

AP Research Syllabus¹- Table of Contents

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In the building: 7:30am - 3:40pm

¹ Adapted from “AP Research Sample Syllabus 1,” *College Board*, 2022.

Curricular Requirements

CR1a Students develop and apply discrete skills identified in the learning objectives within the Big Idea 1: Question and Explore.

- See pages 6, 7

CR1b Students develop and apply discrete skills identified in the learning objectives within the Big Idea 2: Understand and Analyze.

- See page 5,6

CR1c Students develop and apply discrete skills identified in the learning objectives within the Big Idea 3: Evaluate Multiple Perspectives.

- See page 6, 7

CR1d Students develop and apply discrete skills identified in the learning objectives within the Big Idea 4: Synthesize Ideas.

- See page 8

CR1e Students develop and apply collaboration skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

- See pages 8, 9, 11

CR1f Students develop and apply reflection skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

- See page 10

CR1g Students develop and apply written and oral communication skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

- See pages 6, 7, 8, 9, 10

CR2a Students develop an understanding of ethical research practices.

- See pages 7, 10

CR2b Students develop an understanding of the AP Capstone TM Policy on Plagiarism and Falsification or Fabrication of Information.

- See page 5

CR3 In the classroom and independently (while possibly consulting any expert advisors), students learn and employ research and inquiry methods to develop, manage, and conduct an in-depth investigation of an area of personal interest, culminating in an academic paper of 4,000-5,000 words that includes the following elements:

- Introduction
- Method, Process, or Approach
- Results, Product, or Findings

- Discussion, Analysis, and/or Evaluation
- Conclusion and Future Directions
- Bibliography
- See pages 8, 10

CR4a Students document their inquiry processes, communicate with their teachers and any expert advisors, and reflect on their thought processes.

- See pages 6, 11

CR4b Students have regular work-in-progress interviews with their teachers to review their progress and to receive feedback on their scholarly work as evidenced by the PREP.

- See page 5, 7, 8, 9, 10

CR5 Students develop and deliver a presentation (using an appropriate medium) and an oral defense to a panel on their research processes, method, and findings.

- See page 11

AP Research Course Syllabus- 2022-23

Course Overview

The AP Research course operates as year two of the AP Capstone program. After teaching students how to enter the academic conversation in AP Seminar, the AP Research year is designed to instruct students how to begin that conversation. AP Research is an inquiry-based course that encourages students to locate a gap in their preferred discipline of study and to explore a topic of personal interest. Students are empowered to collect and analyze information with accuracy and precision in order to craft, communicate, and eventually defend their argument or their position.

Course Textbooks and/or Resources

- AP Research Course and Exam Description
- Academic papers from the National Conferences on Undergraduate Research (NCUR)
- Peer reviewed literature relating to UN Sustainable Development Goals related to EDGE micro school projects, discussions, and activities.
- Activities and exercises from the 2021 AP Research Student Workbook

Academic Honesty

The subject matter and grading procedures of this class demand academic integrity on the part of young scholars. This includes but is not limited to the avoidance of any form of plagiarism, cheating, and/or any violation of the school's policy on academic honesty as outlined in the handbook, administrative discussions, EDGE specific expectations, etc. A more specific explanation of these items is listed below:

- The Honor Pledge: The honor pledge must be written in full and signed on ANY work that you submit for a grade. Note: Students often like to shorten the pledge to "I pledge" and then sign their name. Since such a statement fails to clarify what exactly the student is pledging, he/she should write out the statement in full.
- Cheating: Students may not work together or collaborate on homework, make-up work, tests, quizzes, papers, or projects unless the teacher has given expressed permission to do so. Keep in mind that if cheating does occur, both the giver and the receiver of the information will be brought before the Honor Council. It is a violation of the Honor Code to discuss a test or quiz you have taken with a student who has not yet taken the test.
- Plagiarism: If you take information from a text and do not cite the source, if you present an idea or a concept that is not original without providing the source, or if you use a quote without giving credit to the author, you have plagiarized a work. Avoid copying or paraphrasing information from any resource without proper and accurate documentation. If you have questions about whether or not something would be considered plagiarism, please see the teacher. It is always better to "over-cite" in such an instance.

AP Capstone Policy on Plagiarism and Falsification or Fabrication of Information

Participating teachers shall inform students of the consequences of plagiarism and instruct students to ethically use and acknowledge the ideas and work of others throughout their course work. The student's individual voice should be clearly evident, and the ideas of others must be

acknowledged, attributed, and/or cited. A student who fails to acknowledge the source or author of any and all information or evidence taken from the work of someone else through citation, attribution or reference in the body of the work, or through a bibliographic entry, will receive a score of 0 on that particular component of the AP Seminar and/or AP Research Performance Task. In AP Seminar, a team of students that fails to properly acknowledge sources or authors on the Team Multimedia Presentation will receive a group score of 0 for that component of the Team Project and Presentation. A student who incorporates falsified or fabricated information (e.g., evidence, data, sources, and/or authors) will receive a score of 0 on that particular component of the AP Seminar and/or AP Research Performance Task. In AP Seminar, a team of students that incorporates falsified or fabricated information in the Team Multimedia Presentation will receive a group score of 0 for that component of the Team Project and Presentation.^{2[CR2b]}

Grading Breakdown

PREP^{3[CR4b]} and WIP presentations⁴: 65%

Minor assignments⁵: 35%

UNIT 1 (Weeks 1–6)

This unit will focus on reviewing major skills and competencies from AP Seminar, while introducing, connecting, and distinguishing the curricular requirements and competencies of AP Research. This goal of this unit is to bridge AP Seminar with AP Research. Students will rethink the Capstone framework in the context of capital R “Research” and will read and discuss sample research papers in order to co-construct success criteria for their end product.^{6[CR1b]} Other course logistics will be addressed in this unit: deadlines for major components of the courses required final products, AP rubrics, the curricular requirements writ large, and other relevant course-specific terms. By the end of this unit, students will have investigated topic areas, and delivered their first elevator pitch for potential research.

Materials:

1. QUEST framework
2. Rubrics (AP Seminar v. AP Research)
3. NCUR sample papers
4. “There is a problem” initiator
5. Sticky note posters

^{2[CR2b]} Students develop an understanding of the AP Capstone Policy on Plagiarism and Falsification or Fabrication of Information.

^{3[CR4b]} Students have regular work-in-progress interviews with their teachers to review their progress and to receive feedback on their scholarly work as evidenced by the PREP

⁴ These are documents that chronicle and validate the scope and breadth of your research.

⁵ Daily homework, reading checkpoints, peer review feedback/reflection, “chunked” deadlines as you complete your research paper and/or prepare for your oral defense.

^{6[CR1b]} Students develop and apply discrete skills identified in the learning objectives within the Big Idea 2: Understand and Analyze.

Activities:

1. Defining and locating “a gap” in the research: Students will identify and define new or unfamiliar terms on the AP Research Rubric such as method, implications, limitations, etc. In addition, they will conduct a close reading of an article and identify these concepts within it. Finally, introductory conversations on what is meant by “gap” will promote the idea of formulating a narrow research question going forward.^{7[CR1b]}
2. Introduce Process and Reflection Portfolios (PREP): Students will receive samples and instructions on keeping and maintaining their PREPs. PREPs not only validate and mark the evolution of the research, they also allow students to show their constant implementation of best practices gleaned in AP Seminar: considering multiple perspectives, synthesizing information, analyzing arguments, evaluating evidence, etc. PREPs will facilitate systemic and ongoing practice of these skills through regular entries and reflections throughout the course.^{8[CR4a]}
3. Discussion of major models through examples of peer reviewed literature sourced by instructor and students.
4. Socratic seminars to articulate process and thinking. Students will engage in regular practice of presentation skills, rhetorical skills, and argumentation in front of peers. Verbal “QUESTing” will be a constant focus in the class throughout the year.^{9[CR1g]}
5. Students will practice writing annotated bibliographies. Students will develop thesis statements, evaluate the quality of each, and select one to gather research and construct an annotated bibliography.^{10[CR1a] 11[CR1g]}
6. Students will co-construct criteria to develop quality research questions by examining exemplars of questions and corresponding abstracts. These criteria will be applied to AP Research Rubric.^{12[CR1a]}

Assessments:

1. Close reading (QUEST) exercises with sample papers.
2. Applying rubric to sample papers.
3. Each student will select two (or more) papers that investigate an identical, or very similar, topic. The student will write a summary comparing how each paper approaches the topic (perspective) and how that perspective is related to the sources chosen as well as mode of presentation the paper employs. Activity culminates with a group discussion placing their papers’ methodologies and approaches in the context of papers examined by classmates.^{13[CR1c]}

^{7[CR1b]} Students develop and apply discrete skills identified in the learning objectives within the Big Idea 2: Understand and Analyze.

^{8[CR4a]} Students document their inquiry processes, communicate with their teachers and any expert advisors, and reflect on their thought processes.

^{9[CR1g]} Students develop and apply written and oral communication skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

^{10[CR1a]} Students develop and apply discrete skills identified in the learning objectives within the Big Idea 1: Question and Explore.

^{11[CR1g]} Ibid.

^{12[CR1a]} Ibid.

^{13[CR1c]} Students develop and apply discrete skills identified in the learning objectives within the Big Idea 3: Evaluate Multiple Perspectives.

4. Assumptions activity. The purpose of the exercise is to help students recognize that researchers can and do make various assumptions in the course of their work and that identifying a researcher's (and one's own) assumptions is critical for quality research.^{14[CR1c]}
5. Evaluating, critiquing, and revising sample research questions: Students will work with the research ideation-formatting tool provided at AP Research training. "There is a problem in or with _____.^{15[CR1a]16[CR1g]}
6. First "elevator pitch" with poster: Students will prepare a three- to five-minute explanation or "elevator pitch" of their intended research question and process and present it to the class using a poster they have prepared. Elevator pitches will be workshopped in small groups and will receive whole class feedback relating to the research question specifically at the conclusion of the presentation.^{17[CR1a]18[CR1g]}

UNIT 2 (Weeks 7–15)

This unit will introduce discipline specific research methods and citation rules as students continue to narrow and hone their research topic and question. Students will begin the actual process of source mining and collecting initial literature on their topics. Students will make contact with relevant expert advisors and will engage in works in progress (WIP). These can happen in personal interviews with the instructor or in class-wide seminar discussions. The purpose of these WIP^{19[CR4b]} reviews is to provide feedback and instruction to help craft the student's research question and inquiry proposal. By the end of this unit, students will have begun to collect data and/or information for their papers, started to compose annotated bibliographies, and completed their final topic of inquiry proposal (due Monday, October 17).

Materials:

1. Style guides (MLA, APA, etc.)
2. Choosing a method examples.²⁰
3. IRB form
4. Inquiry Proposal Form²¹
5. CRAAP (Purpose, Authority, Accuracy, Relevance, Currency) test handouts.
6. Sample annotated bibliography format.

Activities:

1. Aligning inquiry and approach exercise(s): Using sample questions from student samples and peer reviewed literature, students will determine what type of approach, design, or method would yield the best results for such a research project. Students will be expected to use these skills in their own research question in order to determine the best approach or method.^{22[CR1a]}

^{14[CR1c]} Ibid.

^{15[CR1a]} Ibid.

^{16[CR1g]} Ibid.

^{17[CR1a]} Ibid.

^{18[CR1g]} Ibid.

^{19[CR4b]} Ibid.

²⁰ *AP Student Research Workbook*, pg. 107.

²¹ See *AP Course and Exam Description*, pg. 54.

^{22[CR1a]} Ibid.

2. The instructor will lead a discussion of the general principles of ethical research practice. This will include a review of situations that require securing approval of an IRB. Students will then be presented with a variety of exemplar situations for which they will discuss whether IRB approval is required and/or whether proper attribution and citation have been used. These exercises are then applied to the student's own research inquiry proposal.^{23[CR2a]}

3. Students will review sample inquiry proposals.

4. Students will construct a "methods and styles annotated bibliography" of at least five sources obtained in support of their research question. The annotations in this document should focus on methods and styles of presentation utilized to synthesize and display information. Students will prepare a one-pager or presentation on the relative effectiveness of these methods and styles and their applicability to the student's research question. These will then be shared for peer review with the class.^{24[CR1d]25[CR1g]}

5. Library time: Students will identify the appropriate citation style for their research. Librarians and expert advisors will help students make these determinations.

6. Defining "scope, sequence, and feasibility": Students will receive, complete, evaluate, and eventually submit their final Inquiry Proposal Forms.²⁶

7. In the process of completing the Inquiry Proposal Form, students will engage in peer review with one another's proposals. Students' initial Inquiry Proposal Form will be reviewed by the instructor and will receive feedback.^{27[CR4b]} Approval of inquiry proposal is a prerequisite to UNIT

3. Prior to final submission of the Inquiry Proposal Form, students will peer review each other's proposals, and submit their form for a preliminary review by the instructor (with feedback to be provided).^{28[CR3]}

Assessments:

1. PREP (see explanation above)

2. Annotated bibliographies (now included in PREPs)

3. First WIP report^{29[CR4b]}

4. WIP reports, seminars, and impromptu speeches will be assessed in Unit 2. Students will have two to five minutes to share their findings, their struggles, their intentions, and their progress with their peers in an informal presentation. PREP will provide the student with much of the information he/she will impart. Peer feedback is assessed based on application of skills

^{23[CR2a]} Students develop an understanding of ethical research practices.

^{24[CR1d]} Students develop and apply discrete skills identified in the learning objectives within the Big Idea 4:

Synthesize Ideas.

^{25[CR1g]} Ibid.

²⁶ AP CED. Ibid.

^{27[CR4b]} Ibid.

^{28[CR3]} In the classroom and independently (while possibly consulting any expert advisors), students learn and employ research and inquiry methods to develop, manage, and conduct an in-depth investigation of an area of personal interest, culminating in an academic paper of 4,000-5,000 words that includes the following elements: Introduction; Method, Process, or Approach; Results, Product, or Findings; Discussion, Analysis, and/or Evaluation; Conclusion and Future Directions; Bibliography.

^{29[CR4b]} Ibid.

introduced in activities related to inquiry proposal, methods and styles, and scope, sequence and feasibility.^{30[CR1e] 31[CR1g]}

5. Final Inquiry Proposal Form sheet is due (October 17). The Inquiry Proposal Form will be reviewed and approved, or not approved, by the instructor.^{32[CR3]}

UNIT 3 (Weeks 16–20)

Students are expected to use their time during this unit to regularly meet with their expert advisors and to put into practice those skills garnered in Units 1 and 2 related to research methods, data collection, and literature review. Students will continue to research, determine methods and alignment, and will begin to narrow down resources to determine which items are truly useful to their paper and presentation. Finally, the students will begin the earliest stages of composition.

This unit will also pay special attention to plagiarism policies and ethical guidelines in data collection.

Materials:

1. AP Capstone Policy on Plagiarism and Falsification or Fabrication of Information³³
2. Citation examples from peer reviewed literature in multiple disciplines, using varied methods.

Activities:

1. Research time: Students will spend appointed time conducting research in order to broaden their options and will have the opportunity to seek help from media specialists and other relevant research specialists.
2. Meet with expert advisors: Students will begin the process of regularly meeting with their expert advisors as needed. These meetings, discussions, and the ensuing progress will now be included in the PREP.^{34[CR1e]}
3. Socratic seminars: Students will participate in EDGE global micro school seminars focusing on peer reviewed literature related to UN Sustainable Development Goals. Students must attend all seminars and preparatory sessions related to each seminar. These activities are designed to reinforce the skills of QUEST. Specifically, these activities provide students the opportunities to summarize main points/theses, generate follow-up questions for clarification, connect information from at least one additional source, determine validity of both arguments and data, and predict future outcomes.^{35[CR1g]}

Assessments:

1. PREP
2. WIP reports^{36[CR4b]}

^{30[CR1e]} Students develop and apply collaboration skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

^{31[CR1g]} Ibid.

^{32[CR3]} Ibid.

³³ See pages 4-5 in this syllabus.

^{34[CR1e]} Ibid.

^{35[CR1g]} Ibid.

^{36[CR4b]} Ibid.

3. Peer reviews: Students will collaborate with each other on the early drafts of their work. 4. Socratic seminar

UNIT 4 (Weeks 21–26)

This unit will focus on the final product, specifically on the writing or the composition of the research paper as well as the preparation and, eventually, the performance of the oral presentation and defense.^{37[CR3]}

Students will work independently on their final products with insight and counsel from their instructor, their expert advisor, and their peers. Focus will be placed on the clear, concise, and effective communication of ideas and information both generated and validated by the students' research.

Materials:

1. "They Say, I Say" template
2. Two-minute speech prompts
3. Oral defense questions: Students will respond to one question from teacher or audience after two-minute speech.^{38[CR1g]}
4. Noodle tools, Purdue OWL, Writing guides and other citation and bibliographical tools for in-text citation rules.^{39[CR2a]}
5. Graphic organizer for peer reviews

Activities:

1. Socratic seminars
2. PREP
3. WIP reports^{40[CR4b]}
4. Presentation exercises and practice: Students will perform impromptu speeches and receive a visit from the school's director of debate, ELA instructors, and/or the building's instructional coach.^{41[CR1g]}
5. Revising papers and finalizing presentations: The "They Say, I Say" template will function as a way to practice synthesizing information and will function as a check to ensure that work avoids the pitfall of over relying on authors' language.^{42[CR1g]}
6. After submission of the final paper, and the final presentation and oral defense, students will give short five-minute presentations that summarize the relevance of their research and perceived natural extensions of their work for future development.^{43[CR1f]}

^{37[CR3]} Ibid.

^{38[CR1g]} Students develop and apply written and oral communication skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

^{39[CR2a]} Ibid.

^{40[CR4b]} Ibid.

^{41[CR1g]} Ibid.

^{42[CR1g]} Ibid.

^{43[CR1f]} Students develop and apply reflection skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

Assessments:

1. Peer reviews: Students will present findings and work to members of the EDGE micro school for guided peer feedback, and they will be partnered with a classmate who will provide a guided peer review of his/her partner's research paper before the final draft is submitted. The AP Research rubric will be used to guide the peer review process.^{44[CR1e]}
2. PREP^{45[CR4a]}
3. Final paper (due March 31).
4. Final presentation and oral defense (begin April 13)^{46[CR5]}

^{44[CR1e]} Ibid.

^{45[CR4a]} Ibid.

^{46[CR5]} Students develop and deliver a presentation (using an appropriate medium) and an oral defense to a panel on their research processes, method, and findings.