AP® Research Syllabus

2019-07-13

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1 Course Description

Prerequisite: AP® Seminar

AP® Research is a one-year course that culminates in a 4000- to 5000-word academic paper and a 15- to 20-minute presentation with oral defense. Students will learn the process of academic research as well as industry-aligned research tools. Depending on the students' research topics, research methods aligned with the AP® Statistics curriculum may be integrated into mini-workshops.

2 Course Objectives

1. Develop research proposal that demonstrates ability to define research topic and question with accompanying literature review.
2. Design proper research procedures that apply sound methodology to address research question.
3. Analyze and evaluate research findings with appropriate methods.
4. Apply general research tools such as source management software and version control to organize academic paper.
5. Gain familiarity with academic and industry standards of reproducible research.
6. Communicate research effectively with well crafted presentation slides.

3 Recommended Resources

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Thousand Oaks, CA: SAGE Publications.

Gray, P. S., Williamson, J. B., Karp, D. A., & Dalphin, J. R. (2007). *The Research Imagination: An Introduction to Qualitative and Quantitative Methods.* New York, NY: Cambridge University Press.

4 Curricular Requirements

The College Board Syllabus Development Guide lists the following curricular requirements for AP Research:

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

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

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

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

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

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

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

CR2a: Students develop an understanding of ethical research practices.

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

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

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

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.

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.

5 Course Schedule

5.1 Unit 1

5.2 Unit 2

5.3 Unit 3

5.4 Unit 4

References