

Senior Capstone Project Class of 2018

Advanced Technologies Academy



Senior Capstone Project Calendar

Class of 2018

- **September 13-14: Senior Project Begins**
 - Seniors will receive Senior Capstone Project Packets in program area class.
- **September 20-21: Initial Process/Product Proposal Due**
 - Student turns in proposal to program area teacher. See page 6 for guideline.
- **September 27-28: Initial Argumentative Research Proposal & Parent Letter Due**
 - Students turn in research project proposal to English teacher. See page 7 for guideline.
 - Students turn in parent letter (page 15) to program area teacher.
- **Week of October 2: First Teacher Mentor Meeting: Proposal Pitch**
 - See page 5 for guidelines.
- **October 11-12: Final Argumentative Research Paper Proposal Due**
 - Final research paper plan due to English teacher
- **October 18: Final Process/Product Proposal Due**
 - Final process/product proposal approved by program area teacher.
- **November 13: Rough Draft of Research Paper Due**
 - Rough draft of research paper must be printed and turned in to English teacher. See pages 8-10 for research paper requirements and rubric.
- **Week of November 13: Argumentative Research Paper Peer Review in English Class**
 - A printed and complete draft of your research paper is due in English class.
- **November 27: Second Rough Draft of Argumentative Research Paper Due**
 - Rough draft of research paper must be printed and turned in to Teacher Mentor. See pages 8-10 for research paper requirements and rubric.
- **Week of December 4: Second Teacher Mentor Meeting**
 - Students will check-in with Teacher Mentor and briefly discuss progress in the paper and project. Please see page 5 for reference.

- **December 13: Final Draft of Argumentative Research Paper Due**
 - Final Draft of paper must be sent electronically, via Gmail, to your Teacher Mentor and submitted via TurnItIn.com to your English teacher. See pages 8-10 for research paper requirements and rubric.
Research Papers will be graded by Teacher Mentor on or before January 12, 2018.
- **Week of January 22: Third Teacher Mentor Meeting: Presentation Approval and Final Portfolio Due**
 - Students will formally present their Presentation Day Plan to their Teacher Mentor. See page 5 for meeting guideline and page 12 for presentation outline. If the Presentation Day Plan is approved by the Teacher Mentor, the student will schedule their Class Presentation Day date at this time with their mentor.
 - If a Teacher Mentor is a counselor or administrator, arrangements will be made for the student to present to a class.
 - If the Presentation Day Plan is NOT approved, they will need to schedule a time to return to their mentor either before or after school to get the plan approved and set their Presentation Day time.
 - The Final Portfolio will be turned in to the program area teacher January 24-25. See page 11 for requirements and rubric.
- **February 13: Presentation Day**
 - Seniors will present in their Teacher Mentor's class during the scheduled time. Otherwise, seniors will be in their classes. See page 13 for rubric.
- **February 14: Senior Showcase Day**
 - Seniors will set up in their designated areas. Seniors will speak with a variety of visitors from the school district, state, school, and community regarding their project process and outcomes. Seniors will also display their portfolios alongside their project displays. See page 14 for rubric.

Mentor Meeting Guideline

First Mentor Meeting: Week of October 2

- **Prior to first meeting:** Students will write a brief self-introductory letter to their Teacher Mentor. Students will provide the mentor with their school Gmail address, program area, and briefly describe their project and research proposal.
- **Day of meeting:** Students must be prepared to discuss their research proposal and project proposal to their mentor. Students must explain their thesis, why/how it is an argument, and how it connects to the project.

Second Mentor Meeting: Week of December 4

- Mentors will discuss the argumentative research paper rubric score and give students feedback on how to improve their paper's grade. Students must review feedback and make changes to their paper based on feedback to improve the paper's grade.

Third Mentor Meeting: Week of January 22

- Students will present a complete outline of their project presentation, including total presentation time estimate. Mentors will approve presentations only if the presentations are ready. If a presentation is approved, the student and Teacher Mentor will arrange a time for the student to come into the mentor's class to present on February 13.
 - If a Teacher Mentor is a counselor or administrator, arrangements will be made for the student to present to a class.
- Final portfolios will be turned into program area teacher, not mentors, on January 24-25.

Senior Capstone Process/Product Proposal Guidelines

Submit to Program Area Teacher

Use this sheet as a guide to help create a formal proposal for the senior capstone project. Senior students need to address the research topic they will be writing about.

I. Process or Product Proposal (Only One)

- a. Complete a process (Examples: do volunteer work, plan an event, complete an internship, etc.)
- b. Complete a Product (Examples: design a marketing plan, create a household or other tool, build a structure, etc.)

See the appropriate section based on project chosen.

A. Process

1. Describe process in detail.
2. How will time be spent completing project?
3. How is process of the project connected to the research paper?
4. How will this process be displayed and show what was learned for Senior Presentation Day?

B. Product

1. Describe the product in detail.
2. How will time be spent completing project?
3. How is process of the project connected to the research paper?
4. How will this product be displayed and show what was learned for Senior Presentation Day?

Argumentative Research Paper Proposal Guidelines

Submit to English Teacher

Use this sheet as a guide to help create a formal proposal for the senior capstone project. Senior students need to address the research topic they will be writing about.

Brainstorming Research Topic

1. What is the driving question (to drive your research)?
2. What is being proven via research?
3. How does this connect to the senior project?

Part I: Subject

What aspect of the project can this argumentative research paper help strengthen? What is being proven in the research? Why? How does this subject connect to the project?

Part II: The Argumentative Angle

Is the subject truly debatable? For instance, if the argument is that sugar in large quantities is detrimental to your health, is there anyone saying it's not detrimental? If not, the thesis is not arguable. However, if the argument is that high fructose corn syrup is worse for your health than natural sugars, there is a lot of evidence that will support and question the thesis. It's important that a position is taken on a debatable subject; otherwise the paper will fall flat.

Write in this section a paragraph explaining how and why the subject you are researching is argumentative in nature.

Part III: Thesis Statement

Write out the thesis statement as it will appear in the paper. Describe in detail how it is an argumentative thesis and what kind of research will be needed to successfully defend the thesis statement.

Helpful Resources

WikiHow Article: <http://www.wikihow.com/Write-an-Argumentative-Research-Paper>



Argumentative Research Paper Requirements & Rubric

Graded by Teacher Mentor

Final Drafts must be submitted to English teacher’s turnitin.com account and to Teacher Mentor via school Gmail by December 13. Failure to submit to turnitin.com is an automatic zero in the English teacher’s gradebook.

Paper will be 10% of final grade in English class for 3rd quarter.

Student Name: _____

Paper Requirements

- See attached rubric (pg. 9-10) for explanation of the 5 categories
 1. Statement of Purpose/Focus
 2. Organization
 3. Development: Elaboration of Evidence
 4. Language & Vocabulary
 5. Conventions
- 5-7 pages minimum
- APA style
 - Double spaced
 - 1” margins
 - 12 pt. Times New Roman font
 - Cover page & works cited
- Hard copy of rough draft paper turned in to teacher mentor (see timeline for deadline)

Paper Rubric

Statement of Purpose/Focus	4 <i>Exceeds Standard</i>	3 <i>Meets Standard</i>	2 <i>Approaches Standard</i>	1 <i>Begins Standard</i>	0 <i>Missing</i>
Organization	4 <i>Exceeds Standard</i>	3 <i>Meets Standard</i>	2 <i>Approaches Standard</i>	1 <i>Begins Standard</i>	0 <i>Missing</i>
Development: Elaboration of Evidence	4 <i>Exceeds Standard</i>	3 <i>Meets Standard</i>	2 <i>Approaches Standard</i>	1 <i>Begins Standard</i>	0 <i>Missing</i>
Language & Vocabulary	4 <i>Exceeds Standard</i>	3 <i>Meets Standard</i>	2 <i>Approaches Standard</i>	1 <i>Begins Standard</i>	0 <i>Missing</i>
Conventions	4 <i>Exceeds Standard</i>	3 <i>Meets Standard</i>	2 <i>Approaches Standard</i>	1 <i>Begins Standard</i>	0 <i>Missing</i>

Overall Rating: _____/20

Argumentative Research Paper Rubric

	4 Exemplary – Exceeds Standard	3 Proficient – Meets Standard	2 Partial – Approaches Standard	1 Minimal – Begins Standard
Statement of Purpose/Focus	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> effectively and consistently focuses on a clearly identified purpose and topic throughout <input type="checkbox"/> effectively introduces precise, knowledgeable claim(s) <input type="checkbox"/> effectively establishes the significance of the claim(s) <input type="checkbox"/> clearly distinguishes the claim(s) from alternate or opposing claim(s) <input type="checkbox"/> effectively anticipates the audience’s point of view: <ul style="list-style-type: none"> <input type="checkbox"/> knowledge level <input type="checkbox"/> concerns <input type="checkbox"/> values <input type="checkbox"/> possible biases relative to the claim 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> adequately focuses on an identified purpose and topic <input type="checkbox"/> adequately introduces precise, knowledgeable claim(s) <input type="checkbox"/> adequately establishes the significance of the claim(s) <input type="checkbox"/> distinguishes the claim(s) from alternate or opposing claim(s) <input type="checkbox"/> adequately anticipates the audience’s point of view: <ul style="list-style-type: none"> <input type="checkbox"/> knowledge level <input type="checkbox"/> concerns <input type="checkbox"/> values <input type="checkbox"/> possible biases relative to the claim 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> somewhat focuses on an identified purpose and topic <input type="checkbox"/> introduces claim(s), but claim(s) may be unclear and unfocused <input type="checkbox"/> partially establishes the significance of the claim(s) <input type="checkbox"/> somewhat acknowledges the existence of alternate or opposing claim(s) <input type="checkbox"/> somewhat anticipates the audience’s point of view: <ul style="list-style-type: none"> <input type="checkbox"/> knowledge level <input type="checkbox"/> concerns <input type="checkbox"/> values <input type="checkbox"/> possible biases relative to the claim 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> shows a minimal focus on purpose and topic, and response may be very brief <input type="checkbox"/> shows an attempt to introduce claim(s), but claim(s) may be confusing or ambiguous <input type="checkbox"/> does not establish the significance of the claim(s) <input type="checkbox"/> does not acknowledge the existence of alternate or opposing claim(s) <input type="checkbox"/> shows a minimal consideration of the audience’s point of view: <ul style="list-style-type: none"> <input type="checkbox"/> knowledge level <input type="checkbox"/> concerns <input type="checkbox"/> values <input type="checkbox"/> possible biases relative to the claim
Organization	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> uses a clear and effective organizational structure that effectively and logically sequences claims, counterclaims, reasons and evidence creating unity and completeness <input type="checkbox"/> effectively and consistently uses a variety of transitional strategies (efficient and meaningful words, phrases and clauses, as well as varied syntax) to: <ul style="list-style-type: none"> <input type="checkbox"/> link major sections of the text <input type="checkbox"/> make strong connections among ideas <input type="checkbox"/> clarify relationships between <ul style="list-style-type: none"> <input type="checkbox"/> claims and reasons <input type="checkbox"/> reasons and evidence <input type="checkbox"/> claims and counterclaims <input type="checkbox"/> provides an effective introduction <input type="checkbox"/> provides a powerful conclusion that follows from and effectively supports the argument presented 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> uses an evident organizational structure that adequately sequences claims, counterclaims, reasons and evidence creating a sense of completeness <input type="checkbox"/> adequately uses transitional strategies (words, phrases and clauses, as well as varied syntax) with some variety to: <ul style="list-style-type: none"> <input type="checkbox"/> link major sections of the text <input type="checkbox"/> make adequate, if slightly inconsistent, connections among ideas <input type="checkbox"/> clarify relationships between <ul style="list-style-type: none"> <input type="checkbox"/> claims and reasons <input type="checkbox"/> reasons and evidence <input type="checkbox"/> claims and counterclaims <input type="checkbox"/> provides an adequate introduction <input type="checkbox"/> provides a conclusion that follows from and adequately supports the argument presented 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> uses an inconsistent organizational structure that partially sequences claims, reasons and evidence with some evident flaws <input type="checkbox"/> inconsistently uses basic transitional strategies (some words, phrases or clauses) with little variety to <ul style="list-style-type: none"> <input type="checkbox"/> link major sections of the text <input type="checkbox"/> make limited connections among ideas <input type="checkbox"/> provides a limited introduction <input type="checkbox"/> provides a conclusion that partially and weakly supports the argument presented 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> uses little or no discernible organizational structure <input type="checkbox"/> uses few or no transitional strategies (limited language structures) with frequent extraneous ideas that may intrude <input type="checkbox"/> provides a minimal or no introduction <input type="checkbox"/> does not provide a conclusion that supports the argument presented

	4 Exemplary – Exceeds Standard	3 Proficient – Meets Standard	2 Partial – Approaches Standard	1 Minimal – Begins Standard
Development: Elaboration of Evidence	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> develops and justifies claim(s) and counterclaim(s) fairly, thoroughly and insightfully <input type="checkbox"/> supplies thorough and convincing support/evidence: <ul style="list-style-type: none"> o facts o extended definitions o concrete details o quotations/other information o strong examples <input type="checkbox"/> effectively uses a variety of elaborative techniques <input type="checkbox"/> effectively uses evidence from sources that is smoothly integrated, comprehensive, relevant and concrete 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> develops and justifies claim(s) and counterclaim(s) fairly and thoroughly <input type="checkbox"/> supplies adequate relevant support/evidence: <ul style="list-style-type: none"> o facts o extended definitions o concrete details o quotations/other information o strong examples <input type="checkbox"/> adequately uses some elaborative techniques <input type="checkbox"/> adequately uses some evidence from sources that is integrated, though citations may be general or imprecise 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> develops claim(s) and counterclaim(s) fairly <input type="checkbox"/> supplies some relevant support/evidence: <ul style="list-style-type: none"> o facts o details o examples o quotations o examples <input type="checkbox"/> uses weak or uneven elaborative techniques <input type="checkbox"/> uses evidence from sources that is weakly integrated, and citations, if present, are uneven 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> attempts to develop claim(s) and counterclaim(s) <input type="checkbox"/> provides little or no relevant support/evidence: <ul style="list-style-type: none"> o facts o details o examples o quotations o examples <input type="checkbox"/> use little or no elaborative techniques <input type="checkbox"/> uses little or no evidence from sources or evidence that is erroneous or irrelevant
Language and Vocabulary	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> clearly and effectively expresses ideas, using precise words, phrases and clauses to manage the logic and clarity of the argument <input type="checkbox"/> uses academic and domain-specific vocabulary that is clearly appropriate for the audience and purpose <input type="checkbox"/> effectively establishes and maintains a formal style and objective tone 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> adequately expresses ideas, employing a mix of precise with more general words, phrases and clauses to support the logic of the argument <input type="checkbox"/> uses domain-specific vocabulary that is generally appropriate for the audience and purpose <input type="checkbox"/> adequately establishes and maintains a formal style and objective tone 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> unevenly expresses ideas, using simplistic words, phrases and clauses to support the logic of the argument <input type="checkbox"/> uses domain-specific vocabulary that may at times be inappropriate for the audience and purpose <input type="checkbox"/> partially establishes a formal style and objective tone 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> expresses vague, unclear or confusing ideas, rarely using words, phrases and clauses that support the argument <input type="checkbox"/> uses limited language or domain-specific vocabulary <input type="checkbox"/> rarely establishes a formal style and objective tone
Conventions	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> demonstrates a strong command of conventions: <ul style="list-style-type: none"> o demonstrates effective use of capitalization, punctuation, and spelling, with insignificant errors that need little or no editing o effectively demonstrates correct usage of hyphenation conventions o demonstrates few, if any, errors in usage and sentence formation 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> demonstrates an adequate command of conventions: <ul style="list-style-type: none"> o demonstrates adequate use of capitalization, punctuation, and spelling, with few errors that need editing but do not distract from the argument o adequately demonstrates correct usage of hyphenation conventions o demonstrates some minor errors in usage and sentence formation that do not obscure meaning 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> demonstrates a partial command of conventions: <ul style="list-style-type: none"> o demonstrates inconsistent use of capitalization, punctuation, and spelling, with errors that need editing to clarify the argument o sometimes demonstrates correct usage of hyphenation conventions o demonstrates frequent errors in usage and sentence formation that may obscure meaning 	<p>The writer</p> <ul style="list-style-type: none"> <input type="checkbox"/> demonstrates a lack of command of conventions: <ul style="list-style-type: none"> o demonstrates incorrect use of capitalization, punctuation, and spelling, with frequent and severe errors that need editing to convey the argument. o seldom demonstrates correct usage of hyphenation conventions o demonstrates frequent and severe errors in usage and sentence formation that often obscure meaning

Portfolio Requirements and Rubric

Graded by Program Area Teacher

Portfolios must be kept in a Google Drive Folder as determined by program teacher.

Portfolio will be 30% of final grade in Program Area class for 3rd quarter.

Student Name: _____

Portfolio Requirements

- **Cover Page**
- **Log of Hours:** Students must create a log and provide descriptions of activities. Students are responsible for tracking their hours specifically as it relates to product/process development and their presentations. Students must account for a minimum of 15 hours outside of class.
- **Resume**
- **Reflection Essay:** Students will write an essay that describes what they learned from completing the senior project and ways to improve the project in the future.
- **Visual Documentation:** Photos, fliers, charts, graphs, or other visual documentation of project as it takes shape.
- **Final Draft of Research Paper**

Portfolio Rubric

Portfolios will be graded by the student’s program area teacher. The grade will be based on providing the required items and the quality of the items. Quality is determined by neatness, clarity, creativity, originality, and amount of effort shown for each item.

Cover Page	0 <i>Missing</i>	1 <i>Incomplete</i>	2 <i>Below Average</i>	3 <i>Average</i>	4 <i>Above Average</i>	5 <i>Excellent</i>
Log of Hours	0 <i>Missing</i>	1 <i>Incomplete</i>	2 <i>Below Average</i>	3 <i>Average</i>	4 <i>Above Average</i>	5 <i>Excellent</i>
Resume	0 <i>Missing</i>	1 <i>Incomplete</i>	2 <i>Below Average</i>	3 <i>Average</i>	4 <i>Above Average</i>	5 <i>Excellent</i>
Reflection Essay	0 <i>Missing</i>	1 <i>Incomplete</i>	2 <i>Below Average</i>	3 <i>Average</i>	4 <i>Above Average</i>	5 <i>Excellent</i>
Visual Documentation	0 <i>Missing</i>	1 <i>Incomplete</i>	2 <i>Below Average</i>	3 <i>Average</i>	4 <i>Above Average</i>	5 <i>Excellent</i>
Research Paper	0 <i>Missing</i>	5 <i>Included</i>				

Overall Rating: _____/30

Senior Project Presentation

General Outline and Guiding Questions

Presentations should be 8 to 10 minutes in length and should be centered on or culminate in the presentation of your capstone product. Multimedia presentations may accompany your presentation but are not considered the product itself (although, in the case of a video clip, your product can be embedded in a multimedia accompaniment).

I. Acknowledgements and thesis

II. Context:

- Why did you choose the project you chose?
- What's your background knowledge and experience relating to your topic?
- What was your project goal?

III. Body/Development

- How did the experience go?
- What were the challenges?
- What were the joys?
- What did you learn from the experience that you would like your audience to leave with or act on?
- What is the central message that you would like to illustrate related to your topic?
- What did you research?
- How did this tie in with your project overall?

IV. Presentation of Product/Process

V. Final Thoughts

- How does your experience relate to anything the audience should consider?

VI. Call to Action

- What would you like your audience to do or think?

VII. Questions and Answers

Senior Project Presentation Rubric

Graded by Teacher Mentor

Student Name: _____

	Does Not Meet Expectations (1)	Meets Expectations (3)	Exceeds Expectations (5)
<i>Project Overview</i>	Project overview was <u>not clearly</u> explained.	Project overview was <u>adequately</u> explained.	Project overview was <u>clearly</u> explained.
<i>Connection to Program Area</i>	Project has a <u>minimal or no connection</u> to program area.	Project has a <u>connection</u> to program area.	Project is <u>clearly connected</u> to program area.
<i>Explanation/Presentation of Final Process/Product</i>	Student's explanation was <u>hard to understand</u> through the project process and what the outcome of the process was.	Student's explanation was <u>understood</u> through the project process and what the outcome of the process was.	Student's explanation was <u>clearly understood</u> through the project process and what the outcome of the process was.
<i>Presentation Skills</i>	Student was <u>late</u> to presentation and/or presentation <u>lacked organization</u> . Student was <u>not prepared</u> for presentation.	Student was <u>on time</u> and presentation was <u>organized</u> . Student was <u>prepared</u> for presentation.	Student was <u>on time</u> and presentation was <u>very organized</u> . Student was <u>clearly prepared</u> and has rehearsed for presentation.

Project Overview _____/5

Connection to Program Area _____/5

Explanation/Presentation of Final Process/Product _____/5

Presentation Skills _____/5

Total Score: _____ / 20

Senior Showcase Day Rubric

Graded by Program Area Teacher

Student Name: _____

	Does Not Meet Expectations (1)	Meets Expectations (3)	Exceeds Expectations (5)
<i>Following Guidelines</i>	Student <u>did not meet</u> minimum requirements for exhibit, as set forth by program teacher.	Student <u>did what was expected</u> for exhibit, as set forth by program area teacher.	Student <u>went above and beyond expectations</u> for exhibit, as set forth by program area teacher.
<i>Creativity & Quality</i>	Exhibit <u>lacks quality</u> .	This is a <u>quality exhibit</u> and did as was expected.	This is a <u>high-quality</u> exhibit. Exhibit clearly displays going above and beyond expectations.
<i>Clear Representation of Process/Product</i>	Student project and exhibit is unclear.	Student project and exhibit is clear.	Student project and exhibit is very clear. Exhibit could show what project is about without student to explain it.
<i>Other (determined by program area teacher)</i>			

Following Guidelines...../5

Creativity & Quality...../5

Clear Representation of Process/Product...../5

Other (determined by program area teacher)/5

Total Score: _____ / 20



ADVANCED TECHNOLOGIES ACADEMY

1411 Robin Street • Las Vegas, Nevada 89106 (702)799-7870

Fax (702) 799-0656

September 13, 2017

Dear Parents/Guardians,

The class of 2018 will begin the process of planning and creating their Senior Capstone Project this week! Please review the calendar in your child's Class of 2018 Senior Project Packet. Note that their project will count for grades in Program classes and English classes. Student research papers must meet the Standards and Benchmarks requirements (NACs) for English classes and are a requirement for graduation. It is our hope that your student will get a lot out of this process, and s/he will have teachers and a special mentor to provide guidance along the way. Please let your child's program teacher know if you have any questions about the process/product, or speak to your child's English teacher if you have any questions about the research paper. Parents are invited to the Senior Project Showcase Day on Wednesday, February 14, 2018.

Thank you in advance for your support for the class of 2018!

Sincerely,

Jonathan Synold
Principal

Roseann Hill
Assistant Principal

Please sign and date below that you have read and understand this calendar, you have looked over senior project materials, and understand what is required of your child.

STUDENT NAME: _____

PARENT SIGNATURE: _____ DATE: _____

Students, please return this signature page only to your Program Area Teacher by September 27th-28th, 2017.