

Guidelines for Directed Research (DCIS/DISS 898) Students

The Directed Research courses are designed to serve as a transition from regular coursework to the dissertation phase. As a result the student will be expected to demonstrate research qualifications and practices necessary to complete a dissertation.

Students who wish to enroll in their first 898 course will be required (before enrolling) to:

1. Select a research topic from the information provided in <http://www.scis.nova.edu/~cannady/research.htm> Note that in selecting a topic mere interest in the topic is insufficient. You must have the skills and experience necessary to conduct research in that area. For example, while you do not need to have experience with intrusion detection products to conduct research in the area of intrusion detection, you would be expected to have a thorough understanding of networks and application processing.
2. Send an email to me (cannady@nova.edu) with a brief description of your selected topic and your experience.

I will respond with an email indicating (a) that I approve your chosen topic, (b) I disagree with the chosen topic but I provide an alternative topic that you may be interested in, or (c) my disapproval or your request to enroll in the course. Receipt of an "(a)" letter indicates that you are free to enroll in the course. Receipt of a "(c)" letter indicates that your research interest does not coincide with mine or you do not possess the requisite experience and expertise to complete work included in my research agenda. A "(c)" letter is final.

First 898 Course

In the first 898 course the student will be expected to conduct a thorough literature review on the selected topic. A primary focus will be on the current research in the area being conducted by other research groups. This will enable the student to identify viable outstanding research problems in the area. There are two deliverables for the course that are both due on the last day of the semester:

1. Annotated Bibliography - based on the literature review conducted during the semester.
2. Concept Paper - This document is limited to five pages and includes the following sections:
 - a. Overview of the topic area
 - b. Previous research conducted in the area
 - c. Current research (less than three years old) that is being conducted in the area
 - d. Outstanding research questions/problems/issues that have not been resolved and which may be viable for dissertation work

Students will be evaluated on the quality of the work conducted and their potential for conducting viable research in the chosen area. A student may only enroll in their second 898 course with me if they have completed the first 898 course (with me) with a final grade of A- (90) or better.

Second 898 Course

Students enrolled in their second 898 will be expected to complete the following deliverables during the semester:

1. Problem Statement – This document must be limited to **no more** than one page. The problem must be clear and concise and be supported by work done in the first 898 course.
2. Solution Concept – This paper must be **no more** than five pages. It should clearly describe a viable approach to investigating the problem and a brief literature review that justifies the application of the chosen solution. A detailed description of how the solution would be applied is **not** required (a detailed approach is not required until the Dissertation Proposal).
3. Idea Paper – This must be a formal idea paper (no drafts or partial documents) that is compliant with all requirements in the GSCIS Dissertation Guide and which has been unloaded to DTS and is ready for review.

No incompletes or extensions will be permitted for either 898 course except in **extraordinary** circumstances.