

Statistics Portfolio and Exit Interview Guidelines **Updated: November 2021**

In addition to completing all course and university requirements, candidates for a B.A. or B.S. in Statistics must successfully pass the following two assessments as part of the graduation requirement for candidacy:

1. Student Portfolio
2. Exit Interview

Portfolio Guidelines for Statistics Majors

A portfolio that synthesizes the undergraduate experience and provides evidence of expertise in the areas of the major will comprise the Statistics candidate's culminating product of learning. This document will serve as part of the candidate's senior assessment **required for graduation**.

Portfolios must be submitted to the Statistics Program Coordinator (or other designee) in a digital format (i.e., a single pdf file) no later than:

- **February 15th*** by **5:00 pm** for students graduating at the end of the **Spring or Summer** semesters;
- **October 1st*** by **5:00 pm** for students graduating at the end of the **Fall or Winter** semesters.

*If the portfolio due date falls on a weekend, the due date moves to the following Monday.

The portfolio will include the following, in the order shown:

- Cover Page
- Signed Honor Code Statement
- Table of Contents
- Section Divider with the title "Introduction"
 - First entry: cover letter or graduate school personal statement
 - Second entry: resume
- Section Divider with the title "Statistical Foundations"
 - First entry: rationale
 - Additional entries: your products from STS courses, each with a cover page that indicates the course associated with the product.
Note: One product in this section must be the final report for your project from STS 213/2130: Survey Sampling Methods or from STS 325/3250: Design and Analysis of Experiments
- Section Divider with the title "Concentration Area/Application"
 - First entry: rationale
 - Additional entries: your products from your concentration courses, each with a cover page that indicates the course associated with the product.
Note: Your capstone final paper from STS 460/4980: Statistics Practicum, STS 481/4985: Statistics Internship, or STS 499/4999: Statistics Research must be included in this section.
- Graduation Information sheet (see MathStatsMajors Moodle page or end of this document)

Further Details on the Content of the Portfolio

Cover Page

- The cover page must be the first page of the portfolio and must include the candidate’s name, degree, major, and concentration.

Signed Honor Statement

- The second page of the portfolio must include the following Honor Code Statement with the student’s signature and date.

<p><i>Portfolio Honor Code Statement</i></p> <p>“On my honor, I certify that this portfolio upholds the four values of Elon University -- honesty, integrity, responsibility, respect -- as cited in Elon's Honor Code: http://elon.smartcatalogiq.com/2021-2022/Student-Handbook/Honor-System/Honor-Code-and-Pledge .</p> <p>In assembling this portfolio, I have refrained from lying, cheating, plagiarizing, and facilitating others in these actions.</p> <p>I understand that any violation of the Honor Code may result in receiving a failing grade on my portfolio. Further, I understand that egregious violations of the Honor Code may result in disciplinary suspension or permanent separation from Elon University.”</p> <p>Signature: _____</p> <p>Date: _____</p>
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Table of Contents

- Each section, rationale, and product should be indicated in the table of contents with appropriate page numbers. Each product should be numbered and include the name of the course in the description within the table of contents. For example,
Product 1: STS 213 Project.....p. 7

Introduction

- Include a divider labeled “Introduction.”
- The first entry should be a cover letter (for students who plan to seek employment upon graduation) or a graduate school personal statement (for students who have applied, or will apply, to graduate school).
- The second entry should be a current, professionally formatted, resume.

- Entries in this section of the portfolio should show evidence that the candidate can produce materials that are consistent with standard professional format, well-articulated goals, and well-developed plans.

Statistical Foundations

- The Statistical Foundations section of the portfolio should address the following goals:
 - o **Goal 1:** Candidate is able to design sample surveys and/or experiments for standard situations.
 - o **Goal 2:** Candidate is able to demonstrate sufficient statistical computing ability to manage data and implement standard statistical methods using at least one standard statistical package.
 - o **Goal 3:** Candidate is able to explain statistical ideas, methods, and results orally and in writing to non-statistical audiences.
- The first item in this section should be a three-page rationale (1 inch margins, Times New Roman, size 12-point font, double-spaced).
- The rationale should provide evidence of the candidate's ability to meet the goals listed above. In particular, your three-page rationale should respond to each of the following three prompts:
 - o **Prompt 1:** In which product(s) do you show evidence of Goal 1? In what ways do these products illustrate your ability to design sample surveys and/or experiments for standard situations? Cite specific examples from your selected products.
 - o **Prompt 2:** In which product(s) do you show evidence of Goal 2? In what ways do these products illustrate your sufficient ability to use statistical computing to manage data and implement standard statistical methods using at least one statistical package? Cite specific examples from your selected products.
 - o **Prompt 3:** In which product(s) do you show evidence of Goal 3? In what ways do these products illustrate your ability to explain statistical ideas, methods, and results orally and in writing to non-statistical audiences? Cite specific examples from your selected products.
- In general, candidates should refrain from providing a summary of the actual products in their rationale unless it helps the candidate make a case for one of the goals.
- After the rationale, the students should include the STS products which are referenced in their rationale as supporting evidence.
 - o Products for this section must come from courses with an STS prefix.
 - o Each product should include a cover page that at minimum indicates which course the product is associated with.
 - o **Required product:** Candidates are expected to include the final paper from either STS 325/3250: Design and Analysis of Experiments or STS 213/2130: Survey Sampling Methods and to address this product in their rationale.

Concentration Area/Application

- The Concentration Area/Application section of the portfolio should address the following goals:
 - o **Goal 1:** Candidate is able to discuss the problems, methodology, and language of at least one discipline beyond Statistics.
 - o **Goal 2:** Candidate is able to discuss the usefulness of statistics as a service field for other disciplines.

- **Goal 3:** Candidate is able to explain statistical ideas, methods, and results orally and in writing to non-statistical audiences.
- The first item in this section should be a three-page rationale (1 inch margins, Times New Roman, size 12-point font, double-spaced).
- The rationale should provide evidence of the candidate's ability to meet the goals listed above. In particular, your three-page rationale should respond to each of the following three prompts:
 - **Prompt 1:** In which product(s) do you show evidence of Goal 1? In what ways do these products illustrate your ability to discuss the problems, methodology, and language of at least one discipline beyond Statistics? Cite specific examples from your selected products.
 - **Prompt 2:** In which product(s) do you show evidence of Goal 2? In what ways do these products illustrate your ability to discuss the usefulness of statistics as a service field for other disciplines? Cite specific examples from your selected products.
 - **Prompt 3:** In which product(s) do you show evidence of Goal 3? In what ways do these products illustrate your ability to explain statistical ideas, methods, and results orally and in writing to non-statistical audiences? Cite specific examples from your selected products.
- In general, candidates should refrain from providing a summary of the actual products in their rationale unless it helps the candidate make a case for one of the goals.
- After the rationale, the students should include the STS and non-STS products which are referenced in their rationale as supporting evidence.
 - Products for this section must come from courses that are related to the concentration area and primarily are from non-STS courses. These courses may have the STS prefix if a student takes an STS course as part of the concentration.
 - Each product should include a cover page that at minimum indicates which course the product is associated with.
 - **Required product:** Candidates are expected to include the final product from their capstone experience, which most likely is STS460/4980: Statistics Practicum, STS 481/4985: Statistics Internship, or STS 499/4999: Statistics Research, and to address this product in their rationale.

Other Information related to content:

- A product is any document or artifact created by the student coming from coursework, consulting, internship, or research. For example, a product could be a written report, slides, computer code, a homework assignment, an applet, a link to a video presentation, etc. If you include a link to a video presentation, then the link **must work** and/or you must provide a written transcript of the presentation for the evidence provided by that product to be considered.
- A single product can be used as evidence in more than one section. For example, if a candidate includes their STS 4999: Statistics Research paper in their “Concentration Area/Application” section, this product can also be referenced in the rationale for the Statistical Foundations if it helps the candidate make the case for one of the three goals.
- There must be a **minimum of five products** in the portfolio beyond the cover letter/personal statement and resume, and **each section must have at least one unique product**. That is, if Product 3 is referenced in the rationale for the Statistical Foundations and the Concentration Area/Application, each section must include an additional product that is only referenced in that

rationale. However, the emphasis is not on the number of total products in the portfolio, but on how well the product provides evidence of expertise in the area in which it is cited and support for the goal the writer is providing evidence for.

- Products in the portfolio may be the final graded product or a new copy of the final product with no instructor markings.

Submission Information

Candidates are required to submit a digital copy (i.e., a single pdf file) of their portfolio.

A digital copy of the portfolio should be submitted by 5:00 pm on the due date. A digital copy of the portfolio must be submitted in one of the following ways:

- On a flash drive containing a single PDF of all the files in the portfolio;
- As a PDF attachment in an e-mail to the Statistics Program Coordinator (or other designee);
- A PDF uploaded to a link on a Moodle page, if one is provided.

Portfolio Evaluation

Portfolios will be assessed independently by two faculty evaluators from Elon University or another university. In general, candidates will be notified of the results of their portfolio evaluation no later than March 15th for May Graduation and November 1st for January graduation. Candidates must receive a passing rating from each evaluator on the following sections:

- Cover letter or graduate school personal statement
- Resume
- Statistical Foundations rationale
- Concentration Area/Application rationale
- General content requirements (includes required products and content, format, etc.)

If one or more sections receive a failing rating from any reviewer, candidates will be notified and provided feedback from reviewers. The candidate will be allowed one resubmission, which will be due no later than the second Friday after notification. The resubmitted portfolio will be reviewed by the same faculty evaluators and must receive a passing rating in order for the candidate to be eligible to graduate. The resubmission will be evaluated during the following week.

While resubmissions are built into the process, candidates should understand that a failing rating indicates notable deficiencies in the portfolio, and their graduation is put on hold until those deficiencies are remedied. That is, please take resubmissions seriously.

Portfolio Development Resources

For help on portfolio development, candidates should contact their Statistics advisor. There will also be at least one one-hour portfolio question and answer session during fall and/or winter term. An announcement regarding Q&A sessions will be made by email.

Students are encouraged to visit the SPDC or the Writing Center for assistance with their resume and cover letter/personal statement.

Statistics Portfolio Checklist

Element	Included	Comments
Cover page with name, degree, major, and concentration		
Honor code statement - Signed - Dated		
Table of contents		
Section Divider with title "Introduction"		
Cover letter or graduate school personal statement		
Resume		
Section Divider with title "Statistical Foundations"		
Rationale that addresses all 3 Goals (3 pages, double-spaced, size 12 Times New Roman font)		
Contains only products from STS		
Products indicate course number on cover page		
Includes final paper for STS 213/2130 or STS 325/3250		
Section Divider with title "Concentration Area/Application"		
Rationale that addresses all 3 Goals (3 pages, double-spaced, size 12 Times New Roman font)		
Products indicate course number on cover page		
Includes final paper for STS 499/4999 or STS 481/4985 or STS 460/4980		
Minimum of five unique products		
At least one unique product per section		
Graduation Information sheet		

Exit Interview Guidelines for Statistics Majors

After a candidate has successfully completed the statistics portfolio, an oral exit interview will be administered by at least two Elon faculty (typically the faculty who reviewed the portfolio). The purpose of the interview is to judge the candidate's ability to discuss and interpret statistics and to use the language of statistics appropriately. Students will be graded on a Pass/Fail scale and will have one opportunity to re-take the interview in the event of a failure.

Interview Format

- Exit Interviews will be approximately 30 minutes in length.
- Candidates will be asked to discuss two of the products that were included in their submitted portfolio.
- Candidates will be asked to orally explain statistical ideas, methods or results as if speaking to a **non-statistical audience**.
- Students will not be informed of the product choices before the interview and should familiarize themselves with all of their submitted products.

Interview Deadlines

After a candidate has successfully completed the statistics portfolio, the Statistics Program Coordinator (or other designee) will send an e-mail to the candidate and the faculty evaluators indicating that an exit interview should be scheduled. Candidates should schedule interviews between:

- **March 16th and March 30th** for students graduating at the end of the **Spring or Summer** semesters
- **November 2nd and November 16th** for students graduating at the end of the **Fall or Winter** semesters

Candidates will be notified of the results of their interview no later than April 1st for May graduation and November 18th for January graduation.

After the interview, candidates will be asked to complete a senior student survey in which they rate their confidence in the skills related to the program learning objectives. Student feedback on the major program, teaching effectiveness, advising and course offerings will also be sought.

Graduation Information Sheet

Please include a document that contains the following information:

1. Name:

2. Major(s) and associated degree(s):

3. Minor(s):

4. If you completed an internship for ELR credit:
 - a. Name of company you worked for:

 - b. Dates of internship:

 - c. Faculty mentor:

 - d. Description of how you found the internship. If found on a website, please list:

5. If you completed an internship but did not receive ELR credit:
 - a. Name of company you worked for:

 - b. Dates of internship:

- c. Faculty mentor:

 - d. Description of how you found the internship. If found on a website, please list:
6. If you completed undergraduate research within the MTH/STS Department for ELR credit:
- a. Credit hours of research received:
 - b. Title of research:

 - c. Name of faculty mentor
7. If you completed undergraduate research outside the MTH/STS Department, or conducted research that did not earn ELR credit:
- a. Credit hours of research received:

 - b. Title of research:

 - c. Name of faculty mentor:

 - d. Department in which you did research:
8. If you completed Statistics Practicum:
- a. Name of client/collaborating organization that you worked with:

9. If you completed student teaching:

a. Name of school:

b. Name of cooperating teacher:

c. Course(s) taught:

10. If you traveled abroad for ELR credit:

a. Course name:

b. List countries you visited:

c. Dates you were abroad:

11. If you traveled abroad through a course at Elon, without earning ELR credit:

a. Course name:

b. Countries you visited:

c. Dates you were abroad:

12. If you received ELR credit for service learning:

a. State course/experience that earned you credit:

b. Provide brief description of the course/experience:

13. If you received ELR credit for leadership:

a. Name of leadership activity:

b. Brief explanation of leadership activity:

14. Please state your plans/desired plans for post-graduation.