Senior Comprehensive Evaluation Requirements for Statistics Majors
Approved on 11/4/2026

In addition to completing all course and university requirements, candidates for an A.B. or B.S. in Statistics must successfully complete the Senior Comprehensive Evaluation which consists of two options:

1) **Option A** (approved statistics experiences) or
2) **Option B** (portfolio).

All students should register for STS 0070: Senior Comprehensive Evaluation in their final semester to facilitate recording of successful completion of the Senior Comprehensive Evaluation.

Students should review the options with their academic advisor at each advising session to make plans to complete the requirement. Students who have a Primary Advisor outside of the Mathematics and Statistics Department should meet with their Secondary Advisor in the Mathematics and Statistics Department during advising to review plans and to develop a four-year plan to complete the approved statistics experiences or plans to complete a portfolio. Example four-year plans are provided in this document here.

Due Dates

Students pursuing **Option A** (approved statistics experiences) should submit experiences as they complete them using this link. To satisfy your requirement with Option A, you will need to have earned four points by **March 1st for Spring/Summer graduation** and **September 15th for Fall/Winter graduation** unless a plan for remaining points has been approved. Note that any student who has not earned at least four points by the beginning of their final semester must complete a portfolio unless they are approved as follows:

- Students who have not completed at least 1 point by the first day of their final semester must complete Option B (portfolio).
- Students who have earned 1, 2, or 3 points by the first day of their final semester must submit a clear plan to the portfolio coordinator using the form found at this link by 5:00 PM on the second Friday of the semester in which they plan to graduate. If a plan is not approved, the student will be required to complete Option B (portfolio).
- Students who have not completed 4 points by March 1st for Spring/Summer graduates or September 15th for Fall/Winter graduates **or** who have not made progress on an approved plan by March 1st or October 1st will be required to complete Option B (portfolio).

Students pursuing **Option B** (portfolio) should combine their submission into a single PDF file and submit it no later than:

1) March 15th* (or the Friday before Spring Break, whichever is earlier) by 5:00 pm for students graduating in Spring or Summer Semesters.
2) October 15th* (or the Wednesday before Fall Break, whichever is earlier) by 5:00 pm for students graduating at the end of the Fall or Winter semesters.

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

Option A (Approved Statistics Experiences) Guidelines

To complete the Senior Comprehensive Evaluation using Option A (approved statistics experiences), students must earn at least 4 points for approved activities related to their statistics major. The table below includes a list of previously approved activities and their associated point values. Additional details on requirements for experiences can be found after the example pathways.

To receive credit for an activity, students must submit a report of their experience through this form: https://forms.office.com/r/0DBfkUDkvX. Statistics advisors are able to help students monitor their progress and verify their submissions have been processed. Students should be in regular conversations with their advisors and statistics professors throughout their time at Elon to work toward a plan for completing a four-year plan for the experience points. Example pathways for earning 4 points are shown after the table describing experiences.

Category	Description	Points
Research Presentations (Oral presentation or poster)	**Internal Departmental Presentation** (e.g., math/stats tea, present about capstone experience for another course, etc.)	0.5
	Local / Campus Presentation (e.g., SURF, Electronic Undergraduate Statistics Research Conference, UNC-G Regional Math/Stats Conference, SNCURCS)	2
	National Presentation (e.g., NCUR, Joint Statistical Meetings)	3
Additional Statistics Experiences (In some cases, additional points may be awarded for exceptional work)	**Reviewed professional resume and cover letter** Student must have cover letter and resume reviewed by SPDC and by advisor. Evidence of both review processes and implemented revisions must be submitted.	0.5
	Participate in DataFest or SABR Analytics Competition (Maximum 2 points)	1
	Participate in data competition (i.e., Kaggle) DataFest Competitions must be pre-approved to be eligible for points. (Maximum 2 points)	0.5-1
	Submit work to a Project Competition (USPROC) (e.g., Undergraduate Statistics Class Project Competition or Undergraduate Statistics Research Project Competition) 0.5 points awarded for submission; 0.5 points awarded for Finalists and Honorable Mentions. (Maximum 1 point earned)	0.5-1
	Earn a Professional Certification (e.g., SAS, Excel, Teacher Licensure)	1
	Pass an Actuarial Exam	2
	Complete a Statistics Thesis (e.g., Honors or ECF)	2
	Submit a Manuscript for Peer-Review Publication (Note: Must contain significant statistical content)	3
	Additional Approved Capstone Experience (Must be equivalent to at least 2 credits of work)	2
	Apply for the Lumen Prize in Statistics	2

	Apply for a Goldwater Scholarship in Statistics Students will earn 1 point for applying to the scholarship and can earn 1 additional point for being awarded the scholarship. (Maximum of one point can be awarded for applying.)	1-2
	Create a Public Digital Portfolio of Statistics Work (e.g., GitHub page)	1
	Earn a Relevant Elon Digital Badge Introduction to Statistical Programming, R101, Advanced Data Competency, etc. (A maximum of one point can be awarded for digital badges)	0.5
	TA/LA for a statistics class	2
	Mentor Williams High School research teams	2
	Tutor for statistics Maximum of 2 points can be earned from tutoring.	2
	Participate in a project through the consulting center (1 point per semester)	1
	Other statistics experiences Experiences may include writing an article on statistics for The Pendulum, submitting statistical artistic projects, creating multimedia products, etc. These experiences should be pre-approved and point values will be determined based on individual approval.	TBD

Category	Description	Points
Service (No more than 3 points can come from this category, and no more than 2 points can come from one activity)	**Hold leadership role for an active statistics club/group** (Club must hold at least two events per year to be considered active)	1
	Serve on departmental committee or task force Example: Departmental Technology Champion (1 point per semester)	1
	Participation in (Approved) Departmental Recruitment Events (0.5 point maximum)	0.5
Note: Occasionally, the department may send out additional experiences for which students can earn points in other ways. Additionally, other experiences may be approved by the department on a case-by-case basis. If you have an idea, talk to your statistics advisor to begin this process. Examples of possible experiences may include helping create course materials for an introductory class like STS 1100 or STS 2120, leading a discussion on a book, article, or R package, helping organize a campus event or conference, etc.		

Point values approved on November 4 2026, and will be updated yearly.

Sample Paths for Completing 4 Approved Statistics Experience Points

Sample Path A

Semester	Experience	Points
Sophomore Fall	SAS Micro-credential	0.5
Sophomore Spring	R101 Micro-credential	0.5
Junior Fall	Reviewed Cover Letter and Resume	0.5
Junor Spring	Approved Artistic Submission	0.5
Senior Spring	SURF Presentation	2

Sample Path B

Semester	Experience	Points
Sophomore Spring	Submission to Undergraduate Statistics Class Project Competition	0.5
Junior Fall	Reviewed Cover Letter and Resume	0.5
Junor Spring	Participate in DataFest	1
Senior Spring	TA/LA for statistics class	2

Sample Path C

Semester	Experience	Points
Sophomore Spring	R101 Microcredential	0.5
Junior Fall	National Presentation	3
Senor Fall	Reviewed Cover Letter and Resume	0.5

Sample Path D

Semester	Experience	Points
Junor Spring	Pass first Actuarial Exam	2
Senior Year	Mentor Williams High School research teams	2

Sample Path E

Semester	Experience	Points
Sophomore Fall	SAS Micro-credential	0.5
Sophomore Spring	R Micro-credential	0.5
Junior Fall	Reviewed Cover Letter and Resume	0.5
Junor Spring	Participate in (approved) Departmental Recruitment Event	0.5
Junior Spring	Participate in DataFest	1
Senior Fall/Spring	Leadership in Mu Sigma Rho	1

Sample Path F

Semester	Experience	Points
Sophomore Fall	SAS Micro-credential	0.5

Sophomore Spring	R101 Micro-credential	0.5
Junior Fall	Submission to Undergraduate Statistics Class Project Competition	0.5
Junior Fall	Reviewed Cover Letter and Resume	0.5
Junior Spring	Participate in DataFest	1
Senior Fall	Create a Public Digital Portfolio of Statistics Work	1

Additional Details on Statistics Experiences

Datafest

Datafest is held annually in early April on campus and at other universities (for example, Duke University). Students work in teams of students (either selecting teams in advance or being assigned a team) to complete a consulting project in one weekend. Teams present results on the Monday after the competition. Students can earn one point for each Datafest competition that they participate in.

Data Competitions

Additional competitions should be pre-approved. Point values will be awarded based on time commitment and final products. Points may be awarded for submission and for earning recognition (finalists, honorable mentions, placement, etc.)

Project Competition

Students can submit their course project to the Undergraduate Statistics Project Competition or research to the Undergraduate Statistics Research Project Competition. Information about both competitions and general rules can be found through the Consortium for the Advancement of Undergraduate Statistics Education (CAUSE) here.

There are deadlines in December for Summer/Fall course projects and in June for Winter/Spring course projects.

- **Undergraduate Statistics Class Project Competition (USCLAP):** This competition is for undergraduate students who are taking a statistics/data science course at the introductory or intermediate level, in which a class project is part of the course work (either required or optional). Project submissions are a short report/paper (up to 3 pages). When submitting, a project needs to be entered with one of two levels:
    - **Introductory Level**: A data-focused project completed as part of a first course in statistics or data science (with or without a calculus prerequisite, but no prior statistics or data science course). *The method of analysis should not extend beyond logistic regression.*
    - **Intermediate Level**: A data-focused project completed as part of a second or third course in applied statistics, or as part of a DataFest competition. Projects from a first course in statistics or data science may also be included if the method of analysis extended beyond logistic regression.
- **Undergraduate Statistics Research Project Competition (USRESP):** This competition is for undergraduate students who conduct research projects related to statistics or data science, either methodological or applied. The types of research projects may include research work from summer REU

research projects, senior-level research projects (part of coursework), or independent research projects (e.g. honors, capstone) that are not based on a specific course that students are taking. Project submissions are a paper (up to 20 pages).

Digital Portfolio

A digital portfolio should be on online published compilation of example project and coding work. Data Nexus hosts the "Create Your Github Data Portfolio" workshop regularly each semester.

Professional Certifications

Professional Certifications that are accepted include:

- SAS Certified Specialist: Base Programming Using SAS 9.4 (Suggested after STS 3270)
- SAS Certified Associate: Programming Fundamentals Using SAS 9.4 (Suggested after STS 3270)
- Microsoft Office Specialist: Excel Associate (Completed during BUS 2110)

Students should submit a verification (copy of certificate) of their successful completion of the certification.

Additional Approved Capstone Experiences

Statistics majors are required to complete a capstone experience (internship, research, or practicum) for credit. Students can complete an additional capstone experience to earn experience points. For example, if a student takes STS 4980: Statistics Practicum and completes an internship (registered or not), then the internship can be awarded points for additional approved capstone.

- If completing an additional internship, note that at least 80 hours of the internship must be completed (the equivalent of 2 credit hours), but the internship does not need to be registered under STS 4985. The additional internship experience points cannot come from completing an additional 80 hours of internship from an internship that was used for the original capstone experience requirement in the statistics major.
- Points for an additional undergraduate research project must come from a project that is separate from any project that was used to satisfy the original capstone experience requirement in the statistics major. An additional undergraduate rese

Other Statistical Experiences

Students may ask for additional experiences that are not shown in the table to be considered for points. All experiences must be pre-approved. The pre-approval process can be started with a student's academic advisor in the Mathematics and Statistics Department. Examples of experiences that may be considered:

- Create and share a multimedia project (e.g., video, podcast, comic, etc.) that explains a statistical concept to a specific audience.
- Creation of an artistic or educational project for a competition. Typically, students will be required to write a brief report explaining the statistical ideas of their artistic creation. Examples of artistic or educational projects include:

    - A-mu-sing – annual contest; submit your own cartoon, joke, poem, song, or video. The deadline for the competition is usually in mid-April each year.
    - Caption Contest – monthly contest; provide cartoon captions to a statistically-themed comic. Submission are due by 11:59 PM EST on the last day of each month.
    - Data Storytelling Contest – bi-annual contest; submit an engaging experiential data storytelling project. Submission are accepted in Fall and Spring.
    - SPARKS Video Challenge – annual contest; create 10-20 second video clips to explain a statistical concept.
- Writing an article on statistics for The Pendulum or another publication.

Professional Resume and Cover Letter

Students should prepare a resume and cover letter aimed at a career in statistics or statistics-related field. The resume should be reviewed by the SPDC (proof of review must be provided) and reviewed by the student's academic advisor (proof of review must be provided). Suggestions and revisions should be implemented based on the recommendations.

Digital Badges

Students may complete at most two of the following micro-credentials

- Introduction to Statistical Programming (SAS) – This micro-credential can be completed at any time and is self-paced. It is suggested that students complete STS 2120 before attempting the micro-credential. The requirements are successful completion of a 20-question multi-choice/short answer quiz and a coding exercise. Review sessions are typically held once a semester.
- R101 – To earn this micro-credential students attend a three-part workshop (held each semester) and must successfully complete a coding exercises. Other opportunities to fulfill the requirements for the R101 workshop may be offered while students are enrolled in STS 2300, STS 3300, and/or STS 3470.
- Advanced Data Competency – This micro-credential is earned for completing three data intensive courses with a grade of C or higher, completion of at least two co-curricular experiences, and completion of a short reflection video with a facilitated discussion with the Data Nexus committee. A list of previously approved co-curricular activities can be found on the Data Nexus website here. This badge can be earned at any time once the required activities have been completed.

Option B (Portfolio) Guidelines

To complete the Senior Comprehensive Evaluation using Option B (portfolio), students should review their statistics course work over their entire career at Elon and prepare a single PDF document that includes the required components outlined below. Of note, students will write three reflections based on the prompts provided. AI may not be used to compose responses to the prompts, doing so is a violation of the Elon Honor Code.

Portfolios will be reviewed by committees of at least two faculty members and will be evaluated based on the depth of the reflection, quality of response, and clarity of explanations. ***All students will be given feedback on their portfolio by March 31st for May graduation and October 31st for January graduation and will submit a revised digital portfolio due no later than April 15th* or November 15th*, respectively.*** Students who do not satisfactorily incorporate the feedback of the reviewers will be required to meet with the Portfolio Coordinator to develop a plan for completion of the Senior Comprehensive Evaluation requirements or risk delaying their graduation.

*In the event that the due date falls on a weekend, the due date moves to the following Monday.

The portfolio should consist of the following:

I. Cover Page
II. Signed Honor Code Statement
III. Table of Contents
IV. Response to Prompt 1
V. Response to Prompt 2
VI. Response to Prompt 3
VII. Project supporting Prompt 1
VIII. Project(s) or course work supporting Prompt 2
IX. Project(s) or course work supporting Prompt 3

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.

> ***Portfolio Honor Code Statement***
>
> "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: https://elon.smartcatalogiq.com/en/2026-2027/student-handbook/honor-system/the-elon-honor-code/.
>
> In assembling this portfolio, I have refrained from lying, cheating, plagiarizing, and facilitating others in these actions. I have not used any artificial intelligence to compose the contents of my responses to the provided prompts.
>
> 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."
>
> Signature: _____
>
> Date: _____

Table of Contents

- Each of the nine items should be indicated in the table of contents with appropriate page numbers. Any projects or course work included in the portfolio should include the number of the course from which it was drawn. Each product should be included within the table of contents. For example,
  Part VII: STS 2320 Project……p. 7

- Students are encouraged to use the *Link* → *Add/Edit Web or Document Link* option under *Edit PDF* tools in Adobe Acrobat so that their single PDF file is easily navigable.

Responses to prompts

- For each prompt, students may write up to 3 double-spaced pages using 1-inch margins, Times New Roman, size 12-point font. Evidence to support the assertions made in the prompts must be included. Evidences will come from courses within the statistics major (including concentration). Evidences will primarily include projects, presentations, and example course work. Supporting evidence should be included in the portfolio in Parts VII – IX and should be referenced within the body of the appropriate

prompts.

- **Prompt 1**: *What project from your statistics coursework are you most proud of? Why are you most proud of it, and what did you learn about statistics in this project? How does this project showcase your understanding of statistics?*
    - The project referenced should be included in Part VII – Project or Course Work Supporting Prompt 1.

- **Prompt 2**: *Provide an illustration(s)/example(s) of how you have grown in your understanding of statistical concepts (excluding coding) through your work in the statistics program (including course work within the concentration). Provide an explanation of how your illustration(s) demonstrates the growth in your understanding of statistical concepts through your statistics coursework. Use your illustration(s) to support your explanation.*
    - Note: The illustration could be examples from projects in your first year contrasted with a project from your last year or it could be two drafts of the same project.
    - You may choose to include some illustrative portions of your projects in your narrative --- these portions do not count as part of your 3-page maximum.
    - You may also pull in additional examples from your statistics coursework to further illustrate your growth.
    - Projects or relevant components of projects referenced should be included in Part VIII – Project or Course Work Supporting Prompt 2.

- **Prompt 3**: *Provide an illustration of your ability to code in SAS or R and explain why you have chosen this code as an illustration of your statistical computing ability. What are your strengths in coding and how have you improved your coding during your time at Elon?*
    - Note: The illustration could be a single example of high-quality coding or you may choose to provide examples from multiple projects to illustrate your growth. These examples could be from projects in your first-year contrasted with a project from your last-year or it could be two drafts of the same project.
    - You may choose to include some illustrative portions of your code in your narrative --- these portions do not count as part of your 3-page maximum.
    - You may also pull in additional coding examples from your statistics coursework to further illustrate your growth.
    - Projects or relevant components of projects referenced should be included in Part IX – Project or Course Work Supporting Prompt 3.