

Curriculum/Technology Committee

December 4, 2023

A dark blue diagonal graphic that starts from the bottom left corner and extends towards the top right corner, covering the lower half of the page.

AP Precalculus

Course was piloted in the 2022/2023 school year.

This current school year 2023/2024 is the first year of this new course is available nationwide.

We wanted to wait a year to offer it so we can see how it goes and have more data on the exam.

Overview

AP Precalculus prepares students for other college-level mathematics and science courses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. The course framework delineates content and skills common to college precalculus courses that are foundational for careers in mathematics, physics, biology, health science, social science, and data science.

The Course Framework Contains TWO Essential Components

1 MATHEMATICAL PRACTICES

The mathematical practices are central to the study and practice of precalculus. Students should develop and apply the described skills on a regular basis over the span of the course.

2 COURSE CONTENT

The course content is organized into units of study that provide a suggested sequence for the course. Units 1, 2, and 3 topics comprise the content and conceptual understandings that colleges and universities typically expect students to be proficient in in order to qualify for college credit and/or placement, and are therefore included on the AP Exam. Unit 4 consists of topics that teachers may include based on state or local requirements.

Mathematical Practices

Practice 1

Procedural and Symbolic Fluency **1**

Algebraically manipulate functions, equations, and expressions.

SKILLS

1.A Solve equations and **inequalities** represented analytically, with and without technology.

1.B Express functions, equations, or expressions in analytically **equivalent forms** that are useful in a given mathematical or applied context.

1.C Construct **new functions**, using transformations, compositions, inverses, or regressions, that may be useful in modeling contexts, criteria, or data, with and without technology.

Practice 2

Multiple Representations **2**

Translate mathematical information between representations.

2.A Identify information from graphical, numerical, analytical, and verbal **representations** to answer a question or construct a model, with and without technology.

2.B Construct **equivalent** graphical, numerical, analytical, and verbal **representations** of functions that are useful in a given mathematical or applied context, with and without technology.

Practice 3

Communication and Reasoning **3**

Communicate with precise language, and provide rationales for conclusions.

3.A Describe the **characteristics** of a function with varying levels of precision, depending on the function representation and available mathematical tools.

3.B Apply **numerical results** in a given mathematical or applied context.

3.C Support **conclusions** or choices with a logical rationale or appropriate data.

Course Content Through 4 LARGE Units

Unit 1 Polynomial and Rational Functions

Unit 2 Exponential and Logarithmic Functions

Unit 3 Trigonometric and Polar Functions

Unit 4 Functions Involving Parameters, Vectors, and Matrices

Only Units 1-3 on tested on the AP Exam

Gives teachers freedom to do other topics of teach Unit 4

Exam Breakdown

Units	Exam Weighting
Unit 1: Polynomial and Rational Functions	30–40%
Unit 2: Exponential and Logarithmic Functions	27–40%
Unit 3: Trigonometric and Polar Functions	30–35%
Unit 4: Functions Involving Parameters, Vectors, and Matrices	Not assessed on the AP Exam

This year at THS

This year in Honors Precalculus students are following the AP curriculum.

Because at the heart of it, AP Precalculus is still Precalculus which hasn't changed, well, ever.

AP is just giving students a chance to demonstrate their knowledge and possibly get college credit for it as well as STAND OUT to colleges.

Plans at THS

Our plan is to simply replace the Honors Precalculus course with AP Precalculus.

We feel this will continue to give students a thorough curriculum but now give them a chance to stand out to colleges.

We do need to make sure students are not intimidated by the label of AP which I will ensure by speaking with prospective students.

AP African American Studies Course

2022-2023

60 schools nationwide pilot the course

2023-2024

Hundreds of schools nationwide are piloting the course

2024-2025

Course available for High Schools nationwide

Overview

AP African American Studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary moment. Given the interdisciplinary character of African American studies, students in the course will develop skills across multiple fields, with an emphasis on developing historical, literary, visual, and data analysis skills. This course foregrounds a study of the diversity of Black communities in the United States within the broader context of Africa and the African diaspora.

Course Goals

Throughout this course, students will learn to:

- Apply lenses from multiple disciplines to evaluate key concepts, historical developments, and processes that have shaped Black experiences and debates within the field of African American studies.
- Identify connections between Black communities in the United States and the broader African diaspora in the past and present.
- Compare and analyze a range of perspectives about the movements, approaches, organizations, and key figures involved in freedom movements, as expressed in text-based, data, and visual sources.
- Demonstrate understanding of the diversity and complexity of African societies and their global connections before the emergence of transatlantic slavery.
- Evaluate the political, historical, aesthetic, and transnational contexts of major social movements.
- Develop a broad understanding of the many strategies African American communities have employed to represent themselves authentically, promote advancement, and combat the effects of inequality.
- Identify major themes that inform literary and artistic traditions of the African diaspora.

Sources

Includes primary text, visual, and data sources for each topic that help teachers and students stay focused on the actual works and documents of African American studies rather than on extraneous political opinions or perspectives.

Primary sources

With scholarly research from secondary sources.

4 Themes

MIGRATION AND THE AFRICAN DIASPORA:

Migration is key concept to African American studies. AP African American Studies explores the role of migration in the development and evolution of African diaspora communities. Whether it be voluntary or forced, migration is fundamental to Black experiences. The concept of diaspora describes the movement and dispersal of a group of people from their place of origin to various, new locations. In African American studies, the concept of the African diaspora refers to communities of African people and their descendants who have relocated beyond the continent, including to areas in Europe and Asia. It holds Africa as the point of origin for the shared ancestry of diverse peoples of African descent. In different ways over time, Africa has been a symbol that influenced the cultural practices, artistic expression, identities, and political organizing of African Americans in the United States and the broader diaspora in divergent ways.

4 Themes continued

INTERSECTIONS OF IDENTITY:

AP African American Studies examines the interplay of distinct categories of identity (such as race, ethnicity, class, gender, region, religion, and ability) with each other and within a society. Various categories of identity are emphasized throughout the course. Although different identities vary in prominence in the given units, students should develop the habit of thinking about identity as both a unified concept and intersectional framework and consider how different aspects of identity impact their experience.

4 Themes continued

CREATIVITY, EXPRESSION, AND THE ARTS:

As students absorb information about Black experiences, they will discover that Black people begin to formulate community, identity, and culture. Teachers can demonstrate the process of creativity, self-expression, and joy through the lenses of art, literature, and music. This is a good opportunity to have students reflect on how Black people develop and think of themselves. This also provides a chance for students to chart how African identity, though not clearly distinguished by ethnic group or nation, still appears in styles of religious worship, dance, and other forms of creative expression.

4 Themes continued

RESISTANCE AND RESILIENCE:

Intellectual distinctions and differences informed approaches to resisting oppression and building society. These approaches will be examined throughout the course, and it is important that students can recognize the patterns of continuity and change that emerges over time. Encourage students to examine the many forms of resistance that demonstrate how Black people asserted their agency and influenced their cultural environments. Whether it be slave rebellions or the formation of Women's Clubs in the 20th century, varied forms of resistance and political engagement figure prominently across the units as do notions of resiliency—not only in the face of violence and oppression—but in structures of social interaction and ways of community formation.

Embedded Skills

Skill Category 1	Skill Category 2	Skill Category 3
<i>Applying Disciplinary Knowledge</i>	<i>Source Analysis</i>	<i>Argumentation</i>
<i>Explain course concepts, developments, patterns, and processes (e.g., cultural, historical, political, social).</i>	<i>Evaluate written and visual sources, and data (including historical documents, literary texts, music lyrics, works of art, material culture, maps, tables, charts, graphs, and surveys).</i>	<i>Develop an argument using a line of reasoning to connect claims and evidence.</i>

Units and Instructional Focus

UNIT
1

Origins of the
African Diaspora

5 Weeks

UNIT
2

Freedom, Enslavement,
and Resistance

8 Weeks

Units and Instructional Focus continued

UNIT
3

The Practice of Freedom

5 Weeks

UNIT
4

Movements and Debates

7 Weeks

Course Project

Students define and execute a research project of their choice, drawn from topics or themes in the course or from the broader field of African American studies. This project is submitted by students, in combination with their AP exam, to be scored by professors and teachers at the annual AP Reading.

Thank you!

Our next meeting will be **January 22, 2024**

We will be discussing *The Island of Missing Trees*
by Elif Shafak for approval

Have a safe and happy holiday season!

