



AP Research **COURSE SYLLABUS**

GRADE LEVEL: 12

SCHOOL YEAR: 2023-24

TEACHER: Mr. Wolfe

MAIL: wwolfe@dishs.tp.edu.tw

COURSE DESCRIPTION:

(Note: AP Seminar is a prerequisite for AP Research. Completing AP Seminar and all its required assessment components is necessary for students to develop the skills to be successful in AP Research.)

AP Research is the second and final course in the AP Capstone program. It allows students to explore in depth an academic topic, problem, issue, or idea of deep individual interest. AP Research students design, plan, and implement a yearlong investigation designed to address a research question. Through this inquiry process, the AP Research students further apply the skills they acquired in the AP Seminar course. Additional skills and considerations include (but are not limited to) learning, choosing, and implementing a research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information in greater depth than was possible in the AP Seminar course. Throughout the yearlong research process, students will reflect on their skill development, document their successes and failures in the research process, and curate the artifacts of their scholarly work. They will compile records of their reflection in a digital or physical portfolio, so that they may access the records of their work throughout the course. AP Research culminates in a major academic paper of 4,000–5,000 words, and (when applicable to various projects) a performance, exhibit, or product, plus a required presentation of 15-20 minutes, followed by an oral defense. AP Research is a vital preparatory tool for the next phase of a student's academic life, as colleges and universities increasingly design undergraduate and graduate programs in the Capstone self-study framework.

COURSE OBJECTIVES:

The following Curricular Requirements (CR) and Learning Objectives (LO) carry over from last year's AP Seminar course:

CR1 Students explore complexities of one or more themes by making connections within, between, and/or among multiple cross-curricular areas and by exploring multiple perspectives and lenses (e.g., cultural, and social, artistic, and philosophical, political, and historical, environmental, economic, scientific, futuristic, ethical) related to those themes.

CR2a The course provides multiple opportunities for students to practice and refine their skills by engaging with the *QUEST* process: *Question/Understand/Evaluate/Synthesize/Transmit*.

CR2b Students develop and apply discrete skills identified in the learning objectives within the Big Idea 1: *Question and Explore* real-world topics that address individual interests of the AP Seminar student.

LO 1.1A Contextualize and identify the complexities of a problem or issue.

LO 1.1B Pose questions and seek answers that reflect multiple, divergent, and/or contradictory perspectives.

LO 1.2 Retrieve, question, organize, and use prior knowledge about a topic.

LO 1.3 Search out and access new information using effective research strategies

LO 1.4 Evaluate the relevance and credibility of information from sources and data.

LO 1.5 Identify the information required for establishing the context of the inquiry

CR2c Students develop and apply discrete skills identified in the learning objectives within the Big Idea 2: *Understand and Analyze* concepts, arguments, and information learned in the *Question and Explore* process.

LO 2.1A Employ appropriate reading strategies and read critically for a specific purpose.

LO 2.1B Summarize and explain the main idea and the line of reasoning, and identify the supporting details of an argument, while avoiding generalizations and oversimplification.

LO 2.2A Identify, explain, and analyze the logic and line of reasoning of an argument.

LO 2.2B Analyze the relevance and credibility of evidence used to support an argument, taking context into consideration.

LO 2.2C Evaluate the validity of an argument.

LO 2.3A Connect an argument to broader issues by examining the implications of the author's claim.

LO 2.3B Evaluate potential resolutions, conclusions, or solutions to problems or issues that are identified in an argument.

CR2d Students develop and apply discrete skills identified in the learning objectives within the Big Idea 3: *Evaluate Multiple Perspectives*.

LO 3.1 Identify and interpret multiple perspectives on or arguments about an issue.

LO 3.2 Evaluate objections, implications, and limitations of alternate, opposing, or competing perspectives or arguments.

CR2e Students develop and apply discrete skills identified in the learning objectives within the Big Idea 4: *Synthesize Ideas* that have been gathered, verified, and understood throughout the research process.

LO 4.1 Formulate a complex and well-reasoned argument that explicitly considers complexities within the issue or problem.

LO 4.2A Interpret, use, and synthesize qualitative and/or quantitative data/information from various perspectives and sources (e.g., primary, secondary, print, nonprint) to develop and support an argument.

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

LO 4.3 Attribute knowledge and ideas accurately and ethically, using an appropriate citation style.

LO 4.4 Extend an idea, question, process, or product to innovate or create new understandings.

LO 4.5 Offer resolutions, conclusions, and/or solutions based on evidence while considering consequences and implications.

CR2f Students develop and apply collaboration skills identified in the learning objectives within the Big Idea 5: *Team, Transform, and Transmit* ideas and arguments developed in the collaborative research process.

CR2g Students develop and apply reflection skills identified in the learning objectives within the Big Idea 5: *Team, Transform, and Transmit* ideas and arguments developed in the collaborative research process.

CR2h Students develop and apply written and oral communication skills identified in the learning objectives within the Big Idea 5: *Team, Transform, and Transmit* ideas and arguments developed in the collaborative research process.

LO 5.1A Work both as an individual and with a team to plan, produce, and present a cohesive argument, considering audience, context, and purpose, and using appropriate media (e.g., essay, poster, presentation, documentary, research report/thesis).

LO 5.1B Communicate an argument in an evidence-based written essay adhering to established conventions of grammar, usage, style, and mechanics.

LO 5.1C Communicate an argument in an engaging oral presentation using appropriate media, incorporating effective techniques of design and delivery.

LO 5.1D Adapt an argument for context, purpose, or audience.

LO 5.1E Engage an audience by using effective presentation techniques.

LO 5.2A Provide individual contributions to overall collaborative effort.

LO 5.2B Foster constructive team climate, resolving conflicts, and facilitating the contributions of all team members to address complex, open-ended problems.

LO 5.3A Reflect on and revise individual work, thinking, and creative processes.

LO 5.3B Reflect on personal contributions to overall collaborative effort.

CR3 Students gain a rich appreciation and understanding of the issues through the following activities: reading articles and research studies; reading foundational, literary, and philosophical texts; viewing and listening to speeches, broadcasts, and/or personal accounts; and experiencing artistic works and performances.

CR4 Students develop an understanding of how to ethically use others' knowledge and ideas in their own work, avoiding plagiarism.

CR5 Students work collaboratively with a team to identify, investigate, analyze, and evaluate a real-world or academic issue; consider options, alternatives, solutions, or resolutions; and develop a written report, multimedia presentation, and defense to communicate a conclusion or recommendation.

CR6 Students work independently to identify a research question based on provided stimulus material; research the issue; analyze, evaluate, and select evidence to develop an argument; present and defend a conclusion; and produce a multimedia presentation to be delivered to their peers.

The AP Research course, as stated in the *AP Research Handbook* (2020), also requires students to demonstrate proficiency in the following academic areas:

- A. Continue the *QUEST* framework that provided the foundation for all AP Seminar performance tasks.
1. *Question and Explore* topics of personal interest, but also with real-world relevance and implications.
 2. *Understand and Analyze* new information, arguments, and evidence found in resources encountered in the Question and Explore process.
 3. *Evaluate Multiple Perspectives* critically, to ensure that the arguments and conclusions made by the student are valid, so that those arguments and conclusions add to the scholarly conversation regarding the chosen topic.
 4. *Synthesize Ideas* in sound, scholarly arguments that reflect clearly the depth of understanding gained by the student.
 5. *Team, Transform and Transmit* the arguments and conclusions, orally and in writing, so that a critical audience will understand both the complexity and the validity of the work done by the student. (Note that the *Team* aspect of AP Research will not involve collaboration with classmates, but may involve some degree of collaboration with outside experts recruited by the student.)
- B. In addition to the skills and objectives brought forth from the AP Seminar year, more advanced goals are set for the AP Research scholar. The following set of objectives and skills should comprise a significant part of the yearlong research process for all AP Research students:
1. Develop an understanding of ethical research practices and maintain an awareness of these standards at all times. These ethical research standards apply to the following:
 - a. the use of human beings or animals in any experimental form during the research process;
 - b. the engagement with non-adults/minor children in any fashion during the research process;
 - c. the engagement with A.I. resources as means for conducting research or producing any research-related products, not limited to submitted written work;
 - d. the use and citation of information or material produced by others.*(* - See the *AP Capstone Plagiarism Policy* below, in the **Additional Information** portion of this syllabus.)
 2. Produce a final academic paper of 4,000-5,000 words, resulting from in-depth research in a topic of personal and real-world relevance, that includes, at minimum, the following segments:

- a. Introduction and Literature Review
 - b. Discussion of Method, Process, and/or Approach
 - c. Description and Analysis of Results, Findings, and/or Product(s)
 - d. Clear, Precise, and Valid Description of Conclusions
 - e. Consideration of Future Directions for Further Research into the Chosen Topic
 - f. Complete and Properly Cited Bibliography
3. Produce a final academic paper that reflects the highest standards of scholarship, a paper that reflects the following AP Capstone proficiencies:
 - a. refine a narrowly focused research question that limits the scope of effective inquiry;
 - b. identify a ‘gap’ in the existing scholarly conversation regarding the chosen topic, issue, or problem;
 - c. identify an aligned, ethical, feasible research approach or method to accomplish the purpose of the research question and/or project goal that arises from that question;
 - d. select effective resources that provide the broadest possible range of perspectives relative to the chosen research topic;
 - e. analyze, evaluate, and assess the scholarly credibility of the chosen resources;
 - f. understand and analyze the arguments and evidence presented in the chosen resources;
 - g. select the most effective and relevant evidence to support the arguments presented in the academic paper;
 - h. establish the paper’s argument and conclusions in the strongest and most valid language possible;
 - i. contextualize the argument and the research findings so that the paper places itself convincingly within the scholarly conversation regarding the topic or issue or problem;
 - j. present, within the academic paper, a research process that is replicable by any other scholar who is engaged in the ongoing conversation regarding the topic, issue, or problem.
 4. Produce and maintain a *Process and REflection Portfolio* (PREP) that tracks the yearlong research process and provides evidence of the topical and procedural evolution of that process.
 - a. The PREP folder may be physical or digital, depending on class requirements.
 - b. The PREP provides the AP Research instructor with assessable mileposts that comprise the bulk of the in-class assessment for the entirety of the AP Research course.
 - c. PREP folders are not submitted for further assessment by AP Research readers.
 5. Design and deliver a thorough and engaging audio-visual presentation, followed by an oral defense, that clearly communicates to an audience the goals, processes, analysis, and conclusions developed by the student during the yearlong research process.
 - a. For some research projects, a demonstration, performance, display, or product might be presented in addition to the required final presentation and oral defense.
 - b. The AP Research instructor and any outside experts may be consulted as to the necessity of such an additional presentation.

ASSESSMENT:

The AP Research course concludes with an end-of-course assessment of two elements produced by the student:

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| A. The Academic Paper | <i>75% of the final score</i> |
| <ol style="list-style-type: none"> 1. 4,000-5,000 words in length 2. Submitted via the AP College Board digital portfolio, no later than 30 April 2024 3. Scored by AP Research readers at AP College Board | |
| A. Presentation and Oral Defense | <i>25% of the final score</i> |
| <ol style="list-style-type: none"> 1. 15–20 minutes total for both components 2. A panel of 3-4 professional observers (not limited to teachers) must be present 3. A total of 3-4 oral defense questions will be asked and answered 4. Scored by the DIS AP Research instructor and submitted by the instructor via the AP College Board digital portfolio, no later than 30 April 2024 | |

Additional Assessments

AP Research students will submit weekly assignments that formatively assess their demonstration of the skills they need for the successful completion of the course. Those assignments include but are not limited to:

- Document review and analysis
- Applying rubric elements to sample documents
- Peer review critiques of assignments submitted by classmates
- Oral presentation practice
- Source credibility assessment
- Annotated bibliographies
- Resource collection and expansion

All items above, and any additional assessment items, will be maintained by the student in the individual PREP folder for each student.

The AP Research instructor reserves the right to develop and assign various assessments that are not listed here but prove to be effective tools for measuring student progress. Some assignments will be labeled as “Quarter Project” or “Quarter Exam” assessments, per DIS academic grade book requirements.

PRIMARY TEXTBOOK & OTHER RESOURCES

The AP Research course does not use a primary text. In place of a primary text source, several outside resources are used to supplement lessons and to provide students with a wide variety of instructional and informational texts. The following list is not inclusive of all resources that may be used during the school year:

- Booth, W., Colomb, G., and Williams, J. (2008). *The Craft of Research* (3rd Ed.). University of Chicago Press.
- Caulfield, M. (2021). *Web Literacy For Fact-Checkers*. Creative Commons.
- Christensen, L., Johnson, R., and Turner, L. (2015). *Research Methods, Design, and Analysis* (12th Ed.). Pearson.
- Graff, G. and Birkenstein, C. (2014). *They Say / I Say*. (Unabr. Ed.). W.W. Norton & Co.
- Leedy, P. and Ormrod, J. (2010). *Practical Research: Planning and Design* (9th Ed.). Merrill.
- Shea, R., Scanlon, L., and Aufses, R. (2013). *The Language of Composition* (2nd Ed.). Bedford/St. Martin's.
- AP Research Course and Exam Description (2020). New York: College Board
- AP Research Workshop Handbook and Resources (2021). New York: College Board
- APA Style Guide, 7th Edition (available online)
- Sample methodology papers (provided by the teacher)
- Sample AP Research final academic papers (provided by the teacher)

ADDITIONAL INFORMATION

AP College Board **requires** that the following paragraph regarding plagiarism, from the AP Research Course and Exam Description (2021), be included in all syllabi:

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 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 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.

The following passage from the DIS administration regards artificial intelligence and its use as a tool for academically dishonest submissions:

Academic Dishonesty means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at DIS. Academic dishonesty includes but is not limited to, the following:

1. Purposely incorporating the ideas, words of sentences, paragraphs, or parts thereof without appropriate acknowledgment and representing the product as one's own work; and
1. Representing another's intellectual work such as photographs, paintings, drawings, sculpture, or research or the like as one's own, including failure to attribute content to an AI.
2. Employing a tutor, making use of Artificial Intelligence without acknowledgement, getting a parent to write a paper or do an assignment, paying for an essay to be written by someone else and presented as the student's own work.
3. Committing any act that a reasonable person would conclude, when informed of the evidence, to be a dishonest means of obtaining or attempting to obtain credit for academic work.

Any act of academic dishonesty will result in an automatic zero on the entire assignment.

Tentative 1st Quarter Schedule

NOTE: The AP Research course emphasizes individual work and student-centered classroom sessions. Teacher instruction is designed for whole-class lessons in 1st Quarter, along with opportunities for individual project work and one-on-one sessions with each scholar. As often as possible, particularly beginning in the 2nd Quarter, work weeks are built into the syllabus, so students may maximize their efforts to collect and analyze resources, building a body of knowledge (BOK) that they may use to design and initiate their own research project.

Week 1 12-16 August	UNIT: Topic Selection and Preliminary Research INSTRUCTIONAL EMPHASIS: Narrowing a topic; significance of the issue; basic research vocabulary MATERIALS: AP Research rubric; sample papers; PREP folders; reading records; annotated bibliographies; basic research vocabulary glossary ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 2 19-23 August	UNIT: Identify Gaps / Research Question Development INSTRUCTIONAL EMPHASIS: Criteria for research questions; importance of gaps in the body of knowledge; narrow and wide gaps MATERIALS: AP Research rubric; sample papers; PREP folders; reading records; annotated bibliographies; basic research vocabulary glossary ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 3 26-30 August	UNIT: Work Week - Body of Knowledge (BOK) INSTRUCTIONAL EMPHASIS: Review; one-on-one conferences with struggling students MATERIALS: AP Research rubric; reading records; annotated bibliographies; PREP folders ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 4 2-6 September	UNIT: Finalize Research Question / Methodology INSTRUCTIONAL EMPHASIS: Selecting a method; matching method to discipline MATERIALS: AP Research rubric; Simon and Goes methods chart; reading records; annotated bibliographies; PREP folders ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 5 9-13 September <i>9: Mass and VIP induction</i>	UNIT: Methodology and Design INSTRUCTIONAL EMPHASIS: Feasibility; replicability MATERIALS: AP Research rubric; Simon and Goes methods chart; reading records; annotated bibliographies; PREP folders ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 6 16-20 September <i>Only 1 day of classes</i> <i>17: Moon Festival Holiday</i> <i>18-20: Teachers' Retreat and Conferences</i>	UNIT: Annotated Bibliographies due INSTRUCTIONAL EMPHASIS: None (<i>Classes meet only on Monday</i>) MATERIALS: None ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 7 23-27 September <i>24-26: Pre-Exam Days</i>	UNIT: Research Proposals INSTRUCTIONAL EMPHASIS: Elements of a research proposal MATERIALS: Research proposal templates ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 8 30 Sep. - 4 Oct.	UNIT: Work Week – Completing the Research Proposal INSTRUCTIONAL EMPHASIS: Review; one-on-one conferences with struggling students MATERIALS: Research proposal templates; assignment rubrics ASSIGNMENTS/ASSESSMENTS: <i>Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</i>
Week 9 7-11 October	UNIT: Research Proposals due INSTRUCTIONAL EMPHASIS: None (<i>Classes meet only on Monday</i>) MATERIALS: None

<p><i>Only 1 day of classes</i> 8-9: Qtr. Exams, half-days 10: 10/10 Holiday 11: Recording Day, no students</p>	<p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
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Tentative 2nd Quarter Schedule

<p style="text-align: center;">Week 1 (10) 14-18 October <i>14: Begin 2nd Qtr.</i></p>	<p>UNIT: The Literature Review - Week 1*</p> <p>(* - This will remain the primary focus of the short 2nd Quarter, but weekly instruction may include review of areas covered but not completed – in the 1st Quarter.)</p> <p>INSTRUCTIONAL EMPHASIS: Purpose and contents of a literature review; how a lit review fits in the paper introduction; the appropriate voice for writing the lit review</p> <p>MATERIALS: AP Research final paper rubrics; sample papers; Foltz graphics; PREP folders</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 2 (11) 21-25 October <i>25: Masquerade Night</i></p>	<p>UNIT: The Literature Review - Week 2</p> <p>INSTRUCTIONAL EMPHASIS: Purpose and contents of a literature review; how a lit review fits in the paper introduction; the appropriate voice for writing the lit review</p> <p>MATERIALS: AP Research final paper rubrics; sample papers; Foltz graphics; PREP folders</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 3 (12) 28 Oct.-1 Nov. <i>1: All Saint's Day Mass</i></p>	<p>UNIT: Work Week 1 - Students will continue source collection, analysis, and recording</p> <p>INSTRUCTIONAL EMPHASIS: Reviews as needed; one-on-one conferencing</p> <p>MATERIALS: Annotated bibliographies; PREP folders</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 4 (13) 4-8 November</p>	<p>UNIT: Work Week 2 - Students will continue source collection, analysis, and recording</p> <p>INSTRUCTIONAL EMPHASIS: Reviews as needed; one-on-one conferencing</p> <p>MATERIALS: Annotated bibliographies; PREP folders</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 5 (14) 11-15 November</p>	<p>UNIT: The Literature Review – Rough Drafts</p> <p>INSTRUCTIONAL EMPHASIS: Reviews as needed; one-on-one conferencing</p> <p>MATERIALS: Literature Review Quarter Project rubric</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 6 (15) 18-22 November <i>22: G12 Qtr. Exams</i> <i>22: YSC, no afternoon classes</i></p>	<p>UNIT: The Literature Review – Final Drafts</p> <p>INSTRUCTIONAL EMPHASIS: Reviews as needed; one-on-one conferencing</p> <p>MATERIALS: Literature Review Quarter Project rubric</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 7 (16) 25-29 November <i>25: G12 Qtr. Exams</i> <i>26: Start 4th Qtr., Grade 12</i> <i>26-28: Pre-Exam Days</i></p>	<p>UNIT: Preparing for Project Implementation and Data Collection</p> <p>INSTRUCTIONAL EMPHASIS: Reviewing Method and Design</p> <p>MATERIALS: xx</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 8 (17) 2-6 December <i>6: Foundation Day Mass and Christmas celebration, half-day</i></p>	<p>UNIT: Preparing for Project Implementation and Data Collection</p> <p>INSTRUCTIONAL EMPHASIS: Developing effective surveys and other data collection tools</p> <p>MATERIALS: Sample surveys, questionnaires, scales, etc.</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>
<p style="text-align: center;">Week 9 (18) 9-13 December <i>12-13: Qtr. Exams, Half-Days</i></p>	<p>UNIT: Semester Review / 3rd Quarter Project Maps</p> <p>INSTRUCTIONAL EMPHASIS: Any lessons students request for review purposes</p> <p>MATERIALS: Sample project maps/calendars</p> <p>ASSIGNMENTS/ASSESSMENTS: Subject to change depending on weekly lesson progress; all assignments and assessments will be detailed in daily lesson plans.</p>

CHRISTMAS BREAK (14 Dec.-6 Jan.)