† CollegeBoard

Beyond Traditional Advanced Placement: AP Research, AP Capstone™ and the AP Diplomas



Today's Agenda

- 1. Background
- 2. AP Research & AP Seminar: The AP Capstone Program
- 3. Research
- 4. The Diplomas
- 5. Recognition
- 6. Questions





Most credential evaluators are familiar with AP as an academic program, though its global growth can be a reason to reevaluate current policies

Advanced Placement (AP): Some Background

What is it?
How is it developed?
How are exams scored?
How is it validated?

An AP® Primer

38 courses, each culminating in a rigorous, standardized exam



The Advanced Placement (AP) Program enables students to pursue university-level studies while still in secondary school.

Each AP course is modeled upon a comparable university course.

AP courses conclude with a university-level assessment developed and scored by university faculty as well as experienced AP teachers.

AP Exams enable students to demonstrate mastery of university-level course work.

Universities in more than 60 countries recognize AP in admissions process.

Most four-year colleges and universities in the U.S. and Canada also grant credit or placement on the basis of successful AP Exam scores.

Research consistently shows that students who receive a score of 3 or higher on AP Exams typically experience greater academic success in university and have higher graduation rates than their non-AP peers.

How AP Courses and Exams Are Developed

Committees of university faculty members and expert AP teachers design AP courses and exams.

A **curriculum framework** presents the scope and expectations of each course. The framework describes the knowledge and thinking skills students should demonstrate for success on the exam.

AP courses reflect current scholarship and advances in each discipline—and data confirms that AP Exams reflect and assess expectations for university-level work.

AP courses and exams are conceived and developed in parallel processes.

AP course development uses the backward planning model of Understanding by Design®, which proposes that curriculum design should begin with clearly defined learning outcomes with evidence needed to confirm that the learning outcomes have been met.

AP Exam development uses **Evidence-Centered Design**, which incorporates demonstrating evidence of learning outcomes into assessment design.

Both processes begin with the end in mind; together, they articulate what students should understand, know, and be able to do by the end of their AP experience.

About AP Scores

AP Scores are a standardized measure of course mastery

The final score is reported on a 5-point scale as follows:

5 = extremely well qualified

4 = well qualified

3 = qualified

2 = possibly qualified

1 = no recommendation

AP Exams are administered over **two weeks in May** every year.

An **AP score** is a weighted combination of a student's scores on the different sections or parts of the exam. Experienced professors and AP teachers apply to be AP exam readers. AP exams are read and scored centrally.

AP Exam Score Validity

- Concerned with appropriateness of exam score interpretations and uses
- Requires ongoing efforts to accumulate evidence to support sore interpretations and uses
- Three types of evidence used to validate AP courses:

Content validity

Predictive validity

Consequential validity

[&]quot;Qualified" means that students have proven themselves capable of doing the work of an introductory-level course in a particular subject at university.

Validity Measures

Three Types of Validity Used by AP

Content validity

Content of exam should be representative of the content of domain; central elements should receive more emphasis on exam

Content determined by curriculum studies and committees of experts

Exam score represents an accurate estimate of an examinee's mastery of the domain

Consequential Validity

Students exempted from an intro university course perform as well or better in subsequent coursework as students who take the take the course.

Discipline-specific GPAs higher for AP students who place out of the introductory course than non-AP students who take the intro course

Predictive Validity

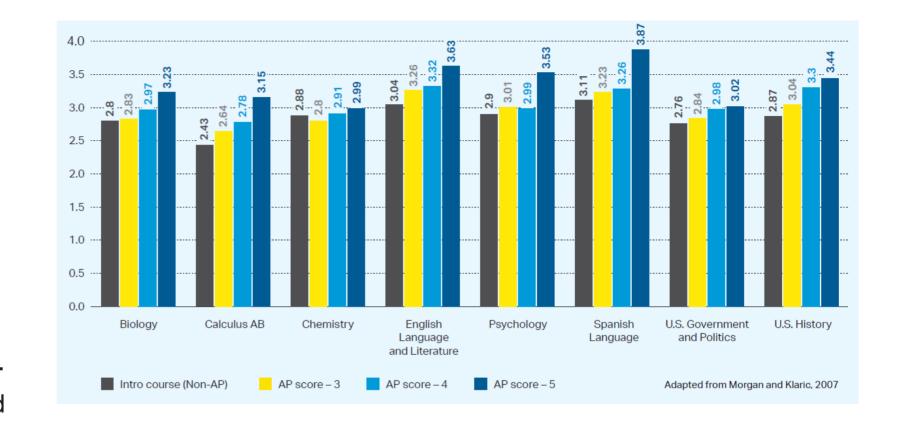
Students who take APs, compared to comparable students who didn't, tended to graduate at higher rates and with higher GPAs. AP course selection is also very aligned with ultimate university course of study/major

GPA in sequent course performance

Students who took an AP Exam perform well in subsequent courses in the discipline.

A 2007 study revealed AP participation is related to positive outcomes for students earning a score of 3 or higher on an AP Exam.

In most AP subjects, they performed the same as or better in the intermediate-level university course than students who took the university's introductory course, controlling for prior achievement.



Morgan, R., & Klaric, J. (2007). AP students in college: An analysis of five-year academic careers (College Board Research Report 2007-4). New York: The College Board.



AP Research and AP Seminar –

AP Capstone as Program and Credential





AP Capstone was developed to teach academic skills needed for higher education, career, and life readiness identified by leading educational organizations and College Board membership

AP Capstone achieves this by:

- Focusing on the skills necessary for successful completion of higher education courses;
- Honing abilities to **synthesize information** from multiple perspectives and apply skills in new situations and **cross-curricular contexts**;
- Practicing collection and analysis of information with accuracy and precision;
- Cultivating abilities to craft, communicate, and defend evidence-based arguments; and
- Providing opportunities to practice disciplined and scholarly research skills while exploring relevant topics that appeal to their interests and curiosity

AP Capstone is a skills-based diploma program that combines AP Seminar and AP Research



EVALUATE academic conversations



AP Capstone is a skills-based program and credential



EVALUATE academic conversations





CONTRIBUTE TOacademic conversations

AP Seminar: evaluate academic conversations

Evaluate complex questions

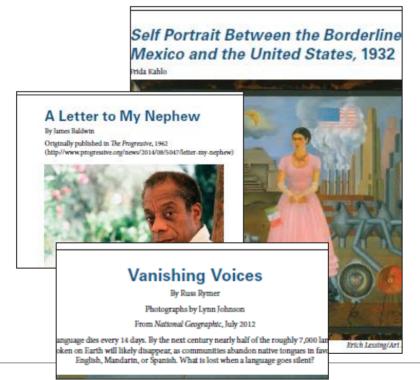
Cultural

TOPIC?

Economic

Historical

Develop evidencebased arguments



Communicate professionally



AP Seminar student samples

Student samples available at: https://apcentral.collegeboard.org/courses/ap-research/exam?course=ap-seminar



Artificial Intelligence and the Art

Community

AP Seminar



Chinese Culture & Chinese Real Estate
AP Seminar

AP Seminar score is based on projects and exams

Performance tasks completed throughout year account for 55% of the AP Seminar score

Task 1 (20%)

(Dec - Feb)

Task 2 (35%)

(Jan – Apr)

AP exam (45%) (May)

Written response

Cultural

Economic Scientific



Academic Implications of Computer Science

AP Seminar End-of-Course Exam

Weight: 45% of the AP Seminar score

AP SEMINAR

Part A

Directions: Read the passage below and then respond to the following three questions.

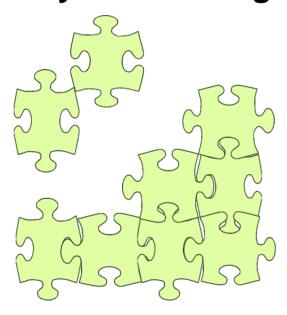
- 1. Identify the author's argument, main idea, or thesis
- Explain the author's line of reasoning by identifying the claims used to build the argument and the connections between them.
- Evaluate the effectiveness of the evidence the author uses to support the claims made in the argument.

Multimedia presentation

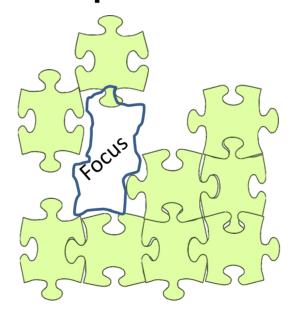


AP Research: contribute to academic conversations

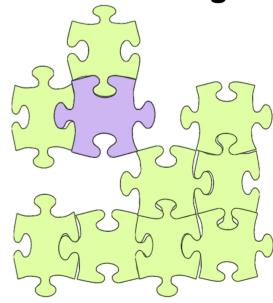
Review the existing body of knowledge



Develop a research question



Contribute to the body of knowledge



AP Research: sample classroom lesson topics

- Understand Discipline-Specific Paradigms
- Develop and Revise Research Questions
- Contextualize Your Inquiry Journey with the Literature Review
- Acknowledge Definitions, Assumptions, Hypotheses
- Align the Inquiry Approach, Design, and Method
- Choose and Defend an Inquiry Method
- Organize and Discuss the Results of Your Method
- Engage in Ethical and Safe Research Practices
- Establish Your Own Credibility

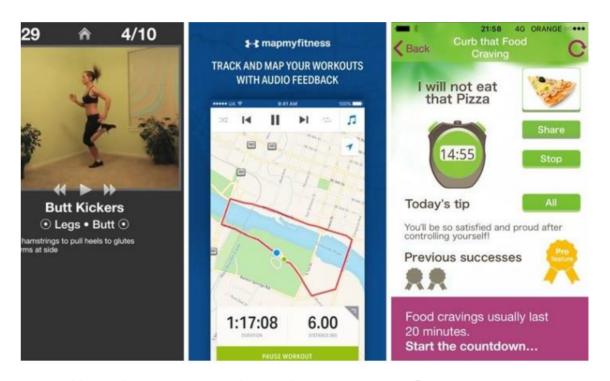
AP Research student samples

Student samples available at: https://apcentral.collegeboard.org/courses/ap-research/exam?course=ap-research



Antimicrobial properties of Chinese herbs

AP Research



Effectiveness of Weight-Loss Smartphone Apps

AP Research

AP Research: performance-based assessments

There is NO end-of-Course exam in AP Research

4,000-5,000 word Academic Research Paper (75%)

Elements of the Academic Paper Required Element Introduction Provides background and contextualizes the research question/ project goal and initial student assumptions and/or hypotheses. Introduces and reviews previous work in the field, synthesizing information and a range of perspectives related to the research question/project goal. Identifies the gap in the current field of knowledge to be addressed. Method, Process, Explains and provides justification for the chosen or Approach method, process, or approach. Presents the findings, evidence, results, or product. Results, Product. or Findings Discussion, Analysis. Interprets the significance of the results, product, or findings; and/or Evaluation explores connections to original research question/project goal. Discusses the implications and limitations of the research or creative work. Conclusion and Reflects on the process and how this project could impact the field. **Future Directions** Discusses possible next steps. Provides a complete list of sources cited and consulted Bibliography in the appropriate disciplinary style. AP Capstone CollegeBoard

Presentation and Oral Defense (25%)

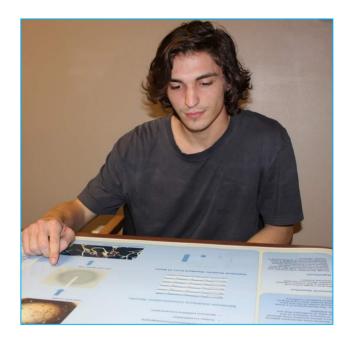




AP Research students showcase work in various ways

Examples

Showcase work at competitions



The Evolution of Antibiotic Resistance Through Protein Mutations

Adis Kukuljac 2018

Publish their research

- Journal of Secondary Interdisciplinary Studies, V.1 (Mission Collegiate High School)
- Big R Research (Red Mountain High School)
- Whitman Journal of Psychology
- National Science Institute in Singapore
- National Human Genome Research Institute
- CREAM Undergraduate Research at UVM

"Thank you so much for all of the time both of you have put into the program - many of the opportunities I am getting now are because of what I had done during my time in AP Seminar and AP Research."

"Last semester, I joined a Psychology research team on campus and I think the primary reason my application even passed the first round to an interview offer was my AP Capstone experience."

Present at undergraduate institutions





AP Capstone helped prepare me so much for University. The hands-off teaching methods, research and writing skills, and just taking control of your own learning.

Y. Chuang, University of Toronto



College Board Research

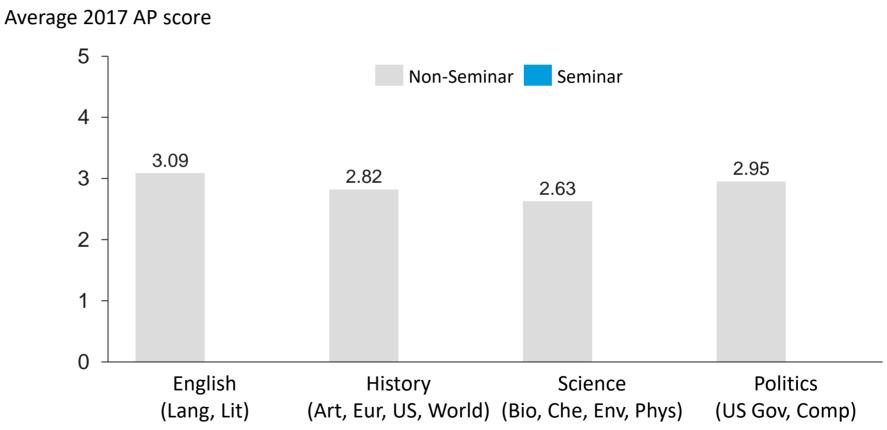
AP Capstone

AP Seminar correlation with other AP exams (I)

NEXT-YEAR PERFORMANCE on AP exams

AP Seminar

~79% (3+ in <u>2016</u>)



P value < 0.01 (all differences)

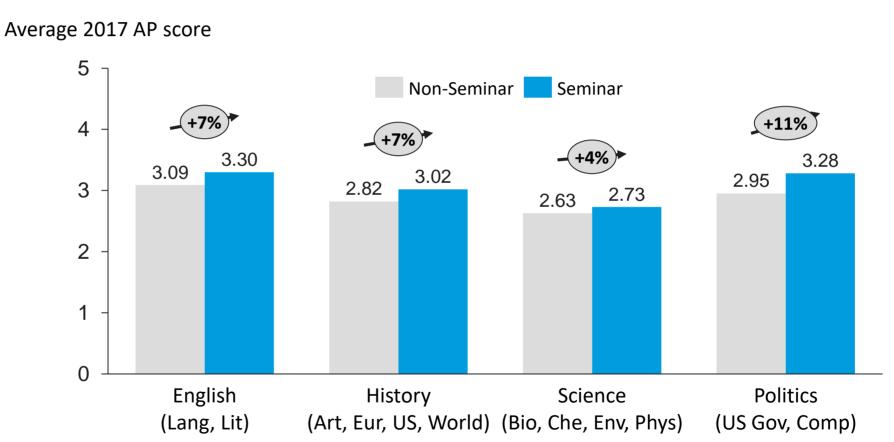
Notes: Results presented take into account student first-generation and minority status, gender, high school grades, PSAT scores, number of AP Exams taken in the same subject area prior to AP Seminar, and number of other AP Exams taken prior and concurrent to AP Seminar.



AP Seminar correlation with other AP exams (II)

NEXT-YEAR PERFORMANCE on AP exams





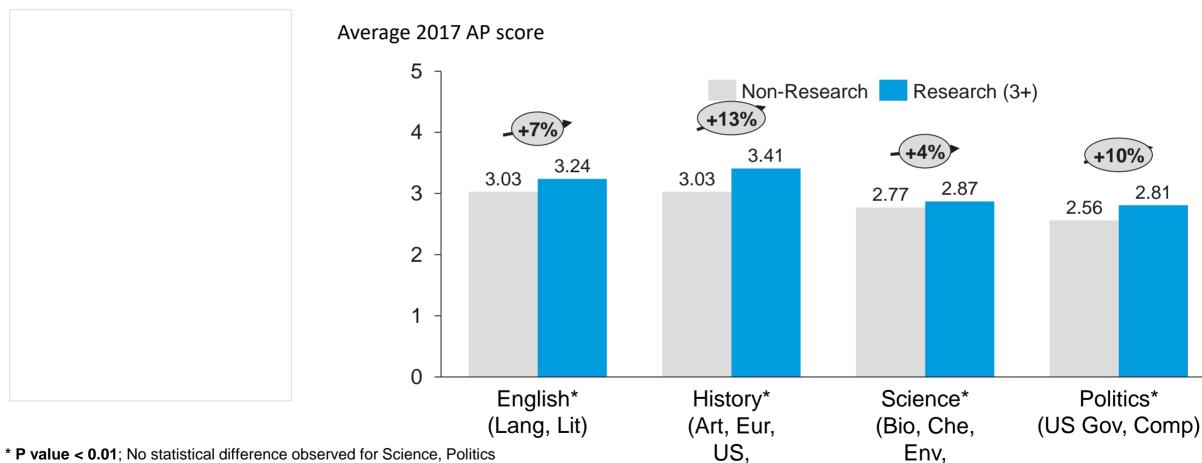
P value < 0.01 (all differences)

Notes: Results presented take into account student first-generation and minority status, gender, high school grades, PSAT scores, number of AP Exams taken in the same subject area prior to AP Seminar, and number of other AP Exams taken prior and concurrent to AP Seminar.



AP Research correlation with other AP exams

CONCURRENT PERFORMANCE on AP exams



Notes: Results presented take into account student first-generation and minority status, gender, high school grades, PSAT scores number of AP Exams taken in the same subject area prior to AP Seminar, and number of other AP Exams taken prior and concurrent to AP Seminar.



Higher Education benefits

Successful AP Seminar students enroll in more selective schools and enjoy GPA success

9%
more selective
vs. comparable
non-AP Seminar
students

+0.16 pts

1st year GPA

vs. comparable

non-AP Seminar

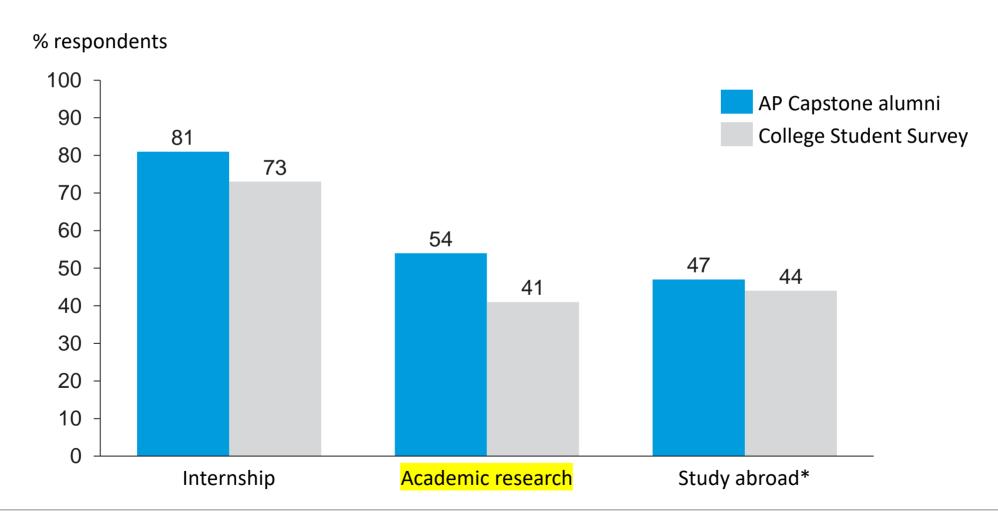
students

Note: Differences are based on regression model controlling for student race, first-generation status, low-income, gender, SAT scores and high school grades.

Note: P<0.01

AP Capstone alumni vs overall university population

Extremely or moderately likely to participate in the following while in college or university







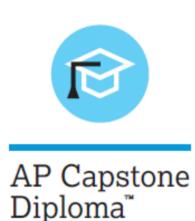
I've gotten a research assistant position after my first year, which is not too common here, and AP Capstone had a role to play.

J. Tang, University of British Columbia



Credentialing: The Diplomas

Conceived by AP Higher Education Advisory Committee



AP Seminar

Year 1
Earn score of 3 or higher

AP Research

Year 2

Earn score of 3 or higher

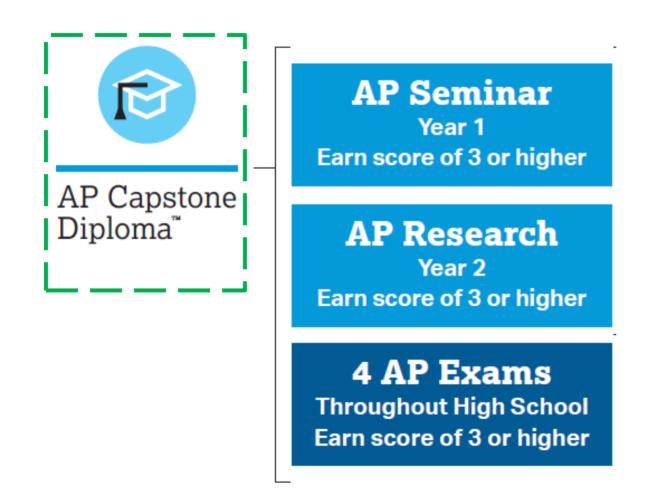
4 AP Exams

Throughout High School Earn score of 3 or higher

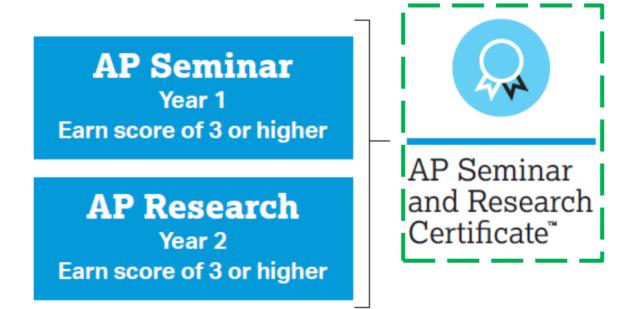


AP Seminar and Research Certificate[™]

AP Capstone program credentials



AP Capstone program credentials



AP Capstone awards

Two potential distinctions'



AP Capstone Has achieved academic distinction by completing a rigorous Advanced Placement course of study while attaining college-level research sidls and has earned the **AP Capstone Diploma** By successfully completing AP Seminar, AP Research, and a minimum of four additional AP Courses and exams with scores of three or higher. **†** CollegeBoard

AP Seminar

AP Research

AP Seminar

AP Research

*Note: Students must earn scores of 3 or higher on all respective exams in order to earn distinction.



4 AP

Exams

AP International Diploma

Intended to be an honor designation 5 AP Exam Scores of 3+ Only offered outside the US



2 Languages*

1 Couse heavy on Global Perspectives**

1 Science or Math

1 Open AP

* The requirement is for modern languages, so AP Latin is not eligible. However, students can be certified for four other modern languages by the National Evaluations of World Languages: **Korean, Arabic, Portuguese** and **Russian**

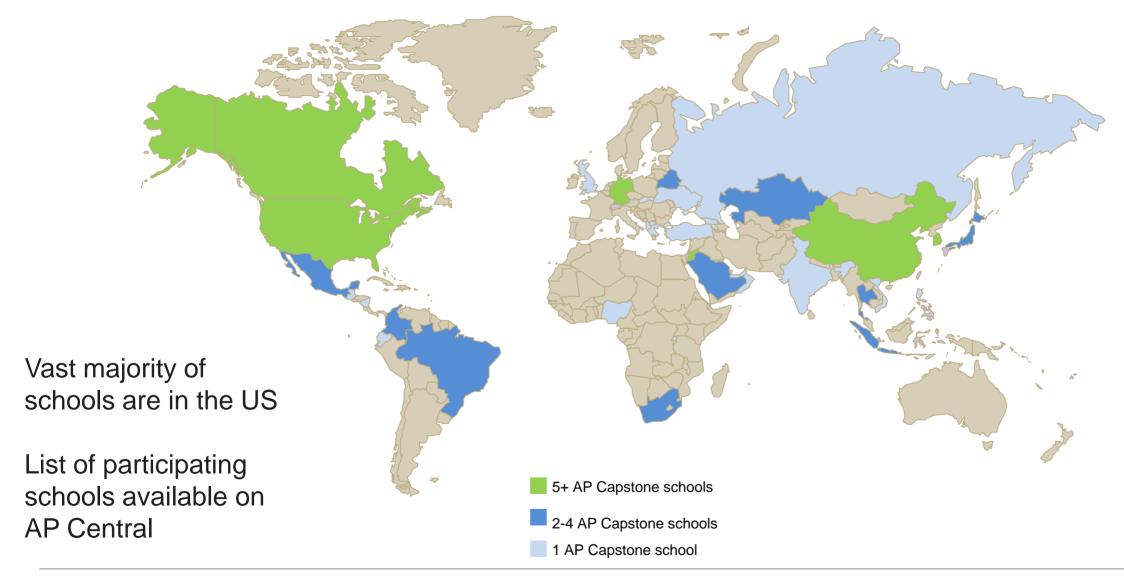
** The courses that meet this requirement are AP World History; AP Comparative Government; AP Art History; AP Macroeconomics; AP Env Science; AP Human Geography



Usage & Recognition

AP Capstone

2019-20 participation: ~1,900 schools, ~60 countries



AP Capstone alumni are global



Sample General AP Usage Policies



US universities often use AP courses in admissions, as an optional credential that is considered alongside mandatory requirements.

Most also **grant credit or placement** for scores of 3 or higher, while many selective schools grant credit for scores of 4 or 5.



Berkeley

at

California

University of

ΑP

AP scores of 3 or higher add strength in admission.

 AP credit granted for scores 3 or higher.

IB

- IB courses or diploma accepted in admissions.
- IB credit granted with full diploma, more credits with HL scores of 5 or higher.

₩ Ī NYU

University

New York

ΑP

- If submitting AP exam scores, students must provide from 3 subjects.
- AP credit granted for results of 4 or 5.

В

- For IB, students may submit 3 HL exams, or the full diploma.
- IB credit typically granted for HL scores of 6 or 7.



AF

University

uke

- AP accepted in admissions.
- AP credit granted for results of 4 or 5.

IB

- IB courses or diploma accepted in admissions.
- IB credit granted for HL with scores of 6 or 7.



Sample General AP Usage Policies



Most universities in Canada use AP in admissions.

Most also **grant credit or placement** for scores of 3 or higher, while many selective schools grant credit for scores of 4 or 5.



A

University

McGill 1

• AP accepted in admissions.

• AP credit granted for scores of 4 or 5.

IB

- IB diploma candidates must submit predicted grades demonstrating scores of 5 or higher in all HL and SL courses. Most programs have higher minimums.
- IB credits with full diploma and HL results of 5 or higher.



Columbia

British

of

University

The

ΑF

- AP accepted in admissions.
- AP credit granted for scores of 4 or 5.

IB

- Full IB diploma accepted in admissions, with 3 HL courses.
- IB credits for all HL and limited SL courses.



of Toronto

The University

AF

- AP accepted in admissions.
- AP credit granted for scores of 4 or 5.

IB

- Full IB diploma accepted in admissions.
- IB credit granted for HL subjects with scores of 5 or higher.



Sample AP Usage Policies



Most UK universities recognize AP exam scores in the **admissions process**, and may grant unconditional admission for scores of 3 or higher in 3 or more relevant subjects, while selective universities may require higher scores.



ΑP

 Successful applicants normally achieve AP scores of 5 on at least 5 AP Exams in the appropriate subjects for their intended concentration.

ΙB

Cambridge

 For IB, SL courses satisfy AS Level and HL satisfy A Level. Typical offers usually require scores 40-42 out of 45, with 776 in HL.



A

 Requires that international applicants applying with AP credentials submit 3 or more AP exams with scores of 5 in appropriate subjects.

ΙB

 IB diploma accepted in admissions, scores of 6 and 7 in HLs are typical. Scores are typically 38-40 out of 45.



London

ast

ŭ

of

University

The

AF

 Recommends international applicants to submit 3 or more AP Exams with scores of 3 or higher as part of their admission policies. Some departments, such as the School of Health and Bioscience, may have require applicants to have an AP Exam in a relevant subject area.

Ш

• IB diploma accepted in admissions, scores are typically 25-26 out of 45.



Examples of AP Capstone credit policies

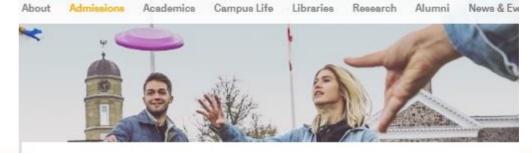
AP Course

AP Research





Search Dal.ca



Min Grade

Dal.ca Home > Admissions > Undergraduate Admissions > Specific Course Requirements > AP Applicants

ar =

4

AP APPLICANTS

As an AP student you must meet our general entrance requirements. For admission we consider your school results or final exams.

Scholarships

Visit Entrance Awards for more information about applying for our awards.

University credit for AP courses

Dalhousie awards university credit for selected AP courses completed with a **national exam** result of 4 or 5.

After you have confirmed your offer and received your exam results we will let you know which AP courses transfer to your new program. Arrange for the College Board to send an official transcript of your final AP exam results to the Registrar's Office as soon as it is available.

AP transfer credit table

**Equivalencies can change if a course is re-evaluated.

AP course	Dalhousie equivalent	
Biology	Biology 1010.03 and 1011.03	
Calculus AB	Mathematics 1000.03 and 1010.03	
Calculus BC	Methematica 1000.03 and 1010.03	
Capatone: Research	ASSC 1999.03	
Capatone: Seminar	ASSC 1999.03	

US public university system credit recommendations for AP Capstone

- State and System Faculty
 Committee Review establishes
 guaranteed credit for AP Capstone
 subjects for all public institutions.
- Ensuring identification of specified course equivalence supports seamless articulation and transfer
- Cross curricular considerations focused on the metacognitive cycle and integrated learning

<u>Florida</u>

AP Seminar-Scores of 3-5 earn 3 credits Interdisciplinary Studies Critical Thinking

AP Research-Scores of 3-5 earn 3 credits of Interdisciplinary Studies-Special Topics

California State University System

AP Seminar-Scores of 3-5 earn 3 Gen Ed credits-Critical Thinking

Kentucky

Scores of 3-5 earn General Education Elective credit. Individual campuses can determine course equivalency. Ex: English and Writing& Rhetoric.

Mississippi

Scores of 3-5 earn General Education Elective credits.

North Dakota

Scores of 3-5 earn General Education Elective credits.

South Carolina

Scores of 3-5 earn General Education Elective credits.

Indiana

Scores of 3-5 earn General Education Elective credits. Individual campuses can determine course equivalency. Ex: English/ Undergraduate Seminar

Ohio

Scores of 3-5 earn General Education Elective credit. Individual campuses can determine course equivalency. Ex: Honors or PLA.

Illinois

Scores of 3-5 earn General Education Elective credit. Individual campuses can determine course equivalency. Ex: ISU-English for AP Research.

Wisconsin

Scores of 3-5 earn General Education Elective credits.

West Virginia

Scores of 3-5 earn General Education Elective credits.





Next Steps

AP Capstone Higher Ed Policies

Please let us know what your university's or government agency's policy is around AP Capstone.

Contact Russell Dover rdover@collegeboard.org

- For universities/government agencies that have a general AP policy (whether for admissions or credit) then AP Seminar and AP Research can be considered (either together or separately) already
 - > This is the most common scenario
- For universities that require specific AP courses as prerequisites, think about whether AP Seminar and AP Research could be options, and for which faculties
 - Requires work if not already done
- For universities that grant credit/equivalency for specific courses, they will need to determine what that equivalency will be.
 - Requires work if not already done





AP Capstone made freshman year a breeze. I honestly didn't realize it at the time, but now I've come to appreciate just how forward thinking the AP Capstone program is. The training the AP Capstone diploma graduates got throughout the program was truly invaluable.



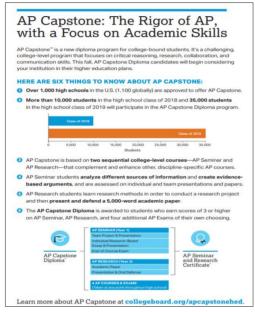
J. Uy, New York University Abu Dhabi

Questions



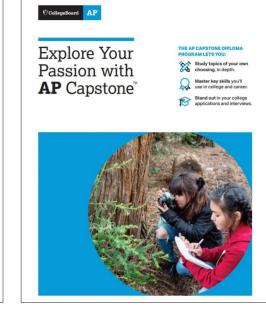
APPENDIX: resources for District and HE Admissions leaders

Additional information is also available on the AP Capstone web page at collegeboard.org/apcapstone.



The AP Capstone
Reference Guide, for
Colleges and
Universities, lists the
top six things to know
about the AP Capstone
program.



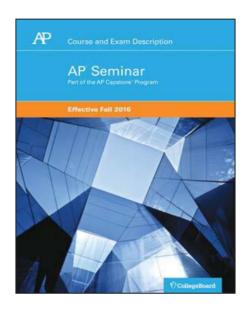


The <u>AP Seminar</u> and <u>AP Research</u> two-page course overview highlights the key elements of the course.

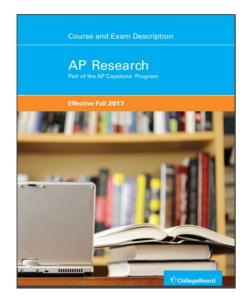
The Explore Your
Passion with AP
Capstone brochure is a high school student recruitment brochure. It provides an overview of the program and how students can stand out in the college admissions process.

APPENDIX: resources for District and School leaders

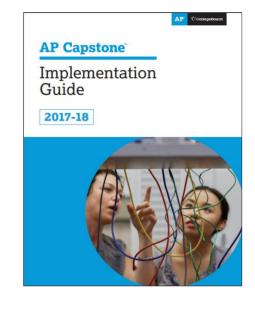
Additional information is also available on the AP Capstone web page at collegeboard.org/apcapstone.



The **AP Seminar Course and Exam Description** provides the pedagogical framework, curricular requirements. instructional approaches, and assessment details for the AP Seminar course.



The AP Research **Course and Exam Description** provides the pedagogical framework, curricular requirements. instructional approaches, and assessment details for the AP Research course.



The AP Capstone **Implementation Guide** provides essential information for schools beginning an AP Capstone program. This guide describes program requirements and policies, program costs, implementation models, and staffing ideas as well as easyaccess links to more detailed information.

APPENDIX: additional web resources

Additional information, including a current list of high schools offering AP Capstone, is also available on the AP Capstone web page at collegeboard.org/apcapstone.



The AP Capstone section of the AP Higher Education web page shares an overview of the AP Capstone program, a one-page reference guide for admissions, and a list of institutions that have credit and/or placement policies for AP Seminar and or AP Research courses.



The AP Data web
page houses AP
Program and
Participation
information for all
courses including
volume of AP Capstone
Diploma recipients and
AP Seminar and
Research Certificate
recipients.



The AP Seminar
Course Home Page
and AP Research
Course Home Page
provide an overview of
the course, the
assessments, and
shares student work.

Thank you!

