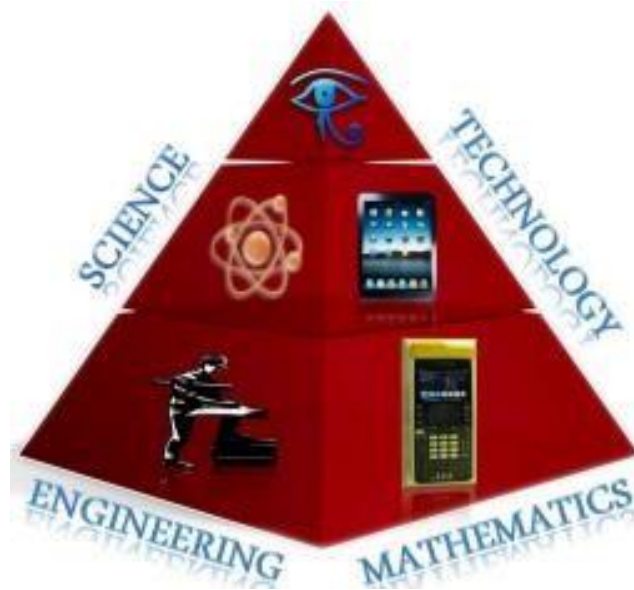


G.W. Carver High School
Senior Project Packet



2018-2019

Principal: Mr. Christopher B. Lindsey

Magnet Program Coordinator: Mrs. Victoria Neal

Definition and Description

The Senior Project is a performance-based exit requirement of the STEM Magnet Program of G.W. Carver High School. It consists of multiple requirements, ending in a presentation to a panel that will determine if credit is earned. The purpose of the Senior Project is to provide every student with the opportunity to explore and experience interdisciplinary topics of his or her choice. It is also intended to demonstrate competency in the skills that the G.W. Carver High School STEM Magnet program intends to instill in all students and serves as a culmination of a STEM student's magnet experience. Therefore, there must be a career or community service connection and the student must demonstrate knowledge and public presentation skills. The Senior Project is a requirement of all G.W. Carver High School STEM Magnet students. Failure to complete the Senior Project will result in the student not receiving their magnet seal on their diploma. To be successful with the Senior Project, there are several required steps.

Students must:

- 1) Choose a topic
- 2) Enlist the aid of an expert in the field of study who will serve as mentor. A Mentor Agreement Letter must be completed and saved in the Final Portfolio.
- 3) Complete an interview with the Mentor which will be documented in the Final Presentation visual aid and in the Final Portfolio.
- 4) Develop and implement a plan that draws upon knowledge from varied courses of study, and complete research to find solutions to problems relating to the project. This research will be documented in a Research Paper that will be included in the Final Portfolio.
- 5) Successfully log and maintain all records, research, visual aids, and material in a Final Portfolio.
- 6) Develop a final product to present during the Final Presentations.
- 8) Successfully present their Senior Project and Final Portfolio.
- 9) Write a Thank-You Letter to the Mentor.

TIMELINE AND DUE DATES

Details and examples of the items listed below are provided in Senior Project Packet.

A digital version of this document is available via Carver's school website.

Due Date	Item Required <i>(All items should be uploaded to Canvas and included in the project portfolio.)</i>	Notes
PART 1 August 24, 2018	▪ Parent and Student Assurance Form (p. 3)	
	▪ Senior Project Proposal Outline (p. 5)	
	▪ Mentor Agreement Form (p. 9)	
	▪ Proposed Mentor Interview Questions (p. 10)	
	▪ Student Learning Log (p. 15)	Minimum of 5 hrs. should be completed.
	▪ Presentation of progress to-date (p. 20)	Includes visual evidence of your progress
	▪ Updated portfolio (p. 19)	Shows all progress made to-date
PART 2 November 29, 2018	▪ Mentor Interview (p. 10)	Audio or visual evidence of the interview must be provided in the presentation
	▪ Mentor Interview Transcript (p. 10)	The transcript must be typed in its entirety
	▪ Mentor Interview Assessment Form (p. 13)	To be mailed or emailed by mentor, or delivered by student in a SEALED and SIGNED envelope (mentor must sign on the seal)
	▪ Outline of Research Paper (p. 18)	Must be typed
	▪ Student Learning Log (p. 15)	Minimum of 15 hrs. should be completed
	▪ Presentation of progress since Part 1 (p. 20)	Includes visual evidence of your progress
	▪ Updated portfolio (p. 19)	Shows all progress made to-date
PART 3 February, 7, 2019	▪ Research Paper (p. 18)	6-8 pages in MLA Format
	▪ Student Learning Log (p. 15)	Minimum of 25 hrs. should be completed
	▪ Presentation of progress since Part 2 (p. 20)	Includes visual evidence of your progress
	▪ Updated portfolio (p. 19)	Shows all progress made to-date
PART 4 March 28-29, 2019	▪ Final Mentor Assessment Form (p. 21)	To be mailed or emailed by mentor, or delivered by student in a SEALED and SIGNED envelope (mentor must sign on the seal).
	▪ Thank You letter to mentor	Type and upload to Canvas a thank you letter to your mentor
	▪ Student Learning Log (p. 15)	Minimum of 30 hrs. should be completed
	▪ Final Product (p. 19)	Performance or creation based on topic
	▪ Final Presentation (p. 20)	Students present their final product, presentation (to include reflections), and portfolio for final evaluation
	▪ Updated portfolio (p. 19)	Shows all progress made to-date

Parent and Student Assurance Form

I, as the sole person responsible for my own project and process, understand that I alone am responsible for my individual research and portfolio. I understand the requirements of this STEM Senior Project and understand that failure to complete this project and the Final Presentation will result in the loss of my Magnet Seal at graduation.

X _____
Student Signature *Date*

PARENTS/GUARDIANS:

If you have any questions or concerns about your student's progress in this class or on their Senior Project, please feel free to contact me through email at neal.victoria.a@muscogee.k12.ga.us. You can reach me at this phone number as well: (706) 748-2499.

I understand that if my student does not complete a Magnet Senior Project he or she will be at risk of not receiving a Magnet Seal from G.W. Carver High School. **I have read this entire packet, and I understand the basic requirements for my child's Senior Project as outlined within it.**

The best way to reach me concerning my child's Senior Project progress is:

(Please provide an email and/or telephone number).

X _____
Parent/Guardian Signature *Date*

Assurance Form Due Date: August 24, 2018

WHAT ARE SOME POSSIBLE TOPICS?

A Senior Project should not be a canned topic that is generic to all. It should be unique to you. You should strive to choose something new for you. The goal is to stretch yourself and get outside your comfort zone. The following is a list of topics that can be selected for your Senior Project. **This is NOT an exhaustive list.**

Animation	Learn a language (not Spanish)
App Development	Learn a musical instrument
Archery	Marathon (full/half)
Architecture	Marksmanship
Authorship (book, play, etc.)	Martial arts
Aviation	Masonry
Auto restoration	Mosaics
Ballroom Dance	Musical composition
Bee Keeping	Painting
Boxing	Photography
Broadcasting	Pottery
Carpentry	Quilting
Computer/web design	Radio Broadcasting
Cooking/Culinary Arts	Research in a lab
Costume/Fashion design	Rock Climbing
Crochet/Knitting	SCUBA
Cycling	Sewing
Dance/choreography	Sign language
Decathlon	Skeet Shooting
Directing	Stained glass
Dog Training	Tae Kwon Do
Drawing	Taxidermy
Event Planning	Triathlon
Fencing	Tumbling
Floral Design	Video production
Fly Fishing	Voice (*special permission needed)
Graphic art/design	Webpage design
Horseback riding	Welding
Interior design	Wood working/carpentry
Jewelry making	
Kayaking (rafting)	
Knife Making☺ Landscaping	

The Proposal

The Proposal is the plan created in conjunction with the Mentor to accomplish the Senior Project. **The proposal is due by August 24, 2018** and must be approved by the Senior Project Panel before work on the project begins. Proposals must be uploaded to the STEM Canvas page by the listed due date. The proposal must take the form of a short essay, and it must explain the work that will be done, the learning that will occur, a description of the work, and an idea of what the Final Presentation will look like. Please use MLA format (Times New Roman, 12 point font, 1-inch margins). All proposals should be at least 1½ pages in length. **A copy of your proposal should be placed in your Final Portfolio.**

Sample Senior Project Proposal Outline

- I. **Statement of Intent:**
 - a. The statement of intent explains what the project is about and how it connects to a community service, career exploration, or both. Explain why it connects to you and is something you have a vested interest in.

- II. **The Plan:**
 - a. What will you need to do to complete the project? What prior knowledge do you have to inform your decision to do this project and learning as you work on it. What resources (these can be human resources as well!) do you think may be helpful for you as you work on the project? What topics are you considering for your research paper?

- III. **The Mentor:**
 - a. Who will mentor you for this project? Why is he/she qualified to mentor you? How will the mentor help you throughout the project?

- IV. **Time Commitment, New Learning and Final Presentation:**
 - a. Explain how you intend to divide up the 30 hours? What are some new things you anticipate learning and when you do the final presentation, what ideas do you have about how you will demonstrate the new learning?

- V. **Conclusion:**
 - a. Why should the proposal be approved? Explain how this project will benefit you and/or the community (if community is applicable). How will it help you and your future?

Proposal Due Date: August 24, 2018

Sample Senior Project Proposal

Name

Senior Project Proposal

Date

I have chosen to explore the topic of children and their disabilities. I am interested in this topic for several reasons. Next year, I hope to study elementary education and possibly special education at Columbus State University. I also know, because of personal connections, that being disabled can create a variety of problems for a young child. I am aware of this problem because my cousin has been deaf since birth. I have several questions that I would like my research to answer. First, I would like to know what problems children with disabilities face. I would also like to know how they overcome these difficulties. I hope to take this information and use it as background for a children's book that would be appropriate for grades 1-3.

In order to write this book, I will need to know how to write for children and know more about disabilities and their impact on the very young. I have also found several books that would help me. The books are I Have a Sister--My Sister is Deaf by Jeanne Whitehouse Peterson, The Way to Write for Children by Joan Aiken, Writing Books for Children by Jane Yolen and Language Instruction for Students with Disabilities by Edward A. Polloway. In addition to this research, I have also started looking at potential topics for my research paper due in January. A topic I plan to pursue is the change in Department of Education under Secretary Betsy DeVos. Secretary DeVos is known to be a proponent of school vouchers and charter

schools. I plan to look at both sides of this issue and figure out whether federal support for vouchers and charter schools will be beneficial or harmful for children with special needs.

Jill Book, an elementary school special education teacher, has agreed to be my mentor. I have arranged to shadow Ms. Booker as she works with her students. I plan to interview her and a few of her students to get a better idea of what disability I wish to focus on throughout my project.

Although I haven't really decided what my presentation will be in the spring. I think I would like to have the opportunity to read my book to a local elementary school class. Perhaps I could videotape that experience and discuss the outcomes when I present.

The Mentor

The Mentor is any individual who has expertise in the area of the Senior Project. The mentor will guide the senior, suggest resources, (especially reading material) participate in an interview designed to provide an overview of the subject area, help solve problems, and supervise the student's progress. The mentor may be any adult, over the age of 21 and not a member of the student's immediate family, who can guide the student responsibly in his or her field of study.

Your Mentor will:

1. Help define the Senior Project focus.
2. Help define and accomplish reasonable goals.
3. Suggest resources (relevant books, articles or manuals) and methods to the student.
4. Be aware of the progress the student is making and be prepared to help the student through any problems he or she may encounter.
5. Participate in an interview and fill out and sign the Interview Assessment form.
6. Verify that the project has been completed/attempted and represents learning goals, quest for quality, acceptable performance and meets or exceeds the time requirement (minimum 30 hours; 20 field experience 10 research and development).
7. Fill out and sign a Mentor Agreement form.
8. Sign learning log.
9. Ensure completion of visual aide and final product.
10. Contact the seniors' Magnet Program Coordinator if any problems arise.

How do I find a mentor?

- Find someone in our community who works as a professional or semi-professional (they should have licensure or certification) in the field you want to study. Contact them, explain the program, and ask if they will serve as your mentor.
- Look for classes in the community that are offered in the subject you are doing. Many times the teachers of those classes will agree to serve as your mentor.
- Network! Have your parents to ask their friends and coworkers if they know of someone who might serve as your mentor.
- Mentors must be over 21 years old. You may not choose a relative or family friend.

Mentor Agreement Form

GWCHS Senior Project

I have agreed to serve as a mentor to _____ (senior's name) for the duration of the proposed Senior Project. I understand that my responsibilities will be the following:

- Help the senior define his/her Senior Project focus
- Help the senior accomplish/attempt reasonable goals
- Suggest resources (relevant books, articles or manuals) and methods for the senior
- Be aware of the progress the senior is making and be prepared to help him or her through any problems he or she may encounter
- Participate in an interview, fill out and sign the Interview Evaluation form
- Verify that the project has been completed/attempted and represents learning goals, quest for quality, acceptable performance and meets or exceeds the time requirement (minimum 30 hours)
- Fill out and sign a Mentor Agreement form
- Fill out and sign an Interview Assessment form
- Fill out and sign a Mentor Assessment form
- Read and sign the senior's learning log entries to verify his/her process, progress, and time spent on the project

I agree to notify the Magnet Coordinator, Victoria Neal, at G.W. Carver High School at (706)748-2499 or by email at neal.victoria.a@muscogee.k12.ga.us if there is a need for consultation during the course of the Senior Project.

Mentor Contact Information

Mentor's Name (please print): _____

Mentor's Address: _____

Mentor's Phone Number: _____

Email (Required): _____

Mentor's Signature: _____

Student's Signature: _____

Parent/Guardian Signature: _____

Agreement Form Due Date: August 24, 2018

The Mentor Interview

The purpose of interviewing the mentor is for the student to gain a clearer picture of his or her experience in the field the student is exploring. Before the student conducts the interview, there should be at least **ten** questions prepared and approved during Part 1 of the project.

Proposed Questions Due Date: August 24, 2018

Once the proposed interview questions have been approved, the interview may be conducted. It should take at least 20 minutes and may be done in person or over the phone. **Please do not simply have your mentor respond to questions via email.** A typed transcript of the interview must be included in the Final Portfolio and submitted into the STEM Canvas page by no later than **November 29, 2018**. In the typed transcript, be sure to introduce your interviewee and state the location of the interview (see sample transcript). Students should also record (visual or audio) the interview to include in their visual aid for their presentation. After completion of the interview, students should have their Mentor complete the Interview Assessment Form and return the form to the Magnet Coordinator by no later than **November 29, 2018**. **A copy of your interview transcript should be placed in your Final Portfolio.**

Interview Transcript Due Date: November 29, 2018

Interview Transcript Sample

Interview Transcription

Interview Conducted January 1, 2018

Interviewers Name

I interviewed Ms. C.S. who is a graduate of Georgia State University in Atlanta, Ga. Ms. C.S. is a 30 year old female with no children who is currently applying for Graduate school. Ms. C.S. hopes to one day become a math professor. For this interview, Ms. C.S. met me at Barnes and Noble where the interview was conducted.

Interviewer (I): Hey C.S.! Thank you so much for taking time out of your busy schedule to let me interview you. This interview will focus on your views of student academic achievement. I am interested in your thoughts and opinions so please be open and ask any questions that you may have.

C.S. (C): Okay let me put on my thinking cap. I am excited!

(I): Question 1: When you hear the phrase “student achievement” what are your thoughts?

(C): When I think of student achievement, I think of it as being multifaceted. In the areas of academics, extracurricular activities, and interpersonal skills. That way it prepares students for not just the present but for the future as well.

(I): Okay that is very insightful. Question 2: What factors do you think contribute/influence student achievement?

(C): I feel that community is a huge factor in influencing student achievement. Future aspirations also influence student achievement as well as peer/familial support. Also, a teacher that is interesting and engaging contributes to student achievement.

(I): Last Question: How do you believe student success should be measured?

(C): Student success should be measured not only by academic achievement (grades), but also be community service, their social adaptability, and their execution after receiving certain competencies and knowledge. By this I mean that if they receive the knowledge and training, they should use it.

(I): Wonderful. Is there anything that you would like to add about your thoughts on student achievement?

(C): No but I want to use the UNCF slogan which is "A mind is a terrible thing to waste but a wonderful thing to invest in." This sums up my ideas on student achievement.

(I): Okay that concludes our interview. Again, thank you so much for taking time out of your schedule to help me out and allowing me to interview you.

(C): No problem at all. I see it as investing in the mind of a student.

Interview Assessment Form

Dear Mentor,

Thank you for volunteering your time to meet and talk with a senior concerning his or her Senior Project. The interview process is an important element in the Senior Project because it gives the senior a broader perspective of your experience in the area he or she is studying.

The time, place, and approximate length of the interview should have been arranged with you prior to the interview. We would find it very helpful if you would take a few minutes to complete this evaluation form concerning the interview. We would like you to help us determine how effectively the student utilized the opportunity. You may either give this completed evaluation in a sealed and signed (please sign across the seal) envelope to the student after the interview, or mail it to the Magnet Coordinator at G.W. Carver High School, 3100 Eighth Street, Columbus, GA 31906. Your evaluation is part of his or her grade; therefore, please return this form prior to **November 29, 2018**.

Thank you again for taking time to share your expertise and to participate in our Senior Project.

Sincerely,

George Washington Carver High School
Magnet Program

Interview Assessment Form

TO BE COMPLETED BY THE STUDENT:

Student Name: _____

Senior Project Topic: _____

TO BE COMPLETED BY THE MENTOR BEING INTERVIEWED:

Mentor's name: _____

Address: _____

Phone Number: _____

_____ Email: _____

Did the student arrive punctually for the interview? Yes ____ No _

Was the student prepared with questions? Yes ____ No ____

What was the total interview time? _____ Min./Hr. _____

Did the student take notes? Yes __ No ____

Signature: _____

Please feel free to write additional comments: _____

Interview Assessment Due Date: November 29, 2018

The Learning Log

An extremely important part of the Senior Project is the learning log. Learning logs represent a special kind of journal keeping in which the student will record what is going on with the project. The personalized tracking of the student's involvement in this experience should not only encourage active learning, but also help students reflect on the process. Students should actively reflect on their progress and what has been learned, as well as make connections and comment on the value of their discoveries.

Students are required to complete a minimum of 30 hours for their project.

The mentor will need to sign each entry to verify the time spent. The learning logs will need to be turned in to the Magnet Coordinator (See Schedule below). Students will scan a copy of the learning log and submit it to the assignment on the STEM Canvas page.

The Learning Log is where you will record the date, time and a detailed description of the activity completed.

- It should state what exactly is done during that time and include at least one of the following:
 - New skills & techniques learned
 - Growth/successes
 - Problems encountered
 - Challenges
- **Any time spent working on your project must be documented in the Log**
 - **20** hours must be spent with your mentor
 - **10** hours can be spent on research and development (no more than 10 hours can be recorded for research and development).
- You must list the times for each entry, not the hours. Ex: 5:00 – 6:00 not 1hr.
- For each event on the learning log you need to provide photo/video evidence to include in your Final Presentation visual aid.
- **A copy of your learning logs and at least 2 pictures per learning log activity should be placed in your Final Portfolio.**

Learning Log Due Dates

August 24, 2018

November 29, 2018

February 7, 2019

March 28-29, 2019

Student Learning Log Sample

Month: November 1-December 8, 2017

Date	Time	Place	Specific Task/Activity	Mentor Signature
Monday 6/3/10	4:45-6:00 1hr. 15 min.	Columbus School of Music	Practiced songs from theory book and scales on my guitar. Songs: Twinkle Twinkle Little star & God Bless America GOOD EXAMPLE	
Wednesday 6/5/10	About an hour	Atlanta, GA	Went to a concert. Listened to guitar. BAD EXAMPLE	

Student Learning Log

Month: _____

Date	Time	Place	Specific Task/Activity	Mentor Signature

I, _____, do hereby attest that I have completed these hours with fidelity and within the guidelines of the stated expectations of the project.

X _____
Student Signature

Date: _____

X _____
Mentor Signature

Date: _____

The Research Paper

The majority of the Senior Project will be based on primary research, (i.e.: research that is generated by the student and with learning that the student actively creates). However, the Senior Project Research Paper is based solely on secondary research. Secondary research comes from books, articles, and other sources.

The Senior Project Research Paper should focus on a problem within their selected topic (i.e. if my topic is radio broadcasting, my research paper could focus on losing listeners due to the growth of internet radio broadcasting). The purpose of the research paper is to identify potential problems and to educate the student of any challenges that people working in the selected field may face.

Each Research Paper should address the following:

- What is a problem within your topic
- Why is this a problem
- Offer plausible solutions to this problem (more than one)

An outline of the research should be submitted before the paper is completed. The outline may follow the bulleted items above. It is due **November 29, 2018**.

Outline due date: November 29, 2018

The research paper should be between 6-8 pages and should contain at least 3 scholarly sources. In any research, it is possible to encounter conflicting points of view. It is the student's task to understand the material and to distinguish between opinion and fact. The student's task in the paper is to identify problems within the field and to identify any available solutions to these problems.

The final research paper should be submitted in MLA format (Times New Roman, 12 point font, 1-inch margins) and should include a title page (with students name, date, and Topic listed) and a works cited page (be sure to cite ALL sources used. **A copy of your research paper should be placed in your Final Portfolio.**

Research paper due date: February 21, 2019

The Portfolio

The portfolio is the reflection of your project journey. It should “tell the story” of why you chose your topic, secured your mentor, what you learned, etc. You can use a binder or the like to display your project artifacts. Feel free to be creative with the cover! The portfolio should be started at the beginning with items added during each part of the project.

Portfolio Due Dates

August 24, 2018

November 29, 2018

February 7, 2019

March 28-29, 2019

The Final Product

The final product for the Senior Project is a product or a performance that the senior will complete based on their selected topic. This final product will show growth in the senior’s selected field of study. Your final product for your Senior Project will vary depending on your selected topic. If you choose dance then your final product can be your performing a dance or it can be a video of you performing in a dance recital. If your chosen topic is video game development then your final product can be a test run of a video game that you have developed. Be creative with your final products! Final products will be shown/performed during Senior Presentations.

Final Product due date: March 28-29, 2019

The Presentations

The culminating activity for your STEM Senior Project is your Senior Project Final Presentation. You should start building your final presentation at the beginning of the project. A visual aid is required for your presentation. This visual aid can be created using any form of digital media (PowerPoint, Prezi, Photostory, Moviemaker, IMovie etc.). The visual aid should document the development of your senior project from beginning to end. It should include video/audio snippets of your mentor interview and documentation of you doing your project. The final presentation should include a reflection on your thoughts and feelings about your senior project.

The items required for each part of your presentation are listed below and on the Timeline and Due Dates chart on p. 2 of this packet.

- Introduce your chosen topic in a creative manner – **Part 1**
- Give an overview of what your presentation will include – **Part 1**
- Discuss why you chose this topic – **Part 1**
- Provide information about your mentor – **Part 1 & 2**
- Discuss the topic of your research paper and your findings – **Part 3**
- Recap your Senior Project Journey (discuss challenges, successes, interesting things etc.) – **Part 4**
- Personal reflection (what did you learn, how have you changed, is there anything you would do differently, etc.) – **Part 4**
- Show your visual aid(s) – **Part 4**

Please make plans for ALL technical difficulties. Be sure to save your presentation on a flash drive, in the OneDrive, etc. Also, be sure to test run your presentation to ensure that all technology is working.

Final Presentation due date: March 28-29, 2019

Mentor Assessment Form

Student's Name: _____

Student's Project: _____

Please provide a brief commentary on the student's overall commitment and performance. Please feel free to address issues such as student's attendance, attire, initiative, skill level, and progress. This Assessment may be completed on this form or it can be typed and emailed to Mrs. Victoria Neal at neal.victoria.a@muscogee.k12.ga.us. Please submit this form by no later than **March 28-29, 2019**.

- 5 - Outstanding, exceptional commitment
- 4 - Above average, strongly committed
- 3 - Average or mediocre commitment
- 2 - Inconsistent commitment
- 1 - Apathetic, unengaged, difficult

X _____ Date: _____

Mentor's Signature

Mentor Assessment due date: March 28-29, 2019