

EHC 310: Research Seminar in Emergency Preparedness, Homeland Security and Cybersecurity¹ (3 Credits)

Semester: Fall 2019

Day/Time: Tuesdays 2:45 pm- 5:35 pm

Location: Husted Hall 14

Pre-requisites/Co-requisites: CEHC/RPAD 101 and CEHC 210.

Instructor: Charmaine N. Willis

Contact: cwillis@albany.edu

Office Location and Hours: Tuesdays 6 pm-7 pm in Draper 146 and by appointment

Course Description, Purpose and Goals

Course Description:

In many undergraduate classes, students are consumers of research created by others. Students read historical case studies of disasters, examine regression results of probing the relationship between democracy and terrorism, peruse interviews with government officials from homeland security agencies, 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 of emergency preparedness, homeland security and cybersecurity. Over the course of the semester, students will conduct literature reviews, develop hypotheses, construct research designs, collect data, test hypotheses, and communicate findings. Students will start by creating a literature review on a topic of the student's interest, identifying a falsifiable research question of interest to them in an area related to his or her concentration and subsequently investigating the question using the procedures and methods of social science.

Student Learning Outcomes:

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

1. Use library and other tools to search for existing research relevant to their topic
2. Articulate a clear research question or problem and formulate a hypothesis or claim
3. Create a research plan to evaluate a hypothesis or claim
4. Identify and execute appropriate methodologies and know the strengths and weaknesses of different methodologies
5. Collect data and information to test a hypothesis or claim
6. Identify and practice research ethics and responsible conduct in research
7. Explain their research to others in the field and to a broader audience through research presentations, posters, and other forms of visualization.

¹ This course is influenced by and benefitting from syllabi and materials from Cheng Chen, Sam Jackson, Keith Preble, Stephan Stohler, and Patricia Strach.

General Education Competencies & Categories:

Advanced Writing: Definitions and Learning Objectives

Educational experiences that satisfy the Advanced Writing competency in the major will provide students with sustained practice in increasingly sophisticated writing, in a variety of formats appropriate to the discipline. Faculty will guide students toward writing effectively in the discipline by providing appropriate evaluation of written documents, including opportunities to incorporate feedback and progress as writers, either through revision or subsequent assignments. Students' coursework will also convey knowledge of and access to the necessary tools and resources for writing in the discipline.

Students completing educational experiences that satisfy the Advanced Writing competency as part of the requirements for graduation in the major will:

1. demonstrate increasingly sophisticated writing according to the conventions of their academic discipline;
2. be able to communicate clearly in writing, employing fundamental rules of usage, style, and mechanics in the context of their discipline;
3. be able to evaluate critically a variety of written texts, including their own;
4. demonstrate the ability to incorporate critical feedback on their writing, coming to understand that revision and rewriting are an integral part of the writing process.

Critical Thinking: Definitions and Learning Objectives

Critical thinking is the systematic process of analyzing and evaluating data, hypotheses, arguments, or critiques. It is an essential component of any academic major. The research, scholarship, and creative activities of university faculty ensure that our academic disciplines are constantly evolving. The facts and theories in academic disciplines are essential knowledge our students must learn, but it is mastery of critical thinking that will allow for lifelong educational and occupational development, and facilitate students' functioning as engaged citizens. Students' coursework in the major will cultivate in them habits of critical thinking, as they learn to approach questions and problems in critical, logical, and reflective ways.

Students completing educational experiences that satisfy the Critical Thinking competency as part of the requirements for graduation in the major will:

1. formulate complex questions, problems, and hypotheses clearly and precisely, and apply familiar and new concepts in developing solutions and conclusions;
2. gather and assess relevant information/data;
3. develop well-reasoned arguments and communicate them effectively to others;

Oral Discourse: Definitions and Learning Objectives

Oral discourse provides opportunities for students to develop the oral communication skills they need to participate more effectively in public and academic debates and discussions. Each academic major will offer opportunities for students to participate in a variety of communication contexts appropriate to the discipline, and to reflect on the principles and theories relevant to specific oral communication activities.

Students completing educational experiences that satisfy the Oral Discourse competency as part of the requirements for graduation in the major will:

1. communicate ideas effectively appropriate to a specific context and according to a specific set of criteria;
2. establish and maintain an appropriate performer/audience relationship in a given oral exercise, and actively engage with listeners/audience;
3. respond to, and where appropriate, incorporate listener's comments and questions;

Information Literacy: Definitions and Learning Objectives

Information literate individuals are able to gather, evaluate, use, manage, synthesize, and create information and data in an ethical manner. They also understand the dynamic environment in which information and data are created, handled, and enhanced. Students demonstrate information literacy through finding information from appropriate sources; evaluating, using and managing information; and appreciating the role of information literacy in learning. Learning is understood here as the constant search for meaning by acquiring information, reflecting on and engaging with it, and actively applying it in multiple contexts. To this end, each academic major will offer increasingly sophisticated research assignments that rely upon diverse information sources. Students will find, process, evaluate, and cite information sources, creating and sharing information presented in multiple formats from multiple sources in a form appropriate to the discipline.

Students completing educational experiences that satisfy the Information Literacy competency as part of the requirements for graduation in the major will:

1. understand the information environment and information needs in the discipline in today's society, including the organization of and access to information, and select the most appropriate strategies, search tools, and resources for each unique information need;
2. demonstrate the ability to evaluate content, including dynamic, online content if appropriate;
3. conduct ethical practices in the use of information, in ways that demonstrate awareness of issues of intellectual property and personal privacy in changing technology environments;
4. produce, share, and evaluate information in a variety of participatory environments;
5. integrate learning and research strategies with lifelong learning processes and personal, academic, and professional goals.

The Course Environment

Instructor Availability: I am available during the office hours listed above and by appoint. I generally reply to email within a few hours of receipt, but any e-mail correspondence after 8 pm may not receive a response until the next day.

Courtesy: During class discussions, the instructor and students are expected to demonstrate professional behavior. This means cooperating and interacting in a courteous, supportive, and tactful manner based on mutual respect for each other's ideas.

Students and professor should be professional at all time. Faculty should be addressed as Prof. XXX or Dr. XXX. Emails should be addressed "Dear..." and end with a "Thank you." *Disrespect in any form in any CEHC class will not be tolerated.*

Attendance Policy: For your benefit and my own, I expect students to attend each class session. We will be regularly working together in class to practice the skills outlined in the learning objectives. Therefore, missing class will result in a missed opportunity for practice and feedback and should be avoided. However, I understand that many things can happen over the course of a semester and an absence may be

necessary. Students are permitted two unexcused absences throughout the semester. Students with more than two unexcused absences will lose 50 points from their overall course grade for each additional unexcused absence. If you must miss class for any reason, I ask that you notify me via email (cwillis@albany.edu) as soon as possible, preferably before the class that you will miss.

Absence due to religious observance: New York State Education Law (Section 224-a) - Campuses are required to excuse, without penalty, individual students absent because of religious beliefs, and to provide equivalent opportunities for make-up examinations, study, or work requirements missed because of such absences. Faculty should work directly with students to accommodate religious observances. Students should notify the instructor of record in a timely manner.

Late and Missed Assignments: Because assignments for this class largely build off of one another, it is imperative that you do not fall behind on assignments. Assignments should be submitted by 11:59 pm the day that they are due via Blackboard. After that, 10% will be deducted from the maximum possible score for each day that the assignment is late (including weekends). Missed assignments will receive '0' points. In the case of a catastrophic event or medical issue that may prevent you from submitting an assignment on time, please see the Office of the Vice Provost and Dean for Undergraduate Education <https://www.albany.edu/undergraduateeducation/> and the University's Medical Excuse Policy https://www.albany.edu/health_center/medicaexcuse.shtml.

Grade Appeals: Students who feel that their exams or assignments have been graded incorrectly should follow a three-step procedure. First, the student carefully reads the assignment and identifies the precise problem(s) with the grading. Second, the student sends a written appeal via email explaining why their answer was appropriate to the instructor; you must wait **24 hours** after receiving your grade to submit an appeal. Third, the instructor will regrade the assignment, taking the appeal into account. Note that the instructor may assign a higher or lower grade following such an appeal.

Style Manuals and Guidelines: Written assignments and papers should be word-processed and double-spaced in Microsoft Word. Students are required to cite sources according to the American Psychological Association (APA).

- American Psychological Association. 2001. *Publication manual of the American Psychological Association*, 5th Edition. Washington, DC: American Psychological Association.

Style manuals are available in the reference sections of many mainstream bookstores and reserve sections of University Libraries, including the Dewey Library.

Withdrawal from the Course: The drop date for the Fall 2019 semester is Monday, November 4 for undergraduate students. That is the last date you can drop a course and receive a 'W'. It is your responsibility to take action by this date if you wish to drop the course. In particular, grades of "incomplete" will not be awarded to students because they missed the drop deadline.

Cell phones & laptops: cell phone use is not permitted in class. Laptop/tablet use is acceptable as long as you are using them solely for taking notes or working in class as applicable. Students using social media, watching movies, or engaging in other non-class related activities will be penalized; this is distracting not only for myself but for other students as well. Repeated violations of cell phone use or inappropriate use of electronic devices in class will incur grade penalties.

I/Incomplete: No graduation credit. A temporary grade requested by the student and assigned by the instructor ONLY when the student has nearly completed the course requirements but because of

circumstances beyond the student's control, the work is not completed. The incomplete should only be assigned on the basis of an agreement between the instructor and the student specifying the work to be completed and establishing a general timeline in which the work will be completed. Incompletes may NOT be resolved by auditing or registering again for a subsequent offering of the course. The date for the completion of the work may not be longer than one month before the end of the semester following that in which the incomplete is received. Once the work is completed, the instructor assigns the appropriate academic grade.

The instructor may extend an incomplete for a maximum of one semester beyond the original deadline providing that the student has made contact with the instructor to request the extension. Additional extensions are NOT permitted.

Any grade of I existing after the stated deadline shall be automatically changed to E or U according to whether or not the student is enrolled for A–E or S/U grading. Except for extenuating circumstances approved by the Office of the Vice Provost for Undergraduate Education, these converted grades may not be later changed.

Important: Incompletes will not be given to students who have not fulfilled their classwork obligations, and who, at the end of the semester, are looking to avoid failing the course. This is asking for special treatment.

Required Readings:

Readings will be posted Blackboard and are listed in the schedule.
Additional readings and exercises may be added during the semester.

Course Delivery Structure, Schedule, & Grading

Grading:

- **Grading:** the course will be graded on a 1,000-point scale. Each assignment and portion of the course is worth a set number of points and will be graded accordingly. At the end of the class your final grade will be based on your total number of points earned throughout the class.
 - **Rubric:**
 - 930- 1,000 points: A
 - 900- 929 points: A-
 - 870- 899 points: B+
 - 830- 869 points: B
 - 800- 829 points: B-
 - 770- 799 points: C+
 - 730- 769 points: C
 - 700- 729 points: C-
 - 670- 699 points: D+
 - 630- 669 points: D
 - 600- 629 points: D-
 - 599 points and below: E

Course outline:

Dates	Class topic	Readings	Notes
August 27	Introduction		Complete the plagiarism tutorial by Sunday, September 1 at 11:59 pm.
September 3	Types of Research	Brady, "Causation and Explanation in Social Science"; Schwartz-Shea and Yanow, "Starting from Meaning"	
September 10	Literature Reviews	Galvan and Galvan, "Writing Reviews of Academic Literature"; Knopf, "Doing a Literature Review"	Topic description due on Blackboard by Friday, September 13 at 11:59 pm.
September 17	Questions and Hypotheses	Eidlin, "The Method of Problems vs. the Method of Topics"; Pajo, "Formulating a Research Question"	Literature list and research question due on Blackboard by Monday, September 23 at 11:59 pm.
September 24	Concepts and Measurements	Adcock and Collier, "Measurement Validity"; Goertz, "Concepts, Theories, and Numbers"	Hypotheses due on Blackboard by Monday, September 30 at 11:59 pm.
October 1	Research Designs	Babbie, "Research Designs"; Gray et al., "Sampling"; Seawright and Gerring, "Case Selection Techniques"	Literature review due on Blackboard by Monday, October 7 at 11:59 pm.
October 8	Quantitative Research	Gerring, "How Good is Good Enough?"; Bryman and Bell, "The Nature of Quantitative Research"; Asal and Rethemeyer, "The Nature of the Beast"	
October 15	<i>No class (Fall Break)</i>		
October 22	Qualitative Research	Mahoney and Goertz, "A Tale of Two Cultures"; Creswell, "Five Qualitative Approaches to Inquiry"; Ness, "In the Name of the Cause"	
October 29	Research Ethics	Seligson, "Human Subjects Protection and Large-N Research"; Cronin-Furman and Lake, "Ethics Abroad"; Williamson, "On the Ethics of Crowdsourced Research"	Research plan due on Blackboard by Monday, October 28 at 11:59 pm.
November 5	Draft Research Proposal		Draft research proposal due on Blackboard by Sunday, November 10 at 11:59 pm.
November 12	Evaluating Research	Miller et al., "How To Be a Peer Reviewer"	Peer review due on Blackboard by Friday November 15 at 11:59 pm.
November 19	Research Presentations		
November 26	Consultations		

Dates	Class topic	Readings	Notes
December 3	Consultations		Final paper due on Blackboard by Tuesday, December 10 at 11:59 pm.

Assignments: In this course, we will engage in a variety of assignments that will help you develop integral skills such as conducting and presenting your own research. All writing assignments should use a conventional 12-point font (i.e. Times New Roman, Calibri, Garamond). The assignments for the course are the following:

- **Participation (50 points):** Participation in class not only benefits you but myself and your classmates as well and, as such, it is very important. Both classroom discussions and peer presentations benefit from your active participation.
- **Completion of plagiarism tutorial (50 points):** At the beginning of the course you will complete the UAlbany plagiarism tutorial, found [here](#). As writing original research is the focus on this course, it is important to understand what plagiarism is and how to avoid it. Please send the completion report to me, cwillis@albany.edu. If you have completed this tutorial over the last year, you may email me the completion report. Due by the end of the first week, **Sunday, September 1 at 11:59 pm.**
- **Topic Description (50 points):** You will submit a 1-page (double-spaced) description of a topic area and its relevance to emergency preparedness, homeland security, or cybersecurity. The more concrete you can be, the better.
- **Literature List (50 points):** You will identify a list of at least 5 peer-reviewed journal articles or books that you will use for your literature review.
- **Research Question (50 points):** You will identify one or more (but no more than three) empirical research questions related to your topic.
- **Literature Review (100 points):** You will develop a literature review relevant to your topic area. The length of the literature review is dependent on the existing literature relevant to the your topic area, but it should discuss at least 5 journal articles and/or research reports and should be 3-4 pages double-spaced. It should include a bibliography and in-text citations (you can use APA, MLA, Chicago). This is where you demonstrate that no one has (satisfactorily) answered your question already.
- **Hypotheses (50 points):** You will identify one or more falsifiable hypotheses derived from your literature review.
- **Research Plan (100 points):** You will write a description of the data you will use to test your hypotheses. The more concrete this document is, the better. It should include a description of how you will gather the data (interviews? archives? governmental datasets? something else?) and what kind of information the data will contain (if interviews, what types of questions will you ask? if archival data, what kind of archival materials? if governmental datasets, what kind of information and at what level?). It will also contain a discussion of why this data is appropriate to test your hypotheses, as well as a discussion of the limitations of the data. This will be 3-4 pages, double-spaced.

- **Research Proposal (draft 1) (100 points):** You will develop a research proposal (double-spaced) that contains the following sections:
 1. An introduction that states your research question and (briefly!) sets the stage for why your study is important (no more than 1 page),
 2. A background section that describes the real-world motivation for your study (no more than 2 pages),
 3. A concise literature review section that reviews the state of existing research on your topic (2-4 pages), and at the end of the section, restates your research question (perhaps in greater detail) and introduces your hypotheses (less than 1 page),
 4. A data section that describes the data you propose to use for your study, including details on how to collect and process that data and a discussion of the strengths, weaknesses, and limitations of that data for testing your hypotheses (2-4 pages),
 5. An analysis section that describes how you will analyze your data (no more than 2 pages),
 6. An ethics section in which you reflect on what harms your research might pose, what benefits it might offer, and how you will treat your participants and/or subjects to ensure that your research is conducted ethically (no more than 2 pages),
 7. A concluding section that makes the case for why your study is worth doing (this might include some educated guesses about what you might find and how your findings might benefit society or the field) (no more than 2 pages).
 8. A bibliography that is not included as part of the length requirement.
 9. If your data come from surveys or interviews, you should include an appendix with the questions that will be part of those surveys or interviews. The appendix is not included as part of the length requirement.

This research proposal will be at least 8 pages (double-spaced). Each of these sections in your proposal should be clearly labeled with a heading.

- **Peer Reviews (50 points):** You will conduct a peer review of one of your colleagues' draft research proposals via Blackboard. These reviews are meant to make research stronger, not undermine or unduly attack research and *never* to attack researchers; we will read about how to write a good review during the semester.
- **Paper Presentation (50 points):** Being able to communicate one's research and receiving feedback is an important part of the research process. To that end, each of you will present your project in November to receive feedback from your peers in preparation for your final draft. Your presentation should be about 5-10 minutes long and tell us what your question is, what other researchers have found about your question, what your hypothesis is, what methodology you will be using, and any difficulties or questions you want feedback about.
- **Final Research Proposal (300 points):** This will be a substantially improved version of your draft research proposal. It will be 8-12 pages (double-spaced, 1" margins, 12-point font, not including bibliography or appendix). **Those are hard limits. Do not turn in a paper that is 7 pages or a paper that is 13 pages.**

Additional Information

Disability Policy: Reasonable accommodations will be provided for students with documented physical, sensory, systemic, medical, cognitive, learning and mental health (psychiatric) disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Disability Resource Center (518- 442-5490; drc@albany.edu). Upon verification and after the registration process is complete, the DRC will provide you with a letter that informs the course instructor that you are a student with a disability registered with the DRC and list the recommended reasonable accommodations.

Academic Integrity: The strength of the university depends on academic and personal integrity. Plagiarism is the use of someone else's work, words, or ideas as if they were your own without giving the original author credit by citing him or her. If you have any questions about plagiarism, please contact me before submitting graded assignments. See http://www.albany.edu/undergraduate_bulletin/regulations.html for UAlbany specific guidelines.

Time Management: For every credit hour that a course meets, students should expect to work 3 additional hours outside of class every week (3 x 3= 9). For a three-credit course you should expect to work 9 hours outside of class every week. Manage your time effectively to complete readings, assignments, and projects.

Respect for Diversity: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.²

Title IX Resources: Title IX of the Education Amendments of 1972 is a federal civil rights law that prohibits discrimination on the basis of sex in federally funded education programs and activities.

The SUNY-wide Sexual Violence Prevention and Response Policies prohibit offenses defined as sexual harassment, sexual assault, intimate partner violence (dating or domestic violence), sexual exploitation, and stalking. The SUNY-wide Sexual Violence Prevention and Response Policies apply to the entire University at Albany community, including students, faculty, and staff of all gender identities. The University at Albany provides a variety of resources for support and advocacy to assist individuals who have experienced sexual offenses.

Confidential support and guidance can be found through the Counseling Center (518-442-5800, https://www.albany.edu/counseling_center/), the University Health Center (518-442-5454, https://www.albany.edu/health_center/), and the Interfaith Center (518-489-8573, <https://www.albany.edu/spirituality/onCampus.shtml>). Individuals at these locations will not report crimes to law enforcement or university officials without permission, except for in extreme circumstances, such as a health and/or safety emergency. Additionally, the Advocates at the University at Albany's Advocacy Center for Sexual Violence are available to assist students without sharing information that could identify them (518-442-CARE, <https://www.albany.edu/advocacycenter/>).

Sexual offenses can be reported non-confidentially to the Title IX Coordinator within The Office for Equity and Compliance (518-442-3800, <https://www.albany.edu/equity-compliance/>, Building 25, Room 117) and/or the University Police Department (518-442-3131, <http://police.albany.edu/>).

² Respect for Diversity statement from <https://www.brown.edu/sheridan/teaching-learning-resources/inclusive-teaching/statements>

Please note, faculty members are considered “responsible employees” at the University at Albany, meaning that they are required to report all known relevant details about a complaint of sexual violence to the University’s Title IX Coordinator, including names of anyone involved or present, date, time, and location.

In case of an emergency, please call 911.

CEHC Grievance Policy & Procedure:

According to the CEHC Grievance Policy:

I. ... a “grievance” shall include any complaint alleging wrongdoing made by students, faculty, staff, or administrators in the College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC) against other students, faculty, staff or administrators. “Faculty” shall include any individuals with appointments enabling them to be designated instructors of record, and “students” shall include any enrolled students.

A “grievance” shall include, but not be limited to, any challenge to the resolution of a dispute over matters of academic honesty (such as plagiarism and cheating) and professional ethics or grades assigned for courses. It shall also include any allegation of improper treatment, including improper treatment on the grounds of age, color, creed, disability, marital status, military status, national origin, race, sex, gender identity, or sexual orientation. In grievances concerning grades, grievances may be filed only as to any final grade or other final disposition for a course. Dropping of a course shall constitute a final disposition for a course so as to allow grievances over grades or other matters occurring prior to the “drop.”

All grievances concerning grades must be adjudicated by the CEHC grievance committee and process. All other grievances may be referred to the University-level community standards process (or other appropriate process). Nothing in this policy prohibits the aggrieved party from pursuing University-level adjudication at any time.

III. Any grievance must be filed within five months of the time the complainant was informed of the matter which is the subject of the grievance. “File” shall mean the submission of a statement from the complainant to either the Dean of the CEHC or the Chair of the CEHC Grievance Committee. The statement shall 1) detail the event or events to which the complainant is objecting, 2) identify the person or persons the complainant alleges is responsible, and 3) identify the remedy or remedies sought to address the complaint.

For the full CEHC Grievance Policy, please contact cehc@albany.edu.

Responsible Use of Information Technology:

<https://wiki.albany.edu/display/public/askit/Responsible+Use+of+Information+Technology+Policy>