**Overview**

 **The purpose of the Sport and Medical Sciences Academy capstone experience is to require seniors to utilize the skills and knowledge that they have gained in their high school experience, to plan, complete and present a self-directed project that reflects their personal interest. The project must STRETCH each student requiring new learning. The capstone experience must demonstrate that students are able to:**

1. **Think critically and creatively**
2. **Demonstrate flexibility and initiative**
3. **Conduct analysis and research**
4. **Communicate ideas through multiple modalities**
5. **Use technology effectively**

**The capstone experience will require each student to produce the following:**

1. **Project proposal and plan of action - TBA**
2. **Research Paper - 1st draft – TBA**
3. **Final Research Paper – TBA**
4. **Final Product and ePortfolio - April**
5. **Presentation/Exhibition - May**

**The senior capstone experience is a one credit graduation requirement. The senior seminar teacher will serve as a guide through the process of planning and implementing the capstone project. In addition, each student is required to seek the help of a mentor, who has expertise in the field that they are interested in pursuing for their Capstone project. The components experience will include the following components:**

1. **Approval of the Project Proposal**
2. **Research Paper**
3. **Completion of the actual Project (15 hrs of field work)**
4. **ePortfolio**
5. **Exhibition**

**Evaluation of the presentation/exhibition portion of the capstone experience will be done by a panel of three judges. The capstone course is a pass/fail and does not impact your overall grade point average.**

**The Proposal**

**The senior capstone project should be self-directed, challenging, interesting and a way in which you can SERVE your community. The most CRITICAL element is the project proposal. You must choose a project that will sustain your interest, while causing you to STRETCH your abilities and learn something new. This is your opportunity to do something REAL; that matters and is important to you. The research paper will be related to your project. You will learn about a particular issue or topic, apply that learning to your project, and share the experience through your exhibition. The following are a few examples of how your research topic can relate to your capstone project:**

**Research (Must develop an essential question) Product**

|  |  |
| --- | --- |
| **Dating Violence** | **Creating and managing a safe teen dating website** |
| **Students who participate in athletics benefit academically, socially and emotionally, compared to non-athletes.** | **SMSA students planned a three hour clinic for elementary school students. Students contacted and worked with administration of the school, wrote parent letters, provided a snack and certificates of participation.**  |
| **Why are students spending a fortune on a college education when there are billions of dollars in scholarship money available to them?** | **Shanice Lopez fundraised and created her own scholarship for a fellow SMSA senior, called the Legacy Scholarship. She created her own application packet, held interviews, chose a recipient, as well as held scholarship workshops for her fellow seniors.**  |
| **Influences of the Underrepresentation of Women in Science** | **Anna Mercaldi focused upon exposing young girls to science. She tutored chemistry students, taught mini science workshops at Kinsella, mentored middle school students, and helped in a 6th grade science classroom.**  |
| **Effect of recognition and performance on athletes.** | **Rashaun Mason focused upon increasing fan participation at SMSA. He designed, bought and sold T-shirts to increase attendance at SMSA sporting events. He also organized a Spring Pep Rally, and donated his proceeds to benefit the physical education program at his old elementary school.**  |
| **The underlying causes of eating disorders and the long term physiological and psychological effects of the disorder.** | **Construct website and organize access to local resources.**  |
| **DNA Decoding** | **Predicting Genetic Disease – Discussion Panel Science Night**  |
| **Music Therapy** | **Bringing music to Patients**  |
| **Discrimination in Our Schools** | **Design an experiment to test a hypothesis about discrimination** |
| **Effect of Media on Self-Esteem**  | **Senior Emily Mendoza created a Middle School Girl’s Inner Beauty Club. She also organized a No Make Up Day at SMSA.**  |
| **Prenatal Care**  | **Prenatal Care Seminar focusing on awareness and resources** |
| **Teen parenting and the impact on the children.**  | **Memoires of a Teen Mother, and blog to prevent teen pregnancy, through an honest look at the lives of teen mothers.**  |
| **Health Care Systems**  | **Informational Session on Healthcare** |
| **Getting Into College** | **Organize a college readiness info. night for juniors and their parents** |
| **Access to books and early literacy** | **Organize a book drive, raise awareness for the need of early literacy opportunities, and donate books to needy preschool age children.**  |
| **Underage Drinking** | **Plan events and activities in your high school and other local schools to raise awareness for teenage alcohol abuse.** |

**Here are some tips for creating a meaningful and enjoyable senior capstone project:**

1. ***Pick something that you are passionate about.***
2. **Develop an essential question. Your topic should revolve around an essential question, which requires you to obtain a deeper understanding of a topic, issue, concept or principle.**
3. **Rather than taking the easy way out, carefully contemplate the possibilities, consult with friends, staff and family.**
4. **Enlist support. In addition to your capstone block teacher or other teacher, find community members that might offer expertise in your area of study. Approach them as a professional with real questions, and in person, for advice and guidance.**

**The Proposal (cont’d)**

**You will communicate your proposal through a letter of intent. You cannot begin working on your product, until your proposal is approved. Letters of intent should be written according to the following format:**

1. **Letters must be typed and single-spaced using Times New Roman, 12 point font.**
2. **Follow Block Style Letter (sample enclosed)**
3. **Letters must be addressed to “Dear Capstone Coordinator:” and signed by YOU.**
4. **The following must be addressed in the letter:**

**Paragraph One:**

* **What is going to be the focus of my capstone project? *Be specific here, give us the WHO, WHAT, WHERE, and WHEN.***
* **Why am I interested in this topic?**
* **What do I know about this topic?**

 **Paragraph Two:**

* **What is my essential question of the research paper? (please bold)**
* **What is the link between the research and the product or service piece of your project? (what is the product you intend to create)**
* **What artifacts do you plan to collect to provide evidence that you have carried out your capstone project? (i.e. Personal testimony, video, pictures, etc…)**

 **Paragraph Three:**

* **Identify a mentor that has agreed to support you in your project, and what is their area of expertise.**
* **If your project requires a staff supervisor because it is taking place in school, please indicate the staff member in this part of the letter.**
* **What do you predict will be your “learning stretch”?**

**Once the letters of intent are approved by the Capstone Coordinator, you can begin your Capstone Project. Letters may be returned for revisions and must be resubmitted for approval before beginning the capstone project.**

 ***(Adapted from North Providence High School)***

**The Research Paper**

**Once your proposal is approved, you are ready to move on to research a particular area or issue within your topic. Before you determine the essential question of your paper, review your research. Once you have determined the essential question of the paper, then you are ready to begin your research and analysis of that research. We are NOT looking for a simple regurgitation of facts. The answers to your essential questions will come from your analysis of the research and your SYNTHESIS of the information. This means you need to evaluate the research, select what is relevant to your essential question, and draw conclusions about what this means for society, humanity, etc. Essential questions require a complex answer, not a simple “Yes” or “NO” response. The following are some examples of not so good and good essential questions:**

 **Not So Good Good**

|  |  |
| --- | --- |
| **What is cancer?** | **What are the patterns of breast cancer rates and what factors contribute to the fluctuations in cancer rates over the years?** |
| **What is dating violence?** | **What factors contribute to abusive relationships?** |
| **What is the history of youth sports in Hartford?** | **How does early involvement in sports impact the student athlete?** |
| **What is genetic engineering?** | **What are the controversies that surround genetic engineering technology and does the good outweigh the bad?** |
| **What is poverty?** | **How does growing up in poverty impact a child’s ability to learn?** |
| **What is the history of gang violence in Hartford?** | **How has gang violence impacted the city of Hartford?** |
| **What are the medical advancements that increase our life expectancy?** | **How have advancements in medicine altered the life expectancy of the human race, and how does that impact the Earth.** |
| **What is underage drinking?** | **What factors contribute to underage drinking and how can those factors be addressed in order to decrease underage drinking?** |

**\*Remember the research and essential question has to have a connection to your project or product that you are creating. For example, maybe researching how gang violence has impacted the city of Hartford will be connected to your organization of a peace rally, or community clean-up of any gang symbols, etc. Or maybe your cancer research will be related to your community initiative to raise awareness for the importance of colonoscopies.**

**The Research Paper (cont’d)**

**Format**

**The first paragraph of your paper is your introduction and should give the reader a brief view of the purpose of the paper and states the purpose of the research.**

**Clearly cite sources, giving credit to avoid plagiarism using APA format**

**Include Cover Page, in-text citations, Running Header and Reference page**

**Explore a clear answer to your essential question and draw conclusions about its impact**

**5-8 page paper**

**12 Font, Times New Roman, Double Spacing**

**Sources**

**A minimum of 5 sources must be listed; MAXIMUM of 2 RELIABLE websites**

**iCONN.org is a very good source for electronic journals (students can access this database using a library card number)**

**Wikipedia/Encyclopedias or Google searches do not count as sources**

**Field Work**

**You will be required to use your research and create a product or project that somehow serves your community. The Capstone project will require you to extend beyond the classroom and the school into the “field” in the process of creating your product. Your “field work” or work outside the classroom cannot simply be the extension of a current job or extracurricular activity. You must be involved in doing something that is new to you and represents a “learning stretch” in the process of creating the product. Fieldwork is not easy and you should not be paid for it. An absolute minimum amount of 15 hours is the requirement; however, your work done in the field will most likely exceed 15 hours.**

**How to document field work?**

* **Keeping track of hours and dates on time sheets in a *Field Work Log* (included in packet)**
* **Have mentor, or advisor can sign off on time sheets to verify hours in *Field Work Log***
* **Include photographs or video of your work as verification**
* **Include a minimum of 10 pages of journaling documenting the capstone process and your experience, field work, interactions with mentors, setbacks and highlights, anything related to the completion of the capstone task.**

**ALL PARTS OF THE ePortfolio are read carefully by the capstone teacher and Mrs. Boutilier. Documentation of field work experiences must be present in journals, and also be reflected in pictures and video, etc.**

**The Product**

**The product component of the Capstone project is the piece, or event that you have planned and created using your research as a guide. You must determine how to document this final product during the exhibition, and provide evidence in your ePortfolio of the work you have done. The final product must benefit the surrounding community in some way, and it must be clear in the exhibition how that was accomplished.**

 **Here are some ways to provide evidence of your work on the capstone project:**

* **Video of the event or project**
* **Slideshow of the event or project**
* **Testimonials of participants**
* **Letter from mentor documenting experiences with you.**

**The Capstone Electronic Portfolio**

**The capstone portfolio will be a thoughtful collection of artifacts that documents the student’s journey throughout the capstone project. The following MUST be included in the capstone electronic portfolio:**

* **Introduction to the portfolio and capstone experience**
* **Personal Mission Statement**
* **Final Job Shadow Reflection (documenting 1 of the 3 experiences)**
* **Project Proposal**
* **Research Paper**
* **Field Work Log (scanned with signatures verifying time spent on project)**
* **Journaling (minimum of 10 pages)**
* **Artifacts related to the Product/Project**
* **Video of event, pictures**
* **Slide show of event or project**
* **Testimonials**
* **The “product”, such as website or other piece that you have created for the project**
* **Final Capstone Reflection**

**The Capstone Exhibition**

**The capstone exhibition will be your opportunity to showcase your capstone project through your electronic portfolio. Your exhibition presentation should be multimedia in order to really tell the story of your capstone experience. The following MUST be included in your capstone exhibition presentation:**

* **Introduction and Personal Mission Statement**
* **Project Proposal**
* **Review of the research. (What did you find out from your research?)**
* **Present the Product**
* **Discuss the process of your capstone experience**
* **What new learning you have experienced?**
* **How did you STRETCH yourself?**
* **Setbacks and successes**
* **Career connections you have made through the process.**
* **Identify how the community has benefitted from your project.**
* **Closing Reflections and offer judges the opportunity to ask questions.**

**Appendices**

**Capstone Graduation Requirement**

***Due Dates and Timelines***

***(dates are subject to change)***

**Requirement Due Date**

**Student Capstone Orientation *September or January (semester 2)***

**Parent Letter and Senior Seminar Letter**

**Begin to Compose Your Personal Mission Statement**

**Project Proposal October/February (semester 2)**

**Mentor Designation**

**Parent/Guardian Consent Form**

***Rough Draft #1 Research* November/February (semester 2)**

**Final Research Paper December/March**

**Project/Product Completion March**

**Field Work/Journal Entries**

**ePortfolio Completion April 16th**

**Exhibition May 17th**

**Block Style Letter \* for Project Proposal**

**(Times New Roman, 12 point, vertically centered)**

**Your Address**

**Hartford, CT 06106**

**Month, Day, Year**

**Capstone Project Coordinator**

**Sport and Medical Sciences Academy**

 **280 Huyshope Avenue**

**Hartford, CT 06106**

**Dear Capstone Project Coordinator:**

**This is a sample of a Block Style Letter. Everything is typed at the left margin, and the top margin is two inches. There are four spaces between the date and the inside address. The side margins are one inch. (DS)**

**There is double spacing before and after the salutation and the paragraphs of the body of the letter. There is a double space from the body of the letter to the closing and four spaces from the closing to the typed signature. This letter is evidence of your ability to communicate in writing. (DS)**

**Sincerely yours,**

**(Signature)**

**Your full, typed name**

**\*This format should be used for all Capstone Project Letters.**

**(Adapted from North Providence High School)**

**Capstone Project**

***Parent/Guardian Consent/Liability Release Form***

**Dear Parent/Guardian:**

The Hartford Board of Education includes the incorporation of a senior Capstone Experience, which is a “senior demonstration project that offers evidence of mastery of essential skills and knowledge” (State Department of Education**). Therefore, all students at SMSA are required to complete a one credit Capstone Course in order to graduate. Completion of the Capstone requirements is solely the responsibility of the student**. The capstone project allows your student to showcase the skills they have mastered over the past 12 years, and provide them with the opportunity to further challenge themselves through an exciting project of their own design. The following are the required components of the capstone experience:

* Project Proposal
* Research Paper
* Product
* ePortfolio
* Exhibition

Please take some time to discuss the project with your child, and **initial each of the items below** indicating that you have read, and approve each.

\_\_\_\_\_ I approve my student’s project proposal.

\_\_\_\_\_ I acknowledge that the intent of the Capstone Project is to STRETCH my student to learn and demonstrate new skills and/or knowledge. I agree that my child’s Capstone project will achieve this goal.

\_\_\_\_\_ I understand that much of the work to complete the Capstone Project will be completed outside of school hours.

\_\_\_\_\_ I **understand that transportation for work related to the Capstone Project is the responsibility of the student or parent.**

**\_\_\_\_\_ I understand that any costs and risks associated with the Capstone Project are the responsibility of the student or parent.**

**\_\_\_\_\_**  I understand that the Capstone Project and all of its parts are a graduation requirement, and any student who chooses to not use **original work**, and therefore has **plagiarized** or **fabricated**, on any component of their research paper, fieldwork, product, or eportfolio, must complete an entirely new project by the due date, in order to graduate.

\_\_\_\_\_ I have reviewed my student’s capstone manual, including the requirements and rubrics.

**Name of Student (Please Print)**

**Capstone Project**

***Field Work Log***

**Senior’s Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Capstone Teacher’s Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Mentor’s Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| --- | --- | --- | --- | --- |
| **Date/ Time** | **Number of Hours** | **Work Accomplished** | **Difficulties/Solutions** | **Witness Sign Off** |
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**Capstone Project *Journaling Requirement***

The journaling component of the capstone project is to document your fieldwork as well as your experiences and learning through the capstone experience. These journals will provide evidence that you have completed your capstone project, and should reflect the time spent in your field work logs. Journals should be written with proper grammar, and will be displayed on the ePortfolio. **Journals should tell the story of your project from beginning to end, and should reveal the changes and growth that you have made throughout the year. (If you haven’t heard already, I read every word.)** The journaling is fairly open-ended; however here are some suggested topics that may be discussed when documenting your fieldwork and capstone experience.

* Brainstorm your preliminary ideas.
* Discuss your final proposal for your capstone project.
* Document any contact or discussions that you have with an individual who has a career that is related to your capstone project.
* Document with vivid detail the event, activity, or project that is considered your capstone product.
* Discuss challenges or obstacles that you encounter in the process.
* Document any “AHA” moments or any other significant revelations that you experience through the capstone experience.
* Discuss the SERVICE piece, how did that feel, how was your community impacted?
* Discuss when you are feeling challenged or stretched, or learning something new.

**Capstone Project *Portfolio Final Reflection***

This essay is your FINAL reflection regarding your capstone experience. In this reflection you are going to process your capstone experience. You are going to give the reader a real look at the journey your capstone project has taken you. Be sure to address the following in a minimum of 2 pages:

* Give a brief synopsis of your capstone project.
* What did you learn through your capstone project academically and personally? Discuss the realizations you have made through every step of the project, for example, through the research, field work, creating the product, or participating in the event, and presentation.
* What were the results of your project?
* Reflect on a specific experience and how it impacted you.
* **How did it feel to SERVE your community?**
* Discuss the areas of the project that were particularly challenging to you. Discuss any changes you would make now having the insight that you do now.
* How did what you learned from the capstone project impact you? How might this learning impact you in the future?

\*\*\* Be sure that your reflection and journal entries include **vivid** accounts of your actual experiences in order to keep the interest of the reader and **give more authenticity to your account of the capstone experience.**