<b>Security III: Operational Security</b>	<b>Coast Guard Manual: Operations Security (OPSEC) Program</b>	
<b>Topic 14</b>	<b>Security III: An Operational Security Program</b>	<b>Securitas Corporate Manual: Security Standard Operating Procedures</b>	
<b>Topic 15</b>	<b>Resilience</b>	<b>Flynn 6-10</b>	
<b>Topic 16</b>	<b>Case Study: Hurricane Sandy</b>	<b>NYS 2100 Commission Report</b>	
<b>Topic 17</b>	<b>Conclusion and the Future</b>	<b>Department of Energy Report: Climate Change and infrastructure, Urban Systems, and Vulnerabilities</b>	

### **Policies:**

**Attendance Policy:** You are expected to attend all classes and all examinations and to complete all course requirements on time. Exceptions are made only for legitimate, documentable reasons including: (a) illness, tragedy, or other personal emergency; (b) foreseeable time conflicts resulting from required appointments or events; and (c) religious observance. It is your responsibility to provide sufficient documentation to support any request. There are three types of missed classes – Approved Absences, Excused Absences, and Unexcused Absences. Approved and excused absences will have no impact on your grade provided that you follow the policies below, including notification, documentation, and the make-up of missed work. For each unexcused absence you will lose 10% of your participation grade. Three or more unexcused absences will result in a failing grade for the course.

### **1. Approved Absences**

**Defined:** Scheduled, college-approved events that require students to miss class. Examples include: musical performances, academic conferences, class field trips, athletic competitions, and class-required attendance at special campus events.

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## 2. Excused Absences

**Defined:** Unexpected events that result in missed classes. Examples may include: significant illness or injury, death in the immediate family, doctor's appointments and severe weather conditions.

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## 3. Unexcused Absences

**Defined:** Absences which are not "approved" or "excused" shall be considered unexcused.

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[http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html). Students will be asked to sign a statement of honor, promising to act with academic integrity.



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## **CEHC 345 Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity**

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**Day/Time:**

**Location:**

**Instructor:**

**Teaching Assistant:**

**Contact:** [phone number/email]

**Office Location and Hours:**

### **Course Information:**

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**Course Description:** CEHC 345 Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity provides a foundation for applying philosophical and ethical understanding to homeland security professions by drawing on both theoretical and practical approaches. It includes an overview of philosophical theories of ethics and political philosophy relevant to security practices and policies, as well as opportunities to develop critical thinking and communication skills in their application to particular cases related to homeland security through analysis and discussion. Historical and contemporary material will be examined to investigate issues such as the right to privacy, the nature and value of freedom, the justification of state security, and rights and responsibilities of public officials and health professionals.

### **Course Structure and Requirements:**

#### **Required Texts:**

1. Steven Cahn, ed. *Classics of Political and Moral Philosophy* (Oxford U. Press)  
ISBN 0-29-514091-5
2. Robert Paul Churchill, *Human Rights and Global Diversity* (Pearson-Prentice Hall)  
ISBN 0-13-040885-9
3. Naomi Zack, *Ethics for Disaster* (Rowman and Littlefield)

ISBN 978-0-7425-6494-7

#### 4. Articles from Blackboard

#### Course Learning Objectives:

Upon completion of this course, students should be able to:

- Demonstrate knowledge, synthesize, critique, communicate and apply basic concepts central to ancient and modern moral philosophy in the western tradition;
- Demonstrate knowledge, synthesize, critique, communicate and apply basic concepts relating to human rights, civil liberties, rights to privacy, and rights to public safety (and other concepts central to the ethics of homeland security);
- Apply moral concepts and theories to cases and design concrete solutions to support ethical requirements;
- Work with others to discuss perspectives and find common ground to pursue action in line with considered moral judgements
- Respond sensitively and critically to others' evaluations of cases and theories.

**Prerequisites:** None

**Grading:** This course is A-E graded and the grades are determined based on the following criteria:

Reading response essays: 30%

Case studies: 15%

Participation: 10%

Midterm: 20%

Final: 25%

**Reading Response Essays:** In preparation for each lecture students will be expected to complete readings assigned by the lecturer and to write a short (250-500 word) response summarizing and reflecting upon the readings. Essays will be graded as satisfactory or unsatisfactory; satisfactory essays receive full credit, and one unsatisfactory grade may be dropped. These will be due by email at 5pm Tuesday evening.

**Case Studies:** Periodically students will receive a case study and a set of associated questions. Students will work together as a group to answer these questions. Students are responsible for submitting a formal 1500 word report of the case study of their choice at any point throughout the semester.

Sample themes for case studies:

Human rights: cases where human rights are alleged to be violated, or controversy about their definition, application or implications, who is the proper subject of

HRs, who enforces them, etc.
Privacy: questions about its scope, meaning and foundation, as well as when (if ever) rights to privacy can be ignored/overridden
Risk Management: questions of how to weigh risks and harms, controversy over the proper assessment of, say, loss of life, morbidity risk of harm
Authority: questions about who/what has the proper authority to undertake security measures; may include issues of police/military power and authorization of their actions
Profiling and alleged racism (or ethno-centrism) in surveillance or security methods

Participation: Active reflection, sharing and defending of ideas, and intellectual collaboration are essential to effective work in the areas of emergency preparedness, homeland security and cybersecurity. As such, students are expected to engage with lecturers and fellow students, participate in discussion, work cooperatively in group work, and orally present and defend their findings.

Midterm and Final: The midterm and final will be in-class, open-book exams focused on the application of relevant material. Students will be expected to be familiar with general theories, concrete concepts from lectures and be able to meaningfully apply these concepts in a practical context.

#### Lecture and Reading Schedule:

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Week/ Dates	Chap #	Lesson Topic
		<b>Course Introduction</b>
<b>Unit 1</b>	1.1	Introduction to Course
	1.2	Introduction to Moral and Political Philosophy
	1.3	Discussion
		<b>Module I: Philosophical Theories of Moral and Political Philosophy</b>
<b>Unit 2</b>	2.1	Ancient Moral Frameworks Plato: Why Should I Be Just?
	2.2	Ethics and the Virtues: Aristotle
<b>Unit 3</b>	3.1	Modern Moral Frameworks: Utilitarianism
	3.2	Utilitarianism and Lifeboat Ethics

	3.3	Case study
<b>Unit 4</b>	4.1	Rights and Duties
	4.2	Kant's Moral Philosophy
	5.1	The Value and Limits of Liberty: J.S. Mill
	5.2	Liberty, con't
	5.3	Liberty and Individuality
<b>Unit 5</b>	6.1	Moral and Political Theory Overview
	6.2	Overview and Review
	6.3	Case study
<b>Unit 6</b>	7.1	Basic Concepts in Political Philosophy Sovereignty
	7.2	Hobbes's Moral and Political Philosophy
	7.3	Hobbes's, con't
<b>Unit 7</b>	8.1	Individual (Natural) Rights
	8.2	Locke, Individual Rights and Political Sovereignty
	8.3	Discussion of Hobbes and Locke
	9.1	Contemporary Political Philosophy
	9.2	Liberal Justice
	9.3	The Social Contract and Disaster Preparedness
<b>Unit 8</b>	10.1	Cultural Difference and Ethical Relativism
	10.2	Cultural Difference and Universal Principles
	10.3	Discussion: Relativism and Difference
	11.1	Overview of Political Philosophy
	11.2	Review for Midterm
	11.3	<b>Midterm</b>
		<b>Module II: Philosophical and Policy Issues in HLS</b>
	12.1	Rights to Privacy

<b>Unit 9</b>	12.2	Rights, Liberty and Security
	12.3	Individual Rights and the Presumption of Innocence: Case Study
<b>Unit 10</b>	13.1	Human Rights
	13.2	Human Rights and Universal Morality
	13.3	Discussion: State Sovereignty and International Justice
<b>Unit 11</b>	14.1	Just War Theory
	14.2	Just War, con't Overview and Review
		Final

#### Policies:

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**Attendance Policy:** Since this course is based heavily on discussion, in-class group work, and application of concepts to concrete case studies, good attendance is essential. We understand that things may come up that prevent students from attending class and so one absence is allowed, with prior notice, for any reason. Students are still expected to complete reading and response essay on time, and to review and respond to case study questions before the following class meeting so as not to fall behind. For documented illness (i.e. with doctor's note) students may miss class with no penalty, but are expected to catch up on missed work within a reasonable time frame. If more than one class is missed without a documented excuse student will lose all 10 points of participation credit. Each additional absence will result in 10 points off the final grade.

**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

**Academic Dishonesty Policy:** Students are expected to comply with the University at Albany's Community Rights and Responsibilities. An incident of unethical conduct (e.g. cheating, plagiarism) or classroom disruption will result in a Fail and referral to the appropriate Departmental and University Committees. More information on academic integrity is available at the following website: [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html). Students will be asked to sign a statement of honor, promising to act with academic integrity.



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 355 Comparative Homeland Security

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**Day/Time:** TBD

**Location:** TBD

**Instructor:** To Be Hired

**Teaching Assistant:** TBD

**Contact:** TBD

**Office Location and Hours:** TBD

### Course Information:

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**Course Description:** Studying the cultural, historical and political differences from different countries, students will be able to determine the shared characteristics they play with the US and be able to determine the relevance with current Homeland Security policies. Students will be able to analyze different policy issues, including both political and public policies, using various methods of review.

#### Required Texts:

- Morag, Nadav. (2011) Comparative Homeland Security: Global Lessons. Wiley.
- Alexander, Yonah. (2002) Combating Terrorism: Strategies of Ten Countries. University of Michigan.
- Rosenau, William. (2004) Confronting the Enemy Within: Security Intelligence, the Police, and Counterterrorism in Four Democracies.  
[http://www.rand.org/content/dam/rand/pubs/monographs/2004/RAND\\_MG100.pdf](http://www.rand.org/content/dam/rand/pubs/monographs/2004/RAND_MG100.pdf)

#### Course Learning Objectives:

Upon completion of this course, students should be able to demonstrate:

- Knowledge of comparative methods for analyzing political and public policy issues across countries, regions, and the globe
- Understanding of various countries practices in a series of domains that are encompassed in Homeland Security; including counter terrorism, emergency management, cyber security, border security and infrastructure protection
- Understanding of the various institutional arrangements, organizational and bureaucratic structures, and stakeholder relationships that exist in homeland security domains in different countries



- Knowledge of best practices and lessons learned from countries outside the United States, including some that may have applications in the US context, and others that will not - for various reasons related to political, cultural, and/or resource constraints.
- Experience in analyzing the political, cultural, social, economic, technological, geopolitical and other factors that influence government choices related to public safety and homeland security programs and initiatives

**Fulfillment of General Education Requirements:** [if any, must include general description of general education as well as description of the particular requirements the course fulfills]

**Prerequisites:**

**Grading:** [whether the course is *A-E* or *S/U* graded and overall method by which grades will be determined ("weights" of exams, class participation, etc.)]

This course is A-E graded and the grades are determined based on the following criteria:

Exams: 40% - 4 exams at 10% each  
 Essays: 40% - 4 policy memos at 10% each  
 Attendance/Participation: 20%

**Description of Course Requirements:**

**Lecture and Reading Schedule:**

Dates	Lecture Title	Readings	Notes
Topic 1	What is Homeland Security?	Bellavita - Changing Homeland Security: What Is Homeland Security?	
Topic 2	How Do We Do Comparative Politics/Comparative Policy Analysis?	Chatham House - Preparing for High-impact, Low-probability Events: Lessons from Eyjafjallajökull	
Topic 3	Why Do We Do Comparative Politics/Comparative Policy Analysis?	Institute for Economics and Peace - 2014 Global Terrorism Index	
Topic 4	Comparing Counter Terrorism (CT) Policy	Rosenau 1-7	
Topic 5	Comparing CT Policy - Legal	Morag 2	
Topic 6	Comparing CT Policy - Organizational	Morag 3	
Topic 7	Comparing Emergency	Morag 8-9	

	Management (EM) Policy - Hazards		
Topic 8	Comparing EM Policy - Military Role	Morag 5	
Topic 9	Comparing Cyber Security Policy	ENISA – An Evaluation Framework for Cyber Security Strategies  Ghana – National Cyber Security Policy and Strategy	
Topic 10	Comparing Cyber Security Policy – Computer Security Incident Response Teams (CSIRTs)	New America Foundation – CSIRT Basics for Policy Makers  GCSCC – Computer Security Incident Response Teams (CSIRTs): An Overview	
Topic 11	Comparing Border Security and Immigration	Morag 6	
Topic 12	Infrastructure Protection Policy	Morag 7	
Topic 13	Country Study 1: Israel	Morag 1 Alexander Part III	
Topic 14	Country Study 2: Japan	Morag 1 Alexander Part IV	
Topic 15	Country Study 3: India	Alexander Part IV	
Topic 16	Country Study 4: Canada	Rosenau  Morag 1	
Topic 17	Insights from Comparison		

#### Policies:

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#### Attendance Policy:

**Attendance Policy:** You are expected to attend all classes and all examinations and to complete all course requirements on time. Exceptions are made only for legitimate, documentable reasons including: (a) illness, tragedy, or other personal emergency; (b) foreseeable time conflicts resulting from required appointments or events; and (c) religious observance. It is your responsibility to provide sufficient documentation to support any

request. There are three types of missed classes – Approved Absences, Excused Absences, and Unexcused Absences. Approved and excused absences will have no impact on your grade provided that you follow the policies below, including notification, documentation, and the make-up of missed work. For each unexcused absence you will lose 10% of your participation grade. Three or more unexcused absences will result in a failing grade for the course.

### **1. Approved Absences**

**Defined:**

Scheduled, college-approved events that require students to miss class. Examples include: musical performances, academic conferences, class field trips, athletic competitions, and class-required attendance at special campus events.

**Policy:**

For approved absences, you are expected to personally inform me in advance of the planned absence and provide appropriate documentation. This notice should be given as early as possible and no later than the last class before the anticipated absence. You are required to complete any scheduled assignments, papers, quizzes and exams before the missed class. If you miss unique in-class learning experiences, you will be required to submit a substitute assignment. If you fail to notify me in advance of approved absences, the absence will be considered unexcused.

### **2. Excused Absences**

**Defined:**

Unexpected events that result in missed classes. Examples may include: significant illness or injury, death in the immediate family, doctor's appointments and severe weather conditions.

**Policy:** If you are unexpectedly absent from class you are expected to contact me as soon as is reasonably possible. This contact may include voice mail messages and email messages. If your absence exceeds one calendar week, you may inform the Vice Provost for Undergraduate Education of an unexpected extended absence and the notice will be forwarded to affected faculty members. In all cases, you should contact me upon your return to campus. In all cases, it is your responsibility to initiate contact with me or the Vice Provost's office. For excused absences, we will determine a plan to make up missed work upon your return.

### **3. Unexcused Absences**

**Defined:**

Absences which are not "approved" or "excused" shall be considered unexcused.

**Policy:**

For each unexcused absence you will lose 10% of your participation grade. Three or more unexcused absences will result in a failing grade for the course.

**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability

Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

**Academic Dishonesty Policy:** Students are expected to comply with the University at Albany's Community Rights and Responsibilities. An incident of unethical conduct (e.g. cheating, plagiarism) or classroom disruption will result in a Fail and referral to the appropriate Departmental and University Committees. More information on academic integrity is available at the following website: [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html). Students will be asked to sign a statement of honor, promising to act with academic integrity.



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 356: Transnational Crime

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**Day/Time:** Tuesdays/ Thursdays 10:15 am - 11:35 am

**Location:** HU 0132

**Instructor:** Dr. Brian Nussbaum

**Contact:** [bnussbaum@albany.edu](mailto:bnussbaum@albany.edu)

**Office Location and Hours:**

### Course Information:

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#### Course Description:

This class introduces the major ideas and problems associated with the study of international and transnational crime in the context of global politics. It will examine transnational criminal activities, illicit markets, those individuals and organizations involved in such crime, and how governments attempt to respond to and cope with such criminality. In order to understand the various phenomena that constitute transnational crime, there are both substantive and theoretical insights that are required. This course will pursue substantive knowledge of various illicit goods and industries, as well as the actors and organizations that take part in such “black market” trade. Besides examining the crimes themselves, and those engaged in them, this course will use certain theoretical perspectives to examine the dynamics that underpin and enable such activities, including concepts from organizational studies (like hierarchies and networks), the analysis of business and political economy (“the firm” and markets), and numerous concepts from political science (the salience of borders, sovereignty, globalization, and others).

This course will also look closely at efforts by government and law enforcement agencies to respond to crime that does not respect traditional jurisdictional or national borders, often using some of the same theoretical insights that may help to illuminate the criminal side of this phenomenon. In addition it will examine how criminal activities impact states and governments negatively, including through funding insurgencies and instability, drawing states into conflicts, and weakening state control.

It is increasingly hard to understand global politics without understanding the dark underside of globalization. This course will offer substantive insights and theoretical insights to help students examine the “other” global economy.

#### Course Structure and Requirements:

Students will be expected to prepare for class discussions by doing all readings thoroughly and in advance. Readings should not only be completed, but also it is expected that students come to class and discuss the readings. THERE WILL BE A LOT OF READING FOR THIS CLASS.

This will not be a traditional lecture class, rather student engagement will be expected and required. As such, participation counts very heavily in this course.

**Attendance is required for this class.** While I understand that we all have numerous other activities and responsibilities, because of the importance of engagement and discussion for this class, you simply can't succeed without being present. **All students will be allowed 3 unexcused absences during the course of the semester.** Absences beyond these three will negatively affect your participation grade. Absences for which there is a legitimate medical or other university-approved purpose (sports, campus service, etc) will not result in any penalization – as long as they are brought to the instructor's attention before the absence

#### **Required books, chapters and articles:**

Naim, Moises. (2005) *Illicit: How Smugglers, Traffickers and Copycats are Hijacking the Global Economy*. Doubleday Books.

Hoffman, Bruce. (1999/2006) *Inside Terrorism*. Columbia University Press. \*\* (2006 version is preferable)

Kenney, Michael. *From Pablo to Osama: Trafficking and Terrorist Networks, Government Bureaucracies and Competitive Adaptation*.

#### **Course Learning Objectives:**

By end of course, students should be able to do the following (not an exhaustive list):

- Understand the breadth and dynamics of transnational crime
- Understand the challenges such crime poses to governments and law enforcement worldwide, and some of the ways in which they respond
- Use theoretical perspectives from several different disciplines to understand transnational crime in the broader context of global politics
- Be able to engage the phenomena of transnational crime both as a policy issue, and as an area of scholarship

#### **Grading:**

The grading for this course is fairly straightforward.

Participation is a key facet of your grade, and counts for 20% of your grade. This includes three components: Attendance, Preparation (reading) **and Active Participation** in class discussion. This class depends heavily on student discussion, and if there is evidence that students are arriving unprepared to engage, the instructor may institute reading quizzes to establish who is prepared.

Two smaller papers (of 2-3 pages) counts for 20% of your grade each. These smaller papers will require you to actively engage readings and utilize themes and theories discussed in class. There will be 3 topics offered, and every student must select two of these papers to write. The assignments will be distributed 2 weeks before their due date.

The final 40% of your grade is based on your term paper proposal and term paper - a 6-8 page analytical memo - details of which will be provided later in the semester. 10% of that will be based on a 1 page paper proposal

20%	Participation **
20%	Short Paper 1
20%	Short Paper 2

10%	Final Paper Proposal
30%	Final Paper – Analytical Memo

\*\* The instructor reserves the right to institute reading quizzes at any time if it appears reading is not being completed.

**Plagiarism Note:**

**Plagiarism is obviously unacceptable in a university class. See the undergraduate student handbook for details. But the bottom line is – don't do it, it will work out poorly.**

**Lecture and Reading Schedule:**

Day	Month	Date	Topic	Readings
Tue	Aug	26	<b>Introduction/ Housekeeping/ Why study international crime and LE in Global Politics?</b>	
Thu		28	<b>Transnational Crime – History and Models of Crime</b>	1) Peter Andreas – Gangster's Paradise: The Untold History of the United States and International Crime. <a href="http://www.watsoninstitute.org/pub/06_Andreas.pdf">http://www.watsoninstitute.org/pub/06_Andreas.pdf</a>  2) United Nations Office on Drugs and Crime – The Globalization of Crime: A Transnational Organized Crime Threat Assessment (2010 – Chapters 1,2,9,11) <a href="https://www.unodc.org/documents/data-and-analysis/tocta/TOCTA_Report_2010_low_res.pdf">https://www.unodc.org/documents/data-and-analysis/tocta/TOCTA_Report_2010_low_res.pdf</a>
Tue	Sept	2	<b>Transnational Crime – Model 1: The Firm or Family</b>	1) Europol – Threat Assessment: Italian Organized Crime (2013) <a href="https://www.europol.europa.eu/sites/default/files/publications/italian_organised_crime_threat_assessment_0.pdf">https://www.europol.europa.eu/sites/default/files/publications/italian_organised_crime_threat_assessment_0.pdf</a>  2) Steven Strang – Project SLEIPNIR: An Analytical Technique for Operational Priority Setting <a href="https://www.e-education.psu.edu/drupal6/files/sgam/Project%20SLEIPNIR%20An%20Analytical%20Technique%20for%20Operational%20Priority%20Setting.pdf">https://www.e-education.psu.edu/drupal6/files/sgam/Project%20SLEIPNIR%20An%20Analytical%20Technique%20for%20Operational%20Priority%20Setting.pdf</a>
Thu	Sept	4	<b>Transnational Crime – Model 2: The Market</b>	1) Letizia Paoli – The Paradoxes of Organized Crime. <a href="http://www.cerium.ca/IMG/pdf/Paoli_2002_The_paradoxes_of_organized_crime.pdf">http://www.cerium.ca/IMG/pdf/Paoli_2002_The_paradoxes_of_organized_crime.pdf</a>  2) Curtis and Wendel. Toward the Development of a Typology of Illegal Drug Markets. (pg 8-23) <a href="http://www.popcenter.org/library/crimep">http://www.popcenter.org/library/crimep</a>

				<a href="http://www.revention.org/volume_11/06-Curtis.pdf">revention/volume_11/06-Curtis.pdf</a>
Tue	Sept	9	<b>Transnational Crime – Model 3: The Proto-State</b>	<p>1) Skaperdas, S. 2001. The Political Economy of Organized Crime: Providing Protection When the State Does Not. Economics of Governance.  <a href="http://www.socsci.uci.edu/~sskaperd/SkaperdasEoG01.pdf">http://www.socsci.uci.edu/~sskaperd/SkaperdasEoG01.pdf</a></p> <p>2) Goga and Goradema - Cape Town's Protection Rackets: A Study of Violence and Control. (2014)  <a href="http://www.issafrica.org/uploads/Paper259_IDRC.pdf">http://www.issafrica.org/uploads/Paper259_IDRC.pdf</a></p>
Thu	Sept	11	<b>Transnational Crime – Model 4: Networks</b>	<p>1) Phil Williams - Transnational Criminal Networks (in Networks and Netwars)  <a href="http://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1382/MR1382.ch3.pdf">http://www.rand.org/content/dam/rand/pubs/monograph_reports/MR1382/MR1382.ch3.pdf</a></p> <p>2) CRS - Organized Crime: An Evolving Challenge for US Law Enforcement.  <a href="http://fas.org/sgp/crs/misc/R41547.pdf">http://fas.org/sgp/crs/misc/R41547.pdf</a></p> <p>3) Andrew Papachristos – Gang World (Foreign Policy)  <a href="http://www.foreignpolicy.com/articles/2005/03/01/gang_world">http://www.foreignpolicy.com/articles/2005/03/01/gang_world</a></p>
Tue	Sept	16	<b>NO CLASS</b>	
Thu	Sept	18	<b>NO CLASS</b>	
Tue	Sept	23	<b>Drugs – Networks and Markets</b>	<p>1) Kenney Ch. 1 – The Architecture of Drug Trafficking</p> <p>2) Kenney Ch. 2 – How Narcos Learn</p> <p>3) UN Office on Drugs and Crime – Estimating the Value of Illicit Drug Markets (2005)  <a href="https://www.unodc.org/pdf/WDR_2005/volume_1_chap2.pdf">https://www.unodc.org/pdf/WDR_2005/volume_1_chap2.pdf</a></p>
Thu	Sept	25	<b>NO CLASS</b>	ROSH HASHANAH
Tue	Sept	30	<b>Drugs – Impacts: Crime and Conflict</b>	<p>1) Office of the Attorney General of California – Gangs Beyond Borders: California and the Fight Against Transnational Organized Crime (2014)  <a href="https://oag.ca.gov/sites/all/files/agweb/pdfs/toc/report_2014.pdf">https://oag.ca.gov/sites/all/files/agweb/pdfs/toc/report_2014.pdf</a></p> <p>2) Hal Brands – Mexico's Narco-Insurgency and US Counterdrug Policy  <a href="http://www.strategicstudiesinstitute.army.mil/pubs/monograph_reports/MR1382/MR1382.ch3.pdf">http://www.strategicstudiesinstitute.army.mil/pubs/monograph_reports/MR1382/MR1382.ch3.pdf</a></p>



				<a href="http://y.mil/pdf/files/pub918.pdf">y.mil/pdf/files/pub918.pdf</a>
Thu	Oct	2	<b>Counter-Narcotics Enforcement</b>	<p>1) Kenney Ch. 3 – How Narcs Learn</p> <p>2) Jamie Bartlett (Ars Technica) Darknet Drug Services Kept Alive by Great Customer Service  <a href="http://arstechnica.com/tech-policy/2014/08/dark-net-drug-markets-kept-alive-by-great-customer-service/">http://arstechnica.com/tech-policy/2014/08/dark-net-drug-markets-kept-alive-by-great-customer-service/</a></p>
Tue	Oct	7	<b>The Arms Trade - Small Arms</b>	<p>1) Naim Chapter 3</p> <p>2) Rachel Stohl. Fighting the Illicit Trafficking of Small Arms (SAIS Review)  <a href="http://faculty.maxwell.syr.edu/rdenever/IntlSecurity2008_docs/Stohl_Trafficking_SmallArms.pdf">http://faculty.maxwell.syr.edu/rdenever/IntlSecurity2008_docs/Stohl_Trafficking_SmallArms.pdf</a></p> <p><b>3) PAPER 1 DUE</b></p>
Thu	Oct	9	<b>The Arms Trade - Small Arms (US Borders)</b>	<p>1) IGARAPE/University of Sand Diego – The Way of the Gun: Estimating Firearms Traffic Across the US-Mexico Border (2013)  <a href="http://catcher.sandiego.edu/items/peace_studies/way_of_the_gun.pdf">http://catcher.sandiego.edu/items/peace_studies/way_of_the_gun.pdf</a></p> <p>2) James Verini – Arming the Drug Wars  <a href="http://upstart.bizjournals.com/news-markets/international-news/portfolio/2008/06/16/Examining-the-US-Mexico-Gun-Trade.html?page=all">http://upstart.bizjournals.com/news-markets/international-news/portfolio/2008/06/16/Examining-the-US-Mexico-Gun-Trade.html?page=all</a></p>
Tue	Oct	14	<b>The Arms Trade - the WMD Supermarket</b>	<p>1) William Langewiesche – The Wrath of Khan (Atlantic)  <a href="http://www.theatlantic.com/magazine/archive/2005/11/the-wrath-of-khan/304333/">http://www.theatlantic.com/magazine/archive/2005/11/the-wrath-of-khan/304333/</a></p> <p>2) William Langewiesche – The Point of No Return (Atlantic)  <a href="http://www.theatlantic.com/magazine/archive/2006/01/the-point-of-no-return/304500/">http://www.theatlantic.com/magazine/archive/2006/01/the-point-of-no-return/304500/</a></p>
Thu	Oct	16	<b>Human Smuggling</b>	<p>1) Naim Chapter 5</p> <p>2) Peter Landesman – The Girls Next Door (NY Times)  <a href="http://www.nytimes.com/2004/01/25/magazine/25SEXTRAFFIC.html">http://www.nytimes.com/2004/01/25/magazine/25SEXTRAFFIC.html</a></p>

Tue	Oct	21	<b>Resource Crime – Diamonds and Minerals</b>	<p>1) CRS - Diamonds and Conflict: Background, Policy and Legislation (2003)  <a href="http://royce.house.gov/uploadedfiles/rl30751.pdf">http://royce.house.gov/uploadedfiles/rl30751.pdf</a></p> <p>2) CRS - Conflict Minerals in Central Africa: US and International Responses (2012)  <a href="http://fas.org/sqp/crs/row/R42618.pdf">http://fas.org/sqp/crs/row/R42618.pdf</a></p>
Thu	Oct	23	<b>Illicit Licit Goods - Case Study: Cigarettes</b>	<p>1) Shelley, L. Melzer, S. The Nexus of Organized Crime and Terrorism: Two Cases in Cigarette Smuggling. International Journal of Comparative and Applied Criminal Justice.  <a href="http://www.traccc.gmu.edu/pdfs/publications/illicit_trade_publications/Shelley_Melzer.pdf">http://www.traccc.gmu.edu/pdfs/publications/illicit_trade_publications/Shelley_Melzer.pdf</a></p> <p>2) House Committee on Homeland Security – Tobacco and Terror: How cigarette Smuggling is Funding Our Enemies Abroad  <a href="http://www.foxnews.com/projects/pdf/Cigarette_smuggling_042408.pdf">http://www.foxnews.com/projects/pdf/Cigarette_smuggling_042408.pdf</a></p> <p><b>3) PAPER 2 DUE</b></p>
Tue	Oct	28	<b>Miscellaneous Illicit Goods</b>	<p>1) Naim Chapter 8</p> <p>2) Alice Blondel – The Logs of War (Le Monde Diplomatique)  <a href="http://mondediplo.com/2004/01/15timber">http://mondediplo.com/2004/01/15timber</a></p> <p>3) Bryan Christy - The Kingpin (National Geographic)  <a href="http://ngm.nationalgeographic.com/print/2010/01/asian-wildlife/christy-text">http://ngm.nationalgeographic.com/print/2010/01/asian-wildlife/christy-text</a></p>
Thu	Oct	30	<b>Financial Crime - Money Laundering</b>	<p>1) Naim Chapter 7</p> <p>2) Phil Williams. Crime, Illicit Markets and Money Laundering (Carnegie)  <a href="http://carnegieendowment.org/pdf/files/mgi-ch3.pdf">http://carnegieendowment.org/pdf/files/mgi-ch3.pdf</a></p> <p>3) <b>FINAL PAPER PROPOSAL DUE</b></p>
Tue	Nov	4	<b>Intellectual Property Crime</b>	<p>1) Naim Chapter 6</p> <p>2) IP Crime Group (UK) – IP Crime Annual Report 2012/2013 (Chapters 1 and 2)  <a href="http://www.ipo.gov.uk/ipcreport12.pdf">http://www.ipo.gov.uk/ipcreport12.pdf</a></p>
Thu	Nov	6	<b>Cyber Crime – Varieties of Cyber Crime</b>	<p>1) CRS – Botnets, Cybercrime and Cyberterrorism: Vulnerabilities and Policy Issues for Congress (2008)  <a href="http://fas.org/sqp/crs/terror/RL32114.pdf">http://fas.org/sqp/crs/terror/RL32114.pdf</a></p>

				<p>2) Price Waterhouse Coopers – US Cybercrime: Rising Risks, Reduced Readiness (2014)  <a href="http://www.pwc.com/en_US/us/increasing-it-effectiveness/publications/assets/2014-us-state-of-cybercrime.pdf">http://www.pwc.com/en_US/us/increasing-it-effectiveness/publications/assets/2014-us-state-of-cybercrime.pdf</a></p> <p>3) McAfee - Net Losses: Estimating the Global Cost of Cyber Crime (2014)  <a href="http://www.mcafee.com/ca/resources/reports/rp-economic-impact-cybercrime2.pdf">http://www.mcafee.com/ca/resources/reports/rp-economic-impact-cybercrime2.pdf</a></p>
Tue	Nov	11	<b>Cyber Crime – Individuals, Organizations, States</b>	<p>1) Trend Micro – Russian Underground 101 (2012)  <a href="http://www.trendmicro.com/cloud-content/us/pdfs/security-intelligence/white-papers/wp-russian-underground-101.pdf">http://www.trendmicro.com/cloud-content/us/pdfs/security-intelligence/white-papers/wp-russian-underground-101.pdf</a></p> <p>2) Mandiant – APT 1: Exposing one of China’s Cyber Espionage Units (2013)  <a href="http://intelreport.mandiant.com/Mandiant_APT1_Report.pdf">http://intelreport.mandiant.com/Mandiant_APT1_Report.pdf</a></p> <p><b>3) PAPER 3 DUE</b></p>
Thu	Nov	13	<b>Cyber Crime – Responding to Cyber Crime</b>	<p>1) Michael Riley. How Russian Hackers Stole the Nasdaq (Bloomberg Businessweek)  <a href="http://www.businessweek.com/articles/2014-07-17/how-russian-hackers-stole-the-nasdaq">http://www.businessweek.com/articles/2014-07-17/how-russian-hackers-stole-the-nasdaq</a></p> <p>2) Stewart Baker. The Attribution Revolution: Raising the Costs for Hackers and Their Customers (2013)  <a href="http://www.judiciary.senate.gov/imo/media/doc/5-8-13BakerTestimony.pdf">http://www.judiciary.senate.gov/imo/media/doc/5-8-13BakerTestimony.pdf</a></p>
Tue	Nov	18	<b>Terrorism - What is it?</b>	1) Hoffman Chapter 1-2
Thu	Nov	20	<b>Terrorism - Who and Why</b>	1) Hoffman Chapter 3-5
Tue	Nov	25	<b>Counter Terrorism</b>	<p>1) David Kilcullen – Countering Global Insurgency.  <a href="http://smallwarsjournal.com/documents/kilcullen.pdf">http://smallwarsjournal.com/documents/kilcullen.pdf</a></p> <p>2) Jim Steiner - Needed: State Level, Integrated Intelligence Enterprises (CIA)  <a href="https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol.-53-no.-3/pdfs/U-%20Steiner-NYStateHomelandSecurity-web.pdf">https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol.-53-no.-3/pdfs/U-%20Steiner-NYStateHomelandSecurity-web.pdf</a></p>
Thu	Nov	27	<b>NO CLASS</b>	THANKSGIVING
Tue	Dec	2	<b>Political Corruption</b>	1) Moises Naim – The Corruption Eruption (1995)

				<a href="http://carnegieendowment.org/1995/06/01/corruption-eruption">http://carnegieendowment.org/1995/06/01/corruption-eruption</a>  2) US Dept of Justice – The Threat of Russian Organized Crime (2001) <a href="https://www.ncjrs.gov/pdffiles1/nij/187085.pdf">https://www.ncjrs.gov/pdffiles1/nij/187085.pdf</a>
				1) OECD – Transnational Organised Crime and Fragile States (2012) <a href="http://www.crime-prevention-intl.org/fileadmin/user_upload/Publications/Transnational_organised_crime_and_fragile_states_2012.pdf">http://www.crime-prevention-intl.org/fileadmin/user_upload/Publications/Transnational_organised_crime_and_fragile_states_2012.pdf</a>  2) Gretchen Peters – How Opium Profits the Taliban (USIP) <a href="http://www.usip.org/sites/default/files/resources/taliban_opium_1.pdf">http://www.usip.org/sites/default/files/resources/taliban_opium_1.pdf</a>
Thu	Dec	4	<b>Weak and Failed States</b>	<b>3) FINAL PAPER DUE</b>
Tue	Dec	9	<b>Concluding Thoughts and Wrap Up</b>	

### Policies:

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# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## **CEHC 390: Internship Experience in Emergency Preparedness, Homeland Security and Cybersecurity**

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**Day/Time:**

**Location:**

**Instructor:**

**Teaching Assistant:**

**Contact:** [phone number/email]

**Office Location and Hours:**

### **Course Information:**

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#### **Course Description:**

This course offers students the opportunity to integrate theoretical concepts related to politics, public administration, and organizations with practical experience in political, public sector and administrative institutions. This course seeks both to enhance the education value of the internship and to make it a springboard for a successful career. The course has four major components:

- ✓ **Skill Development**
  - The ability to communicate clearly is an essential aspect of nearly every job. Consequently, students will make a presentation and learn how to interact in class groups in order to facilitate problem solving.
- ✓ **Careers**
  - The course will identify a broad range of public policy and administration career options in emergency preparedness, homeland security and cybersecurity and help students to identify the types of jobs that best match their personal style and interests. In addition, students will better understand the role the student's internship organization plays in the larger political, social, economic, and administrative realms as well as the student's individual role in the organization.
- ✓ **Employment Strategies**
  - There will be opportunities to discuss different career paths and perspectives from professionals in different fields as you move towards completing your undergraduate degree.
- ✓ **School to Work Connection**

- Relate the theoretical concepts discussed in the student's coursework to a non-academic organizational setting.

### Course Structure and Requirements:

Required readings, chapters and articles:

All students are required to purchase the text listed below. The book has been ordered at the University Bookstore, Mary Jane's and is available online.

Pollack, Lindsay, *Getting from College to Career: Your Essential Guide to Succeeding in the Real World*, 2<sup>nd</sup> Edition. HarperBusiness, 2012. ISBN: 9780062069276

The course as a whole is flexible and highly interactive in nature. Students are encouraged to raise questions about any issue that is relevant to their internship or their careers. If you are having difficulty with the class, internship or anything, please contact the instructor as soon as possible. The instructor can work with you to overcome any difficulties or challenges.

### Assignments

Students are required to complete several written projects and make a presentation at the end of the semester on their internship experience. Assignments must be typed (double spaced and 12 point font) and will be submitted online via Blackboard. All other assignments will be judged in preparation for career purposes. Please review your spelling, grammar, and formatting.

**Internship Experience:** Students are required to complete a minimum of **140 hours** at their internship sites. This is roughly 10 hours/week for the duration of the semester. **An internship placement is a required component of this course; students who have not found a placement prior to our third class meeting must drop the class.**

**Forms:** There are four required forms associated with the internship course. All forms will be completed online at Handshake or Blackboard.

1. **Student Outcome Form:** Complete outcome form by filling out information about recent internship (See tutorial on Blackboard).
2. **Student Final Evaluation:** Complete online evaluation form from Handshake *on or before the last day of class* (See tutorial on Blackboard).
3. **Supervisor Final Evaluation:** Have your supervisor complete an online evaluation on Handshake *on or before the last day of class*.
4. **Resume:** In addition to the evaluations and forms, you will be required to submit an updated resume with your new internship experience added for feedback. Please check the schedule for the due date.

### Writing Assignments:

#### 1. Pre-Class Guest Speaker Question Submissions:

- Several classes will require an email submission prior to class (**please see assignment due dates on the attached schedule**).
- Each submission will consist of two questions posed to the guest speaker coming to the class. You should identify one question that you would like the presenter to incorporate into their presentation and the second question will identify what you plan to ask the speaker during class.

- Submissions are due before class by 5pm. These questions will be the basis for our question and answer session and will give the speaker an idea of what the class discussion will focus on. If you do not submit questions, you must ask a question during class to receive credit. **\*\*NO LATE QUESTIONS WILL BE ACCEPTED\*\***
  - Questions must be submitted on Blackboard & posted on the Anonymous discussion board.
  - Please see Blackboard for specific instructions.
2. **Personal Vision Statement:** The student will write a 1-2 page personal vision statement that describes your learning objectives, expectations and concerns about your internship. This assignment is intended to help you think through what you hope to gain from your internship experience both on a professional and a personal level. Student should discuss the learning objectives with their supervisors. **Personal Vision Statements are due in class at our 2<sup>nd</sup> meeting.**
  3. **Weekly Blackboard Posts/Reading Questions:** In addition to your Personal Vision Statement, students are required to post from each chapter of the course readings will be required. This will help you analyze, discuss, reflect, and present on your internship experience related to the book. Each post should answer the following questions in **essay format** regarding the textbook readings:
    - a. Why was this tip helpful?
    - b. Is/Was this applicable to your current internship experience?
    - c. How does knowing this affect your future career goals and path?

You will come to find as the semester goes on that they will be an invaluable tool not only as you progress through the internship experience but will be very useful as you prepare your final presentations for the last day of class.
  4. **Response to Personal Vision Statement:** At the end of your internship experience, write a 3-4 page response to the Personal Vision Statement and journals you created throughout the course. This response should summarize and contrast your internship experience with your Personal Vision Statement. Use this assignment to explore how your expectations and concerns have evolved over the course of your internship. How did your internship change your views of the organization, clients-customers-citizens, mission, etc.? Has your internship experience been congruent with what you envisioned or has it evolved into something else? Make sure to incorporate information you learned from class, readings, discussion posts and guest speakers. This response is due on the last day of class.
  5. **Presentation:** Students will present in front of the class and giving a short presentation based on a summary and reflection of their internship experience. Students will give their presentation on the last day that we meet at the end of the semester. The presentation should answer the broad questions, “What did you do on your internship? What did you learn that is important to you for your career? Describe what you have learned about yourself as a result of your internship?” The requirements for the presentation assignment will be distributed later in the semester.

### Course Learning Objectives:

Upon completion of this course, students should be able to:

1. understand the range of career opportunities in the fields of emergency preparedness, homeland security and cybersecurity.

2. work effectively in teams in evaluating policies, managing projects, and implementing programs as well as effectively managing conflicts, optimizing resources and meeting deadlines.
3. recognize and formulate effective written and oral communication, giving appropriate consideration to audience, context, format, and textual evidence.
4. apply knowledge and skills obtained in the Emergency Management, Homeland Security and Cybersecurity major to a real world project under the joint supervision of the site supervisor and a faculty advisor.
5. develop personal and professional skills, explore career interests, and expand their professional networks.

**Note: Students will develop learning objectives for their particular internship in consultation with their supervisor and faculty mentor as part of the Personal Vision Statement assignment. Through their reflection work with their instructor students will be expected to practice and consider the concrete application of all of the program level student learning objectives, including:**

1. Conduct a comprehensive assessment of risks, generate an analysis of options for mitigating risks, select the most appropriate mitigating actions for each risk, develop contingency and crisis response plans, communicate the risk assessment to a variety of audiences, and evaluate risk management plans (i.e., risk management).
2. Critically analyze arguments by identifying assumptions, understanding claims, evaluating evidence, and drawing a conclusion (i.e., critical thinking).
3. Recognize and formulate effective written and oral communication, giving appropriate consideration to audience, context, format, and textual evidence (i.e., communication).
4. Design and implement strategic plans and creative solutions in novel and evolving circumstances (i.e., problem solving).
5. Demonstrate understanding of ethical principles in general and the ability to recognize, articulate, and apply ethical principles in concrete situations related to emergency preparedness, homeland security, and cybersecurity (i.e., ethical analysis).
6. Demonstrate an understanding of diversity and the ability to assess social equity in management and policy decisions through courses that focus on topics such as race, ethnicity, gender, sexuality, religion, disability, language, and/or social class (i.e., diversity).



7. Work effectively in teams in evaluating policies, managing projects, and implementing programs as well as effectively managing conflicts, optimizing resources and meeting deadlines (i.e., teamwork and project management).
8. Comprehend of the theory and practice of homeland security and be able to analyze policy and synthesize information in five key areas: risk and vulnerability analysis, terrorism, intelligence and counter-terrorism, intergovernmental coordination, and ethics.
9. Understand the theoretical and practical principles of emergency preparedness for both natural disasters and terrorist incidents and be able to analyze key topics related to natural disasters, extreme events, emergency planning, all-hazard management, and ethics.
10. Review and understand the legal, regulatory, policy, and ethical issues related to securing cyberspace; identify and evaluate cybersecurity threats to organizations; and analyze the effectiveness of cybersecurity in an organization by performing vulnerability assessments, risk mitigation, auditing, certification and accreditation of information systems.

**Prerequisites:** CEHC101 Introduction to Emergency Preparedness, Homeland Security and Cybersecurity and junior or senior status.

**Grading:** Students will receive a grade of S or U for the course. **Students must receive a grade of 75 or above in order to receive a satisfactory grade.** All grades are also contingent upon the successful completion of internship requirements with a satisfactory review from your internship site.

Attendance and Participation:	15%	Personal Vision Statement:	10%
Discussion Posts	10%	Response to Personal Vision:	15%
Guest Speaker Questions:	10%	Presentation:	15%
Internship Forms:	15%	Resume	10%

#### **Lecture and Reading Schedule:**

<i>Date</i>	<i>Class Topics</i>	<i>Assignments Due</i>
Week 1	Introductions, syllabus review, preview of student internships	
Week 3	Creating resumes, cover letters and joining <i>Handshake</i>	<ul style="list-style-type: none"> <li>• Personal Vision Statement</li> <li>• Pollack, Introduction, Ch. 1 &amp; 2</li> <li>• Blackboard Post</li> <li>• Hard Copy of Current Resume</li> </ul>
Week 5*	Careers Trivia – How to Find a Job	<ul style="list-style-type: none"> <li>• Pollack, Ch. 3 &amp; 4</li> </ul>

	Interviewing Informational Interviews Networking	<ul style="list-style-type: none"> <li>• Blackboard Post</li> <li>• <b><i>After this class, points will be deducted for late outcome forms.</i></b></li> </ul>
Week 7*	Career Guest Speaker: to be determined	<ul style="list-style-type: none"> <li>• 2 questions for guest speaker due</li> <li>• Pollack, Ch. 5 &amp; 6</li> <li>• Blackboard Post</li> </ul>
Week 9*	Career Guest Speaker: to be determined	<ul style="list-style-type: none"> <li>• 2 questions for guest speakers due</li> <li>• Pollack, Ch. 7 &amp; 8</li> <li>• Blackboard Post</li> </ul>
Week 11*	Graduate School information Guest Speaker: Kara Pangburn, Director of Recruitment and Graduate Admissions	<ul style="list-style-type: none"> <li>• 2 questions for guest speakers due</li> <li>• Pollack, Ch. 9 &amp; 10</li> <li>• Blackboard Post</li> </ul>
Week 13*	Career Guest Speaker: to be determined	<ul style="list-style-type: none"> <li>• Resume, which should include your internship</li> </ul>
Week 14	Class presentations	<ul style="list-style-type: none"> <li>• Presentation</li> <li>• Response to Personal Vision Statement-<b><i>Due</i></b></li> <li>• Student Final Evaluation-<b><i>Due</i></b></li> <li>• Supervisor Final Evaluation-<b><i>Due</i></b></li> </ul>

**\*Open to the public.**

### **Policies:**

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**Attendance and Participation Policy:** The initial class meetings are designed to both integrate a student's internship experience with their course work at UAlbany and to help students acclimate themselves in the first few weeks of their internships. Consequently, attendance is required. **If you are unable to attend class, please let me know in advance.** UAlbany's medial excuse policy can be reviewed at: [http://www.albany.edu/health\\_center/medicalexcuse.shtml](http://www.albany.edu/health_center/medicalexcuse.shtml).

**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

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# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## **CEHC 410: Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity**

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**Day/Time:**

**Location:**

**Instructor:**

**Contact:** [phone number/email]

**Office Location and Hours:**

### **Course Information:**

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#### **Course Description:**

The Capstone Project brings together teams of 3-6 undergraduate students to address complex policy and management challenges facing firms, governmental organizations, and/or nonprofit organizations in the fields of emergency preparedness, homeland security, and cybersecurity. Projects are initiated by clients (e.g., Division of Homeland Security and Emergency Services or the Department of Health) seeking to solve a problem. The student teams examine the problem, develop an action plan, conduct the analysis, and present a final report and oral presentation highlighting their findings and recommendations.

Capstone Projects are designed to be the synthesizing educational experience for students majoring in Emergency Preparedness, Homeland Security, and Cybersecurity. The experience provides students with an opportunity to apply the skills and knowledge acquired in their academic careers to solve a problem for a client. The Capstone Project requires students to engage in higher-order intellectual activity such as analysis, synthesis, and evaluation in a new or novel situation. In addition, students are expected to communicate the results of this intellectual activity in oral or written form to an appropriate audience. Capstone Projects are student-centered experiences that demonstrate that the students have become independent learners.

#### **Course Structure and Requirements:**

Capstone Projects are applied research or policy analysis exercises. During the first week of class, students will be assigned to a team and each team will be assigned a client with a real world puzzle. In many cases, multiple teams will be assigned to one client in order to give the client a range of recommendations at the end of the semester. (However, the teams are not in competition with each other and the teams will be evaluated independently using the course grading rubric).

The readings will be based on the particular project proposed by the client. The class will collectively build annotated bibliography for the topic and develop a literature review surrounding the client's problem. The literature will guide the research plan for the rest of the semester. Students will meet with faculty mentor during some weeks and with members of the team during others. Given that this is a three credit course, we expect that the students will devote approximately 10 hours per week to the effort. The team oral and written reports (draft and final) will be evaluated by both the faculty mentor and the client using the rubric for assessing student performance found in Appendix A. However, only the faculty mentor's assessment will be used in determining the final grade.

### **Course Learning Objectives:**

Upon completion of the Capstone Project, students should be able to accomplish the following activities:

1. Effectively listen to the client, understand the needs of the client, interact with the client's staff, and respond to the needs of the client.
2. Apply knowledge and skills gained in the classroom to solve the problem defined by the client (with the assistance of the faculty mentor).
3. Generate multiple solutions to the client's problem and utilize critical thinking skills to determine the best solution.
4. Communicate professionally and effectively in the written final report and the oral presentation. Work independently with limited oversight from faculty mentor and client.
5. Work effectively in research teams using listening and communication skills, effectively managing conflicts, optimizing resources and meeting deadlines.
6. Identify and address ethical issues that arise during the project.

**Prerequisites:** CEHC 210 Critical Inquiry and Communication and CECH 310 Research Seminar, or permission of instructor.

### **Grading:**

This course is A-E graded and the grades are determined based on the following criteria:

Literature Review: 10%

Draft Oral Presentation: 10%

Draft Written Project: 20%

Final Oral Presentation: 20%

Final Written Project: 30%

Attendance/Participation: 10%

*Evaluation of Team Members:* Twice during the semester students will rate the performance of their fellow teammates. Based on these evaluations, the final oral presentation and final written project grades will be adjusted to account for an overall assessment of superior and inferior teamwork. This provision is designed to minimize free riding in teams.

### **Description of Course Requirements:**

#### **Lecture and Reading Schedule:**

Dates	Lecture Title	Readings	Notes
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<b>Week 1</b>	Introduction	tbd based on project	
<b>Week 2</b>	Meet with Client: Defining the Problem	tbd based on project	
<b>Week 3</b>	Meet with Faculty Mentor	tbd based on project	
<b>Week 4</b>	Team Meeting	tbd based on project	Literature Review Due
<b>Week 5</b>	Meet with Faculty Mentor	tbd based on project	
<b>Week 6</b>	Team Meeting	tbd based on project	
<b>Week 7</b>	Meet with Faculty Mentor	tbd based on project	
<b>Week 8</b>	Team Meeting	tbd based on project	
<b>Week 9</b>	Meet with Faculty Mentor	tbd based on project	
<b>Week 10</b>	Draft Presentations to Client		Written Draft and Oral Presentation Due
<b>Week 11</b>	Meet with Faculty Mentor	tbd based on project	
<b>Week 12</b>	Team Meeting	tbd based on project	
<b>Week 13</b>	Meet with Faculty Mentor	tbd based on project	
<b>Week 14</b>	Final Presentations to Client		Final Draft and Oral Presentation Due

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**Disability Policy:** Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of the Disability Resource Center (Campus Center 137, 442-5490). That office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.

**Academic Dishonesty Policy:** Students are expected to comply with the University at Albany's Community Rights and Responsibilities. An incident of unethical conduct (e.g. cheating, plagiarism) or classroom disruption will result in a Fail and referral to the appropriate Departmental and University Committees. More information on academic integrity is available at the following website: [http://www.albany.edu/undergraduate\\_bulletin/regulations.html](http://www.albany.edu/undergraduate_bulletin/regulations.html). Students will be asked to sign a statement of honor, promising to act with academic integrity.

**Grade Complaints:** Students or teams that feel their exams or assignments have been graded incorrectly should follow a three-step procedure. First, the student or team should carefully read the exam or assignment and identify the precise problem with the grading. Second, the student or team must send a written appeal explaining why their answer was appropriate to the instructor. Third, the instructor will meet with the student or team to discuss the appeal and resolve the conflict.

### Appendix A: Rubric for Capstone Project Evaluation (Oral Presentation and Written Report)

Criteria	Exceeds (3)	Meets (2)	Approaches (1)	Does Not Meet (0)
<b>Arguments And Methods of Analysis</b>	<ul style="list-style-type: none"> <li>- Keen focus on problem specified by client</li> <li>- Extremely thorough, well-organized presentation of arguments</li> <li>- Excellent use of knowledge and skills from classroom to address problem</li> <li>- Excellent exploration of multiple solutions and the identification of the best solution given constraints</li> <li>- Excellent use of the most appropriate method of analysis for the class of problem</li> </ul>	<ul style="list-style-type: none"> <li>- Focus on problem specified by client</li> <li>- Well-organized and complete presentation of arguments and evidence</li> <li>- Good use of knowledge and skills from classroom to address problem</li> <li>- Good exploration of multiple solutions and the identification of the best solution given constraints</li> <li>- Use of the most appropriate method of analysis for the class of problem</li> </ul>	<ul style="list-style-type: none"> <li>- Somewhat focused on problem specified by client</li> <li>- Weaknesses in organization and presentation of arguments and evidence</li> <li>- Some use of knowledge and skills from classroom to address problem</li> <li>- Some exploration of multiple solutions and the identification of a good solution given constraints</li> <li>- Some use of appropriate method of analysis for the class of problem</li> </ul>	<ul style="list-style-type: none"> <li>- No clear focus on central problem specified by client; argument wanders</li> <li>- Arguments are unorganized, incomplete, or severely lacking in evidence</li> <li>- Little or no use of knowledge and skills from classroom to address problem</li> <li>- Weak exploration of solutions and weak identification solution given constraints</li> <li>- Fails to use of appropriate methods of analysis for the class of problem</li> </ul>
<b>Evidence</b>	ample, relevant, concrete evidence and persuasive support for every debatable assertion; uses multiple, reliable sources which are assessed critically	relevant, concrete evidence and persuasive support for most debatable assertions; uses multiple or reliable sources which are not always assessed critically	merely adequate evidence and support for most assertions; uses single or multiple sources, which may be unreliable and used uncritically	weak evidence and persuasive support; uses limited source(s), and/or relies predominantly on sweeping generalizations, narration, description, or summary
<b>Logic &amp; Organization</b>	develops ideas cogently, organizes them logically within paragraphs, connects them with highly effective transitions; clear and logically consistent organization relating all ideas together	develops unified and coherent ideas within paragraphs with generally adequate transitions; clear overall organization relating most ideas together;	develops and organizes ideas in paragraphs that are not necessarily connected with transitions; some overall organization, but some ideas may seem illogical and/or unrelated	does not develop ideas cogently, organize them logically within paragraphs and/or connect them with clear transitions; uneven and/or ineffective overall organization
<b>Citations</b>	researched support correctly	researched support adequately	researched support incorrectly	researched support incorrectly

	quoted, paraphrased, and cited	quoted, paraphrased, and cited	quoted, paraphrased, or cited	quoted, paraphrased, and cited
<b>Understanding Of the Issue In Oral Presentation</b>	<ul style="list-style-type: none"> <li>-Demonstrates a sophisticated understanding of the issues, events and facts relevant to the topic</li> <li>-Demonstrates thorough and accurate understanding of details as well as the ability to make original connections and interpretations</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstrates a good understanding of the issues, events and facts relevant to the topic</li> <li>-Demonstrates a good understanding of details as well as the ability to make original connections and interpretations</li> </ul>	<ul style="list-style-type: none"> <li>-Demonstrates an adequate understanding of many relevant issues, events and facts, but may exhibit minor confusion</li> <li>- Seems to understand general ideas, but do not support their ideas with relevant facts; OR, seems to understand facts but are unable to connect them into coherent arguments</li> </ul>	<ul style="list-style-type: none"> <li>-Demonstrates a very inadequate understanding of the history content relevant to the topic</li> <li>-Supports statements with vague or irrelevant information, or no information at all</li> </ul>
<b>Oral Presentation Performance</b>	<ul style="list-style-type: none"> <li>- Exhibits outstanding confidence, energy, and passion</li> <li>- Maintains respectful tone</li> <li>- Consistently maintains eye contact with audience</li> <li>- Outstanding use of visuals (if used)</li> <li>- Rate and volume of speech carefully monitored</li> <li>- Uses language that is stylistically sophisticated and appropriate for a college course</li> </ul>	<ul style="list-style-type: none"> <li>- Exhibits confidence, energy, and passion</li> <li>-Maintains respectful tone</li> <li>- Maintains eye contact with audience</li> <li>- Good use of visuals (if used)</li> <li>- Rate and volume of speech adequately monitored</li> <li>- Uses language that is appropriate for a college course</li> </ul>	<ul style="list-style-type: none"> <li>-Lacks confidence, energy, and/or passion</li> <li>-Maintains respectful tone</li> <li>- Some eye contact with audience</li> <li>- Use of visuals inadequate (if used)</li> <li>- Rate and volume of speech inadequately monitored</li> <li>- Often uses language that lacks sophistication and appropriateness for a college course</li> </ul>	<ul style="list-style-type: none"> <li>-Demonstrates little or no confidence, energy, or passion</li> <li>-Fails to maintain respectful tone</li> <li>- Generally fails to make eye contact with audience</li> <li>- Ineffective use of visuals (if used)</li> <li>- Rate and volume of speech severely interfere with communication</li> <li>- Language is inappropriate for a college course</li> </ul>





# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## CEHC 410: Capstone Course Project Guidelines for Partners

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The Capstone Project brings together teams of 3-6 undergraduate students to address complex policy and management challenges facing government and nonprofit organizations in the fields of emergency preparedness, homeland security, and cybersecurity. Projects are initiated by clients seeking to solve a problem. The student teams examine the problem, develop an action plan, conduct the analysis, and present a final report and oral presentation highlighting their findings and recommendations.

Capstone Projects are designed to be the synthesizing educational experience for the student majoring in Emergency Preparedness, Homeland Security, and Cybersecurity. The experience provides students with an opportunity to apply the skills and knowledge acquired in their academic careers to solve a problem for a client. The Capstone Project requires students to engage in higher-order intellectual activity such as analysis, synthesis, and evaluation in a new or novel situation. In addition, students are expected to communicate the results of this intellectual activity in oral or written form to an appropriate audience. Capstone Projects are student-centered experiences that demonstrate that the students have become independent learners.

How will a Capstone Project benefit the client? The project can provide with a fresh perspective on a familiar problem or with an opportunity to analyze new issues that your organization may not have had the time to address. You may also use the project to obtain policy advice from an objective, independent source. In all cases, the project will provide your organization with a useful, professional study at very little cost.

Capstone Project teams work on a wide range of projects ranging from highly technical quantitative analysis to qualitative organizational or management analysis. All projects, however, must be focused on an actual policy decision or problem. Background or library research is not an adequate project in itself. The topic must be limited enough in scope to be completed during one semester

of work and be intellectually challenging for the students. A Capstone Project that produces results which are not helpful for the client cannot be considered a success.

In the Emergency Preparedness, Homeland Security and Cybersecurity major, the Capstone Course is a three credit course. We expect that the students will devote approximately 10 hours per week to the effort. The student work will be evaluated by both the faculty mentor and the client using the rubric for assessing student performance found in Appendix A.

Projects begin with the client identifying a problem and working with a faculty mentor to refine the problem; this step is completed prior to the start of the semester. The student teams will meet with the client at a kick off meeting to discuss the problem and potential solutions. The teams and client will also reach an agreement on the final deliverable for the project and a schedule for the semester. We expect that the student teams will meet with the client periodically over the course of the semester; the teams will also meet periodically with their faculty mentor. The client is expected to read and provide comments on a draft final report. After revising the analysis based on client feedback, the student team will present the findings to the client in an oral presentation. An example for a semester long schedule is provided in Table 1. In some projects, students work with the client on a weekly basis throughout the semester. In other projects, the students will conduct analysis more independently and will meet with the client periodically. The nature of the relationship and the frequency of meetings are specified at the kickoff meeting.

**Table 1: Template for Capstone Project.**

Week 1: Student team meets with faculty mentor.  
Week 2: Kickoff meeting with client to define the project.  
Week 3:  
Week 4: Meeting with client.  
Week 5: Meeting with faculty mentor.  
Week 6:  
Week 7: Meeting with client.  
Week 8: Meeting with faculty mentor.  
Week 9:  
Week 10: Draft final report provided to client.  
Week 11: Student team meets with faculty mentor to discuss client comments.  
Week 12:  
Week 13: Final oral presentation to client.

### **Capstone Project Learning Objectives**

Upon completion of the Capstone Project, students should be able to accomplish the following activities:

7. Effectively listen to the client, understand the needs of the client, interact with the client's staff, and respond to the needs of the client.
8. Apply knowledge and skills gained in the classroom to solve the problem defined by the client (with the assistance of the faculty mentor).
9. Generate multiple solutions to the client's problem and utilize critical thinking skills to determine the best solution.
10. Communicate professionally and effectively in the written final report and the oral presentation. Work independently with limited oversight from faculty mentor and client.
11. Utilize leadership and team building skills necessary to complete the project.
12. Identify and address ethical issues that arise during the project.

### Rubric for Capstone Project Evaluation (Oral Presentation and Written Report)

Criteria	Exceeds (3)	Meets (2)	Approaches (1)	Does Not Meet (0)
<b>Arguments And Methods of Analysis</b>	<ul style="list-style-type: none"> <li>- Keen focus on problem specified by client</li> <li>- Extremely thorough, well-organized presentation of arguments</li> <li>- Excellent use of knowledge and skills from classroom to address problem</li> <li>- Excellent exploration of multiple solutions and the identification of the best solution given constraints</li> <li>- Excellent use of the most appropriate method of analysis for the class of problem</li> </ul>	<ul style="list-style-type: none"> <li>- Focus on problem specified by client</li> <li>- Well-organized and complete presentation of arguments and evidence</li> <li>- Good use of knowledge and skills from classroom to address problem</li> <li>- Good exploration of multiple solutions and the identification of the best solution given constraints</li> <li>- Use of the most appropriate method of analysis for the class of problem</li> </ul>	<ul style="list-style-type: none"> <li>- Somewhat focused on problem specified by client</li> <li>- Weaknesses in organization and presentation of arguments and evidence</li> <li>- Some use of knowledge and skills from classroom to address problem</li> <li>- Some exploration of multiple solutions and the identification of a good solution given constraints</li> <li>- Some use of appropriate method of analysis for the class of problem</li> </ul>	<ul style="list-style-type: none"> <li>- No clear focus on central problem specified by client; argument wanders</li> <li>- Arguments are unorganized, incomplete, or severely lacking in evidence</li> <li>- Little or no use of knowledge and skills from classroom to address problem</li> <li>- Weak exploration of solutions and weak identification solution given constraints</li> <li>- Fails to use of appropriate methods of analysis for the class of problem</li> </ul>
<b>Evidence</b>	ample, relevant, concrete evidence and persuasive support for every debatable assertion; uses multiple, reliable sources which are assessed critically	relevant, concrete evidence and persuasive support for most debatable assertions; uses multiple or reliable sources which are not always assessed critically	merely adequate evidence and support for most assertions; uses single or multiple sources, which may be unreliable and used uncritically	weak evidence and persuasive support; uses limited source(s), and/or relies predominantly on sweeping generalizations, narration, description, or summary
<b>Logic &amp; Organization</b>	develops ideas cogently, organizes them logically within paragraphs, connects them with highly effective transitions; clear and logically	develops unified and coherent ideas within paragraphs with generally adequate transitions; clear overall organization	develops and organizes ideas in paragraphs that are not necessarily connected with transitions; some overall organization, but	does not develop ideas cogently, organize them logically within paragraphs and/or connect them with clear transitions; uneven

	consistent organization relating all ideas together	relating most ideas together;	some ideas may seem illogical and/or unrelated	and/or ineffective overall organization
<b>Citations</b>	researched support correctly quoted, paraphrased, and cited	researched support adequately quoted, paraphrased, and cited	researched support incorrectly quoted, paraphrased, or cited	researched support incorrectly quoted, paraphrased, and cited
<b>Understanding Of the Issue In Oral Presentation</b>	<ul style="list-style-type: none"> <li>-Demonstrates a sophisticated understanding of the issues, events and facts relevant to the topic</li> <li>-Demonstrates thorough and accurate understanding of details as well as the ability to make original connections and interpretations</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstrates a good understanding of the issues, events and facts relevant to the topic</li> <li>-Demonstrates a good understanding of details as well as the ability to make original connections and interpretations</li> </ul>	<ul style="list-style-type: none"> <li>-Demonstrates an adequate understanding of many relevant issues, events and facts, but may exhibit minor confusion</li> <li>- Seems to understand general ideas, but do not support their ideas with relevant facts; OR, seems to understand facts but are unable to connect them into coherent arguments</li> </ul>	<ul style="list-style-type: none"> <li>-Demonstrates a very inadequate understanding of the history content relevant to the topic</li> <li>-Supports statements with vague or irrelevant information, or no information at all</li> </ul>
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# Proposed Training Requirement- CEHC

## Proposed CEHC Major and Training Requirement

The proposed major in Emergency Preparedness, Homeland Security and Cybersecurity is designed to provide students with broad overview of these three critical fields and depth in one field through a concentration. The major emphasizes the development of skills and knowledge over the course of a student's academic career (e.g., a critical thinking class during the sophomore year, a research seminar during the junior year, and a capstone experience during the senior year). The program also emphasizes experiential learning in multiple courses and requirements. The major is designed to provide a broad liberal arts foundation while also giving students critical skills and subject area knowledge of public policy, management, and risk analysis. As part of the experiential and applied learning emphasis in the major 100 hours of training will be required, selected by the student from a list of approved trainings. These trainings have been carefully selected to provide important skills and knowledge, to help students apply the concepts they are learning in their classes, and to build students' professional portfolios before entering the workforce.

## Existing History of Training in EP, HS and C at the University at Albany

The University at Albany already provides a significant amount of training in the areas of homeland security and emergency preparedness. For example, funded by Centers for Disease Control and Prevention since 2002, the School of Public Health's Center for Public Health Preparedness (CPHP) provides highly relevant emergency preparedness training, resources, and assistance to public health professionals and their community response partners across New York State and the nation. Similarly, the School of Public Health's Center for Public Health Continuing Education (CPHCE) is nationally known for its distance learning training, including the award-winning Public Health Live webcast series and numerous interactive, self-paced online courses. Finally, Rockefeller College's National Center for Security & Preparedness (NCSP) supports the nation's efforts to be secure from acts of terrorism and to be prepared to respond to incidents of high consequence and disasters through research, education, training, and technical assistance. The NCSP is the project lead on the creation and delivery of training at the New York State Preparedness Training Center (SPTC) located in Oriskany, NY. In 2014, NCSP supported development and/or delivery of training for over 17,000 participants at the SPTC.

## Training and Applied Learning in CEHC's Academic Programming

The undergraduate curriculum will integrate education and training in order to blend theoretical learning in the classroom with applied trainings directly relevant to work in the field. The proposed major will require students to take 100 hours of training which could include training offered through CPHP, CPHCE and NCSP, as well as from a number of approved trainings from

external organizations. The College will build on this training foundation in a number of other ways to reinforce and support this training requirement. The NCSP will work with the College to develop training specifically designed for our students in order provide a direct link between theory and practice. These trainings will be chosen especially to further students' understanding of the content they are learning in the classroom and give them the skills to utilize that content in an applied environment.

## Logistics of the Major's Training Requirement

Students will be expected to complete 100 hours of training, which will be documented in an ePortfolio and which will appear as a "milestone" on their transcript and will be required for graduation. CEHC has worked with Advisement, the Registrar's Office, Undergraduate Education, and other departments who have used portfolios and milestones, in order to make a decision about how best to track and record the students' progress on this requirement. The college will continue to work closely with those units to ensure seamless implementation. Students will choose from a list of dozens of approved trainings that have been selected, reviewed, evaluated, and summarized by a CEHC graduate assistant over the course of the past six months (his full report is available upon request). Many professionals and faculty members have also provided feedback on these lists of trainings to ensure that they support valuable career development in these fields.

Students will track their progress with an ePortfolio service *Digication* in which they will collect the verifications that they have completed the trainings (for each training the college will determine the appropriate documentation, and that information will be included in each training's profile on the CEHC website). Upon declaring the major, students will be assigned an advisor and they will open the ePortfolio in collaboration with their advisor. When the ePortfolio is opened, CEHC will notify the Registrar's Office to record an in-progress milestone on the student's academic record. Once the milestone is recorded, the department can query results to track the number of students who have an in-progress milestone, by major. When they have submitted their completed ePortfolio to their advisor and it has been fully reviewed and approved (typically during their senior year), the department will notify the Registrar's Office that the milestone has been completed and should be recorded on the academic transcript (there are no grades for milestones, so it will simply appear as having been completed). The completion of the milestone is required for degree clearance. We are working with Undergraduate Education and with the Registrar's office to ensure that we can adequately track and assign completion to this requirement from an administrative perspective, and have consulted several academic advisors to discuss the programmatic and curricular feasibility. An Experiential Learning Coordinator has been included in the projected 2017-2018 budget to support the training, internships, and other experiential learning opportunities in the College.



Transfer students may count up to 40 hours of training completed prior to enrollment at UAlbany; non-transfer students may count up to 15 hours of training completed prior to enrollment at UAlbany. Just as students can receive academic and general education credit for AP and other college level courses that they took as high school students, we feel that it is important to provide some acknowledgement of trainings that students may have completed before enrolling at the University, while still encouraging a student to complete the majority of their training (85%) alongside their academic program. In the case of transfer students, we would like to acknowledge work that they have done prior to enrolling, while also requiring that the majority (60%) of their training is completed while the students are here in the program. Trainings completed prior to enrollment will be evaluated in exactly the same way as trainings completed during the program. Approved trainings can be counted toward training hours even when they are taken as work for other courses, as a requirement for a job or internship, or in any other contexts, as long as the required documentation is provided to confirm that they completed the training.

## Approved Trainings

Students may take trainings from the approved list of trainings that are always available and updated regularly, or they may participate in trainings evaluated and promoted by the college as they arise (these will be sent out to students, and will include a designation of the number of hours they will fulfil), or as approved by the Experiential Learning Coordinator on a case by case basis (students will be strongly encouraged to seek approval *before* participating in the training), and the Experiential Learning Coordinator will evaluate how many hours it is worth. For the majority of trainings, the expected number of hours for completion will be already evaluated and published, given that many trainings are offered for continuing education requirements for professionals who require that the hours be tracked. In the event that it is not, the Coordinator will request additional documentation from the student to make a determination. A preliminary list of approved trainings is included below, and will be significantly augmented and reviewed by the Experiential Learning Coordinator who will begin July 1, 2016. Trainings are evaluated based on explicitness, consistency, practicality, level of prior knowledge required, difficulty, and repetitiveness.

## Frequently Asked Questions, Non-Credit Training Requirement:

### **How is an hour of training defined? What if it takes me longer than the posted hours or I finish early?**

Any trainings that we list as approved trainings will designate the number of hours that it will count for. Most of these are determined by the organization offering the training, based on average completion time. You may finish faster, or it may take you slightly longer, but in either case you will earn the number of hours that are posted.

### **How do I prove that I completed a training?**

All approved trainings will include information about how to demonstrate completion.

In most cases there will be a completion certificate that you are awarded when you finish; you will upload that to your Digication portfolio. In some cases, like certain in-person trainings, there will not be a completion certificate and instead there will be a specified point of contact who will sign off on your “training certification form”, indicating that you participated fully in the training, the number of hours it lasted, and the date. If you plan to participate in a training that is not on the pre-approved list, consult first with the Experiential Learning Coordinator to determine how to prove completion and evaluate the hours.

### **How do I create my ePortfolio for my training?**

Upon declaring the major you will work with your advisor and the Experiential Learning Coordinator to set up your ePortfolio and to discuss the trainings that you ought to take to support your academic interests and career goals. Most training on the approved list provides a proof of completion with a number of hours completed and date. You will upload this document into your ePortfolio. If you complete a training that does not automatically generate or provide a proof of completion, you should fill out the CEHC Training Certification form, have it signed by the training provider, and upload this in your ePortfolio.

### **What if I want to do a training that is not on the approved list?**

If you’d like to do a training that is not on the approved list you are strongly encouraged to consult the experiential learning coordinator *before* taking the training. Bring a description of the training, information about the organization hosting and delivering the training, and documentation of the number of hours you expect it will last (many trainings, especially those that count toward certain continuing professional development hours, will post the number of hours it is worth – otherwise an agenda or schedule will also work). Indicate whether a certificate is issued at the end of the training, or list a point of contact who can certify your participation (you may need to call or email the host to get this information). Approval from the Experiential Learning Coordinator is required to earn hours for training not on the pre-approved list.

### **What if I want to receive credit for a training that I already took that is not on the approved list?**

It is strongly encouraged that you seek approval from the Experiential Learning Coordinator *before* taking a training that is not on the list. In the event that you did not receive prior approval you may still go through the same approval process described above to request that your hours count. However, it is not guaranteed that you will get approval or that you will have the documentation needed which is why you are strongly encouraged to consult and get approval in advance.

### **If I take a training as part of an internship or class can I count these hours toward my requirement?**

Yes, if you complete any of the approved trainings in the context of your job, internship, class or other context, and you provide the required documentation, you may use those

hours. If you do a training not on the list that you think should count you may follow the same approval process described above.

**I took an online course about emergency management, can I count the hours put into the course as training?**

No. Online academic courses (including MOOCs) do not count toward the training requirement. Training involves an identifiable performance and/or skill that has to be mastered and practice is required for the mastery of it.

**I volunteer for an EMS squad for about 10 hours per week. Can I count this service toward the training requirement?**

No. Training involves an identifiable performance and/or skill that has to be mastered and practice is required for the mastery of it. Service is general experience rather than aiding the mastering of a specific skill. However, if your EMS squad requires you to complete a training that appears on the list of approved training, with proof of completion these specific hours can count toward the training requirement.

**I have completed my internship requirement. This summer I plan to intern at DHS. Can I count the hours of my DHS internship toward my training requirement?**

No. Internship experiences are job-related and provide students with an opportunity to for professional work experience in a career field. In contrast, training involves an identifiable performance and/or skill that has to be mastered and practice is required for the mastery of it. Internships provide general work experience rather than aiding the mastering of a specific skill. However, if your employer requires you to complete a training that appears on the list of approved training, with proof of completion these specific hours can count toward the training requirement.

**What if I do not complete my trainings – can I still graduate?**

Completion of 100 hours of training and documentation of those trainings in your Digication ePortfolio is a graduation requirement, and without completing your graduation requirements you will not receive degree clearance. Your degree award date will be the semester in which you complete all requirements, and degrees are awarded in May, August, and December (you may find degree conferral dates and deadlines at this link: [http://www.albany.edu/registrar/academic\\_calendar.php](http://www.albany.edu/registrar/academic_calendar.php)). To make sure that you are on track to complete your hours on time, you are required to meet with the Experiential Learning Coordinator before registering for classes in your second-to-last semester, and again before registering for your last semester of classes. The coordinator will work with you to devise a workable strategy to complete your hours on time, and will provide any support or guidance you need to complete this milestone. However, just as it is ultimately any student's responsibility in any major to register for and pass all of his or her required courses in the major to graduate, it is also ultimately your responsibility to complete this milestone in order to graduate. It is important that you take this requirement seriously, just as you would any other courses or requirements for your program.



# THE COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY State University of New York

## Non-Credit Training Requirement

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As part of the experiential and applied learning emphasis in the major in Emergency Preparedness, Homeland Security and Cybersecurity 100 hours of training will be required for graduation, selected from the list of approved trainings below. These trainings have been carefully selected to provide important skills and knowledge, help you to apply the concepts you are learning in your classes, and to build your professional portfolio before entering the workforce. Additional trainings will be announced as they become available, and trainings can be approved on a case by case basis by the Experiential Learning Coordinator.

**Documenting the Training:** Completion of training must be documented and the documentation will be stored in an ePortfolio. Upon declaring the major you will be assigned an advisor within the major. You will work with your advisor and the Experiential Learning Coordinator to set up your ePortfolio and to discuss the trainings that you ought to take to support your academic interests and career goals. You are expected to save documentations that you have completed the trainings in your ePortfolio. If the training that you completed appears on the list and you can provide documentation you are permitted to count any training completed during enrollment at UAlbany. If the training you have completed is not on the list you may provide documentation and a justification to the Experiential Learning Coordinator for approval; it is generally advised to seek approval before participating in the training. Transfer students may count up to 40 hours of training completed prior to enrollment at UAlbany; non-transfer students may count up to 15 hours of training completed prior to enrollment at UAlbany.

**Completing the Training:** During the second to last semester before you intend to graduate you are expected to meet with the Experiential Learning Coordinator and assess the progress that you have made on your training and develop a plan for completing the training requirement within your final two semesters. You are again expected to meet with the Coordinator at the start of your final semester. Once the Experiential Learning Coordinator has reviewed and signed off on your progress and you have provided that approval to your advisor you will be provided an AVN to register for classes. This is intended to help make sure that you are on track to finish the training before you intend to graduate, and to get advice and input from your Experiential Learning Coordinator about how best to complete those requirements and meet your graduation goals. When you have completed the training and the documentation in your ePortfolio you may submit your ePortfolio to the Experiential Learning Coordinator for approval. Once the Coordinator has reviewed and approved your trainings they will indicate their approval to your advisor who can update the milestone in your record which is required for degree clearance.

Agency	Topic Area	Training Name	Cost	Time
<b>FEMA Emergency Management Institute (EMI)</b>		<a href="#">Distance Learning (Independent Study)</a>		
FEMA EMI	Emergency Prep.	IS-1a Emergency Manager: An Orientation to the Position		
FEMA EMI	Emergency Prep.	IS-100b Introduction to the Incident Command System	Free	3 hours
FEMA EMI	Emergency Prep.	IS-200b ICS for Single Resources and Initial Action Incident	Free	3 hours
FEMA EMI	Emergency Prep.	IS-230d Fundamentals of Emergency Management	Free	6 hours
FEMA EMI	Emergency Prep.	IS-235b Emergency Planning	Free	10 hours
FEMA EMI	Emergency Prep.	IS-700a National Incident Management System (NIMS)	Free	3 hours
FEMA EMI	Emergency Prep.	IS-800b National Response Framework	Free	3 hours
FEMA EMI	Emergency Prep.	IS-860c The National Infrastructure Plan	Free	2 hours
<a href="#">Texas A&amp;M Engineering Extension Service (TEEX) Online Courses</a>				
TEEX	Emergency Prep.	AWR 160: WMD/Terrorism Awareness for Emergency Responders	Free	4 hours
TEEX	Cyber Security	AWR 168: Cyber Law and White Collar Crime	Free	10 hours
TEEX	Cyber Security	AWR 169: Cyber Incident Analysis and Response	Free	10 hours
TEEX	Cyber Security	AWR 173: Information Security Basics	Free	13 hours
TEEX	Cyber Security	AWR 174: Cyber Ethics	Free	13 hours
TEEX	Cyber Security	AWR 175: Information Security for Everyone	Free	10.5 hours
<a href="#">Naval Postgraduate School (NPS): Center for Homeland Defense and Security (CHDS)</a>				
NPS CHDS	Homeland Security	Understanding Terrorism: A Social Science View on Terrorism	Free	8 hours

NPS CHDS	Homeland Security	Counterterrorism in the United Kingdom	Free	5 hours
NPS CHDS	Homeland Security	Critical Infrastructure Protection: Transportation Security	Free	4 hours
NPS CHDS	Homeland Security	Terrorist Financing and State Response	Free	6 hours
NPS CHDS	Homeland Security	Intelligence for Homeland Security: Organizational and Policy Challenges	Free	8 hours
NPS CHDS	Homeland Security	Homeland Security in Israel	Free	4 hours
NPS CHDS	Homeland Security	The Global Jihadi Threat	Free	5 hours
NPS CHDS	Homeland Security	Critical Infrastructure: Vulnerability Analysis and Protection	Free	10 hours
NPS CHDS	Homeland Security	Technology for Homeland Security: Inspection and Detection Technologies	Free	4 hours
<b>AmeriCorps National Civilian Community Corps (NCCC)</b>				
AmeriCorps	Emergency Prep.	<a href="#">Traditional Corps Member</a>	Free	10 month: hours tbd w/ advisor
AmeriCorps	Emergency Prep.	<a href="#">Traditional Corps Team Leader</a>	Free	11 months: hours tbd w/ advisor
AmeriCorps	Emergency Prep.	<a href="#">Fema Corps</a>	Free	10 months: hours tbd w/ advisor
AmeriCorps	Emergency Prep.	<a href="#">Fema Corps Team Leader</a>	Free	11 months: hours tbd w/ advisor
<b>Red Cross</b>				
Red Cross	Emergency Prep.	First Aid/CPR/AED Instructor	\$250	
Red Cross	Emergency Prep.	Basic Life Support for Healthcare Providers		2-2.4 hours

<a href="#">UA Red Cross Chapter</a>	Emergency Prep.	Volunteer Opportunities		
<b>Trainings Administered by the University at Albany</b>				
University Police Department	Emergency Prep.	<a href="#">Citizen Police Academy</a>	Free	8 weeks: hours tbd w/ advisor
University at Albany	Emergency Prep.	R.A.D. (Rape Aggression Defense/Resisting Aggression with Defense)	Free	9-12 hours
Center for Public Health Preparedness	Emergency Prep.	Personal Safety and Health for Emergency Responders	Free	1 hour
Center for Public Health Preparedness	Emergency Prep.	Emer. Mgmt. and Prep. Planning for Community Health Center Leaders	Free	
Center for Public Health Preparedness	Emergency Prep.	Preparedness & Community Response to H1N1	Free	1 hour
Center for Public Health Preparedness	Emergency Prep.	Special Medical Needs Shelters	Free	2.5-3 hours
Center for Public Health Preparedness	Emergency Prep.	Emergency Animal Sheltering	Free	1.5-2 hours
Center for Public Health Preparedness	Emergency Prep.	Long-term Care Facilities: Emergency Preparedness Plans	Free	
Center for Public Health Preparedness	Homeland Security	Ethics and Public Health in an Age of Terrorism	Free	10 hours
Center for Public Health Preparedness	Emergency Prep.	Basic Emergency Preparedness for Staff of Community Health Facilities	Free	1 hour
Center for Public Health Preparedness	Emergency Prep.	Risk Communication for Community Health Centers	Free	2 hours
Center for Public Health Preparedness	Emergency Prep.	Detecting Bioterror (Forensic Epidemiology)	Free	6 hours
Center for Public Health Preparedness	Emergency Prep.	Zoonosis, Preparedness, and Public Health	Free	3 hours
Center for Public Health Preparedness	Emergency Prep.	Your Family Disaster Plan	Free	1 hour
Center for Public Health Preparedness	Emergency Prep.	County Animal Response Team	Free	1 hour

Center for Public Health Preparedness	Emergency Prep.	Mass Dispensing: A Primer for Community Leaders	Free	1-1.5 hours
Center for Public Health Preparedness	Homeland Security	Nuclear Terrorism: Pathways & Prevention	Free	3 hours
Center for Public Health Preparedness	Emergency Prep.	Emergency Preparedness Training for Hospital Clinicians	Free	6 hours
Center for Public Health Preparedness	Emergency Prep.	HazMat Transportation Incidents: Using the Emergency Response Guidebook	Free	1 hour
Center for Public Health Preparedness	Emergency Prep.	Personal Preparedness	Free	1 hour
Center for Public Health Preparedness	Emergency Prep.	Preparedness & Community Response to Pandemics	Free	6 hours
Center for Public Health Preparedness	Homeland Security	Terrorism, Preparedness, and Public Health: An Introduction	Free	6 hours
Center for Public Health Preparedness	Emergency Prep.	Working in a Point of Dispensing (POD)	Free	1 hour
National Coalition Building Institute (NCBI)		<a href="#">Coalition Building Workshop</a>	Free	4-6 hours
Intercultural Student Engagement		Safe Space Training	Free	4-6 hours
<b>National Center for Security and Preparedness (NCSP) Trainings</b>				
<a href="http://www.albany.edu/ncsp/training/">http://www.albany.edu/ncsp/training/</a>				
<b>SANS Self-Study Courses</b>				
SANS	Cyber Security	IT Security and Penetration Testing:		
SANS	Cyber Security	SEC301: Intro to Information Security	\$4,615	60 hours
SANS	Cyber Security	SEC401: Security Essentials Bootcamp Style	\$5,350	60 hours
SANS	Cyber Security	SEC501: Advanced Security Essentials - Enterprise Defender	\$5,350	60 hours
SANS	Cyber Security	SEC503: Intrusion Detection In-Depth	\$5,350	60 hours
SANS	Cyber Security	SEC504: Hacker Tools Techniques, Exploits & Incident Handling	\$5,350	60 hours
SANS	Cyber Security	SEC505: Securing Windows with the Critical Security Controls	\$5,275	60 hours



SANS	Cyber Security	SEC506: Securing Linux/Unix	\$5,350	60 hours
SANS	Cyber Security	SEC511: Continuous Monitoring and Security Operations	\$5,140	60 hours
SANS	Cyber Security	SEC542: Web App Penetration Testing and Ethical Hacking	\$5,350	60 hours
SANS	Cyber Security	SEC560: Network Penetration Testing and Ethical Hacking	\$5,350	69 hours
SANS	Cyber Security	SEC566: Implementing and Auditing the Critical Security Controls - In-Depth	\$4,770	60 hours
SANS	Cyber Security	SEC575: Mobile Device Security and Ethical Hacking	\$5,350	60 hours
SANS	Cyber Security	SEC579: Virtualization and Private Cloud Security	\$5,350	60 hours
SANS	Cyber Security	SEC617: Wireless Ethical Hacking, Penetration Testing, and Defenses	\$5,350	60 hours
SANS	Cyber Security	SEC642: Advanced Web App Penetration Testing and Ethical Hacking	\$5,350	60 hours
SANS	Cyber Security	SEC660: Advanced Penetration Testing, Exploit Writing, and Ethical Hacking	\$5,350	60 hours
SANS	Cyber Security	Digital Forensics & Incident Response:		
SANS	Cyber Security	FOR408: Windows Forensic Analysis	\$5,350	60 hours
SANS	Cyber Security	FOR508: Advanced Computer Forensic Analysis and Incident Response	\$5,350	60 hours
SANS	Cyber Security	FOR526: Memory Forensics In-Depth	\$5,350	60 hours
SANS	Cyber Security	FOR572: Advanced Network Forensics and Analysis	\$5,350	60 hours
SANS	Cyber Security	FOR585: Advanced Smartphone and Mobile Device Forensics	\$5,350	60 hours
SANS	Cyber Security	FOR610: Reverse-Engineering Malware: Malware Analysis Tools and Techniques	\$5,350	60 hours
SANS	Cyber Security	Security Management:		
SANS	Cyber Security	MGT414: SANS® +S™ Training Program for the CISSP® Certification Exam	\$4,615	60 hours
SANS	Cyber Security	MGT512: SANS Security Leadership Essentials For Managers with Knowledge Compression™	\$4,995	60 hours

SANS	Cyber Security	MGT514: IT Security Strategic Planning, Policy and Leadership	\$4,615	60 hours
SANS	Cyber Security	Software Security:		
SANS	Cyber Security	DEV522: Defending Web Applications Security Essentials	\$5,140	60 hours
SANS	Cyber Security	DEV541: Secure Coding in Java/JEE: Developing Defensible Applications	\$4,150	60 hours
SANS	Cyber Security	DEV544: Secure Coding in .NET: Developing Defensible Applications	\$4,150	60 hours
SANS	Cyber Security	IT Audit:		
SANS	Cyber Security	AUD507: Auditing & Monitoring Networks, Perimeters & Systems	\$5,140	60 hours
SANS	Cyber Security	Legal Security:		
SANS	Cyber Security	LEG528: Law of Data Security and Investigations	\$4,615	60 hours
SANS	Cyber Security	Industrial Control Systems:		
SANS	Cyber Security	ICS410: ICS/SCADA Security Essentials	\$4,615	60 hours

## IS-1.A: EMERGENCY MANAGER: AN ORIENTATION TO THE POSITION

### FEMA | EMERGENCY MANAGEMENT INSTITUTE EMERGENCY PREPAREDNESS

The goal of this course is to acquaint new personnel with the position of emergency manager, including history and underlying principles of emergency management, key areas of emphasis, the emergency manager's roles and responsibilities, and tips for getting started.

At the completion of this course, students should be able to:

- Identify the principles and authorities that are the foundation of emergency management.
- Describe the roles and responsibilities of an emergency manager.
- Identify strategies for developing a preparedness program.
- Indicate the significance of planning, training, and exercising in emergency management.
- Describe how prevention, protection, and mitigation contribute to a safe and resilient community.

- Describe the emergency manager's role in relation to emergency response.
- Indicate how an emergency manager helps lead disaster recovery efforts.
- Identify key considerations in managing an emergency management program.

Course Length: 6 hours

Cost: Free

Website: <https://training.fema.gov/is/courseoverview.aspx?code=IS-1.a>

## **IS-100.B: INTRODUCTION TO INCIDENT COMMAND SYSTEM**

FEMA | EMERGENCY MANAGEMENT INSTITUTE

EMERGENCY PREPAREDNESS

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ICS 100, Introduction to the Incident Command System, introduces the Incident Command System (ICS) and provides the foundation for higher level ICS training. This course describes the history, features and principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS).

The Emergency Management Institute developed its ICS courses collaboratively with:

- National Wildfire Coordinating Group (NWCG)
- U.S. Department of Agriculture
- United States Fire Administration's National Fire Programs Branch

Course Length: 3 hours

Cost: Free

Website: <http://www.training.fema.gov/is/courseoverview.aspx?code=IS-100.b>

**IS-200.B: ICS FOR SINGLE RESOURCES AND INITIAL ACTION INCIDENTS**  
FEMA | EMERGENCY MANAGEMENT INSTITUTE  
EMERGENCY PREPAREDNESS

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ICS 200 is designed to enable personnel to operate efficiently during an incident or event within the Incident Command System (ICS). ICS-200 provides training on and resources for personnel who are likely to assume a supervisory position within the ICS.

The Emergency Management Institute developed ICS its ICS courses collaboratively with:

- National Wildfire Coordinating Group (NWCG)
- U.S. Department of Agriculture
- United State Fire Administration's National Fire Programs Branch

Course Length: 3 hours

Prerequisites:

- IS-100 Introduction to the Incident Command System is required.
- Completion of IS 700.A, National Incident Management System (NIMS), An Introduction is recommended.

Cost: Free

Website: <http://www.training.fema.gov/is/courseoverview.aspx?code=IS-200.b>

**IS-230.D: FUNDAMENTALS OF EMERGENCY MANAGEMENT**  
FEMA | EMERGENCY MANAGEMENT INSTITUTE  
EMERGENCY PREPAREDNESS

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The goal of this course is to introduce you to the fundamentals of emergency management. This course presents emergency management as an integrated system with resources and capabilities networked together to address all hazards. This is the first course in the Federal Emergency Management Agency (FEMA) Emergency Management Institute's independent study Professional Development Series.

At the completion of this course, participants should be able to:

- Describe the principles and authorities that are the foundation of emergency management.
- Explain how the different partners contribute to emergency management in your community.
- Explain how the core capabilities support the mission areas to ensure preparedness.

- Describe the roles of each partner in emergency management.
- Explain the steps and resources necessary for developing a comprehensive emergency operations plan.
  - Explain how to plan, manage, and coordinate resources for an efficient and effective response.
  - Explain the functions of emergency management in emergency and day-to-day situations.

Course Length: 6 hours

Prerequisites: While there are no prerequisites for this course, it is recommended that persons taking this course also take IS-700.a (National Incident Management System, an Introduction) and IS-800.b (National Response Framework, an Introduction).

Cost: Free

Website: <http://www.training.fema.gov/is/courseoverview.aspx?code=IS-230.d>

## **IS-235.B: EMERGENCY PLANNING**

FEMA | EMERGENCY MANAGEMENT INSTITUTE  
EMERGENCY PREPAREDNESS

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This course is designed for emergency management personnel who are involved in developing an effective emergency planning system. This course offers training in the fundamentals of the emergency planning process, including the rationale behind planning. It will develop your capability for effective participation in the all-hazard emergency operations planning process to save lives and protect property threatened by disaster.

Course Length: 10 hours

Cost: Free

Website: <http://www.training.fema.gov/is/courseoverview.aspx?code=IS-235.b>

## **IS-700.A: NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)**

FEMA | EMERGENCY MANAGEMENT INSTITUTE  
EMERGENCY PREPAREDNESS

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This course introduces and overviews the National Incident Management System (NIMS). NIMS provides a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents.

At the end of this course, students will be able to:

1. Describe the intent of NIMS.
2. Describe the key concepts and principles underlying NIMS.
3. Describe the purpose of the NIMS Components including: Preparedness, Communications and Information Management, Resource Management, and Command and Management.
4. Describe the purpose of the National Integration Center.

Note: This course provides a basic introduction to NIMS. It is not designed to replace Incident Command System and position-specific training.

Course Length: 3 hours

Cost: Free

Website: <http://training.fema.gov/is/courseoverview.aspx?code=IS-700.a>

## **IS-800.B: NATIONAL RESPONSE FRAMEWORK**

FEMA | EMERGENCY MANAGEMENT INSTITUTE  
EMERGENCY PREPAREDNESS

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The course introduces participants to the concepts and principles of the National Response Framework.

At the end of this course, you will be able to describe:

- The purpose of the National Response Framework.
- The response doctrine established by the National Response Framework.
- The roles and responsibilities of entities as specified in the National Response Framework.
- The actions that support national response.

- The response organizations used for multiagency coordination.
- How planning relates to national preparedness.

Course Length: 3 hours

Cost: Free

Website: <http://training.fema.gov/is/courseoverview.aspx?code=IS-800.b>

## **IS-860.C: THE NATIONAL INFRASTRUCTURE PROTECTION PLAN**

FEMA | EMERGENCY MANAGEMENT INSTITUTE  
EMERGENCY PREPAREDNESS

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Ensuring the security and resilience of the critical infrastructure of the United States is essential to the Nation's security, public health and safety, economic vitality, and way of life. The purpose of this course is to present an overview of the National Infrastructure Protection Plan (NIPP). The NIPP provides the unifying structure for the integration of existing and future critical infrastructure security and resilience efforts into a single national program.

Course Length: 2 hours

Cost: Free

Website: <https://training.fema.gov/is/courseoverview.aspx?code=IS-860.c>

## **AWR160: WMD/TERRORISM AWARENESS FOR EMERGENCY RESPONDERS**

TEXAS A&M ENGINEERING EXTENSION SERVICE (TEEX)  
EMERGENCY PREPAREDNESS

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This online course focuses on training responders to meet the requirements established in the National Fire Protection Association (NFPA) 472 (2008 ed.), Chapter 4, "Competencies for Awareness Level Personnel," and the Occupational Safety and Health Administration (OSHA) 28 Code of Federal Regulations (CFR) 1910.120 (q) (6) (i) (a-f) "First Responder Awareness Level" competencies.

This course takes an all-hazards approach to Hazardous Material (HazMat) incidents, including acts of terrorism where Weapons of Mass Destruction (WMD) materials may have been used. It provides participants the knowledge to recognize

the hazardous material, protect themselves, notify others, and secure the scene.

Course Length: 4 hours

Prerequisite: IS-700

Cost: Free

Website:

<https://teex.org/Pages/Class.aspx?course=AWR160&courseTitle=WMD%2FTerrorism%20Awareness%20for%20Emergency%20Responders>

## **AWR168: CYBER LAW AND WHITE COLLAR CRIME**

TEXAS A&M ENGINEERING EXTENSION SERVICE (TEEX)

CYBER SECURITY

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This intermediate course is designed to teach students the fundamentals of computer crime issues from a legal perspective. The training will highlight the various computer crimes and appropriate response by first defenders and others that may encounter these types of issues. Participants learn legislations and organizational efforts to control or prevent such crimes. This course covers intellectual property law (copyright, trade secrets, unfair competition, and unfair business practices), personal jurisdiction, electronic commerce and software contracts, telecommunications, antitrust, privacy, the right to accuracy of information, the right to access to information, and the First Amendment.

Course Length: 10 hours

Prerequisite: AWR-173, AWR-174, and AWR-175

Cost: Free

Website:

<https://teex.org/Pages/Class.aspx?course=AWR168&courseTitle=Cyber%20Law%20and%20White%20Collar%20Crime>



## **AWR169: CYBER INCIDENT ANALYSIS AND RESPONSE**

TEXAS A&M ENGINEERING EXTENSION SERVICE (TEEX)

**CYBER SECURITY**

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This course covers various incident analysis tools and techniques that support dynamic vulnerability analysis and elimination, intrusion detection, attack protection and network/resources repair. The trainee will be presented with real-world examples and scenarios to help provide knowledge, understanding, and capacity for effective cyber incident analysis and response.

Course Length: 10 hours

Cost: Free

Website:

<https://teex.org/Pages/Class.aspx?course=AWR169&courseTitle=Cyber%20Incident%20Analysis%20and%20Response>

## **AWR173: INFORMATION SECURITY BASICS**

TEXAS A&M ENGINEERING EXTENSION SERVICE (TEEX)

**CYBER SECURITY**

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Information Security Basics is designed to teach entry and mid-level IT staff the technological fundamentals of information security. The goal of this course is to provide trainees some preliminary knowledge of computer security to help in identifying and stopping various cyber threats. In addition to providing an introduction to information assurance, trainees will also learn general concepts (terminologies), an overview of TCP/IP, introductory network security, introductory operating system security, and basic cryptography.

Course Length: 13 hours

Cost: Free

Website:

<https://teex.org/Pages/Class.aspx?course=AWR173&courseTitle=Information%20Security%20Basics>

## **AWR174: CYBER ETHICS**

TEXAS A&M ENGINEERING EXTENSION SERVICE (TEEX)

**CYBER SECURITY**

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Cyber Ethics is designed to teach students the proper techniques with which to approach the difficult ethical dilemmas that arise from using the modern Internet. In addition to providing students with the skills to assess future ethical dilemmas for themselves, Cyber Ethics also looks at some of the more pressing concerns related to Internet usage today.

Course Length: 13 hours

Cost: Free

Website:

<https://teex.org/Pages/Class.aspx?course=AWR174&courseTitle=Cyber%20Ethics>

## **AWR175: INFORMATION SECURITY FOR EVERYONE**

TEXAS A&M ENGINEERING EXTENSION SERVICE (TEEX)

**CYBER SECURITY**

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Information Security for Everyone is designed to teach the principles and practices that all computer users need to keep themselves safe, both at work and at home. By presenting best practices along with a small amount of theory, trainees are taught both what to do and why to do it. Topics covered include how to secure both clean and corrupted systems, protecting your personal data, securing simple computer networks, and safe Internet usage.

Course Length: 10.5 hours

Cost: Free

Website:

<https://teex.org/Pages/Class.aspx?course=AWR175&courseTitle=Information%20Security%20for%20Everyone>

## **UNDERSTANDING TERRORISM: A SOCIAL SCIENCE VIEW ON TERRORISM**

CENTER FOR HOMELAND DEFENSE AND SECURITY

**HOMELAND SECURITY**

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Over the last 25 years, much of the research on terrorism has been accomplished without rigorous adherence to analytical frameworks. This series of three modules

will trace the history of religious terrorism scholarship, introducing you to Social Identity Theory (SIT) and demonstrating how this particular scholarly approach within social psychology can provide nuance, depth, and rigor to your studies of religious terrorism. The first two modules will focus on explaining and exploring SIT itself, while the final modules take a closer look at the phenomenon we refer to as “religious terrorism.” By applying the analytical framework of SIT to different historical and contemporary religious terrorist groups, this course offers students of homeland security and terrorism studies a new understanding of group and individual dynamics within a covert environment.

Course Length: 8 hours

Cost: Free

Website: <https://www.chds.us/olc/mod/page/view.php?id=4>

## **COUNTERTERRORISM IN THE UNITED KINGDOM**

CENTER FOR HOMELAND DEFENSE AND SECURITY

HOMELAND SECURITY

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Tracing the UK response to violent subnational terrorism back to its efforts against the PIRA in the 1970s through the 1990s, these modules demonstrate how the UK counterterrorism community recognized long ago the serious threat to national security that subnational violence poses, and how its response to the recent violent terrorist activities of al-Qaeda is situated within an environment informed by the earlier “Irish Troubles.” Additionally, the modules provide an overview of the contemporary counterterrorism organizational structure within the UK, and the challenges it faces in a world of increasing vulnerability and uncertainty.

Course Length: 5 hours

Cost: Free

Website: <https://www.chds.us/olc/mod/page/view.php?id=49>

## **CRITICAL INFRASTRUCTURE PROTECTION: TRANSPORTATION SECURITY**

CENTER FOR HOMELAND DEFENSE AND SECURITY

HOMELAND SECURITY

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This self-study course is comprised of three lecture modules developed by Kip Hawley, former Administrator of the Transportation Security Administration (TSA), focusing on risk-based solutions for airport and freight rail security and other related topics. Module One addresses how security officials can approach policies

and procedures using “smarter security.” Module Two uses the 2009 Underwear Bomber incident as a case study, demonstrating the usefulness of “Inside-Out” risk management to the protection of national airports. Module Three shifts the discussion away from aviation to the challenges the TSA faces in the protection of the freight rail industry, an equally vital, though often inadequately addressed, component of our national economy and infrastructure. Students participating in this self-study course are required to think critically about current security policies and procedures, evaluating them using a risk-management approach that accounts for the complex environment surrounding the transportation sector.

Course Length: 4 hours

Cost: Free

Website: <https://www.chds.us/olc/course/view.php?id=5>

## **TERRORIST FINANCING AND STATE RESPONSE**

CENTER FOR HOMELAND DEFENSE AND SECURITY

HOMELAND SECURITY

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This course examines exactly how far we have come in our understanding of the ways in which terrorists raise, store, and transfer funds. It also evaluates challenges facing the U.S. government and international community in responding to this problem. In each module, we use a mix of official reports, academic papers, and other works to explore the subject and identify problems with the received wisdom about terrorist financing.

Course Length: 6 hours

Cost: Free

Website: <https://www.chds.us/olc/course/view.php?id=4>

## **INTELLIGENCE FOR HOMELAND SECURITY: ORGANIZATIONAL AND POLICY CHALLENGES**

CENTER FOR HOMELAND DEFENSE AND SECURITY

HOMELAND SECURITY

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The 11 September 2001 terrorist attacks on the World Trade Center and Pentagon and the ensuing War on Terror have focused the nation's attention on homeland security. This course examines key questions and issues facing the U.S. intelligence community and its role in homeland security and homeland defense. Course reference materials will provide an overview of diverse intelligence disciplines and

how the intelligence community operates. Course emphasis will be on issues affecting policy, oversight, and intelligence support to homeland defense/security and national decision-making. The Intelligence Reform and Terrorism Prevention Act of 2004 is presented and the course is shaped to focus on homeland intelligence support issues at the State / Local / Tribal levels.

Course Length: 8 hours

Cost: Free

Website: <https://www.chds.us/olc/course/view.php?id=6>

## **HOMELAND SECURITY IN ISRAEL**

CENTER FOR HOMELAND DEFENSE AND SECURITY  
HOMELAND SECURITY

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Since its creation in 1948, Israel has had to cope with ongoing periods of terrorism punctuated by periods of war. While this has been an unfortunate reality for Israeli citizens, it has enabled the Israeli authorities to develop a wealth of experience in homeland security policies and practices.

This course will focus on a range of preventive and response policies followed by Israel in the context of its counterterrorism and homeland defense policies. After a brief discussion of the nature of the terrorism threat facing the country, the course then focuses on the legal, organizational and strategic environments that affect Israeli policies before moving to discuss some of Israel's response policies in the context of the response agencies, medical system and the military's Homefront Command.

Course Length: 4 hours

Cost: Free

Website: <https://www.chds.us/olc/course/view.php?id=7>

## **THE GLOBAL JIHADI THREAT**

CENTER FOR HOMELAND DEFENSE AND SECURITY  
HOMELAND SECURITY

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Islam is a faith of richness and complexity that has manifested itself over time in a broad variety of ways. Unfortunately, it is also used as the basis for the violent ideologies of the Global Jihad. Understanding the fundamentals behind the religion (as well as concepts such as Jihad), the background with respect to the Islamic community's relationship to the West, the position of Muslims in modern-day

Western societies and the various permutations of extremist Islamic ideologies is critical in helping policy makers, law enforcement personnel and governmental administrators at various levels relate to Islam and Muslims in an informed manner while also being able to effectively counteract extremist activities and ideas.

Course Length: 5 hours

Cost: Free

Website: <https://www.chds.us/olc/course/view.php?id=8>

**CRITICAL INFRASTRUCTURE:  
VULNERABILITY ANALYSIS AND PROTECTION**  
CENTER FOR HOMELAND DEFENSE AND SECURITY  
HOMELAND SECURITY

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The overall mission of this course is to enable students to create informed policies regarding infrastructure.

Students will achieve this mission by accomplishing the following objectives:

1. Understand the regulatory and technical architecture of the principle critical infrastructure sectors in the U.S.:
  - a. Learn how each sector works
  - b. Discover vulnerabilities in each sector
2. Be able to perform a model-based vulnerability analysis (MBVA) on a CI sector.
3. Be able to formulate best strategies on how to maximize protection of each sector given budgetary constraints in your region or area of responsibility.

Course Length: 10 hours

Cost: Free

Website: <https://www.chds.us/olc/course/view.php?id=10>

**TECHNOLOGY FOR HOMELAND SECURITY:  
INSPECTION AND DETECTION TECHNOLOGIES**  
CENTER FOR HOMELAND DEFENSE AND SECURITY  
HOMELAND SECURITY

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Recent advances in inspection and detection technologies provide us with low cost, portable, real-time remote sensing capabilities. These advances hold great promise

for significant improvements in our ability to protect against and respond to chemical, biological, radiological, nuclear, and explosive (CBRNE) threats.

**Upon completion of this course, you should be able to:**

- Understand the fundamentals of inspection and detection technologies and how they are used by HLS professionals detect and prevent CBRNE attacks.
- Leverage your knowledge of chemical, biological, radiological, nuclear and explosive (CBRNE) inspection and detection technologies to facilitate the strengthening of protection and response capabilities as specified in Presidential Directive #8.
- Understand the limitations, liabilities and risks associated with using inspection and detection technologies.

Course Length: 4 hours

Cost: Free

Website: <https://www.chds.us/olc/course/view.php?id=9>

## **TRADITIONAL CORPS**

### **AMERICORPS NATIONAL CIVILIAN COMMUNITY CORPS (NCCC) EMERGENCY PREPAREDNESS**

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AmeriCorps NCCC (National Civilian Community Corps) is a full-time, team-based residential program for men and women ages 18-24. AmeriCorps NCCC members are assigned to one of five regional campuses into teams of approximately ten members, and complete 2- to 3-month projects responding to local communities' needs in every state. Teams serve with local and national organizations, infusing resources and leading volunteers for hundreds of organizations. These young adults lead youth development activities, construct and rehabilitate low-income housing, clean up streams, help communities develop emergency plans, and address other pressing local needs.

- Filling and installing sandbags for local communities to mitigate the impacts of natural disasters
- Educating people on sustainability and energy conservation practices
- Constructing or repairing hiking trails in local and national parks across America
- Receiving, inventorying, and distributing donated food and other goods
- Removing exotic vegetation and planting new trees
- Making facilities handicap accessible and installing informative public signs

- Directly assisting veterans, homeless, and senior citizen populations
- Constructing and rehabilitating low-income housing

Deadline:

Corps Member – October 1/April 1

Team Leader – September 1/March 1

Website: <http://www.nationalservice.gov/programs/americorps/americorps-nccc>

## **FEMA CORPS**

### AMERICORPS NATIONAL CIVILIAN COMMUNITY CORPS (NCCC) EMERGENCY PREPAREDNESS

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FEMA Corps is an NCCC track for young adults who want to gain professional skills in emergency management while serving with the Federal Emergency Management Agency (FEMA) staff on disaster response and recovery efforts. It is a 10 month, full-time, team-based residential service program that was developed in partnership with FEMA and the Corporation for National and Community Service, the agency that oversees AmeriCorps NCCC. As a member, you'll be assigned to one of five NCCC campuses. Your focus will solely be on emergency management and long-term recovery activities within FEMA.

- Educating communities, assessing needs, and collecting information
- Developing materials that promote disaster preparation to the public
- Ordering materials, tracking inventory, loading supplies, and managing IT equipment
- Updating electronic files, managing data, and compiling reports
- Working with nonprofits and government agencies to coordinate services for disaster survivors
- Helping survivors complete applications for disaster assistance
- Assessing and reporting damage to public facilities
- Setting up shelter operations and re-unification of families and pets

Deadline:

Corps Member – October 1/April 1

Team Leader – September 1/March 1

Website: <http://www.nationalservice.gov/programs/americorps/americorps-nccc>

## **PERSONAL SAFETY AND HEALTH FOR EMERGENCY RESPONDERS**

### CENTER FOR PUBLIC HEALTH PREPAREDNESS EMERGENCY PREPAREDNESS

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As a responder, you put yourself in harm's way in order to help others. Emergencies can occur at any time, often without warning. While rescue and recovery work can be rewarding, response workers are not immune from the physical and psychological toll of disasters.

In order to respond safely, you must be prepared, and train for your response regularly. If you become sick, injured or are ill prepared during a response, you may actually hinder the rescue effort. If you are a volunteer, you have made a commitment to be ready to respond in an emergency. If you are an employee of a health department, hospital, or clinic, this emergency response may be part of your expectations as an employee.

This course will help the emergency responder understand the types of dangers that may be encountered in a disaster setting, as well as the common injuries and other health impacts that can be sustained during an emergency response. This course will also examine various health and safety preparedness measures a responder may take before, during, and after an emergency.

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycph.org/learning/registration/tab.cfm?course=PSHER&s=Overview>

## **EMERGENCY MANAGEMENT AND PREPAREDNESS PLANNING FOR COMMUNITY HEALTH CENTER LEADERS**

**CENTER FOR PUBLIC HEALTH PREPAREDNESS  
EMERGENCY PREPAREDNESS**

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As a community health center, your facility has a responsibility for the care and treatment of the people that live within your community. This care and treatment extends beyond routine primary care. Your health center will be a focal point during emergencies, both large and small, that impact the community in which you operate. Such emergencies may include:

- Natural disasters (floods, hurricanes, wild fires, earthquakes, winter storms, etc.)
- Large-scale accidents (transportation accidents, industrial explosions)
- Terrorism (biological, chemical, or radiological)
- Communicable disease outbreaks
- Internal (fire, burst pipe, carbon monoxide leak)

Emergencies happen – but is your facility prepared? The more prepared your facility is, the more efficient your facility's response will be and the more quickly your center can recover and get back to business as usual.

The purpose of this course is to aid community health centers in developing and maintaining an emergency management plan that guides their response to all hazards. For organizations that have developed emergency management plans, this course will provide an opportunity to evaluate how the plan might function in a disaster scenario.

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=EPforCHCL&s=Overview>

## **PREPAREDNESS AND COMMUNITY RESPONSE TO H1N1**

CENTER FOR PUBLIC HEALTH PREPAREDNESS  
EMERGENCY PREPAREDNESS

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The earliest recognized case of the 2009 Novel H1N1 (then referred to as "Swine Flu") occurred in Mexico on March 17, 2009. On April 15, 2009 laboratory tests confirm H1N1 infection in California. By the end of May 2009, every U.S. region was affected, as were 48 countries around the world, by this novel influenza virus.

This course provides an overview of the 2009 Novel H1N1 pandemic, a real-life case study that reinforces the CPHP course "Preparedness & Community Response to Pandemics."

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=h1n1&s=Overview>

## **SPECIAL MEDICAL NEEDS SHELTERS**

CENTER FOR PUBLIC HEALTH PREPAREDNESS  
EMERGENCY PREPAREDNESS

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Hurricane Katrina, which brought mass destruction to New Orleans and the Gulf coast region of Mississippi in August 2005, brought to light the deficiencies in mass

shelter care, particularly for special needs populations (ie: chronically ill, physically disabled, mentally ill), referred to as “special medical needs” in this course. In the aftermath of Hurricane Katrina, it became evident that different accommodations were necessary to shelter those with special medical needs. Currently, there is no federal guidance on the establishment of special needs shelters. This responsibility rests on state and local governments.

Many people who are displaced during a disaster or emergency situation seek refuge in shelters, which temporarily protect disaster victims by providing support services, such as food, comfort, information, and a place to sleep until it is safe to return home. However, most “general” shelters are not designed to easily or properly assist those people who have medical issues. A special medical needs shelter is designed to serve the needs of people who have certain physical, mental, or emotional impairments or disabilities and who need assistance with medical and/or personal care, but do not require nursing home, hospital, or other institutional care.

This course seeks to appeal to a national audience. Therefore, this course was written with general information about special medical needs shelters with the intent to introduce people to the concept of such shelters, as well as educate users on the operational and administrative aspects of such shelters.

Course Length: 2.5 to 3 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=smns&s=Overview>

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**EMERGENCY ANIMAL SHELTERING**  
**CENTER FOR PUBLIC HEALTH PREPAREDNESS**  
**EMERGENCY PREPAREDNESS**

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Pets are often perceived as family members. During an emergency situation, many people refuse to evacuate their homes if it means leaving their pets behind. This not only puts their own lives at risk, but also the lives of emergency responders involved in rescue efforts.

Animal welfare during a disaster came to the forefront of America’s consciousness during Hurricane Katrina. This and other disasters helped drive the development of new legislation concerning pets. The Federal Pets Evacuation and Transportation Act of 2006 (P.E.T.S Act) requires state and local emergency preparedness operational plans to address the needs of individuals with pets or service animals during each phase of the emergency management cycle. Services to be provided include rescue, care, sheltering, and essential assistance to those with animal companions.

This course is the second in a series of introductory courses designed for those interested in assisting animals during emergencies. The main purpose of this course is to educate course participants on the purpose and types of emergency animal shelters, as well as the management and administration of such shelters.

Course Length: 1.5 to 2 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=eas&s=Overview>

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## **LONG-TERM CARE FACILITIES: EMERGENCY PREPAREDNESS PLAN**

### **CENTER FOR PUBLIC HEALTH PREPAREDNESS**

#### **EMERGENCY PREPAREDNESS**

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Knowing how to plan for disasters is essential to emergency management. Planning can make a difference in responding to an emergency. It can lessen the effects of a disaster, including saving lives and protecting property. It will help a community to recover more quickly from a disaster. Furthermore, caring for the frail older adult or medically-frail resident can become especially difficult in a time of crisis. Therefore, you need to plan for the specific needs of your residents. This course reviews the reasons for planning and who should be involved in planning. The all-hazards model of emergency management planning is explained, as well as the critical issues involved in preparedness planning.

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=longtermcare&s=Overview>

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## **ETHICS AND PUBLIC HEALTH IN AN AGE OF TERRORISM**

### **CENTER FOR PUBLIC HEALTH PREPAREDNESS**

#### **HOMELAND SECURITY**

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Terrorism, whether biological, chemical, or nuclear, presents special challenges to caregivers, healthcare institutions, community organizations, and governmental agencies. Major natural disasters offer many of the same challenges. Finding one's

way ethically is particularly problematic. When decisions must be made rapidly, under anxiety-filled and emergency conditions, being prepared to face the ethical issues is a necessary part of public health services. Issues of professional conduct and responsibility, of civil rights and civil liberties, of conscience, are bound to appear.

*Ethics and Public Health in an Age of Terrorism* is a carefully-crafted curriculum that explores the role of public health in addressing the ethical, emotional and legal dilemmas confronting those who plan for and respond to all hazards. This course offers preparation for the moral dimensions of a terrorism event, emerging infectious disease or other disaster.

Course Length: 10 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=ethics&s=Overview>

## **BASIC EMERGENCY PREPAREDNESS FOR STAFF OF COMMUNITY HEALTH FACILITIES**

**CENTER FOR PUBLIC HEALTH PREPAREDNESS  
EMERGENCY PREPAREDNESS**

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Community-based clinicians (physicians, nurses, advanced practice nurses, physician assistants and others) have been identified as essential to a community's emergency preparedness, referred to as needed components of preparedness planning and training in Joint Commission hospital standards and in Center for Disease Control & Prevention and HRSA grants. All staff members in community-based healthcare facilities should be able to identify and respond appropriately to potential clinical signs of an emergency situation and to communicate with patients and partners in a way that supports an effective response system. You should also understand the importance of understanding your facility's emergency operations plan and where you fit into this plan.

This course provides information about basic emergency preparedness including the main components of a family disaster plan, the basic components of the National Incident Management System (NIMS) and the Incident Command System (ICS), and the roles your healthcare facility might play in a community-wide emergency.

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=staffep&s=Overview>

## **RISK COMMUNICATION FOR COMMUNITY HEALTH CENTERS**

CENTER FOR PUBLIC HEALTH PREPAREDNESS

EMERGENCY PREPAREDNESS

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Risk Communication is a science-based approach for communicating effectively in high concern, high stress, emotionally charged or controversial situations. This course provides an overview of the principles and practices of risk communication and practical ways to use these concepts to better communicate in an emergency situation.

Course Length: 2 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=riskcomm&s=Overview>

## **DETECTING BIOTERROR**

CENTER FOR PUBLIC HEALTH PREPAREDNESS

EMERGENCY PREPAREDNESS

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Detecting Bioterror provides an overview of forensic epidemiology and the activities of law enforcement officers, laboratory professionals, and public health personnel in joint investigations of bioterrorist events. The course provides not only instructional content on a wide variety of bioterrorism-related concepts, it also dramatizes a bioterrorism investigation in a “mystery movie,” provides case studies, links, and other instructional tools.

Course Length: 6 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=bioterror&s=Overview>

## **ZOONOSIS, PREPAREDNESS, AND PUBLIC HEALTH**

CENTER FOR PUBLIC HEALTH PREPAREDNESS

EMERGENCY PREPAREDNESS

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Zoonoses, diseases that can be transmitted from animals to humans, are of increasing concern to public health. Of the infectious organisms known to be pathogenic to humans, approximately 60% are zoonotic. Of the recent emerging and re-emerging pathogens, 75% have originated from animals. These include diseases such as SARS, West Nile Virus, Monkeypox and Avian Influenza.

This course uses real-life case studies to illustrate zoonotic disease basics and epidemiology, modes of transmission, factors related to emergence, and the components of public health response (surveillance, investigation, prevention and control).

Course Length: 3 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=zoo&s=Overview>

## **YOUR FAMILY DISASTER PLAN**

CENTER FOR PUBLIC HEALTH PREPAREDNESS

EMERGENCY PREPAREDNESS

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Disasters can strike anyone, anytime, and anywhere. The emergency may require you and your family to evacuate your home or to stay at home without electricity or water. Advance planning can save precious time in an emergency. This course provides step by step instructions for developing a family disaster plan. (It is based on the course "Personal Preparedness" which provides similar information for anyone who might be required to respond to an emergency as a worker or volunteer.)

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=fpp&s=Overview>

**COUNTY ANIMAL RESPONSE TEAM**  
**CENTER FOR PUBLIC HEALTH PREPAREDNESS**  
**EMERGENCY PREPAREDNESS**

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Companion animals such as dogs and cats are considered part of the family in many homes. In addition, livestock play an important role in our economy. When emergencies such as natural disasters or disease outbreaks occur, they affect *both* human and animal populations. Therefore, it is important to include plans for animals in preparedness activities to ensure their safety before, during, and after an emergency.

In this course, you will get an overview of why it is important to plan for animals; the types of disasters that affect animals; the purpose and roles of State Animal Response Teams (SARTs) and County Animal Response Teams (CARTs) in preparing, planning and responding to emergencies affecting animals; and how these teams use the Incident Command System to coordinate response.

This course is the first of several introductory courses for individuals interested in joining aCART in New York State.

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=cart&s=Overview>

**MASS DISPENSING: A PRIMER FOR COMMUNITY LEADERS**  
**CENTER FOR PUBLIC HEALTH PREPAREDNESS**  
**EMERGENCY PREPAREDNESS**

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This course provides an overview of mass dispensing, which is a method health departments might use to give medication or vaccinations to a large number of people in a short period of time. The course describes what mass dispensing involves and how this fits into the national and state response to public health emergencies. It also outlines the leadership roles for community leaders during mass dispensing.

Course Length: 1 to 1.5 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=massd&s=Overview>



## NUCLEAR TERRORISM: PATHWAYS AND PREVENTION

CENTER FOR PUBLIC HEALTH PREPAREDNESS

HOMELAND SECURITY

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The possibility that terrorists might acquire and use nuclear weapons is an urgent and potentially catastrophic challenge to global security. Nuclear weapons, the most powerful weapons of mass destruction (WMD), use the energy produced by reactions within and between atomic nuclei to generate tremendous explosive force, heat, radiation, and other harmful effects.

You will learn about the threat of terrorism using nuclear explosives, and options for meeting this threat, in this self-directed course developed by the [Center for Nonproliferation Studies](#)

This course provides relatively technical information about nuclear energy and nuclear terrorism, but it does not include detailed information about implications for public health professionals and hospital clinicians. For more information on public health and healthcare implications, see relevant modules of these UAlbany online courses: [“Terrorism, Preparedness, and Public Health”](#) and [“Emergency Preparedness Training for Hospital Clinicians.”](#)

Course Length: 3 hours

Cost: Free

Website:

<http://www.ualbanycph.org/learning/registration/tab.cfm?course=nt&s=Overview>  
[w](#)

## EMERGENCY PREPAREDNESS TRAINING FOR HOSPITAL CLINICIANS

CENTER FOR PUBLIC HEALTH PREPAREDNESS

EMERGENCY PREPAREDNESS

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"Emergency Preparedness Training for Hospital Clinicians" is a web-based course that provides hospital and community-based clinicians with awareness level training concerning appropriate responses to emergency events whether they be biological, chemical, explosive, radiological or nuclear incidents.

The course is divided into six modules:

1. **The Basics** (Now equivalent to the FEMA IS-100 course)  
This module provides an overview of the fundamentals of emergency preparedness in hospital settings.
2. **Biological Incidents**  
This module is designed to prepare clinicians to recognize the role of the

hospital and the clinician in the public-health response to biological incidents, be they naturally occurring or man-made.

3. **Chemical Incidents**

This module provides an overview of emergency preparedness in response to the accidental or intentional release of chemical agents

4. **Radiological and Nuclear Incidents**

This module focuses on radiological incidents, providing an overview of key issues and highlighting some of the ways in which your expertise may be called upon during a radiological emergency

5. **Explosive Incidents**

This module provides an overview of emergency preparedness for explosive incidents, including unintended events and terrorist attacks.

6. **Incidents Affecting Children**

This module provides an overview of emergency preparedness as it pertains to pediatric populations.

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=ept&s=Overview>

## **HAZMAT TRANSPORTATION INCIDENTS: USING THE EMERGENCY RESPONSE GUIDEBOOK**

CENTER FOR PUBLIC HEALTH PREPAREDNESS  
EMERGENCY PREPAREDNESS

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The *Emergency Response Guidebook\** (ERG2012) is a tool for first responders to use during the initial phase of a transportation incident involving hazardous materials. It is intended for firefighters, police, and other emergency services personnel who may be the first to arrive at the scene of the incident. It is primarily designed to aid first responders in (1) quickly identifying the specific or generic classification of the material(s) involved in the incident and (2) protecting themselves and the general public during this initial response phase of the incident.

By using the ERG, public health workers will become more aware of the hazardous materials being used in or transported through their communities. This should make them better able to prepare their local health department's response plan for an appropriate response. By becoming familiar with the ERG, public health professionals will also be more knowledgeable in talking to other first responders.

NOTE: You will need a copy of the Emergency Response Guidebook (ERG2008) to take this course. Your local Emergency Management Office will generally have copies available. The ERG is available to download from the [Pipeline and Hazardous](#)

[Materials Safety Administration \(PHMSA\) website](#) (opens new window). You can also buy a copy on [Amazon](#) (opens new window).

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=erg&s=Overview>

## **PERSONAL PREPAREDNESS**

### **CENTER FOR PUBLIC HEALTH PREPAREDNESS EMERGENCY PREPAREDNESS**

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Disasters can strike anyone, anytime, and anywhere. Community volunteers, hospital workers, and public health staff members may be called on to help with a community response to a disaster. In order to respond effectively in such an emergency, these workers must have plans in place to be sure their families, other dependents, pets, etc. are cared for. This course provides a step-by-step process for developing a family disaster plan and a personal emergency plan.

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=pep&s=Overview>

## **PREPAREDNESS AND COMMUNITY RESPONSE TO PANDEMICS**

### **CENTER FOR PUBLIC HEALTH PREPAREDNESS EMERGENCY PREPAREDNESS**

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This introductory course on pandemic influenza will help the learner understand why this virus is capable of producing worldwide outbreaks. Participants will

explore the epidemiology, historical context, and response efforts related to both seasonal and worldwide influenza outbreaks.

At the end of this course, learners will be competent to describe the public health role in emergency response during an influenza outbreak or pandemic and to recognize unusual events that might indicate an emergency and describe appropriate action. Additionally, learners will be able to describe their functional role(s) in emergency response and apply flexible thinking to unusual challenges within their functional role. Several activities are designed to help the learner identify personal limits of knowledge, skill, and authority and direct the learner to useful resources when these limits have been exceeded. Refer to the [Core Public Health Worker Competencies for Emergency Preparedness and Response](#)(link opens PDF document in new window).

Course Length: 6 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=pandemics&s=Overview>

## **TERRORISM, PREPAREDNESS, AND PUBLIC HEALTH: AN INTRODUCTION**

**CENTER FOR PUBLIC HEALTH PREPAREDNESS  
HOMELAND SECURITY**

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At the end of this course, public health workers will be competent to describe the public health role in emergency response in a range of potential or possible emergencies and to recognize unusual events that might indicate an emergency and describe appropriate action. A minor focus is the chain of command in emergency response. Several activities are designed to help the learner identify personal limits of knowledge and direct the learner to useful resources when these limits have been exceeded. Refer to the [Core Public Health Worker Competencies for Emergency Preparedness and Response](#) (link opens PDF document in new window).

Course Length: 6 hours

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=terrorism&s=Overview>

**WORKING IN A POINT OF DISPENSING**  
**CENTER FOR PUBLIC HEALTH PREPAREDNESS**  
**EMERGENCY PREPAREDNESS**

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There are a number of situations where local public health departments might need to mobilize a point of distribution (POD) to dispense medication or vaccinate a large group of people. "Working in a POD" provides you with an understanding of what a POD is, how it operates, and what functional roles you may be assigned as a volunteer serving in a POD.

Course Length: 1 hour

Cost: Free

Website:

<http://www.ualbanycphp.org/learning/registration/tab.cfm?course=pod&s=Overview>

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**Appendix 7    External Instruction Form**

## External Instruction Form

**Form 2E**

Version 2014-11-17

This form is required when external instruction is part of the degree requirements in an academic program. External instruction includes internships, field work, clinical placements, cooperative education, service learning, and the like, which are offered in cooperation with external partners, such as business and industry, health care facilities, public agencies, or schools.

1. Use the table below (expanded as necessary) to summarize proposed arrangements for required external instruction in an academic program. List all proposed arrangements. The number of placements listed below should equal or exceed the number of students expected to be in the initial cohort of a new program.

Name and Title of Contact Person	Name and Address of Placement Site	# of placements per year
Kathline McCarty 518-455-4704	New York State Assembly Sample Committees & Subcommittees: Health, Transportation, Catastrophic Natural Disasters, Consumer Fraud Protection Empire State Plaza Albany, NY	15
Kevin E Wisely Director 518-292-2305 <a href="mailto:Kevin.wisely@dhss.ny.gov">Kevin.wisely@dhss.ny.gov</a>	State Office of Emergency Management 1220 Washington Street Albany, NY	8-10
Jayson Kratoville Chief of Staff 518-956-8180 <a href="mailto:jkratoville@albany.edu">jkratoville@albany.edu</a>	National Center for Security & Preparedness 4 Tower Place, Suite 600 Albany, NY	8-10
Nicholas J Parrella M.A. Director 518-455-2611 <a href="mailto:students@nysenate.gov">students@nysenate.gov</a>	Legislative Office Building 80 South Swan Street Albany, NY	5
Scott Siegel Policy Analyst 518-447-7040 <a href="mailto:scott.siegel@albanycounty.com">scott.siegel@albanycounty.com</a>	Albany County Executive Office Infrastructure Safety Measures 112 NY-5 Albany, NY	3-5
Robert Poisson, Captain 518-786-2100 <a href="mailto:Robert.Poisson@troopers.ny.gov">Robert.Poisson@troopers.ny.gov</a>	New York State Police Criminal Intelligence Section –NYSIC Division Headquarters, Building 22 1220 Washington Avenue Albany, NY	3-5

Gary Striar 518-465-7551	American Red Cross New York Northeast Region 33 Everett Road Albany, NY	2
Mark Waldenmaier Public Health Preparedness Representative 518-408-5163 <a href="mailto:mark.waldenmaier@health.ny.gov">mark.waldenmaier@health.ny.gov</a>	New York Department of Health Capital Region Emergency Preparedness Program 800 North Pearl Street Albany, NY	1-2
Michael Primeau Director 518-474-7000 <a href="mailto:michael.primeau@health.ny.gov">michael.primeau@health.ny.gov</a>	Office of Health Emergency Preparedness New York State Department of Health Corning Tower Building Empire State Plaza Albany, NY	1-2
James Feeley Human Resources Specialist 212-637-4178 <a href="mailto:feeley.james@epa.gov">feeley.james@epa.gov</a>	U.S. Environmental Protection Agency – Region 2 Hudson River Field Office 187 Wolf Road Albany, NY	1-2
Fredisberto Pica Director of I.T. 518-261-0554 <a href="mailto:f.pica@ta-cr.org">f.pica@ta-cr.org</a>	Trinity Alliance of the Capital Region I.T. Division 15 Trinity Place Albany, NY	1-2
Paul C Burlingame Inspector 518-442-3131 <a href="mailto:pburlingame@albany.edu">pburlingame@albany.edu</a>	University Police Department University Police Building Albany, NY	1-2
Steve Taylor 518-473-9169 <a href="mailto:Steven.Taylor@ocfs.ny.gov">Steven.Taylor@ocfs.ny.gov</a>	NYS Office of Temporary and Disability Assistance (OTDA) 40 North Pearl Street Albany, NY	1-2
Steve Moscovitz 518-408-2967 <a href="mailto:steven.moscovitz@omh.ny.gov">steven.moscovitz@omh.ny.gov</a>	Emergency Preparedness and Response New York State Office of Mental Health 44 Holland Avenue Albany, NY	1-2



<p>Scott Heller Coordinator 518-262-1069 <a href="mailto:HellerS@mail.amc.edu">HellerS@mail.amc.edu</a></p>	<p>Agency Emergency Management Albany Medical Center 43 New Scotland Avenue Albany, NY</p>	1-2
<p>Craig Apple 518-487-5400</p>	<p>Albany County Sheriff 16 Eagle Street Albany, NY</p>	1-2
<p>Roderic Sechrist Director of Operations Division 518-457-2071 <a href="mailto:twesthuis@dot.state.ny.us">twesthuis@dot.state.ny.us</a></p>	<p>NY State Department of Transportation 50 Wolf Road Albany, NY</p>	1-2
<p>John Sennett Chief, Utility Section, Office of Electric, Gas and Water 518-402-5445 <a href="mailto:John.Sennett@dps.ny.gov">John.Sennett@dps.ny.gov</a></p>	<p>Department of Public Service 3 New York State Bicycle Rte 5 Albany, NY</p>	1-2
<p>FBI Cyber Internships 518-541-4225  <a href="mailto:jobs@oem.gov">jobs@oem.gov</a></p>	<p>FBI Albany Field Office 200 McCarty Avenue Albany, NY</p>	1
	<p>New York City Office of Emergency Management Summer Interns Program 200 Warren Street Brooklyn, NY</p>	8
<p>Rich Licht Chief Administrative Officer 518-266-3460 <a href="mailto:richard.licht@cisecurity.org">richard.licht@cisecurity.org</a></p>	<p>Center for Internet Security 31 Tech Valley Drive, #2 East Greenbush, NY</p>	5-6
<p>Michael Schillinger 516-541-4225 <a href="mailto:Michael.Schillinger@mail.house.gov">Michael.Schillinger@mail.house.gov</a></p>	<p>Office of Congressman Peter T King Homeland Security Committee Chair Sub-committee on Counterterrorism 1003 Park Boulevard Massapequa Park, NY</p>	1
<p>Katherine Taylor Experiential Education Manager 301-405-8504</p>	<p>National Consortium for the Study of Terrorism and Responses (START) 8400 Baltimore Avenue College Park, MD</p>	10

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2. For clinical placements for programs leading to [professional licensure in a health profession](#), **append** documentation to demonstrate each site's commitment to a numerical range of students each year, and the time period of its commitment. The documentation should be signed by the responsible official at each proposed clinical site.
3. In the table below, list the individual(s) at the campus (or at each campus, in the case of multi-institution programs) who will have responsibility for oversight and administration of external instruction.

<b>Name</b>	<b>Title</b>	<b>Email Address</b>
TBH	Experiential Training Coordinator	

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**Appendix 8     Position Announcement for Faculty To-Be-Hired**

## Emergency Preparedness, Homeland Security & Cybersecurity Faculty

### About University at Albany:

Located in state capital of New York, a thriving tri-city area with a population approaching 900,000, the University at Albany is a public research university with very high research activity that enrolls over 12,000 undergraduate students, 4,000 graduate students, and employs more than 1,000 faculty and nearly 3,600 staff. UAlbany has more than 162,000 living alumni, including many top academic, artistic, policy, research, and business leaders.

The University at Albany has a rich history dating back more than 150 years. Established in 1844, the University began as the first state-chartered public institution of higher education in New York founded to train teachers. The school grew and evolved over time and by 1962 the College had earned national distinction and was designated as one of four University Centers in the State University of New York (SUNY) system. Today, the University at Albany is a major public research university where students and faculty collaborate to conduct life-enhancing research and scholarship in a wide range of disciplines. With nationally respected programs, top-ranked professors, and a strategic location in New York's capital, UAlbany offers an excellent education with 120 undergraduate majors and minors and 125 master's, doctoral and certificate programs.

The University's location in the state capital of New York provides students and faculty with unique opportunities for internships, policy research, and public service. The area is also a vibrant center for culture and entertainment. Among its attractions are the New York State Museum and Library, and the Times Union Center, a major Northeast entertainment and sports venue. The city of Albany will soon construct a new Convention Center. Close by are the Berkshires, the Catskills, and the Adirondack Mountains, areas famed for recreational and cultural opportunities such as the Saratoga Performing Arts Center (which annually hosts the New York City Ballet and the Philadelphia Orchestra), the Tanglewood Music Center (which is the summer home of the Boston Symphony Orchestra), and Jacob's Pillow dance center. The region offers easy access to skiing, hiking, camping, boating, and other outdoor activities year-around.

Albany is easily accessible to New York City by car or train (2.5 hours) as well as Boston (2.5 hours) and Montreal (3.5 hours).

## Job Description:

The College of Emergency Preparedness, Homeland Security and Cybersecurity is seeking to fill **up to six** tenure track faculty positions across the following areas:

- Cybersecurity
- Digital Forensics
- Homeland Security
- Emergency Management
- Public Health Preparedness

As the first college of its kind in the nation, The College of Emergency Preparedness, Homeland Security and Cybersecurity is projected to grow over the next five years as it establishes both undergraduate and graduate academic programs in emergency preparedness, homeland security, and cybersecurity. The University at Albany and the State of New York are committed to seeing the College become a global leader in education and research in these fields, and are providing significant support to the establishment and planned growth of the unit.

The mission of the College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC) is to support high-quality academic programs for undergraduate and graduate students, to produce new knowledge through innovative research, and to provide training and lifelong learning opportunities for working professionals - all to help prepare for, protect against, respond to, and recover from a growing array of natural and man-made risks and threats in the state, the nation, and around the world.

UAlbany is a nationally recognized leader in Homeland Security training, research and education, and has longstanding partnerships with key security and emergency response agencies across the State. The University has received tens of millions of dollars in federal, state and private sector support to its schools, colleges and research centers based on this expertise. Partnerships with government agencies, private industry and not-for-profit organizations provides an opportunity to contribute to highly applied research and access to a wealth of resources held in these organizations and agencies. All faculty members in the College will join a research lab, where they will have the opportunity to work with faculty members from various disciplines from across the University.

Given the interdisciplinary nature of the project, many faculty will have joint appointments with other schools and colleges at the University at Albany (e.g., cybersecurity in the College of

Engineering and Applied Science, digital forensics in the School of Business Administration, public health preparedness in the School of Public Health). The unique model of the College places its faculty in a highly collaborative core, while also fostering interaction with a large interdisciplinary network throughout the University. Across the University, a rich learning and research environment is marked by a highly accomplished faculty, who are essential to delivering high quality academic programs and producing influential and cutting edge research. The faculty is comprised of nationally and internationally visible researchers and scholars and highly dedicated teachers.

### **Requirements:**

- The successful candidate will hold a PhD in an appropriate field such as computer science, business administration, public administration, political science, public policy, public health, homeland security, psychology, sociology, or allied field.
- Senior applicants should have a well-established program of research and external funding; junior applicants should have a range of publications in submission, revision, and/or print that suggest a trajectory toward a tenurable research record.
- The College welcomes applications from scholars interested in a wide range of topics within the broad areas of emergency preparedness, homeland security and cybersecurity such as intelligence analysis, critical infrastructure protection, terrorism, risk analysis, hazard mitigation, border security, cybercrime, forensics, decision analysis, disaster psychology, disaster mental health, extreme weather, pandemics, crisis communications, privacy and civil liberties, and continuity of operations.
- The College is open to researchers using a wide range of methods. We are particularly interested in researchers that creatively employ mixed mode qualitative/quantitative approaches and that can contribute to the University at Albany's data analytics program.
- Applicants must address in their application their ability to work with culturally diverse populations.
- A Ph.D. must be from a college or university accredited by the US Department of Education or an internationally recognized accrediting organization.

### **Additional Information:**

Professional Rank and Salary Range: Open rank, competitive based on experience and qualifications

Start date: September 1, 2016

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, or Clery Act, mandates that all Title IV institutions, without exception, prepare, publish and distribute an Annual Security Report. This report consists of two basic parts: disclosure of the University's

crime statistics for the past three years; and disclosures regarding the University's current campus security policies. The University at Albany's Annual Security Report is available in portable document format [PDF] by clicking this link <http://police.albany.edu/ASR.shtml>

THE UNIVERSITY AT ALBANY IS AN EO/AA/IRCA/ADA EMPLOYER

Please apply online via <http://albany.interviewexchange.com/candapply.jsp?JOBID=63367>

### **Application Instructions:**

Applicants must submit the following documents:

- Curriculum Vitae
- Cover letter
- Writing sample or publication
- Evidence of teaching effectiveness (such as syllabi and student evaluations)
- Graduate transcript (for ABD and assistant professors)
- Three letters of recommendation (soon after you have submitted your application in Interview Exchange you will receive a notice with instructions for submitting letters of recommendation)

**Note:** After submitting your CV, the subsequent pages give you instructions for uploading additional documents (i.e. cover letter etc.).

See the FAQ for using our online system. Please **contact us** if you need assistance applying through this website.

**Returning Applicants** - [Login](#) to your U-Albany Careers Account to check your completed application.

A review of applications will begin immediately, and the search will remain open until the position is filled.



## College of Emergency Preparedness, Homeland Security and Cybersecurity Tenure-Track Faculty Positions

The University at Albany is launching a bold new initiative in the rapidly growing and critically important area of security and preparedness. The first-of-its kind College of Emergency Preparedness, Homeland Security and Cybersecurity was established this year, and is expected to grow over the next five years as it establishes both undergraduate and graduate academic programs. In support of this important and ambitious endeavor, the University is seeking to fill up to six tenure-track faculty positions within the following areas:

- Homeland Security
- Cybersecurity
- Emergency Management
- Digital Forensics
- Public Health Preparedness

The University at Albany and the State of New York are committed to ensuring that the College become a global leader in education and research in these fields and are providing significant support to the establishment and planned growth of the unit. Faculty members will have the unique opportunity to contribute to program development, work closely with external partners in the public, private, and non-profit sectors on research and curriculum development, and participate in highly interdisciplinary and applied research groups.

The mission of the College of Emergency Preparedness, Homeland Security and Cybersecurity is to support high-quality academic programs for undergraduate and graduate students, to produce new knowledge through innovative research, and to provide training and lifelong learning opportunities for working professionals – all to help prepare for, protect against, respond to, and recover from a growing array of natural and man-made risks and threats in the state, the nation, and around the world.

Given the interdisciplinary nature of the project, many faculty will have joint appointments with other schools and colleges at the University at Albany (e.g., cybersecurity in the College of Engineering and Applied Science, digital forensics in the School of Business Administration, public health preparedness in the School of Public Health). The University at Albany is a leader in public affairs and policy research and education with nationally ranked programs in criminal justice, public affairs, public health, and social welfare.

### **Requirements:**

- PhD in an appropriate field such as computer science, business administration, public administration, political science, public policy, public health, homeland security, psychology, sociology, or allied field. The PhD must be from a college or university accredited by the U.S. Department of Education or an internationally recognized accrediting organization.
- Senior applicants should have a well-established program of research and external funding.
- Applicants must address in their application their ability to work with culturally diverse populations.

To apply and for further details, visit:

<https://albany.interviewexchange.com/jobofferdetails.jsp?JOBID=63367>

*The University at Albany is an EO/AA/IRCA/ADA Employer*



**University at Albany**  
**New Program Proposal**  
**Emergency Preparedness, Homeland Security and Cybersecurity**

**Appendix 9    Articulation Tables and Letters of Support**

Hudson Valley Community College

SUNY Adirondack Community College

Columbia-Greene Community College

Schenectady County Community College



February 8, 2016

James R. Stellar, Ph.D.  
Provost and Vice President for Academic Affairs  
University at Albany, UNH-308  
1400 Washington Avenue  
Albany, NY 12222

Dear Provost Stellar:

I am writing in support of the proposed Bachelor of Arts and Sciences degree programs in Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany. An Emergency Preparedness, Homeland Security and Cybersecurity degree program and transfer articulation agreement between the University at Albany and Hudson Valley Community College will be very beneficial to both institutions.

We have consulted with the University at Albany's College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC) and carefully reviewed their proposed Bachelor's degree in Emergency Preparedness, Homeland Security and Cybersecurity. The result of our close collaboration, is the development of a program transfer articulation agreement that will allow Hudson Valley Community College students who complete their two-year degree, to enter the University at Albany with junior-status majoring in Emergency Preparedness, Homeland Security and Cybersecurity. This transfer program agreement will afford transfer students the opportunity to complete their Bachelor's degree requirements for the Emergency Preparedness, Homeland Security and Cybersecurity degree after two years of full-time study.

Hudson Valley Community College is committed to collaborating with four-year SUNY institutions in an effort to create well-defined articulation agreements that provide seamless and predictable transfer opportunities for our students. The University at Albany's new Emergency Preparedness, Homeland Security and Cybersecurity degree program is an example of an outstanding transfer opportunity for our students.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Carolyn G. Curtis". The signature is fluid and cursive, with the first name "Carolyn" being more prominent than the last name "Curtis".

Carolyn G. Curtis, Ph.D.  
Vice President for Academic Affairs

# SUNY TRANSFER COURSE EQUIVALENCY TABLE

Hudson Valley Community College: (34134) AS Degree in Criminal Justice					University at Albany: BA Degree in Emergency Preparedness, Homeland Security and Cybersecurity : Homeland Security Concentration				
Course #	Course Title	SUNY Gen Ed	Major or Pathway	Credits Granted	Course #	Equivalent Course Title	SUNY Gen Ed	Major or Pathway	Credits Accepted
BIOL 215	Environmental Science (Nat-Science Elective)	X		3	ABIO 010	Environmental Science	X (NS)		3
CRJS 101	Introduction to Criminal Justice		X	3	RCRJ 201	Introduction to the Criminal Justice Process; Concentration Elective 1		X	3
CRJS 250	Criminology		X	3	RCRJ 203	Criminology; Concentration Elective 2		X	3
CRJS 265	Correctional Services			3	RCRJ 302	Punishment and Corrections			3
CRJS 295	Criminal Justice Capstone Course			3	RCRJ 010	Criminal Justice Capstone Course			3
ENGL 101	English Composition I	X		3	AENG 100Z	Introduction to Analytical Writing	X (BC)		3
ENGL 104	English Comp. II - Writing about Literature	X		3	AENG 121	Reading Literature	X (H)		3
HSUV 210	Psychology of Human Sexuality (Elective)			3	APSY 340	Psychology of Human Sexuality			3
MATH 135	Statistics (Statistics Elective)	X		3	AMAT 108	Statistics	X (M)		3
POLS 101	Introduction to Political Science	X		3	RPOS 101	American Politics	X (AH)		3
PSYC 100	General Psychology	X		3	APSY 101	Introduction to Psychology	X (SS)		3
PSYC 260	Practical Research Methods			3	RCRJ 282	Research Methods			3
SOCL 100	Sociology	X		3	ASOC 115	Introduction to Sociology	X (SS)		3
	Arts Elective	X		3		Arts Elective	X (AR)		3
	Criminal Law Elective			3		Criminal Law Elective			3
	Foreign Language - Two Electives	X		6		Foreign Language - Two Electives	X (FL)		6
	Other World or Western Civilizations Elective	X		3		International Perspectives Elective	X (OW)		3
	Restricted Electives			6		Electives			6
					<b>Additional Required and Elective Courses for the Major at UAlbany</b>				
					CEHC/RPAD 101	Introduction to Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 210	Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 242	Cybersecurity		X	3
					CEHC 310	Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC/RPAD/RPOS 343	Homeland Security		X	3
					CEHC/RPAD 344	Emergency Preparedness		X	3
					CEHC 345	Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 390	Internship Experience in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 410	Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
						Milestone - Experiential Training (100 hours)		X	0
					<u>Concentration*</u>	Two additional courses within the Homeland Security concentration – Must be upper level		X	6
						Additional Elective Credits			9
					<u>Minor</u>	An 18 credit Minor is required at UAlbany			18
Total Credits Eligible for Transfer:					Total Transfer Credits Applied to Program:				
60					Total Credits Required after Transfer:				
					60				
					Total Credits Required for Degree				
					120				

\*Homeland Security Concentration Electives:

CEHC 320 Psychology of Terrorism; CEHC 321 Human Trafficking; CEHC 324 Civil Liberties in Context: Emergency Preparedness, Homeland Security & Cybersecurity; CEHC 325 Critical Infrastructure; CEHC 355 Comparative Homeland Security; CEHC 356 Transnational Crime; CEHC 393 Simulation: Building Security and Preparedness; CEHC/RPAD 456 Homeland Security Intelligence; CEHC/RPAD 457 Intelligence Analysis for Homeland Security; CEHC/RPAD 459 Homeland Security: Building Preparedness Capabilities; RCRJ 201 Intro to the Criminal Justice Process; RCRJ 202 Intro to Law and Criminal Justice; RCRJ/ASOC 203 Criminology; RCRJ 281 Intro to Statistics in Criminal Justice; RCRJ 351 Policing in a Free Society; RCRJ 353/RPOS363 American Criminal Courts; RCRJ 401 Crime Deviation and Conformity; RCRJ 417 Cross-National Crime; RCRJ 418 Information Use and Misuse in Criminal Justice; RPOS/RPAD 140 Intro Public Policy; TPOS 260 Political Violence; TPOS 261Y Comparative Ethnicity; RPOS 361 Comparative Ethnicity; RPOS/RPAD 316 Methodological Tools for Public Policy; RPOS 320 American Federalism; RPOS 360 Violent Political Conflict



# SUNY ADIRONDACK

640 Bay Rd. Queensbury, NY 12804-1445  
Tel: 518.743.2200 Web: [www.sunyacc.edu](http://www.sunyacc.edu)

February 8, 2016

James R. Stellar, Ph.D.  
Provost and Vice President for Academic Affairs  
University at Albany, UNH-308  
1400 Washington Avenue  
Albany, NY 12222

Dear Provost Stellar:

I am writing in support of the proposed Bachelor of Arts and Sciences degree programs in Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany. An Emergency Preparedness, Homeland Security and Cybersecurity degree program and transfer articulation agreement between the University at Albany and SUNY Adirondack will be very beneficial to both institutions.

We have consulted with the University at Albany's College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC) and carefully reviewed their proposed Bachelor's degree in Emergency Preparedness, Homeland Security and Cybersecurity. The result of our close collaboration, is the development of a program transfer articulation agreement that will allow SUNY Adirondack students who complete their two-year degree, to enter the University at Albany with junior-status majoring in Emergency Preparedness, Homeland Security and Cybersecurity. This transfer program agreement will afford transfer students the opportunity to complete their Bachelor's degree requirements for the Emergency Preparedness, Homeland Security and Cybersecurity degree after two years of full-time study.

SUNY Adirondack is committed to collaborating with other SUNY institutions in an effort to create well-defined articulation agreements that provide seamless and predictable transfer opportunities for our students. The University at Albany's new Emergency Preparedness, Homeland Security and Cybersecurity degree program is an example of an outstanding transfer opportunity for our students.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,



John E. Jablonski  
Interim Vice President for Academic Affairs



# SUNY TRANSFER COURSE EQUIVALENCY TABLE

SUNY Adirondack: (92247) AS Degree in Criminal Justice: Police Science					University at Albany: BA Degree in Emergency Preparedness, Homeland Security and Cybersecurity: Emergency Preparedness Concentration				
Course #	Course Title	SUNY Gen Ed	Major or Pathway	Credits Granted	Course #	Equivalent Course Title	SUNY Gen Ed	Major or Pathway	Credits Accepted
CRJ 101	Introduction to Criminal Justice			3	RCRJ 201	Introduction to the Criminal Justice Process			3
CRJ 104	Criminal Law			3	RCRJ 000	Criminal Justice Elective			3
CRJ 205	Criminal Justice Administration			3	RCRJ 010	Criminal Justice Elective			3
CRJ 211	Criminal Procedure			3	RCRJ 000	Criminal Justice Elective			3
CRJ 212	Criminal Evidence			3	RCRJ 000	Criminal Justice Elective			3
CRJ 216	Seminar in Criminal Justice Issues			3	RCRJ 010	Criminal Justice Elective			3
CRJ 218	Criminal Investigation			3	RCRJ 010	Criminal Justice Elective			3
ENG 101	Introduction to College Writing	X		3	AENG 010Z	English Elective	X (BC)		3
ENG 110	Elements of Technical Writing	X		3	AENG 309Z	Professional Writing	X		3
GEO 114	Weather and Climate (Suggested Mathematics or Science Elective)	X	X	3	AATM 100	The Atmosphere – Concentration Elective 1	X (NS)	X	3
HIS 103	US History I (Suggested SUNY Gen Ed American History)	X		3	AHIS 100	US History	X (AH)		3
MAT 127	Introductory Statistics with Probability	X		4	AMAT 108	Elementary Statistics	X (M)		4
PHI 202	Ethics	X		3	APHI 212	Introduction to Ethical Theory	X (H)		3
PSC 103	American National Government (Suggested Elective)	X		3	RPOS 101	American Politics	X (SS)		3
PSY 101	General Psychology	X		3	APYS 101	Introduction to Psychology	X (SS)		3
SCI 210	Forensic Science	X		4	RCRJ 000	Criminal Justice Elective	X		4
SOC 101	Principles of Sociology	X		3	ASOC 115	Introduction to Sociology	X (SS)		3
SOC 211	Criminology	X		3	RCRJ 010	Criminal Justice Elective			3
SOC 274	Corrections: Probation, Parole, and Social Structure	X		3	RCRJ 000	Criminal Justice Elective			3
	Physical Activity Elective			2		General Elective Credits			2
	SUNY Gen Ed (Arts, Foreign Language, Other World Civilizations, or Western Civilizations)	X		3		SUNY Gen Ed (TBD)	X		3
HRD 100	Freshmen Experience*			1		No Credit Transferred			0
					<b>Additional Required and Elective Courses for the Major at UAlbany</b>				
					CEHC/RPAD 101	Introduction to Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 210	Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 242	Cybersecurity		X	3
					CEHC 310	Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC/RAPD/RPOS 343	Homeland Security		X	3
					CEHC/RAPD 344	Emergency Preparedness		X	3
					CEHC 345	Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 390	Internship Experience in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 410	Capstone Project Emergency Preparedness, Homeland Security and Cybersecurity		X	3
						Milestone - Experiential Training (100 hours)		X	0
					<u>Concentration**</u>	Three additional courses in the Emergency Preparedness Concentration – One must be lower level, Two must be upper level		X	9
						Additional Elective Credits			2
					<u>Minor</u>	An 18 credit Minor is required at UAlbany		X	18
<b>Total Credits Eligible for Transfer:</b>				<b>64</b>	<b>Total Transfer Credits Applied to Program:</b>				<b>64</b>
					<b>Total Credits Required after Transfer:</b>				<b>56</b>
					<b>Total Credits Required for Degree</b>				<b>120</b>

\*The University at Albany does not currently accept transfer credit for Freshmen Experience courses.

\*\*Emergency Preparedness Electives:

AATM 100 The Atmosphere; AATM 103 Intro to Climate Change; AATM 107 The Oceans; AATM 200 Natural Disasters; AENV/AGEO 105 Introduction to Environmental Science; AUSP 201 Intro to Urban Planning; AUSP 315z State and Regional Planning; AUSP/AGOG 430 Environmental Planning; AUSP 456/AGOG 496 Geographic Information Systems; AUSP 474 Site Planning; AUSP 475 Urban Design; AGOG 290 Intro to Cartography; AGOG 484 Remote Sensing I; CEHC 393 Simulation: Building Security and Preparedness; CEHC/RPAD 455 Disaster, Crisis and Emergency Management and Policy; CEHC/RPAD 471 Military Forces in Support of Civil Authorities; CEHC/RPAD 472 Disaster and Crisis Management in the Public, Private, and Nonprofit Sectors; HSPH 201 Intro Public Health; HSPH 231 Concepts in Epidemiology; TSPH/RPOS/RPAD 272 Health and Human Rights: an Interdisciplinary Approach; HSPH 321 Global Environmental Issues and Their Effect on Human Health; HSPH 323 Environmental Laboratory Perspectives in Public Health; HSPH 341 Promoting Healthy People and Communities; RPAD/RPOS 140 Intro Public Policy; RPOS/RPAD 321 State and Local Government; RPOS 336 Civil Liberties

# SUNY TRANSFER COURSE EQUIVALENCY TABLE

Columbia-Greene Community College – (83270) AS Degree in Computer Science					University at Albany – BS in Emergency Preparedness, Homeland Security and Cybersecurity: Cybersecurity Concentration				
Course #	Course Title	SUNY Gen Ed	Major or Pathway	Credits Granted	Course #	Equivalent Course Title	SUNY Gen Ed	Major or Pathway	Credits Accepted
BI 101	General Biology (Lab Science Elective)	X		4	ABIO 120/201	General Biology I/Lab	X (NS)		4
CS 134	Computer and Informatics Science I		X	4	BFOR 100	Introduction to Information Systems		X	4
CS 154	JAVA Programming			3	ICSI 010	Computer Science Elective			3
CS 256	Computer Science II		X	4	BFOR 203	Networking – Introduction to Communications		X	3
EN 101	Composition	X		3	AENG 100Z	Introduction to Analytical Writing	X (BC)		3
EN 102	Composition and Literature	X		3	AENG 121Z	Reading Literature	X (H)		3
HI 101	Western Civilization 5000 BC – 1700 (General Elective)	X		3	AHIS 130	History of European Civilization I	X (OW)		3
HI 103	U.S. History 1492-1865 (General Elective)	X		3	AHIS 100	American Political & Social History I	X (AH)		3
MA 102	Statistics (Mathematics Elective)	X		3	AMAT 108	Elementary Statistics	X (M)		3
MA 111	Pre-Calculus			4	AMAT 100	Precalculus Mathematics			4
PY 101	General Psychology (Social Science Elective)	X		3	APSY 101	Introduction to Psychology	X (SS)		3
SO 101	Introduction to Sociology (Social Science Elective)	X		3	ASOC 115	Introduction to Sociology	X (SS)		3
	Computer Science Electives			6		Computer Science Electives			6
	General Elective Credits			8		General Elective Credits			8
	Mathematics Electives			6		Mathematics Electives			6
	Physical Education/Health Elective			2		General Elective Credit			2
CE 101	College Experience*			1		No Credit Transferred			0
					<b>Additional Required and Elective Courses for the Major at UAlbany</b>				
					CEHC/RPAD 101	Introduction to Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 210	Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 242	Cybersecurity		X	3
					CEHC 310	Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC/RPAD/RPOS 343	Homeland Security		X	3
					CEHC/RPAD 344	Emergency Preparedness		X	3
					CEHC 345	Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 390	Internship Experience in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 410	Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
						Milestone - Experiential Training (100 hours)		X	0
					Concentration	Two additional courses within the Cybersecurity concentration		X	6
						Additional Elective Credits			8
					Minor	An 18 Credit Minor is required at UAlbany			18
				Total Credits eligible for Transfer					61
					Total Transfer Credits Applied to Program				61
					Total Credits Required after Transfer				59
					Total Credits Required for Degree				120

\*The University at Albany does not currently accept transfer credit for College Experience courses.

\*\*Cybersecurity Concentration Elective

CEHC/RPAD 445 Principles and Practices of Cyber Security; CEHC/RPAD 449 Cyber Security: Long Term Planning and Risk Management; CEHC/RPAD 469 Cyber Threats and Intelligence; BFOR 100 Intro to Information Systems; BFOR 201 Intro to Digital Forensics; BFOR 202 Cyber Crime Investigations; BFOR 203 Networking: Intro to Data Communication; BFOR 204 Fundamentals of Information and Cybersecurity **OR** ICSI 124X Computer Security Basics; BFOR 300 Databases for Digital Forensics; BFOR 410 International Cyber Conflicts; BFOR 412 Cyber Incident Analysis; IINF 202 Introduction to Data and Databases; IINF 306 Information Security and Assurance



February 15, 2016

James R. Stellar, Ph.D.  
Provost and Vice President for Academic Affairs  
University at Albany, UNH-308  
1400 Washington Avenue  
Albany, NY 12222

Dear Provost Stellar:

I am writing in support of the proposed Bachelor of Arts and Sciences degree programs in Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany. An Emergency Preparedness, Homeland Security and Cybersecurity degree program and transfer articulation agreement between the University at Albany and Schenectady Community College will be very beneficial to both institutions.

Schenectady Community College is committed to collaborating with four-year SUNY institutions in an effort to create well-defined articulation agreements that provide seamless and predictable transfer opportunities for our students. The University at Albany's new Emergency Preparedness, Homeland Security and Cybersecurity degree program is an example of an outstanding transfer opportunity for our students.

We have consulted with the University at Albany's College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC) and carefully reviewed their proposed Bachelor's degree in Emergency Preparedness, Homeland Security and Cybersecurity. The result of our close collaboration, is the development of a program transfer articulation agreement that will allow Schenectady Community College students who complete their two-year degree, to enter the University at Albany with junior-status majoring in Emergency Preparedness, Homeland Security and Cybersecurity. This transfer program agreement will afford transfer students the opportunity to complete their Bachelor's degree requirements for the Emergency Preparedness, Homeland Security and Cybersecurity degree after two years of full-time study.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Vice President of Academic Affairs

# SUNY TRANSFER COURSE EQUIVALENCY TABLE

Schenectady County Community College – (33705) AS Degree in Criminal Justice					University at Albany – BS in Emergency Preparedness, Homeland Security and Cybersecurity: Cybersecurity Concentration				
Course #	Course Title	SUNY Gen Ed	Major or Pathway	Credits Granted	Course #	Equivalent Course Title	SUNY Gen Ed	Major or Pathway	Credits Accepted
CIS 221	Advanced Computer Applications		X	3	BFOR 100	Intro to Computing & Information Systems; Concentration Elective 1		X	3
CIS 241	Routing Fundamentals (Elective)		X	3	BFOR 203	Networking I – Intro to Data Communications; Concentration Elective 2		X	3
CIS 262	Network Security (Elective)			3	BFOR 204	Fundamentals of Info and Cyber Security			3
CIS 263	Intro to Computer Forensics (Elective)			3	BFOR 201	Intro to Digital Forensics			3
CRJ 113	Introduction to Criminal Justice			3	RCRJ 201	Intro to the Criminal Justice Process			3
CRJ 117	Police Organization & Supervision			3	RCRJ 010	Criminal Justice Elective			3
CRJ 131	Criminal Law			3	RCRJ 202	Intro to Law and Criminal Justice			3
CRJ 133	Criminology			3	RCRJ 203	Criminology			3
CRJ 143	Criminal Evidence & Procedures			3	RCRJ 010	Criminal Justice Elective			3
CRJ 219	Corrections			3	RCRJ 302	Punishment & Corrections			3
CRJ XXX	Criminal Justice Electives			6	RCRJ 010	Criminal Justice Elective			3
ENG 123	College Composition	X		3	AENG 010Z	Basic Communication Gen Ed	X (BC)		3
ENG 124	Literature & Writing	X		3	AENG 121	Reading Literature	X (HU)		3
MAT 147	Statistics (Math Elective)	X		3	AMAT 108	Elementary Statistics	X (M)		3
PSY 121	Introduction to Psychology	X		3	APSY 101	Introduction to Psychology	X (SS)		3
SOC 121	Sociology	X		3	ASOC 115	Introduction to Sociology	X (SS)		3
	Natural Laboratory Science	X		4		Natural Laboratory Science	X (NS)		4
	Liberal Arts/Humanities (Gen Ed) Elective	X		9		Liberal Arts/Humanities (Gen Ed) Elective	X		9
					<b>Additional Required and Elective Courses for the Major at UAlbany</b>				
					CEHC/RPAD 101	Introduction to Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 210	Critical Inquiry and Communication in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 242	Cybersecurity		X	3
					CEHC 310	Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC/RPAD/RPOS 343	Homeland Security		X	3
					CEHC/RPAD 344	Emergency Preparedness		X	3
					CEHC 345	Leadership and Ethics in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 390	Internship Experience in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
					CEHC 410	Capstone Project in Emergency Preparedness, Homeland Security and Cybersecurity		X	3
						Milestone - Experiential Training (100 hours)		X	0
					Concentration	Two additional courses within the Cybersecurity concentration – Must be upper level		X	6
						Additional Elective Credits			5
					Minor	An 18 Credit Minor is required at UAlbany			18
Total Credits eligible for Transfer				64	Total Transfer Credits Applied to Program				64
					Total Credits Required after Transfer				56
					Total Credits Required for Degree				120

\*Cybersecurity Concentration Elective

CEHC/RPAD 445 Principles and Practices of Cyber Security; CEHC/RPAD 449 Cyber Security: Long Term Planning and Risk Management; CEHC/RPAD 469 Cyber Threats and Intelligence; BFOR 100 Intro to Information Systems; BFOR 201 Intro to Digital Forensics; BFOR 202 Cyber Crime Investigations; BFOR 203 Networking: Intro to Data Communication; BFOR 204 Fundamentals of Information and Cybersecurity **OR** ICSI 124X Computer Security Basics; BFOR 300 Databases for Digital Forensics; BFOR 410 International Cyber Conflicts; BFOR 412 Cyber Incident Analysis; IINF 202 Introduction to Data and Databases; IINF 306 Information Security and Assurance