

Course: AP Research

Course Description

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Student design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their process, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5000 words (accompanied by a performance, exhibit, or product where applicable) and presentation with an oral defense.

Course Goals

By the end of the course, students in AP Research should be able to understand principles of discipline-specific research methods (e.g., qualitative, quantitative). Have the capacity of using appropriate disciplinary research methods to develop, manage, and conduct an in-depth study. Students will understand the complexities of research and gain various skill sets pertaining to good research skills.

The course culminates with two major tasks. The students will complete a 4,000 to 5,000 word essay, which will be 70% of their AP Research external assessment. Students will also be required to present and defend their paper in their oral defense (15-25 minutes with 3-4 questions), which will count as 30% of their external assessment.

Academic Integrity

The AP Research course is all about accessing and experiencing the great ideas of many others that have come before us and who are working as experts and familiar voices within their respective fields of study. This course is also an opportunity for you as students to develop your own ideas and join these ongoing academic conversations. With that spirit in mind, we must exercise the utmost caution to ensure that our ventures into these discussions-- whether through our writing, our speaking, or our production of media-- adhere to the highest standards of academic honesty. The following policy has been established by the College Board specifically for this course, and all AP Research students will be expected to sign a contract that declares they have read, understood, and agree to abide by these standards:

AP CAPSTONE OFFICIAL: 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.

External Evaluation:

Like other AP courses, the Research course has an externally assessed component that is separate from your course grade. AP Research is unique, however, in that there is no end-of-course exam.

- **AP Research Oral Defense (25% of AP Seminar Score)**

The oral defense is fifteen to twenty five minutes, followed up by three to four questions. The evaluation for the oral defense will be given by your teacher.

- **AP Research Academic Paper (75% of AP Seminar Score)**

The Academic Paper should be 4,000 to 5,000 words in length and documented in a style that is relevant to the genre at hand.

This paper showcases a student's comprehension and understanding of their research topic.

The papers will be graded by College Board Readers in June.

Internal Evaluation SEMESTER 1:

PREP Portfolio (40%)

The PREP portfolio will be used by students as part of the process of their journey of learning. The PREP portfolio will be a critical tool students can utilize for intrapersonal reflections, but also to use for communication with peers for review and their teacher. The portfolio will be used for

- Weekly reflections (Journal),
- Biography on expert,
- Source collection,
- Records of peer-to-peer conferences,
- Records of teacher-student conferences,
- Records of expert-student conference.

Project Progress PPT (The PPPPT) (30%)

In December, prior to winter break, students will present for 6-8 minutes the process (or lack of) they have had with their Academic Paper. This PPPPT must include the following;

- a. The reason the topic was selected,
- b. Challenges faced,
- c. Limitation in regards to information gathered,
- d. Credible sources used to gather sources,
- e. Meta-analysis or data (if available),
- f. Founding(s) so far,
- g. Future outlook and potential questions.

The presentation will be recorded and logged into the AP Research folder.

Students can revisit this document following winter break (or during) to confirm their direction from here on.

Literature Review (20%)

In the "Literature Review" assignment, students will be expected to accumulate twenty credible sources. Students will then complete an annotated bibliography, in order to create a literature review. The annotated bibliography will follow a specific format, the same format utilized by AP Seminar the previous year.

Elevator Pitch(10%)

Students will perform an "elevator pitch". Literally, using the elevators at the school. In the "elevator pitch, students will have 90-seconds to pitch their Academic Paper to a peer, and then to the teacher. The elevator pitch must convince the listener why the question being investigated is has value, and can be researched with appropriate methods within the limited constraints (including time). The activity will help students comprehend whether or not

their topic is one that can provoke interest by the general populous, and hold value within the community.

Internal Evaluation SEMESTER 2:

PREP Portfolio (40%)

The PREP portfolio will be used by students as part of the process of their journey of learning. The PREP portfolio will be a critical tool students can utilize for intrapersonal reflections, but also to use for communication with peers for review and their teacher. The portfolio will be used for

- Weekly reflections (Journal),
- Biography on expert,
- Source collection,
- Records of peer-to-peer conferences,
- Records of teacher-student conferences,
- Records of expert-student conference.

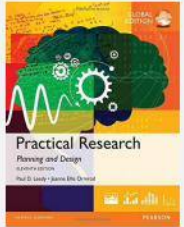
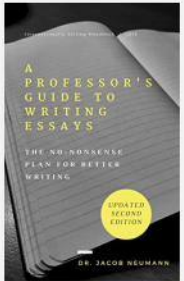
Methods Annotated Bibliography (25%)

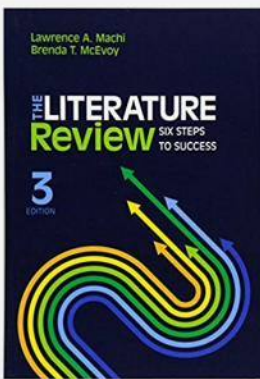
In these set of annotated bibliographies, students will analyze the methodologies they utilize for their research, and analyze the type of methods used for their specific findings. Through analysis of their methods, students will better understand the process of research, and be able to analyze whether their approach in regards to a qualitative, quantitative or a mix of the two is a proper method of research for the topic at hand. Through annotating methods, students will focus on avoiding potential pitfalls in their methodologies.

Pecha Kucha Presentation (25%)

Students will perform a *pecha kucha* presentation in regards to a topic of interest. They will utilize this *pecha kucha* as a chance to work on their public speaking and presentation skills, which will be necessary for their oral defense. Students listening to the Pecha Kucha should use this as a great opportunity to provide classmates with advice based on observations. The rationale of the *pecha kucha* is for students to get used to presenting in front of an audience, with little to no reliance of notes. It will also provide as an opportunity for students to take a break from their core question, and focus on a hobby or an activity they enjoy on a regular basis. By watching their peers perform, it will also provide them with first hand insight in regards to the difficulty and challenges one may face when presenting.

Course Texts

Book	Author	ISBN	
Understanding Methods of Research (10th Edition)	Mildred L. Patten Michelle Newhart	0415790522	
The Bedford Researcher (4th Edition)	Mike Palmquist	0312675127	
Practical Research Planning and Design (11th Edition)	Paul D. Leedy Jeanne E. Ormrod	0133747182	
A Professor's Guide to Writing Essays	Dr. Jacob Neumann	0692822526	

The Literature Review Six Steps to Success	Lawrence Machi Brenda McEvoy	1506336248	
*Each student will have a soft or hard copy of Understanding Methods of Research by Mildred L. Patten and Michelle Newhart, and will utilize this book as the primary book for class. **To meet the course objectives, these course texts will be extensively supplemented with other fiction and non-fiction readings, artwork, film/video, photography, and other rhetorical miscellany gathered from print and online sources and from within our school's library of materials.			

Overview of General Schedule:

The dates below are intended only to provide a general idea of the course's organization and to ensure that we allot enough time for each of the required external assessments. Please be aware that there may be minor changes made to the schedule over the course of the year if the need arises.

MONTH	UNIT	INFORMATION
August September October	1 Question and Explore Ethical Research and Credibility	Students develop Research Question, carry out preliminary research and finalize research question Students finalize their question, and begin to design their methods of research. Final proposals must be submitted to the teacher by <u>October 6th (FRI)</u> . Students review what it means to have an ethical research and to use credible sources.
November December January	2 Literature Review and Methods of Research	Students conduct research and begin writing their academic paper. Through peer review, inquiry method design and biweekly teacher meetings, students will continue to accumulate data and continue with the research process (Using the QUEST model).
February March	3 Conducting Research and Writing the Academic Paper	Students finalize, proofread, peer review and submit their academic papers. Academic papers due <u>March 24th</u> .
April	4 Creating the Presentation	Students will create a comprehensive presentation that exhibit their depth of knowledge of the topic of their academic paper. <u>Presentations mid-April</u>
May	5 Preparing the 11th graders.	Help future AP Research students (Current Seminar students) prepare for AP Research 2019-2020 through student run activities and assignments.

Required Course Supplies

Notebook with lines	
Pens (blue or black ink)	
Colored Pencils (At least five colors)	
Highlighters (at least three colors)	
USB Flash Drive	

Ethical Research

The U.S. Department of Health and Human Resources outlines in the Belmont Report specific regulations for the protection of human subjects involved in the research process. All students' research proposals will be vetted for potential harm to human subjects to determine the need for an institutional review board approval. Students will receive instruction on ethical research practices during Unit 1 of the course.

Learning Object LO 1.5D

Employing ethical research practices

EK 1.4D1 Scholars have ethical and moral responsibility when they conduct research

EK 1.5D2 There are laws, rules, and guidelines that govern the conduct of researchers, in particular when studies involve human and animals. Accordingly, scholars gain approval to conduct research with humans through an institutional review board (IRB).

EK 1.5D3 There are copyright and patent laws and guidelines that govern the use and reproduction of others instruments, work, personal, information, and intellectual property.



The Academic Paper

In AP Research, the year will culminate with a submission of an Academic Paper, which is based upon a student's question they compose at the start of the school year, about which they will research and write a 4,000 to 5,000 word essay

The essay will include the following components:

- 1. Introduction**
- 2. Method, Process, or Approach**
- 3. Results, Product, or Findings**
- 4. Discussion, Analysis, and/or Evaluation**
- 5. Conclusion and Future Directions**
- 6. Bibliography**

The academic paper will be evaluated by College Board AP Readers in June.

The evaluation of the academic paper will determine 75% of the AP grade.

Final scores for the AP will be provided in July of 2019.

Throughout all four unit students will engage in the following activities to help reflect and identify the learning objectives for Big Idea 5.

(This will be done in addition to their PREP Journal, which will include their bi-weekly reflections pertaining to their research topic)

PEER REVIEW

Students will be required to undergo an extensive peer review for each unit. The peer review will consist of reviewing the following points for each unit.

The peer review will be submitted to the teacher as a formative assessment.

Students must heavily scrutinized the work they are looking at, and must not take it personally if they are given back harsh feedback.

UNIT 1 (Peer Review in October)

Review IFP and elevator pitch

Does the research question presented have value?

What are the anticipated limitations the researcher may face for the proposed research question?

What type of topics and issues relate to the main issue at hand?

What are potential biases to be weary of in regards to the research question?

Does the peer see any potential issues for the research question at hand?

Is the expert chosen for the topic appropriate for the research question?

UNIT 2 (Peer Review in December)

Review research methodology and annotated bibliographies

Is the research method proposed by the researcher appropriate in regards to the scope and sequence of the question it seeks to answer?

Is the research method proposed by the researcher acknowledge other perspectives?

What are potential issues the researcher should be weary of in regards to the research method?

Is the research method qualitative or quantitative? Is the type of research appropriate?

Are the resources for the annotated bibliography both extensive in breadth and depth? Are there any other areas the researchers should consider exploring?

UNIT 3 (Peer Review in February)

Review draft of academic essay

Are there other conclusions the researcher could consider? Have all results been extensively covered? Are there any major gaps in the research method or essay?

Is the “why” comprehensively covered in the intro of the essay?

Does the conclusion of the essay wrap up all loose ends/

Are there any repeated mechanical errors the researchers should be careful of?

Is the evidence used appropriate and align with the conclusions that are built upon those evidence?

UNIT 4 (Peer Review in April)

Review final draft of academic essay and oral defense preparation

Are there any missing points in the final draft?

Are there any spelling/grammar errors to be fixed in the final draft?

Does the final draft extensively cover all discoveries and limitations for the subject at hand?

Is the student ready for all types of oral defense? If no, which ones should they work on?

TEAM PROGRESS CHECK

Teams of 3 (3 per team)

Will, “re-review” the specific feedbacks, to confirm that the feedback itself is not lacking, and appropriately addresses all questions extensively.

METHODS OF RESEARCH TOPICS

Students will utilize the book, [Understanding Methods of Research](#), by Mildred Patten and Michelle Newhart throughout the year to help aid their research process.

Many of the topics will directly affect their specific topic at hand, but others are generic research topics that students can understand further in order to become a better researcher. Even if these topics may not be directly affecting their specific question. For example, in topic 5, students will study about "Causal-Comparative Studies". Even if their specific question is not relative to this type of study, by learning how causal-comparative studies are done, it will help students become better researchers in general.

WEEK 1-2 August 13-26	TOPIC 1: Knowledge and Research Methods TOPIC 2: Empirical Research
WEEK 3-4 August 27-Sept. 9	TOPIC 3: The Role in Theory in Research TOPIC 4: Experimental and Nonexperimental Studies
WEEK 5-6 Sept. 10-Sept. 23	TOPIC 5: Causal-Comparative Studies TOPIC 6: Types of Nonexperimental Research
WEEK 7-8 Sept. 24-Oct. 7	TOPIC 7: Quantitative and Qualitative Research: Key Differences TOPIC 8: Quantitative and Qualitative Research Decisions
WEEK 9-10 Oct. 8-Oct.21	TOPIC 9: Program Evaluation TOPIC 10: The Development of Ethical Research Standards TOPIC 11: Ethical Principles in Research
WEEK 11-12 Oct. 22-Nov. 4	TOPIC 12: Why Researchers Review Literature TOPIC 14: Structuring the Literature Review TOPIC 15: Connecting the Literature to Your Study
WEEK 13-14 Nov. 5-Nov. 18	TOPIC 16: Why Researchers Review Literature TOPIC 17: Creating a Synthesis
WEEK 15-16 Nov. 19-Dec. 2	TOPIC 18: Why Academics Use Citation TOPIC 19: Introduction to Style Guides

WEEK 17-18 Dec. 3-Dec. 16 (Winter Break)	NONE
FINAL EXAM WINTER BREAK Dec. 17-Jan. 20	TOPIC 58: Descriptive and Inferential Statistics TOPIC 81: The Structure of a Research Report TOPIC 82: Writing Abstracts
WEEK 19-20 Jan. 21-Feb. 3	Students choose “focus” depending on type of research they are conducting. <u>Possible Options:</u> Qualitative Research Design: TOPICS 46 - 51 (6 topics) Designing Experimental Research: TOPIC 52 - 57 (6 topics) Meta Analysis: TOPIC 75 - 80 (6 topics)
WEEK 21-22 Feb. 4-Feb. 17	
WEEK 23-24 Feb. 18-Mar. 3	
WEEK 25-26 Mar. 4--Mar. 10	
WEEK 27-28 Mar. 11-Mar. 24	
WEEK 29-30 Mar. 25 - April 7	NONE
WEEK 30-31 April 8-April 21	NONE
WEEK 32-33 April 22-May 5	NONE
WEEK 34-35 May 6-May 19	NONE

URL FOR NOTES ON TOPIC 1 - 19 and 58, 81, 82: www.goo.gl/SYB6kF

Downloaded from

Enduring Understandings, Learning Objectives and Essential Knowledge

Unit 1: Question and Explore and Contact Expert Advisers

In this unit, students will investigate a complex issue or problem that stimulates their curiosity. They will seek answers to those questions through evaluating and exploring numerous perspectives, and finding various resources in congruence evaluating those resources credibility. As they finalize their questions their process of inquiry will include finding two expert advisers. One adviser will be a faculty member at our school and the other expert adviser from outside of the school who is knowledgeable of the topic at hand.

Essential Questions

What do I want to know, learn or understand?

What questions have yet to be asked?

How does my research question shape how I go to about trying to answer it?

How does my project goal shape the research or inquiry I engage in to achieve it?

What information/evidence do I need to answer my research question?

How might others see a problem or issue differently?

What patterns or trends can be identified among the arguments about the issue?

What are the implications and/or consequences of accepting or rejecting a particular argument?

How can I connect the multiple arguments? What other issues, questions, or topics do they relate to?

How can I explain contradictions within or between arguments.

From whose perspective is the information being presented, and how does that affect my evaluation.

Enduring Understandings:

EU 1.1: Personal interest and intellectual curiosity inspire investigation of topics or issues that may or may not be clearly defined. A well-crafted investigation explores the complexity of an issue or topic. Further inquiry can lead to unexpected conclusions, resolutions, innovations, or solutions.

EU 1.2: Strengthening understanding of a concept or issue requires questioning existing ideas, using what is known to discover what is not known, and making connections to prior knowledge.

EU 1.3: The investigative process is aided by the effective organization, management, and selection of resources and information. Appropriate technologies and tools enable the scholar to become more efficient, productive, and credible.

EU 3.1: Different perspectives often lead to competing and alternative arguments. The complexity of an issue emerges when people bring these differing, multiple perspectives to the conversation.

EU 3.2: Not all arguments are equal; some arguments are more credible/valid than others. Through evaluating others arguments, one's own argument can be situated within a larger conversation.

Learning Objective:

LO 1.1C: Identifying the topic of inquiry.

LO 1.1E: Developing and revising a focused research question/project goal.

LO 1.2A Retrieving, questioning, organizing and using prior knowledge about at topic.

LO 1.3A Accessing and managing information using effective strategies

LO 1.4A Evaluating the relevance credibility of the source of information and data in relation to the inquiry.

LO 3.1A Identifying, comparing, and interpreting multiple perspectives on or arguments about an issue.

LO 3.2A Evaluating objections, implications, and limitations of alternate, opposing, or competing perspectives.

Core Assignments for Unit 1:

Refining the Question (RTQ) part of the PREP grade

Students will refine questions using the RTQ. The RTQ examines a question:

Focused, Is a narrow scope of interest? Is it too broad? For example, "What is the impact of bottled water on the environment" is not a good question; it is too broad.

Variables, what are the components or elements of a phenomenon that can be counted or measured, or connected to other variables via correlation studies?

Context/Scope, what is the specific time, place, population, and genre related to what you are studying?

Value, a statement of importance, significance, or relevance to the body of knowledge of the discipline or to society at large.

Feasibility, a statement of how this topic of inquiry can be investigated using time and resources available to the researcher.

(FVCVF)

Students will go through this process in several ways;

- individually,
- with peers,
- with teachers,
- with AP Research teacher.

The Proposal Form (TPF) part of the PREP grade

During this period students are expected to come up with various research questions, and through the process of explorations of topics of curiosity, students will come up with a question that is able to withstand any questions pertaining to "The Proposal Form" (TPF).

1. *What is your research question?*
2. *What is the reason(s) you chose the topic of interest?*
3. *Data or information that will have to be collected to answer the research question.*
4. *Create a brief list of possible sources of information to discuss during the introduction of the paper.*
5. *What is the chosen or developed research method to collect and analyze the above data/information?*
6. *What are possible equipment or resources needed to collect data or information?*
7. *What are anticipated challenges to implement the chosen research method?*

The students during this unit will finalize the question after numerous peer-reviews and 1 v 1 meetings with their teacher.

Throughout the exploration process, students will be evaluating the various resources they may be utilizing for their research, and be analyzing the data

The Elevator Pitch (10%)

Students will perform an “elevator pitch”, literally, using the elevators at the school. In the “elevator pitch, students will have 90-seconds to pitch their Academic Paper to a peer, and then to the teacher. The elevator pitch must convince the listener why the question being investigated has value, and can be researched with appropriate methods within the limited constraints (including time).

PREP Journal

Students will document their inquiry process and keep documentation of the process (struggles, successes, new inquiry, logging data) through the use of their PREP journal.

The PREP Journals will be logged on a bi-weekly basis, and will be due Sunday night at 11:59 PM.

The PREP Journals should be logged in the following format.

1. General feedback (1-2 paragraphs) explaining how research has progressed (or stalled), and explain how the student plans to progress in their research.
2. (If applicable) answer the bi-weekly question(s), question(s) below in 1-2 paragraphs. Second semester there are fewer #2 PREP questions, and students are expected to write more lengthy reflective pieces answering question #1 of the PREP journal.
3. One question that has arisen throughout the week, which the researcher would like to explore further. This could be very research subject specific (Such as, “What type of data could I find in regards to _____”) or a general question such as “I should explore another research engine apart from the two that I primarily use now”.

PREP JOURNAL SCHEDULE

(May be subject to minor changes as the year progresses)

WEEK 1-2 August 13-26	Why should the public or your audience care about this particular topic? What type of value does it have for society? Why did you choose this particular topic? What possible issues do you foresee, how will you overcome these issues?
WEEK 3-4 August 27-Sept. 9	How has your research question evolved? How has it changed from its original/first version? What was the most important factor contributing to this shift? How might your own positions, and or bias affect your analysis, how do you expect to address this issue?
WEEK 5-6 Sept. 10-Sept. 23	What challenges, puzzles, questions, or concerns do you have right now about your research project? (Final opportunity to change research question, or make major amendments).
WEEK 7-8 Sept. 24-Oct. 7	Describe your process for evaluating the relevance and credibility of the sources you are consulting.
WEEK 9-10 Oct. 8-Oct.21	What do you anticipate the results/findings/product will illustrate/show/prove/be?
WEEK 11-12 Oct. 22-Nov. 4	Has there be any major gaps in information that you have noticed between your preconceived knowledge of the topic of your academic paper in comparison to what you know now?
WEEK 13-14 Nov. 5-Nov. 18	What is the main method of communication between you and your expert advisers? Has there been any difficulty with the communication so far?
WEEK 15-16 Nov. 19-Dec. 2	None.

WEEK 17-18 Dec. 3-Dec. 16	As you enter into winter break, take into consideration the following: What are your specific goals between now (December 16th) to the end of winter break (January 20th) in regards to your project? Will you be traveling anywhere? Would this travel allow you access to continue your research at your travel destination?
FINAL EXAM WINTER BREAK Dec. 17-Jan. 20	None.
WEEK 19-20 Jan. 21-Feb. 3	None.
WEEK 21-22 Feb. 4-Feb. 17	None.
WEEK 23-24 Feb. 18-Mar. 3	In what type of format would you like to present? Why have you chosen this type of format?
WEEK 25-26 Mar. 4--Mar. 10	How will you prepare for the final questions you will receive at the end of your oral presentation?
WEEK 27-28 Mar. 11-Mar. 24	-
WEEK 29-30 Mar. 25 - April 7	What was the most difficult aspect with regard to presenting your findings? What aspect of the oral defense was most difficult?
WEEK 30-31 April 8--April 21	*If not answered in previous week. What was the most difficult aspect in regards to presenting your findings? What aspect of the oral defense was most difficult?
WEEK 32-33 April 22-May 5	If you could go back to the first week of school, and tell yourself <u>three points</u> that would help you improve your performance in AP Research class, what type of advice would you give?
WEEK 34-35 May 6-May 19	Write a note of advice/message to one or two of the AP Seminar students.

Securing an Expert Adviser (not assessed)

Students will secure at least two expert advisers for their topic at hand.

At least one of their experts will be from the school community (Faculty, parents, administration), and the other expert will be from outside of school.

Faculty

The AP Research students will be presented with Google Sheets containing all faculty from K-12 willing to participate as an expert adviser, next to their names including areas of expertise. The expert faculty must be decided prior to September 30th, 2018.

Non-Faculty

The AP Research students have complete freedom in regards to who they would like to approach. We will in class go through methodologies of approaching people for help, and things to do (and not to do) when requesting someone to become an expert adviser for your topic. The expert adviser who is non-faculty must be decided prior to October 5th, 2018.

Explanation of the AP Research Expert (Page 51-52 of the Course and Exam Description)

It is mandatory and very important that students inform their experts what they can and cannot do as part of the AP Research advising process.

Expert advisers should

- when asked, should ask questions and provide feedback and guidance to students regarding their choice of research question/project goals, data- or information-collection methods, and analysis strategies.
- may hold individual work-in-progress interviews with students to discuss the progress of their papers or presentations, explore issues and/or discuss topics and perspectives, and question students as necessary.
- may provide necessary background for a topic - including suggesting possible resources - so that students are not disadvantaged in their exploration.
- may help students with the mechanics of the research process (e.g. strategizing to find answers to questions or helping them understand how to access resources)
- may provide general feedback to students about elements of their papers or presentations that need improvement
- may vary in number, according to the needs of the paper presentation

Expert adviser may not

- generate research questions/project goals for students
- conduct or provide research, articles, or evidence for students,
- write, revise, amend or correct student work
- provide or identify the exact questions a student will be asked prior to his or her defense (i.e., student should be prepared to answer every one of the oral defense questions).
- provide unsolicited help (i.e. students must initiate conversations that call for expert adviser feedback, such as asking a question to which the expert adviser can then respond).

However, it is very important that the students stay mindful about what expert advisers may not do, and remind an adviser that what they are doing is not following protocol if they were to provide any type of help that is not recognized as legitimate by College Board (Such as providing unsolicited help, writing, amending student work and conducting research for a student).

The 30 Source List Assignment part of PREP grade

8 Discipline-Specific Research Studies

8 Historical Sources for the Topic

8 Possible Research Methods that could help you answer your initial question

6 OPEN Sources

Through accumulating these various sources, students will have a list of sources they could begin to apply towards using for research for their academic paper.

Annotated Bibliography part of PREP grade

Utilizing the 30 Source List, students will create an annotated bibliography for at least 10 of the sources, which the students deem the most useful.

[Annotated bibliography formatted](#) (The same from AP Seminar)

(LINK: www.goo.gl/N5r4Ea)

Unit 2: Understand and Analyze + Literature Review

In this unit, students will develop and understand the perspective or argument of their topic at hand in order to better analyze it. The analysis should include an examination of the validity of the quality of evidence the author uses.

Students in this unit will also be required to complete a segment of literature reviews. Through the literature reviews, students will be able to examine the biases authors may have, and be able to cross-analysis a variance of resources. Furthermore, the literature review will help students consolidate various sources into one location, and make the process of writing the academic paper later on easier.

Essential Questions

What strategies will help me comprehend a text?

What is the main idea of the argument or artistic work and what reasoning does the author use to develop it?

What biases may the author have that influence his or her perspective?

Does this argument acknowledge other perspectives?

How can I assess the quality or strength of others research, products, or artistic work.

Enduring Understandings

EU 2.1 Authors express their ideas, perspectives, and/or arguments through their works. The first step in evaluating an author's perspective or argument is to comprehend it. Such comprehension requires reading, viewing, listening, and thinking critically

EU 2.2 Authors choose evidence to shape and support their arguments. Individuals evaluate the line to determine to what extent they believe or accept an argument.

EU 2.3 Arguments have implications and consequences.

Learning Objectives

You

Core Assignments for Unit 2

Multiple Perspectives Activities part of PREP grade

It is imperative that students comprehend the idea of multiple perspectives. The idea that almost every academic study has a variance of views based on the author's implicit or explicit biases. In this activity, students will start by investigating together major issues that are controversial in the United States, such as the legalization of marijuana, abortion, LGBTQ adoption rights, the Death Penalty, euthanasia and gun control. They will analyze how there is a variance of views, and how each view has a different type of statistics and "evidence" that come from a variety of sources. The students then will further dissect these

findings, by searching for any type of bias the organizations providing “evidence” may have. Through this activity, students will understand that there is a gradient of evidence for any given issue, often backed by groups with again a variance of bias.

The Literature Review

Students will complete a comprehensive literature review, which should include:

- The main ideas, theories and concept,
- Areas of agreement and disagreement,
- Are there any major gaps in the literature,
- Compare and contrast the various findings, arguments, theories, and methodologies in the literature,
- What are the most polemical elements of your topic?
- What are the underlying biases in any of the literatures.

Explanation of sources:

Primary sources: First-hand reports of original studies.

Secondary sources: Critical evaluations and syntheses of original studies.

Tertiary sources: Information and ideas often put together from primary or secondary sources, such as text books.

Analyzing Text

Students will view four types of text:

- qualitative,
- quantitative,
- anecdotal,
- and biographical.

They will analyze the strengths and weaknesses of the types of texts, which should help them understand the foreseeable challenges they may face with their own data and research.

Unit 3: Writing the Academic Paper and Methods

In this unit, students will begin the process of writing the Academic Paper. The students will build upon the paper by starting off with a comprehensive outline and inclusion of any type of methodologies included for their academic research. At this point, students should have an extensive library of information they have accumulated from unit 1-2. They should also have a concrete understanding of the potential pitfalls of research, and should be mindful when writing their paper.

Essential Questions

How do I connect and analyze the evidence in order to develop an argument and support a conclusion.

Are there other conclusions I should consider?

How does my scholarly work emerge from my perspective, design choices, or aesthetic rationale?

How do I acknowledge and account for my own biases and assumptions?

What is the most appropriate way to acknowledge and attribute the works used to support their argument? How do I ensure the conclusions I present are my own?

Enduring Understandings

EU 4.1: Scholarly works convey perspectives and demonstrate effective reasoning that have been selected for the intended audience, purpose and the situation?

EU 4.2: Scholars responsibility and purposefully engage with the evidence to develop a compelling argument or aesthetic rationale.

Learning Objectives

LO 4.1A: Formulating a well-reasoned argument, taking the complexities of the problem or issue into consideration.

LO 4.1B: Selecting and consistently applying an appropriate disciplinary or interdisciplinary to approach to form a scholarly argument.

LO 4.2A: Interpreting, using, and synthesizing qualitative and/or or quantitative data/information from various perspectives and sources (e.g., primary, secondary, print, non print) to develop and support an argument.

LO 4.2B: Providing insightful and cogent commentary that links evidence with claims.

LO 4.3A: Attributing knowledge and ideas accurately and ethically using an appropriate citation style.

LO 4.4A: Extending an idea, question, process, or product to innovate or create new understandings.

LO 4.5A: Offering resolutions, conclusions, and/or solutions based on evidence considering limitations and implications

Core Assignments for Unit 3

Project Progress PPT (The PPPPT) (30%)

In December, prior to winter break, students will present for 6-8 minutes the process (or lack of) they have had with their Academic Paper. This PPPPT should include the following;

- a. The reason the topic was selected
- b. Challenges faced

- c. Limitation in regards to information gathered
- d. Credible sources used
- e. Meta-analysis or data (if available)
- f. Findings so far
- g. Future outlook and potential questions

The presentation will be recorded and logged into the AP Research folder. Students can revisit this document following winter break to confirm their direction henceforth.

Methods Annotated Bibliography (25%)

In these annotated bibliographies, students will analyze the methodologies they utilize for their research, and analyze the methods used for these specific findings. Through analysis of their methods, students will better understand the process of research, and be able to analyze whether their approach in regards to a qualitative, quantitative or a mix of the two is a proper method of research for the topic at hand.

Unit 4: Creating a Presentation

In this unit, students are expected to understand how to effectively communicate their topic of study through various mediums. They will understand the necessity of utilizing engaging delivery tactics, and understand how to win over the focus and understanding of their audience. Students will also use this unit to prepare for the 3-4 questions they will receive at the end of their presentation. Through the Pecha Kucha activity, students will also gain the skills needed for a strong presentation, which will help them when it comes to their oral defense for their Academic Paper.

Essential Questions

- How can I best appeal to and engage my audience?
- What is the best medium or genre through which to reach my audience?
- How might I adapt my written and oral presentations for different audiences and situations?
- How might my communication choices affect my credibility with my audience?
- Which revision strategies are most appropriate to develop and refine my project at different stages?
- How do I provide feedback that is valuable to others? How do I act upon feedback I have received?
- How can I benefit from reflecting on my own work?

Enduring Understandings

- EU 5.1: How a perspective or argument is presented affects how many people interpret or react to it. The same perspective or argument may be developed or presented differently depending on the audience, purpose, and context.
- EU 5.3: Reflection increases learning, self-awareness, and personal growth through identification and evaluation of personal conclusions and their implications.
- EU 5.4: Scholars perform, present, and/or produce their work within a larger community. Throughout the inquiry process, scholars interact with and benefit from the scholarly community through thoughtful engagement with the opinions and critiques of others.

Learning Objectives

- LO 5.1: Planning and producing a cohesive academic paper, considering audience, context, and purpose.
- LO 5.1B: Adhering to established conventions of grammar, usage, style and mechanics.
- LO 5.1C: Communicating information through appropriate media using effective techniques of design.
- LO 5.1D: Adapting an argument for context, purpose, and/or audience.
- LO 5.1E: Engaging an audience by employing effective techniques of delivery or performance.
- LO 5.1F: Defending inquiry choices and final product with clarity, consistency, conviction.
- LO 5.3A: Reflecting on and revising their own writing, thinking, and creative processes.
- LO 5.3C: Reflecting on the larger significance of engaging in the overall inquiry process and producing a completed scholarly work.
- LO 5.4A: Engaging in peer review to provide constructive responses to one another's work, appropriate to the stage of project development.
- LO 5.4B: Engaging in peer review to receive and consider responses to their work.

Core Assignments for Unit 4

Rapid Fire Questions part of PREP

In the initial phases of practicing answering oral defense questions, students will face the other students in the AP Research class and be asked questions for 10 to 12 minutes uninterrupted about their research. As the name suggests, the format would be “rapid” in the sense that questions may not exceed 15-seconds, and subsequent answers to aforementioned question, may not go beyond 1-minute.

Preparation for Questions part of PREP

The students will have a list of all possible questions they may receive in the oral defense in the CED. On pages 52 and 53, there are:

- 5 questions about the research/inquiry process,
- 6 questions about the depth of understanding,
- 6 questions about the reflection throughout the inquiry process.

Students can begin to prepare for these questions by writing the answers to each of these questions on a document first. They will then peer-review this document to make sure that there are no major gaps in their arguments.

Students do not have to memorize aforementioned notes, but can now use this preparation for questions as a key tool when preparing to answer the 3-4 oral defense questions.

Pecha Kucha Presentation (25%)

Students will choose a subject not related to their academic paper. Ideally something they are interested in, a hobby, an activity, something they enjoy.

The students will then create a presentation, *pecha kucha* style about the subject.

Pecha Kucha is sometimes referred to as a 20x20 presentation. This is because the presentation includes 20 slides, and each slide is on screen for exactly 20 seconds.

This style of presentation was born in Japan in the early 2000s, and is a format of presenting, which focuses on keeping the audience attentive.

The *Pecha Kucha* presentation will provide students with an opportunity to briefly research upon a topic that is not pertaining to their academic paper, and give them a brief change in topic.

Unit --- Submission of Academic Paper / Oral Defense / Ted Talk

The final academic paper will not be evaluated as part of the students letter grade for the class.

The final paper will be evaluated, only by College Board Readers, and will be part of 75% of their final AP Grade (The remaining 25% being the teachers evaluation of the oral defense).

Although the College Board deadline is April 30th, 2019, our internal submission deadline is

April 7th, 2019 (SUN) 11:59 PM

Following the submission, between April 8th to April 30th the student complete their oral defense of the paper, which will count towards 25% of the AP grade. The evaluation will be completed by the teacher.

Component 1f: Students develop and apply reflection skills identified in the learning objectives within the Big Idea 5: Team, Transform, and Transmit.

Reflect on the significance or contribution of their scholarly work in a larger context.

AP Research TED Talk

In May, the class will culminate with a TED Talk by the AP Research students in front of an audience consisting of classmates, teachers, and parents. In conjunction with our TEDx club, students present for 5-8 minutes about the contribution of their work to the larger field of study.

Students must be aware of the following points about these specific question when presenting their TED Talk.

1. Whom is my scholarly work helping?
2. How can I help disseminate the information gathered to the necessary parties?
3. Why did I decide that this type of topic would be an interesting topic to research.
4. The methodology used for research, and why it was most appropriate for the research question.
5. The limitations the research methodology and/or results may had.
6. A summary and analysis of the data collected.
7. How AP Research helped the student become a better learner.

*The TEDTalk will take place in May at the HS PAC.

**The number of audience members is hard to deduce, but we hope to have gathered at least thirty people for their presentations from the community.

***If point (2) above is very specific audience. Students must be mindful to pursue their method of delivery, in order to disseminate their scholarly work to the proper outlets.

Homework

Homework is designed to support the learning that takes place in the classroom. All homework and due dates will be posted on the class calendar for the course.

Additional Help

With prior arrangement, students may request academic support during Study Hall. Teachers are available most days until 4:30pm to support students. You are also expected to make use of the regular, scheduled Academic Support opportunities the school offers on Tuesday and Thursday afternoons and your presence will be demanded if you are failing to achieve the

standards set. Students must be proactive in scheduling other additional time with their teachers.

Academic Grading and Reporting

There have been substantial changes to the grading and reporting system. Please read the following carefully and make sure you are fully aware about how your grades are reported.

The academic year is divided into two semesters. Progress reports (Q1 and Q3) will be issued mid semester with report cards being issued at the end of each semester. Letter grades are based on your demonstration of understanding of the academic standards only. (Please see the section below for a description of how the DRAGONS are now reported). The school employs a system of standards-based grading, and uses a four point scale to evaluate academic standards.

The following benchmark qualifiers are used:

Proficiency Level	Beginning 1	Approaching 2	Proficient 3	Exemplary 4
Descriptors	The student does not yet demonstrate knowledge or	The student demonstrates understanding of key concepts	The student demonstrates the ability to use the concepts	The student clearly produces work that meets the most

	comprehension of the required concepts		learned	sophisticated version of the standard
--	--	--	---------	---------------------------------------

Grades: Letter grades are used to summarize the assessment of benchmark performance in each course according to teacher assessed performance levels.

4	Exemplary	A+, A
3	Proficient	A-, B+, B, B-
2	Approaching	C+, C, C-
1	Beginning	D+, D, D-
0	Incomplete	I or F

Grade Weighting in PowerSchool

100% Assessment

No Final Exam

DRAGONS Grading and Reporting

DRAGONS standards reports are given each quarter. Quarters 1 and 3 are internal updates on semester progress and are not shared outside our school. DRAGONS assessments at the end of Semester 1 and Semester 2 will be reported to ongoing educational institutions. Each assignment we give will have at least one DRAGONS attached to it and each standard will be assessed 2-3 times per quarter and 5 times per semester. Please note that your DRAGONS score is independent of your academic grade.

Major and Minor Assignments

There are two types of assessments outside of the final exam: Major and Minor.

- Major assignments are large, end of unit type exams, labs, or projects.
- Minor assignments are smaller, homework, quizzes, in-class, formative-type works.

The number of points assigned to a single assessment is at the teacher's discretion. However, one of three point totals will be assigned:

- 10 points / 5 points / 3 points

The teacher will use these three different point totals to help differentiate between the complexity of various assessments.

Reassessment

Reassessment of student progress may apply to major assignments only. Minor assignments do not represent the final opportunity for a student to show mastery of a standard and so do not merit reassessment. At the beginning of any new unit of study, the teacher will notify students which work will be re-assessable (if any).

Final Course Letter Grade will be determined as follows:

80% Assessments
~~20% Semester/Final exam~~
****For AP Research, there
will be no final exam.
In its place, you will
complete a final task
"Helping the AP Seminar"
students.***

The final course letter grade will be reported via a transcript.

In addition to the normal letter grade, there will be a second report which will include our assessment of the **DRAGONS standards scores for this course**. This will also be reported to universities or other educational institutions.

AP CAPSTONE OFFICIAL

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.