College of Computing and Engineering
NOVA SOUTHEASTERN UNIVERSITY | NSU Florida

Department of Info Systems & Cybersec
ISEC 0885 - Doctoral Research

I. Course Information

Course: ISEC 0885 - Doctoral Research
Course Division: Doctoral
Course CRN and Section: 23208 - P01
Semester and Year: Fall 2023
Course Start and End Dates: 08/21/2023 - 12/10/2023
Semester Credit Hours: 4.0
Building and Room: No Building/Room Required - NRR

II. Instructor Information

Professor: Gregory E Simco Ph.D.
Email: greg@nova.edu
Phone: 954-262-2017
Fax: 954-262-3014
Office Hours: By Appointment.

III. Class Schedule and Location

Day	Date	Time	Location	Building/Room
	08/21/2023 - 12/10/2023		Ft Lauderdale/Davie Campus	No Building/Room Required-NRR

IV. Course Description

The student pursues research under the direction of a faculty member. To register, students contact their advisor with the name of the faculty member under whose direction they would like to work and a brief explanation of the research area to be explored. Recommended prerequisite: completion of a 700-level course with the requested professor with a grade of B+ or higher.

V. Course Objectives / Learning Outcomes

1) The student has pursued research under the direction of a faculty member.

VI. Materials and Resources

Book Url: [NSU Book Store](#)
Course Required Texts and Materials:
APA (2020). *Publication Manual of the American Psychological Association (APA)* **(7th ed.).**
ISBN#: 9781433832178

Course Supplemental Materials:

The Dissertation Guide:
https://computing.nova.edu/doctoral/documents/dissertation_guide.pdf

VII. **Course Requirements**

Upon the successful completion of this course, the student should exhibit the research ability to locate a specific research topic, conduct a comprehensive literature review, identify potential research problems based on critical thinking, and propose potential methodologies and solutions to address the research problems.

VIII. Course Schedule and Topic Outline

Course Schedule:
Assignments
- Topic Proposal
- Mid-Term Report 1
- Mid-Term Report 2
- Final Report

Topic Outline:
Any researchable cybersecurity topic agreed upon by the instructor and the student.

IX. Instructional Methods

The following online tools will be used in the course:

Canvas – The Canvas web-based interface will be used by the student to submit all course assignments. The instructor will provide assignment grades through Canvas.

Email – Electronic mail will be used in the course by the instructor to notify students of course-related issues and requirements. Students will use email for all questions, concerns, or issues addressed to the instructor during the course. All correspondences via email will utilize the student's NSU email account. Students should check their NSU email daily.

Zoom - The NSU Zoom will be used for meetings.

X. Assignments

The objective of this course is to provide students with the experience of conducting research and writing an article on a specific area approved by the instructor. The project involves the submission of a topic proposal, two mid-term reports, and the final paper. Ideally, the final report will lead to a quality dissertation idea paper.

All assignments are expected to be submitted via Canvas before the due date. Make sure your name, student id, and email address are available on each document. Late submissions will be penalized by 10 percentage points of the total assignment grade for each day past the due date.

Topic Proposal

The topic proposal should be in the form of a research plan or an idea paper. The proposal should briefly address the following issues:

1) Problem addressed

Clearly state the research problem that you plan to address.

2) Prior research

Briefly discuss the body of literature that is used to motivate the research. Emphasize the shortcomings in the prior literature that you plan to address.

3) Significance

Explain why you think your work makes a significant contribution to the field. Cite references wherever possible to establish that there is a consensus among researchers that the problem addressed in the article is indeed an important one.

4) Methodology

Discuss the methodology you plan to use for the study. Justify the appropriateness of the selected methodology. Be as precise as you can. Identify the knowledge representation scheme and the search

strategy where appropriate.

Make sure that you cite all relevant articles that are referenced in your paper. Please submit a copy of the paper that you believe is most significant in motivating your work. If relevant, you may also send copies of any other supporting articles.

Mid-Term Report 1

The mid-term report 1 will be a progress report based on the delineated plan shown in the proposal (if no major revisions are needed), and/or revisions to the topic proposal based on the instructor's feedback (if major revisions on the original proposal are needed).

Mid-Term Report 2

The mid-term report 1 will be a progress report based on the delineated plan shown either in the original proposal (if no major revisions are needed) or the revised proposal (based on the plan proposed in mid-term report 1).

Final Report

This is the final manuscript of your report. The report should show the detailed process of how your research was conducted, and the major results obtained from your research. It may contain limited texts from the previous reports. The final report will be evaluated based on the quality of the research described in the paper, the clarity of presentation, and the student's compliance with APA style required by the CCE.

XI. Assessments

Evaluating doctoral-level work is quite different from evaluating undergraduate or even masters-level work. At this level, simple mastery of the course content is not adequate; you must also demonstrate the capacity to conduct research in the discipline and make an original contribution. For the purposes of this course, the following will be the "working definition" of doctoral-level scholarship:

- Well written:
  - Absence of grammatical errors
  - Correct word selection and usage
  - Logically organized
  - Material synthesized into a smoothly-flowing discussion
- Well researched
  - Peer-reviewed sources with focus on journals, less on conference proceedings
  - Current literature
  - Evidence of synthesis of the literature
- Factually sound
  - Clear distinction between opinion, theory, and fact
  - Essential constructs identified and defined
  - Zero factual errors
- Demonstrates a potential for original work through
  - Analysis
  - Synthesis
  - Evaluation

XII. Grading Criteria

Final Course Grade:

Topic Proposal	10%
Mid-Term Report 1	30%
Mid-Term Report 2	30%
Final Report	30%

Grading Scale:

85% -- 100%	PR
Otherwise	NPR

XIII. Course Policies

1) Everyone is encouraged to discuss the contents of this course with as many people as possible, in order to gain a thorough understanding of the various topics covered. However, any work you hand in to me is implicitly represented as **your own**. Any acknowledged team effort will result in each member of the team receiving an equal share of the total grade.

2) The "**Certification of Authorship**" form must be attached to each document you submitted that represents your original work. Failure to follow this requirement may be subject to penalty. The form can be located in Canvas.

3) Submissions of assignment files should be in one of the following formats:

a) Plain text file (ASCII)

b) PDF file

c) Microsoft Office files for Windows

You are responsible for ensuring that the file is readable and free of viruses. Your final grades will be based on all the material that I receive by the last day of the term.

4) Coding/development skills: I shall not provide remedial help concerning coding problems that you might have. Students are responsible for the setup of their own programming environments. Each student is also expected to write and debug their code.

CLASS RECORDING POLICY:

Class content throughout this course may be recorded in accordance with the NSU Class Recording Policy. If class content is recorded, these recordings will be made available to students registered for the course as a supplement to classroom experience. Recording will be made available to all students who were registered to attend the live offering of the class, regardless of a students' section or discipline, or whether the student is participating in the course online. If recordings are intended to be accessible to students or third parties who were not registered to the live offering of the class, students' personal identifiable information will be removed or redacted from the recording, unless (1) their written consent to such disclosure was personally provided, or (2) the disclosure is permissible in accordance with the Family Educational Rights and Privacy Act ("FERPA").Students are prohibited from recording audio or video, or taking photographs in classroom (including online classes) without prior permission from the instructor or pursuant to an approved disability accommodation, and from reproducing, sharing, or disseminating classroom recordings to individuals outside of this course. Students found engaging in such conduct will be in breach of Student Code of Conduct and subject to disciplinary action.

XIV. University Policies

Sexual violence and sexual harassment are contrary to our core values and have no place at Nova Southeastern University. In accordance with Title IX and other laws, NSU prohibits discrimination, including sex-based discrimination and discrimination towards pregnant/parenting students. If you or someone you know experiences sexual violence and/or sexual harassment, there are resources and options available. To learn more or to report an incident, please visit the NSU Title IX website at www.nova.edu/title-ix. Please be aware that your instructor is not a confidential resource, and the instructor is required to report any incident of sexual misconduct to the NSU Title IX Coordinator. Alternatively, you may choose to contact Laura Bennett, Title IX Coordinator, directly at laura.bennett@nova.edu, 954-262-7858 to report an incident or receive support and resources.

Nova Southeastern University (NSU) is a majority-minority institution, with graduates from more than 115 countries around the world, as well as a university recognized as a Hispanic-Serving Institution (HSI). As such, we find ourselves with the unique opportunity to invite all members of our community to learn from and appreciate others and to create a learning community that exemplifies inclusiveness and respect for diversity.

We are committed to educating our students, interacting with colleagues, and engaging with our campus community in a manner that is respectful of all cultural traditions and practices, gender identities and expressions, sexual orientations, age, religious/spiritual beliefs, and in all areas that distinguish individuals. Respect for Diversity: It is the 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 the 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. Students must comply with the policies published in the school's Graduate Catalog and the NSU Student Handbook, some of which are included or referenced below. The catalog is at catalog_2020-2021 (nova.edu) The handbook is at https://www.nova.edu/studentaffairs/forms/studenthbk_2019-2020.pdf

1. Standards of Academic Integrity For the university-wide policy on academic standards, see the section Code of Student Conduct and Academic Responsibility in the *NSU Student Handbook*. Also see the section Student Misconduct in the CEC catalog.

Each student is responsible for maintaining academic integrity and intellectual honesty in his or her academic work. It is the policy of the school that each student must:

- Submit his or her own work, not that of another person
- Not falsify data or records (including admission materials and academic work)
- Not engage in cheating (e.g., giving or receiving help during examinations; acquiring and/or transmitting test questions prior to an examination; or using unauthorized materials, such as notes, during an examination)
- Not receive or give aid on assigned work that requires independent effort
- Properly credit the words or ideas of others according to accepted standards for professional publications (see the next section *Crediting Words or Ideas*)
- Not use or consult paper writing services, software coding services, or similar services for the purpose of obtaining assistance in the preparation of materials to be submitted for course assignments or for theses or dissertations.
- Not commit plagiarism (*Merriam-Webster's Collegiate Dictionary* (2004) defines plagiarism as "stealing or passing off ideas or words of another as one's own" and "the use of a created production without crediting the source.") (see *Crediting Words or Ideas* below)

Crediting Words or Ideas

When using the exact words from another work, quotation marks must be used for short quotations (fewer than 40 words), and block quotation style must be used for longer quotations. In either case, a proper citation must also be provided. *Publication Manual of the American Psychological Association, Sixth Edition,* contains standards and examples on quotation methods.

When paraphrasing (summarizing, or rewriting) the words or ideas from another work, a proper citation must be provided. (*Publication Manual of the American Psychological Association, Sixth Edition* contains standards and examples on citation methods. The *New Shorter Oxford English Dictionary* (1993) defines paraphrase as "An expression in other words, usually fuller and clearer, of the sense of a written or spoken passage or text…Express the meaning (of a word, phrase, passage, or work) in other words, usually with the object of clarification…". Changing word order, deleting words, or substituting synonyms is not acceptable paraphrasing—it is plagiarism, even when properly cited. Rather than make changes of this nature, the source should be quoted as written.

Original Work

Assignments, exams, projects, papers, theses, dissertations, etc., must be the original work of the student. Original work may include the thoughts and words of others, but such thoughts or words must be identified using quotation marks or indentation and must properly identify the source (see the previous section *Crediting Words or Ideas*). At all times, students are expected to comply with the school's accepted citation practice and policy.

Work is not original when it has been submitted previously by the author or by anyone else for academic credit. Work is not original when it has been copied or partially copied from any other source, including another student, unless such copying is acknowledged by the person submitting the work for the credit at the time the work is being submitted, or unless copying, sharing, or joint authorship is an express part of the assignment. Exams and tests are original work when no unauthorized aid is given, received, or used before

or during the course of the examination, reexamination, and/or remediation.

2. Writing Skills

Students must demonstrate proficiency in the use of the English language. Grammatical errors, spelling errors, and writing that fails to express ideas clearly will affect their grades and the completion of their academic programs. The faculty will not provide remedial help concerning grammatical errors or other writing difficulties. It is the student's responsibility to proofread and edit his or her work, which, in both form and content, should be letter-perfect. Work that is not properly edited will be rejected.

3. Disabilities and ADA

NSU complies with the American with Disabilities Act (ADA). The university's detailed policy on disabilities is contained in the NSU *Student Handbook*. Student requests for accommodation based on ADA will be considered on an individual basis. Students with disabilities should discuss their needs with NSU's ADA Coordinator before the commencement of classes if possible.

4. Communication by Email

Students must use their NSU email accounts when sending email to faculty and staff and must clearly identify their names and other appropriate information, e.g., course or program. When communicating with students via email, faculty and staff members will send mail only to NSU email accounts using NSU-recognized usernames. Students who forward their NSU-generated email to other email accounts do so at their own risk. CEC uses various course management tools that use private internal email systems. Students enrolled in courses using these tools should check both the private internal email system and NSU's regular email system. NSU offers students web-based email access. Students are encouraged to check their NSU email account and their course management email daily.

5. The Temporary Grade of Incomplete (I)

The temporary grade of Incomplete (I) will be granted only in cases of extreme hardship. Students do not have a right to an incomplete, which may be granted only when there is evidence of just cause. A student desiring an incomplete must submit a written appeal to the course professor at least two weeks prior to the end of the term. In the appeal, the student must: (1) provide a rationale; (2) demonstrate that he/she has been making a sincere effort to complete the assignments during the term; and (3) explain how all the possibilities to complete the assignments on time have been exhausted. Should the course professor agree, an *incomplete contract* will be prepared by the student and signed by both student and professor. The *incomplete contract* must contain a description of the work to be completed and a timetable. The completion period should be the shortest possible. The completion date will not typically extend beyond 30 days from the last day of the term for master's courses or beyond 60 days from the last day of the term for doctoral courses. The *incomplete contract* will accompany the submission of the professor's final grade roster to the program office. The program office will monitor each *incomplete contract*. When the incomplete contract ends the course professor will assign a grade based upon the work completed. No student may graduate with an I on his or her record.

6. Grade Policy Regarding Withdrawals

Course withdrawal requests must be submitted to the program office in writing by the student. Requests for withdrawal must be received by the program office by the withdrawal deadline (see dates in the academic calendar in the catalog and program brochures or websites). Withdrawals sent by email must be sent from the student's assigned NSU email account. Requests for withdrawal received after 11:59 p.m. EST on the withdrawal deadline date will not be accepted. Failure to attend class or participate in course activities will not automatically drop or withdraw a student from the class or the university. Students who have not withdrawn by the withdrawal deadline will receive letter grades that reflect their performance in the course. When a withdrawal request is approved, the transcript will show a grade of W (*Withdrawn*) for the course. *Students with four withdrawals will be dismissed from the program.* Depending on the date of withdrawal, the student may be eligible for a partial refund (see the appropriate catalog section Refund Policy Regarding Withdrawals).

7. Acceptable Use of Computing Resources

Students must comply with the university's *Policy on Acceptable Use of Computing Resources (see NSU Student Handbook).*

8. Academic Progress, Grade Requirements, and Academic Standing

Students must be familiar with the school's policies, A which are contained in its catalog.

9. Student Research Involving Human Subjects

Students must be familiar with the university's policy (see paragraph in catalog).

10. Responsibility for Payment of Tuition and Fees

Once registered, students are personally responsible for the payment of their tuition and fees. Returned checks, cancelled credit cards, employer or agency refusal to pay, ineligibility for financial aid, and other reasons for non-payment may result in a direct bill to the student, and/or referral to a collection agency. Payment and refund policies are based on the view that a student registering for a class is reserving a place in that class and that tuition and fees cover the opportunity to secure that place in the class. Since no other person can purchase that place, the student is responsible for the tuition and fees associated with it. Simply not attending does not constitute a reason for non-payment.

XV. **Bibliography**

Additional articles, Internet resources and notes will be provided in class or via the Canvas site assigned to this course. Please check the Canvas site regularly!