Storm King School Capstone/Cornerstone Project

Students will work with a faculty advisor to complete a project which synthesizes learning from other courses, and demonstrates their command of S.K.S. (skills for knowledge and success) in a real-world context. Capstones will be the designated term for senior projects and cornerstones the designated term for all other classes. Seniors are required to complete the capstone project as a criterion for graduation. Cornerstone projects are encouraged to be ongoing projects that grow in scope and impact from year to year, but returning students may choose to start a new project in a given year.

Advisors for capstone/cornerstone projects may be any member of the faculty or administration. Each faculty member will be limited to a maximum of 5 projects. Students may work individually on the project or in a group of no more than 3 students. Some of the project steps may be completed together (bibliography/research steps/presentation) and others individually (journal entries, reflection paper, portfolio). If a faculty member is not approached by a student to be a project advisor, he or she may be asked to assist another faculty member who has a multitude of projects.

Requirements

1. Design and produce a rigorous, student-driven project that answers a central question and has a real world application.
2. Visually and orally present your project to an audience at the conclusion of the year.
3. Complete a project portfolio to document your progress that includes:
   a. Annotated Bibliography of 15-20 sources
   b. All of your fully completed steps throughout the process, including all journal entries
   c. A reflection paper of 3-4 pages that demonstrates your work on S.K.S.

Project Steps & Timeline with Due Dates

A. Defining the problem
   a. Selection of Topic (Step One) – September 21
   b. Capstone Proposal & Advisory Selection (Step Two) – October 5
B. Identify and Implement a strategy
   a. Central Question & 5 sources (Step Three) – November 9
   b. Research & Creation (5 sources) (Step Four) – December 14
C. Evaluate and progress toward goal
   a. Research & Creation (5 sources) (Step Five) – January 25
   b. Completion of Research & Selection of Presentation Method (Step Six) – February 29
D. Presentation and Reflection
   a. Preliminary presentation & portfolio (Step Seven) - **April 25**
   b. Making the presentation (Step Eight) - **May 23**
   c. Self-assessment reflection (Step Nine) - **May 27**
   d. Final portfolio submission (Step Ten) - **May 27**

**Capstone/Cornerstone Grading Policy for Overall Project:**

All student projects will be assessed according to the rubric presented below.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Advanced</th>
<th>Proficient</th>
<th>Needs Improvement</th>
<th>Inadequate</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Reading</td>
<td>16-14</td>
<td>13-10</td>
<td>9-6</td>
<td>5-0</td>
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<tr>
<td>Research</td>
<td>16-14</td>
<td>13-10</td>
<td>9-6</td>
<td>5-0</td>
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<tr>
<td>Problem Solving</td>
<td>16-14</td>
<td>13-10</td>
<td>9-6</td>
<td>5-0</td>
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<tr>
<td>Collaboration</td>
<td>16-14</td>
<td>13-10</td>
<td>9-6</td>
<td>5-0</td>
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<tr>
<td>Technology</td>
<td>13-11</td>
<td>10-8</td>
<td>7-5</td>
<td>4-0</td>
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</tr>
<tr>
<td>Written Report</td>
<td>17-15</td>
<td>14-11</td>
<td>10-7</td>
<td>6-0</td>
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<tr>
<td>Oral Report</td>
<td>17-15</td>
<td>14-11</td>
<td>10-7</td>
<td>6-0</td>
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<tr>
<td><strong>Project total</strong></td>
<td><strong>111-97</strong></td>
<td><strong>90-70</strong></td>
<td><strong>63-43</strong></td>
<td><strong>36-0</strong></td>
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Each skill will also have an accompanying rubric to be used to determine the individual scores for that skill. Students' scores on the rubric above will determine their final grade. Cumulative scores greater than 90 will be considered *Passing with Distinction*, scores between 64 and 90 will be considered *Passing*, while scores below 64 will be considered *Failing*. Seniors are required to either pass with distinction or pass as a requirement for graduation.

**Grade Policy for each term:**

Please note that term grades are progress indicators only, they do not guarantee your final grade, and do not affect a student’s grade point average. As previously stated, the final grade will be determined by the rubric stated above.
Term 1

Selection of Topic – Worksheet (10 pts)

Capstone Proposal – must be accepted by Advisor (20 pts)

Central Question Worksheet (20 pts)

5 source bibliography (15 pts)

Journal Entries (minimum of 3) (15 pts)

Collaboration with Advisor (25 pts)

Total possible points = 105

Term 2

Research Worksheet (Stage 1) with 5 additional sources (25 pts)

Research Worksheet (Stage 2) with 5 additional sources (40 pts)

Journal Entries (minimum of 8) (20 pts)

Selection of Presentation Method (10 pts)

Collaboration with Advisor & Group (25 pts)

Total possible points = 120

Term 3

At the conclusion of Term 3, students will receive their final capstone/cornerstone grade. The final grade for the capstone will be determined by your score of the capstone rubric presented previously. For the advisor to be able to grade your capstone, the project must be presented orally, and the portfolio (along with the reflection paper) must be submitted on or before Friday, May 27*.

*Late work will receive ½ credit
Capstone/Cornerstone Project

Step One: Topic Worksheet

Name _________________________

What topic have you selected for your capstone/cornerstone project?

For this project, I will be:

☐ Working independently

☐ Working with one other student

  Name of Partner ______________________

☐ Working with two other students

  Names of Partners ______________________

  ______________________
Capstone/Cornerstone Project

Step Two: Proposal & Advisor Selection

Student Name(s):__________________________

__________________________

__________________________

Project Advisor: __________________________

This proposed project will focus on the skills of written and oral communication, strategic reading, research, problem solving, collaboration, and technology.

Project Title:

Project Goal(s) [including real world application]:

Strategies for Accomplishing Goal(s):

Capstone Presentation Plan & Materials Needed:

Student Signature: __________________________
For Advisor only: Please consider the proposal on the previous page, and either approve the proposal (which cements the relationship between student(s) and the project advisor, accept the proposal conditionally, or do not accept the proposal. For the conditional acceptance, please explain the revisions that must be made to the proposal before it will be approved. A conditional acceptance means you plan on accepting the proposal when revised. If you choose not to accept the proposal, please state the reason(s) why in the space provided. After considering the proposal, fill in the chosen oval, and if approved, keep for your records. If conditionally accepted or not accepted, please promptly return to the student(s) who submitted the proposal.

☐ Approved

☐ Conditionally Accepted

   Revisions necessary for approval:

☐ Not Accepted

   Reason(s) not accepted:

Project Advisor Signature: ___________________________

Date:___________________
Capstone / Cornerstone Project

Step Three: Central Question Worksheet

**Introduction:**

The first step in developing your topic is to identify a working central question. Since your project requires that you answer a central question, you should try to select a question that interests and that you feel passionate about. Your central question will be the focus of your research. You should start with a general question that requires more than just a yes/no answer. You will be required to do preliminary research based on your central question. This research must be recorded in your annotated bibliography and journal entries. Your central question does not need to be super complex but it does need to be researchable, and readily useable for a project which could be visually presented and that demonstrates the depth of the S.K.S. (skills for knowledge and success) you have learned during your years at The Storm King School.

**My central question is:**

**Central Question Check List:**

The Central Question requires more than a yes/no answer.

The Central Question can be expressed as a project which will demonstrate the depth of learned S.K.S. by the student or students.

You have read 5 sources about your central question, and included with this step an annotated bibliography for at least 5 sources you have read. Citations should be in MLA style and annotations should provide a summary, evaluation, and application of the information in the source.

You have kept a journal of the project, and included with this step a minimum of 3 journal entries detailing all work, both planned and accomplished, as well as any personal thoughts about the project or the process.
Place your description of how your project will answer the central question here.

The Central Question submission includes a discussion of who will benefit most from this project (e.g. fields of study, professionals, community). Place your discussion of the impact of your project here.

The Central Question submission identifies any preconceived beliefs and what you will do to ensure your research results is not effected by bias in your analysis, interpretation of results, and implementation of the project outcome. Discuss your preconceived beliefs here.

The Central Question includes an explanation of why you feel it is important. Discuss why your central question is important here.
Capstone / Cornerstone Project

Research & Creation – Step Four

For Step Four, you must complete the following tasks:

- Pass in your project's updated annotated bibliography, which at this step should include a minimum of 10 source entries.
- Share your journal with your project advisor. The journal should have a minimum of four additional entries since the last check in Step Three.
- Update the checklist below of the S.K.S. (skills for knowledge and success) practiced thus far (use your journal to help you). In the space provided for each skill, explain how you have exercised the skill or how you plan to do so moving forward.
- Meeting with advisor: Discuss the research and creation process. Establish a plan to address skills not yet proficiently demonstrated.

S.K.S. Checklist

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Capstone / Cornerstone Project – Annotated Bibliography

Below is a sample source entry that would appear on an MLA style annotated bibliography. It uses a 3-paragraph formula of Summarize, Assess, and Reflect.

You must hand in an annotated bibliography with 5 of these entries with Step Three, 5 more with Step Four, and a final 5 with Step Six. The complete annotated bibliography is part of the Project Portfolio due at the conclusion of the project.

Sample

Lamott, Anne. *Bird by Bird: Some Instructions on Writing and Life.*


Lamott’s book offers honest advice on the nature of a writing life, complete with its insecurities and failures. Taking a humorous approach to the realities of being a writer, the chapters in Lamott’s book are wry and anecdotal and offer advice on everything from plot development to jealousy, from perfectionism to struggling with one’s own internal critic. In the process, Lamott includes writing exercises designed to be both productive and fun.

Lamott offers sane advice for those struggling with the anxieties of writing, but her main project seems to be offering the reader a reality check regarding writing, publishing, and struggling with one’s own imperfect humanity in the process. Rather than a practical handbook to producing and/or publishing, this text is indispensable because of its honest perspective, its down-to-earth humor, and its encouraging approach.

Chapters in this text could easily be included in the curriculum for a writing class. Several of the chapters in Part 1 address the writing process and would serve to generate discussion on students’ own drafting and revising processes. Some of the writing exercises would also be appropriate for generating classroom writing exercises. Students should find Lamott’s style both engaging and enjoyable.
Capstone / Cornerstone Project - Journal of Progress

The Capstone/Cornerstone Project is an exciting and dynamic assignment that calls upon you to use the skills you have acquired at the Storm King School in a real world project of your choice. To help you stay on task, be accountable for your scheduled timeline, and effectively reflect on your experiences, you will keep a Journal of Progress during the time you work on the project. The Journal of Progress will be a quick and efficient way to show your advisor exactly where you are in the process, and moreover, will serve as an invaluable resource when you write your final reflection at the end of the year.

Each journal entry should be dated and titled based upon the part of the process in which you are currently working.

Entries should be made weekly to keep the most accurate records possible for both you and your advisor.

Each should address what you have accomplished for the week, including:

- Your needs, including time, space, and materials
- Any personal contacts made during the week relevant to the project
- Any obstacles anticipated and/or encountered
- A summary of your progress for that week
- An explanation of what skills you employed during your work:
  - Strategic reading
  - Written communication
  - Research
  - Problem solving
  - Technology
  - Collaboration
  - Oral communication

The Journal of Progress will be used in Steps Three-Six of the Project Timeline. Starting with Step Three and ending with Step Six, you must send your advisor your journal entries once a month on the date that the step is due. You will compile all of these entries into your project portfolio. This will be displayed when you present your project and will be passed into your advisor along with your reflection paper at the end of the project.
Capstone / Cornerstone Project

Research & Creation – Step Five

For Step Five, you must complete the following tasks:

- Pass in your project's updated annotated bibliography, which at this step should include a minimum of 15 source entries.
- Share your journal with your project advisor. The journal should have a minimum of four additional entries since the last check in Step Three.
- Update the checklist below of the S.K.S. (skills for knowledge and success) practiced thus far (use your journal to help you). In the space provided for each skill, explain how you have exercised the skill or how you plan to do so moving forward.
- Meeting with advisor: Discuss the research and creation process. Establish a plan to address skills not yet proficiently demonstrated.

S.K.S. Checklist

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Capstone – Cornerstone Project

**Step Six:** Completion of Research and Selection of Presentation Method

Due Date: February 29, 2016

**Introduction:**

At this step, your research for the project should be complete. Your final Annotated Bibliography must be turned into your project advisor at this time. Before doing so, please synthesize your research by answering the questions below.

**Please restate your central question and real-world problem that are the focus of this project.**

Central Question:

Real-World Problem:

Explain your research methods and where the information came from:

Explain how your research helped you to propose a solution to the stated problem:
**Presentation Methodology:**

Describe how you will present your project to your advisor and the attendees at the project fair.

Please sketch out and label what your tri-fold will look like and describe in writing what your table will look like at the project fair night.

Describe how you will share your project with a real world audience beyond the attendees at the fair.
Capstone / Cornerstone Project

Step Seven: Preliminary Presentation & Portfolio

Due Date: April 25, 2016

Introduction:

As the presentation date approaches, you want to make sure you have documented all experiments, experiences, and meetings with experts. Finalizing your project portfolio will help you make sure you followed through on all aspects of your project. Once you conclude the research phase, you must put your project into a presentation format. You are encouraged to utilize a presentation method and format that best demonstrates your skills and talents, as well as highlights your project. While many students will opt for a multi-media presentation format, others may prefer a spoken presentation. If your project includes some form of performing arts, you may even choose to perform some portion of your presentation. Your adviser could help you discover the best presentation method.

Presentation must include the following:

- Tri-fold poster showing the following
  - The title of your project
  - Your central question
  - Your answer to your central question
  - Cited research that helps support your answer to the central question
  - Visual documentation of process
  - If applicable, visual aids or manipulative of the product you created for your project
  - The use of technology, or the documentation of how you used technology to create your project

- Project Portfolio in a binder with your name, project title, and central question on it. The Capstone/Cornrstone Portfolio should look professional and organized with typed work and a table of contents.
  - Steps Three - Six
  - Journal of Progress
  - 15-20 source Annotated Bibliography
  - MLA formatted Work Cited page with 15-20 sources

Any multi-media equipment needed for the presentation must be secured at least two weeks prior to your scheduled presentation with your advisor.
Capstone / Cornerstone Project

Step Eight: Making the Presentation

The Fair:

You should plan to explain your project to attendees at the project fair. Be prepared to answer questions that may be asked by any of the individuals assessing the project.

Attendance:

You need to arrive at least 60 minutes prior to your presentation. Copies of your presentation in electronic format must have been sent to your advisor. You must make sure that all electronic equipment is set up and working before the presentations start.

Professionalism Appearance:

You should be dressed appropriately for your presentation. Students are required to be in school dress code, but may choose to wear their formal SKS attire for the presentation.

Presentation:

Whatever your method of presentation, you should begin by introducing yourself and your project. Your goal is to provide attendees and/or judges with a clear and concrete sense of what you did and what you gained from the experience.

Organization:

Speak in a coherent line of thinking and a logical order for the project. The visual aid should be organized and arranged to show that logical order. Tell a synopsis of the “story” from beginning to end.

Clarity:

Speak confidently and in a manner that is easy to hear and understand. For the presentation, YOU ARE THE EXPERT. You are the one that has invested the energy and countless hours into the project. The attendees are there to listen. They are truly interested in what you accomplished and the lessons you learned.

Delivery:

Be enthusiastic. Explain why you selected this project and engage the attendees in your experience. Your display(s) should also be engaging and capture the attention of the attendees.
Content:

Reflect on the experience and show evidence of what you learned. Show evidence of all 7 skills for knowledge and success (S.K.S.). Show the progression you achieved throughout the project. Be prepared to be asked questions that may require you to expand on your responses. Show a depth of understanding of the topic. Your presentation or display should also include components of your self-evaluation (reflection paper).

Work Product:

Be sure to bring, display and incorporate resulting work product into your discussion and presentation. This will be extremely interesting to the reviewers and will provide evidence of real life and practical results from your efforts.

Real World Application:

Be ready to discuss and demonstrate how your project benefits someone or something in the real world.

Presentation Skills/Speaking Skills:

You may be nervous about speaking in front of an audience; once again, you are the expert and have invested a significant amount of time and energy in this project. Speak clearly and at an appropriate pace. Make eye contact with your attendees. Stand straight and show your confidence and enthusiasm for what you have achieved. This is a huge accomplishment and you should be proud of yourself!
Capstone / Cornerstone Project

Step Nine: Self-Assessment Reflection Paper

Due Date: May 27, 2016

Congratulations on successfully completing and presenting your Capstone/Cornerstone Project!
The last requirement of the project is to reflect on the process by writing a three to four page reflection paper about your process and product addressing the questions below. You must place this reflection paper at the back of your portfolio binder and submit the binder to your advisor for your project to be graded.

As you begin to draft your final reflection paper, consider how you might respond to the following questions:

- The SKS Capstone/Cornerstone is a unique and demanding challenge. In completing it, what did you learn about your subject? Your skill set? Yourself? How is your project relevant to you, the school or the community at large?
- What skills do you feel you have mastered? Which do you need to still work on?
- What impact did your project have?
- Thinking about the whole process and your finished product, what are you most proud of?
- What was a difficulty you encountered and how did you solve the problem?
- What is one thing about your approach to your project that you wish you could change? Why?
- What is one thing about your finished project you wish you could change? Why?
- How accurately did you answer your central question? Did your central question change at all during the course of your project? Why?
- How effectively did the presentation method you chose work for presenting your project in a clear and engaging manner? Why was it effective? Would you change your presentation method now if you could? Why?
- What source from your research helped you the most? The least?
- What advice would you give to a student who will be completing their project next year?