

STS 499: Independent Research

Mentor: Dr. Taylor

Mentor Contact Information: ltaylor18@elon.edu, office hours – See OnTrack

Semester: Fall 2018

Number of STS 499 Hours: Varies by student

Weekly meetings: To be arranged with faculty mentor.

Grading: The grade for this semester will be assigned on the following basis:

Activity	Course Points (%)	Grades are assigned as follows:			
Weekly progress reports	30	A	93-100	C	73-76.9
Research Tasks	20	A-	90-92.9	C-	70-72.9
Drafts of written work	20	B+	87-89.9	D+	67-69.9
Final Paper	30	B	83-86.9	D	63-66.9
		B-	80-82.9	D-	60-62.9
		C+	77-79.9	F	0-59.9
Total Course Points (%)	100				

A. Weekly progress reports.

Each week the student will submit a typed progress report which contains

- *the goals determined by the student and professor for the previous week* (a bulleted list is fine),
- *an indication on the progress toward those goals* (describe to what extent the goal was met, what specifically was done, the time commitment, etc.),
- *a reflection on the progress of the project* (what were the challenges for that week, where there any surprises in completing the goals, how the progress impacts future timelines and the successful completion of the project, and ideas for what to do next or what to consider next), and
- *an assessment by the student of their work for the previous week with justification* (on a scale of A, A-, B+, ... , F).

Weekly progress reports are expected to be about 1 page in length and will be graded on the clarity of writing about goals, the level of reflection on goals, the demonstrated progress, and incorporating research skills described in the syllabus under “General Expectations for Grades.”

B. Other research tasks.

Various other research tasks will be assigned throughout the semester. These include, but are not limited to, annotated bibliographies, creating timelines for the project, generating data sets, writing code, etc. These assignments will be graded based on quality and completion.

C. Drafts of written work.

The student and mentor will collaborate on due dates for written work. All written work will first be submitted as a draft for feedback from the professor. Grades on drafts will be based on meeting content requirements for the assignment and potential of written work.

D. Final paper.

A final project reflection or research paper is due at the end of the semester. The student and professor will determine whether a reflection or research paper is most appropriate based on the work and will collaborate on a reasonable due date for this paper. Minimal content approved by the Mathematics and Statistics Department are provided in the syllabus under “Guidelines for MTH/STS 481 or 499 Final Paper.” The final

paper will be graded based on quality of final work, particularly in reference to incorporating comments from previous drafts, the level of communication/explanation, and inclusion of required content at a high level.

General Expectations for Grades

Expectations for a grade of A:

- The student must show excellent consistency in meeting all of the expectations of a B.
- The student must consistency put forth an effort that pushes their abilities to the limit.
- The student must consistently take the initiative in all of their work.
- Assigned tasks are completed in full and on time.
- A grade of A is not normally given, it must be earned.
- Point total average on assignments of at least an 93.

Expectations for a grade of A-:

- Same as those for an A, with the exception of a point total average of 90-93.

Expectations for a grade of B+:

- Same as those for an B, with the exception of a point total average of 87-89.

Expectations for a grade of B:

- The student must have a consistently good record attending and being prepared for scheduled meetings.
- The student must make consistent progress from meeting to meeting.
- The student must consistently demonstrate a positive general attitude and serious-minded effort.
- The student must have consistently upheld all other aspects of semester contract, with the resulting products being of good, collegiate quality.
- Point total average on assignments of at least an 83.

Expectations for a grade of B-:

- Same as those for a B, with the exception of a point total average of 80-83.

Failure to meet any of the expectations for a grade of a B will result in a grade below a B, to be determined by the judgment of the mentor.

EXTRA SPACE

Guidelines for MTH/STS 481 or 499 Final Paper

Students who take MTH/STS 481 or MTH/STS 499 as a capstone experience will be required to write a final paper. Students who take MTH/STS 481 for their capstone will be required to write a reflection paper that reflects on their internship as a culminating experience for their math/stats major. Students who take MTH/STS 499 for their capstone may either write a reflection paper or a research paper. Guidelines for both types of paper are given below.

Capstone Reflection Paper

The following questions should be addressed in a reflection paper for either an internship or for undergraduate research. Responses should be thoughtful and should truly reflect on the capstone experience. In most cases, a sentence or two will not be sufficient to answer a given question.

- 1) Describe what you did for your capstone experience in at least one paragraph.
- 2) Did you achieve the objectives you set out for your capstone experience? Explain. If you did not achieve them, be sure to explain why not.
- 3) What classes and/or skills were useful for you in this capstone experience? Be specific, and give examples of how they were useful.
- 4) What classes and/or skills do you wish you had before your capstone experience? Be specific, and give examples of ways they would have been useful.
- 5) What skills did you gain (or improve) during your capstone experience that will be helpful in your future career path?
- 6) What challenges or surprises did you encounter during your capstone experience?
- 7) Has your capstone experience affected or changed your future plans or goals? Explain.
- 8) If you were starting over, what would you have done differently in choosing your specific capstone experience?
- 9) What advice would you give to undergraduate math/statistics majors planning to begin their capstone experience?

Capstone Research Paper

Each student who undertakes undergraduate research will have a unique experience. If they choose to write a research paper, their papers may look very different depending on their area or research. However, all capstone research papers should follow this same general template.

- 1) Introduction to the problem with background.

This section could include...

- A statement of the problem with all technical terms defined
- History of the problem. What has been done before and by whom?
- A literature review

2) Solution and Discussion

This section could address...

- How did you solve the problem?
- What techniques were used?
- What were the findings?
- How exactly does your work make a contribution to the field?
- What are the implications of your findings?

3) Conclusion and Future Research

This section could address...

- How could this project be extended?
- What are possible limitations of your findings?

Honor Code

Elon's honor pledge calls for a commitment to Elon's shared values of Honesty, Integrity, Responsibility, and Respect. To be clear about what constitutes violations of these values; students should be familiar with code of conduct policies described in the student handbook.

Students with questions about the specific interpretation of these values and violations as they relate to this course should contact this instructor immediately. Violations in academic-related areas will be documented in an incident report which will be maintained in the Office of Student Conduct, and may result in a lowering of the course grade and/or failure of the course with an Honor Code F.

Violations specifically covered by academic honor code policies include: plagiarism, cheating, lying, stealing, and the facilitation of another's dishonesty. Multiple violations may result in a student's suspension from the University.

Disabilities Resources

If you are a student with a documented disability who will require accommodations in this course, please register with Disabilities Resources using the following link: https://elon-accommodate.symlicity.com/public_accommodation/. You may reach out to Disabilities Resources for assistance in developing a plan to address your academic needs.

Disability Resources is located in the Koenigsberger Learning Center (Belk Library 226; 336-278-6568). For more information about Disabilities Resources, please visit the website:

<https://www.elon.edu/u/academics/koenigsberger-learning-center/disabilities-resources/>.

Writing Center

Elon's [Writing Center](#) in the Center for Writing Excellence is staffed by trained peer-consultants who can help you with all of your writing projects (for any class or major and for any extracurricular, personal, or professional purposes), so take advantage of this excellent academic resource and include a visit to our Writing Center as part of your writing process.

<http://www.elon.edu/cwe>

In one-to-one sessions of up to 45 minutes, Writing Center consultants will work with you on any kind of writing (such as research or analysis papers, PowerPoint or poster presentations, resumes, or job applications) at any stage of the writing process (such as understanding an assignment; brainstorming, drafting, revising, and editing; developing a research question or starting your research; or writing in-text citations and bibliographies/works cited).

We have two multimedia production studios so you can create and work with a consultant on your multimedia and visual texts (such as PowerPoint or Prezi presentations, videos, or websites). Visit our presentation practice room where you can easily record and critique yourself giving a presentation and get feedback from a consultant on your accompanying visuals.

The main Writing Center, located in Belk Library, is open extensive hours:

M-Th	10am-10pm
Fri	10am-4pm
Sun	2pm-10pm

The Writing Center also staffs satellite Writing Centers in CREDE and in the Business School (see The Writing Center website for more details).

If you have questions, please contact The Writing Center Director, Dr. Julia Bleakney, at jbleakney@elon.edu or X5642.

Religious Holidays Policies

In supporting religious diversity, Elon has a policy and procedures for students who wish to observe religious holidays that are in conflict with the academic calendar, allowing students an excused absence. Students who wish to observe a holiday during the semester must complete the online [Religious Observance Notification Form](#) (RONF) by September 17, 2018, with the exception of Rosh Hashanah. Excused absence requests for Rosh Hashanah Day 1 and Day 2 must be submitted by September 7, 2018.

http://www.elon.edu/e-web/students/religious_life/ReligiousHolidays.xhtml.

This policy does not apply during the final examination period. Students are required to make prior arrangements with the instructor for completion of any work missed during the absence. Once the completed RONF is received, the Truitt Center will confirm the excused absence with notification to the instructor and the appropriate academic dean, along with a copy to the student. Students may contact the Truitt Center staff with any questions (336-278-7729).

Student Options Related to Enrollment in Your Course

Enrollment

Students should confirm their enrollment in this course through their On-Track account. Students who do not appear on the course roll or do not show the correct course/section listed on On-Track should consult with their instructor immediately.

Policies on Dropping or Withdrawing from this Course

- Students may drop a course during the designated drop/add period through On-Track. A course that is dropped during the designated drop/add period will not appear on the student's transcript or grade report.
- After the designated drop/add period, students may [withdraw from a course](#) without penalty before the course withdrawal deadline published in the [academic calendar](#). Withdrawing from a course during this period will result in a mark of "W" that will appear on the student's academic transcript. Students may withdraw online via OnTrack. Students should refer to the [academic calendar](#) for important semester dates.

<http://elon.smartcatalogiq.com/en/2018-2019/Academic-Catalog/Calendar>

NOTE: Students should not assume that they will be officially withdrawn from a course based on failure to attend class or notifying a faculty member of their intent to withdraw. The student is responsible for following the official process of withdrawing from a class. Students who do not properly withdraw from a course will receive a grade of F.

- Students may not withdraw from a course after the published withdrawal deadline. Any exception to this policy is the responsibility of the appropriate academic dean's office. When granted, withdrawal from a course after this time will result in a grade of "W" or "F" depending on the student's grade at the time of withdrawal.

For additional information on university course policies, students should consult the [Academic Catalog](#).

<http://elon.smartcatalogiq.com/en/2018-2019/Academic-Catalog>