



INCLUDES

- ✓ Course framework
- ✓ Instructional section
- ✓ Sample exam questions

AP® Human Geography

COURSE AND EXAM DESCRIPTION

Effective
Fall 2020



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AP COURSE AND EXAM DESCRIPTIONS ARE UPDATED PERIODICALLY

Please visit AP Central (apcentral.collegeboard.org) to determine whether a more recent course and exam description is available.

What AP® Stands For

Thousands of Advanced Placement teachers have contributed to the principles articulated here. These principles are not new; they are, rather, a reminder of how AP already works in classrooms nationwide. The following principles are designed to ensure that teachers' expertise is respected, required course content is understood, and that students are academically challenged and free to make up their own minds.

1. AP stands for clarity and transparency. Teachers and students deserve clear expectations. The Advanced Placement Program makes public its course frameworks and sample assessments. Confusion about what is permitted in the classroom disrupts teachers and students as they navigate demanding work.
2. AP is an unflinching encounter with evidence. AP courses enable students to develop as independent thinkers and to draw their own conclusions. Evidence and the scientific method are the starting place for conversations in AP courses.
3. AP opposes censorship. AP is animated by a deep respect for the intellectual freedom of teachers and students alike. If a school bans required topics from their AP courses, the AP Program removes the AP designation from that course and its inclusion in the AP Course Ledger provided to colleges and universities. For example, the concepts of evolution are at the heart of college biology, and a course that neglects such concepts does not pass muster as AP Biology.
4. AP opposes indoctrination. AP students are expected to analyze different perspectives from their own, and no points on an AP Exam are awarded for agreement with any specific viewpoint. AP students are not required to feel certain ways about themselves or the course content. AP courses instead develop students' abilities to assess the credibility of sources, draw conclusions, and make up their own minds.

As the AP English Literature course description states: "AP students are not expected or asked to subscribe to any one specific set of cultural or political values, but are expected to have the maturity to analyze perspectives different from their own and to question the meaning, purpose, or effect of such content within the literary work as a whole."

5. AP courses foster an open-minded approach to the histories and cultures of different peoples. The study of different nationalities, cultures, religions, races, and ethnicities is essential within a variety of academic disciplines. AP courses ground such studies in primary sources so that students can evaluate experiences and evidence for themselves.
6. Every AP student who engages with evidence is listened to and respected. Students are encouraged to evaluate arguments but not one another. AP classrooms respect diversity in backgrounds, experiences, and viewpoints. The perspectives and contributions of the full range of AP students are sought and considered. Respectful debate of ideas is cultivated and protected; personal attacks have no place in AP.
7. AP is a choice for parents and students. Parents and students freely choose to enroll in AP courses. Course descriptions are available online for parents and students to inform their choice. Parents do not define which college-level topics are suitable within AP courses; AP course and exam materials are crafted by committees of professors and other expert educators in each field. AP courses and exams are then further validated by the American Council on Education and studies that confirm the use of AP scores for college credits by thousands of colleges and universities nationwide.

The AP Program encourages educators to review these principles with parents and students so they know what to expect in an AP course. Advanced Placement is always a choice, and it should be an informed one. AP teachers should be given the confidence and clarity that once parents have enrolled their child in an AP course, they have agreed to a classroom experience that embodies these principles.

Contents

- v **Acknowledgments**
 - 1 **About AP**
 - 4 **AP Resources and Supports**
 - 6 **Instructional Model**
 - 7 **About the AP Human Geography Course**
 - 7 College Course Equivalent
 - 7 Prerequisites
-

COURSE FRAMEWORK

- 11 **Introduction**
- 12 **Course Framework Components**
- 13 Course Skills
- 15 Course Content
- 18 **Course at a Glance**
- 21 **Unit Guides**
- 22 Using the Unit Guides
- 25 **UNIT 1:** Thinking Geographically
- 37 **UNIT 2:** Population and Migration Patterns and Processes
- 55 **UNIT 3:** Cultural Patterns and Processes
- 69 **UNIT 4:** Political Patterns and Processes
- 85 **UNIT 5:** Agriculture and Rural Land-Use Patterns and Processes
- 103 **UNIT 6:** Cities and Urban Land-Use Patterns and Processes
- 119 **UNIT 7:** Industrial and Economic Development Patterns and Processes

INSTRUCTIONAL APPROACHES

- 135 **Selecting and Using Course Materials**
- 139 **Instructional Strategies**
- 143 **Developing the Course Skills**

EXAM INFORMATION

- 155 **Exam Overview**
- 160 **Sample Exam Questions**

SCORING GUIDELINES

- 171 **Question 1: No stimulus**
- 174 **Question 3: Two stimuli**

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College Board Staff

Erica T. Appel, Associate Director, AP Curricular Publications

John C. Baran, Jr., Director, AP Instructional Design and PD Resource Development

Cheryl Harmon, Senior Director, AP Instructional Design and PD Resource Development

Brett Mayhan, Senior Director, AP Human Geography Content Development

Dan McDonough, Senior Director, AP Content Integration

SPECIAL THANKS

Christopher Budano, Lawrence Charap, Krista Dombush, and John R. Williamson

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About AP

College Board's Advanced Placement® Program (AP®) enables willing and academically prepared students to pursue college-level studies—with the opportunity to earn college credit, advanced placement, or both—while still in high school. Through AP courses in 38 subjects, each culminating in a challenging exam, students learn to think critically, construct solid arguments, and see many sides of an issue—skills that prepare them for college and beyond. Taking AP courses demonstrates to college admission officers that students have sought the most challenging curriculum available to them, and research indicates that students who score a 3 or higher on an AP Exam typically experience greater academic success in college and are more likely to earn a college degree than non-AP students. Each AP teacher's syllabus is evaluated and approved by faculty from some of the nation's leading colleges and universities, and AP Exams are developed and scored by college faculty and experienced AP teachers. Most four-year colleges and universities in the United States grant credit, advanced placement, or both on the basis of successful AP Exam scores—more than 3,300 institutions worldwide annually receive AP scores.

AP Course Development

In an ongoing effort to maintain alignment with best practices in college-level learning, AP courses and exams emphasize challenging, research-based curricula aligned with higher education expectations.

Individual teachers are responsible for designing their own curriculum for AP courses, selecting appropriate college-level readings, assignments, and resources. This course and exam description presents the content and skills that are the focus of the corresponding college course and that appear on the AP Exam. It also organizes the content and skills into a series of units that represent a sequence found in widely adopted college textbooks and that many AP teachers have told us they follow in order to focus their instruction. The intention of this publication is to respect teachers' time and expertise by providing a roadmap that they can modify and adapt to their local priorities and preferences. Moreover, by organizing the AP course content and skills into units, the AP Program is able

to provide teachers and students with free formative assessments—Personal Progress Checks—that teachers can assign throughout the year to measure student progress as they acquire content knowledge and develop skills.

Enrolling Students: Access, Opportunity, and Readiness

The AP Program welcomes all students willing to challenge themselves with college-level coursework and career preparation. We strongly encourage educators to invite students into AP classes, including students from ethnic, racial, socioeconomic, geographic, or other groups not broadly participating in a school's AP program. We believe that readiness for AP is attainable, and that educators can expand readiness by opening access to Pre-AP course work. We commit to support educators and communities in their efforts to make AP courses widely available, advancing students in their plans for college and careers.

Offering AP Courses: The AP Course Audit

The AP Program unequivocally supports the principle that each school implements its own curriculum that will enable students to develop the content understandings and skills described in the course framework.

While the unit sequence represented in this publication is optional, the AP Program does have a short list of curricular and resource requirements that must be fulfilled before a school can label a course "Advanced Placement" or "AP." Schools wishing to offer AP courses must participate in the AP Course Audit, a process through which AP teachers' course materials are reviewed by college faculty. The AP Course Audit was created to provide teachers and administrators with clear guidelines on curricular and resource requirements for AP courses and to help colleges and universities validate courses marked "AP" on students' transcripts. This process ensures that AP teachers' courses meet or exceed the curricular and resource expectations that college and secondary school faculty have established for college-level courses.

The AP Course Audit form is submitted by the AP teacher and the school principal (or designated administrator) to confirm awareness and understanding of the curricular and resource requirements. A syllabus or course outline, detailing how course requirements are met, is submitted by the AP teacher for review by college faculty.

Please visit the [AP Course Audit](#) website for more information to support the preparation and submission of materials for the AP Course Audit.

How the AP Program Is Developed

The scope of content for an AP course and exam is derived from an analysis of hundreds of syllabi and course offerings of colleges and universities. Using this research and data, a committee of college faculty and expert AP teachers work within the scope of the corresponding college course to articulate what students should know and be able to do upon the completion of the AP course. The resulting course framework is the heart of this course and exam description and serves as a blueprint of the content and skills that can appear on an AP Exam.

The AP Test Development Committees are responsible for developing each AP Exam, ensuring the exam questions are aligned to the course framework. The AP Exam development process is a multiyear endeavor; all AP Exams undergo extensive review, revision, piloting, and analysis to ensure that questions are accurate, fair, and valid, and that there is an appropriate spread of difficulty across the questions.

Committee members are selected to represent a variety of perspectives and institutions (public and private, small and large schools and colleges), and a range of gender, racial/ethnic, and regional groups. A list of each subject's current AP Test Development Committee members is available on [AP Central®](#).

Throughout AP course and exam development, College Board gathers feedback from various stakeholders in both secondary schools and higher education institutions. This feedback is carefully considered to ensure that AP courses and exams are able to provide students with a college-level learning experience and the opportunity to demonstrate their qualifications for advanced placement or college credit.

How AP Exams Are Scored

The exam scoring process, like the course and exam development process, relies on the expertise of both AP teachers and college faculty. While multiple-choice questions are scored by machine, the free-response questions and through-course performance

assessments, as applicable, are scored by thousands of college faculty and expert AP teachers. Most are scored at the annual AP Reading, while a small portion is scored online. All AP Readers are thoroughly trained, and their work is monitored throughout the Reading for fairness and consistency. In each subject, a highly respected college faculty member serves as Chief Faculty Consultant and, with the help of AP Readers in leadership positions, maintains the accuracy of the scoring standards. Scores on the free-response questions and performance assessments are weighted and combined with the results of the computer-scored multiple-choice questions, and this raw score is converted into a composite AP score on a 1–5 scale.

AP Exams are **not** norm-referenced or graded on a curve. Instead, they are criterion-referenced, which means that every student who meets the criteria for an AP score of 2, 3, 4, or 5 will receive that score, no matter how many students that is. The criteria for the number of points students must earn on the AP Exam to receive scores of 3, 4, or 5—the scores that research consistently validates for credit and placement purposes—include:

- The number of points successful college students earn when their professors administer AP Exam questions to them.
- The number of points researchers have found to be predictive that an AP student will succeed when placed into a subsequent, higher-level college course.
- Achievement-level descriptions formulated by college faculty who review each AP Exam question.

Using and Interpreting AP Scores

The extensive work done by college faculty and AP teachers in the development of the course and exam and throughout the scoring process ensures that AP Exam scores accurately represent students' achievement in the equivalent college course. Frequent and regular research studies establish the validity of AP scores as follows:

AP Score	Credit Recommendation	College Grade Equivalent
5	Extremely well qualified	A
4	Well qualified	A–, B+, B
3	Qualified	B–, C+, C
2	Possibly qualified	n/a
1	No recommendation	n/a

While colleges and universities are responsible for setting their own credit and placement policies, most private colleges and universities award credit and/or advanced placement for AP scores of 3 or higher. Additionally, most states in the U.S. have adopted statewide credit policies that ensure college credit for scores of 3 or higher at public colleges and universities. To confirm a specific college's AP credit/placement policy, use the search engine available on the [AP Credit Policy Search](#) page.

BECOMING AN AP READER

Each June, thousands of AP teachers and college faculty members from around the world gather for seven days in multiple locations to evaluate and score the free-response sections of the AP Exams. Ninety-eight percent of surveyed educators who took part in the AP Reading say it was a positive experience.

There are many reasons to consider becoming an AP Reader, including opportunities to:

- **Bring positive changes to the classroom:**
Surveys show that the vast majority of returning AP Readers—both high school and college

educators—make improvements to the way they teach or score because of their experience at the AP Reading.

- **Gain in-depth understanding of AP Exam and AP scoring standards:** AP Readers gain exposure to the quality and depth of the responses from the entire pool of AP Exam takers, and thus are better able to assess their students' work in the classroom.
- **Receive compensation:** AP Readers are compensated for their work during the Reading. Expenses, lodging, and meals are covered for Readers who travel.
- **Score from home:** AP Readers have online distributed scoring opportunities for certain subjects. Check the [AP Reader](#) site for details.
- **Earn Continuing Education Units (CEUs):** AP Readers earn professional development hours and CEUs that can be applied to PD requirements by states, districts, and schools.

How to Apply

Visit the [Become an AP Reader](#) site for eligibility requirements and to start the application process.

AP Resources and Supports

By completing a simple activation process at the start of the school year, teachers and students receive access to a robust set of classroom resources.

AP Classroom

AP Classroom is a dedicated online platform designed to support teachers and students throughout their AP experience. The platform provides a variety of powerful resources and tools to provide yearlong support to teachers and enable students to receive meaningful feedback on their progress.

UNIT GUIDES



Appearing in this publication and on AP Classroom, these planning guides outline all required course content and skills, organized into commonly taught units. Each unit guide suggests a sequence and pacing of content, scaffolds skill instruction across units, organizes content into topics, and provides tips on taking the AP Exam.

PERSONAL PROGRESS CHECKS



Formative AP questions for every unit provide feedback to students on the areas where they need to focus. Available online, Personal Progress Checks measure knowledge and skills through multiple-choice questions with rationales to explain correct and incorrect answers, and free-response questions with scoring information. Because the Personal Progress Checks are formative, the results of these assessments cannot be used to evaluate teacher effectiveness or assign letter grades to students, and any such misuses are grounds for losing school authorization to offer AP courses.*

PROGRESS DASHBOARD



This dashboard allows teachers to review class and individual student progress throughout the year. Teachers can view class trends and see where students struggle with content and skills that will be assessed on the AP Exam. Students can view their own progress over time to improve their performance before the AP Exam.

AP QUESTION BANK



This online library of real AP Exam questions provides teachers with secure questions to use in their classrooms. Teachers can find questions indexed by course topics and skills, create customized tests, and assign them online or on paper. These tests enable students to practice and get feedback on each question.

* To report misuses, please call, 877-274-6474 (International: +1-212-632-1781).

Digital Activation

In order to teach an AP class and make sure students are registered to take the AP Exam, teachers must first complete the digital activation process. Digital activation gives students and teachers access to resources and gathers students' exam registration information online, eliminating most of the answer sheet bubbling that has added to testing time and fatigue.

AP teachers and students begin by signing in to [My AP](#) and completing a simple activation process at the start of the school year, which provides access to all AP resources, including AP Classroom.

To complete digital activation:

- Teachers and students sign in to, or create, their College Board accounts.
- Teachers confirm that they have added the course they teach to their AP Course Audit account and have had it approved by their school's administrator.
- Teachers or AP Coordinators, depending on whom the school has decided is responsible, set up class sections so students can access AP resources and have exams ordered on their behalf.
- Students join class sections with a join code provided by their teacher or AP coordinator.
- Students will be asked for additional registration information upon joining their first class section, which eliminates the need for extensive answer sheet bubbling on exam day.

While the digital activation process takes a short time for teachers, students, and AP coordinators to complete, overall it helps save time and provides the following additional benefits:

- **Access to AP resources and supports:** Teachers have access to resources specifically designed to support instruction and provide feedback to students throughout the school year as soon as activation is complete.
- **Streamlined exam ordering:** AP Coordinators can create exam orders from the same online class rosters that enable students to access resources. The coordinator reviews, updates, and submits this information as the school's exam order in the fall.
- **Student registration labels:** For each student included in an exam order, schools will receive a set of personalized AP ID registration labels, which replaces the AP student pack. The AP ID connects a student's exam materials with the registration information they provided during digital activation, eliminating the need for pre-administration sessions and reducing time spent bubbling on exam day.
- **Targeted Instructional Planning Reports:** AP teachers will get Instructional Planning Reports (IPRs) that include data on each of their class sections automatically rather than relying on special codes optionally bubbled in on exam day.

Instructional Model

Integrating AP resources throughout the course can help students develop skills and conceptual understandings. The instructional model outlined below shows possible ways to incorporate AP resources into the classroom.



Plan

Teachers may consider the following approaches as they plan their instruction before teaching each unit.

- Review the overview at the start of each **unit guide** to identify essential questions, conceptual understandings, and skills for each unit.
- Use the **Unit at a Glance** table to identify related topics that build toward a common understanding, and then plan appropriate pacing for students.
- Identify useful strategies in the **Instructional Approaches** section to help teach the concepts and skills.



Teach

When teaching, supporting resources could be used to build students' conceptual understanding and their mastery of skills.

- Use the topic pages in the **unit guides** to identify the required content.
- Integrate the content with a skill, considering any appropriate scaffolding.
- Employ any of the instructional strategies previously identified.
- Use the available resources on the topic pages to bring a variety of assets into the classroom.



Assess

Teachers can measure student understanding of the content and skills covered in the unit and provide actionable feedback to students.

- At the end of each unit, use **AP Classroom** to assign students the online **Personal Progress Checks**, as homework or an in-class task.
- Provide question-level feedback to students through answer rationales; provide unit- and skill-level feedback using the progress dashboard.
- Create additional practice opportunities using the **AP Question Bank** and assign them through **AP Classroom**.

About the AP Human Geography Course

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).

College Course Equivalent

The AP Human Geography course is equivalent to an introductory college-level course in human geography.

Prerequisites

There are no prerequisites for AP Human Geography. Students should be able to read college-level texts and write grammatically correct, complete sentences.

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AP HUMAN GEOGRAPHY

Course Framework



Introduction

AP Human Geography introduces high school students to college-level introductory human geography or cultural geography. The content is presented thematically rather than regionally and is organized around the discipline's main subfields: economic geography, cultural geography, political geography, and urban geography. The approach is spatial and problem oriented. Case studies are drawn from all world regions, with an emphasis on understanding the world in which we live today. Historical information serves to enrich analysis of the impacts of phenomena such as globalization, colonialism, and human–environment relationships on places, regions, cultural landscapes, and patterns of interaction.

Specific topics with which students engage include the following:

- problems of economic development and cultural change
- consequences of population growth, changing fertility rates, and international migration
- impacts of technological innovation on transportation, communication, industrialization, and other aspects of human life

- struggles over political power and control of territory
- conflicts over the demands of ethnic minorities, the role of women in society, and the inequalities between developed and developing economies
- explanations of why location matters to agricultural land use, industrial development, and urban problems
- the role of climate change and environmental abuses in shaping the human landscapes on Earth

The goal for the course is for students to become more geoliterate, more engaged in contemporary global issues, and more informed about multicultural viewpoints. They will develop skills in approaching problems geographically, using maps and geospatial technologies, thinking critically about texts and graphic images, interpreting cultural landscapes, and applying geographic concepts such as scale, region, diffusion, interdependence, and spatial interaction, among others. Students will see geography as a discipline relevant to the world in which they live; as a source of ideas for identifying, clarifying, and solving problems at various scales; and as a key component of building global citizenship and environmental stewardship.

Course Framework Components

Overview

This course framework provides a description of the course requirements necessary for student success, specifying what students must know, be able to do, and understand to qualify for college credit or placement.

The course framework includes two essential components:

1 COURSE SKILLS

The course skills are central to the study and practice of human geography. Students should have the opportunity to 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 commonly taught units of study that provide a suggested sequence for the course. These units comprise required content and conceptual understandings that colleges and universities typically expect students to master to qualify for college credit and/or placement. This content is grounded in big ideas, which are cross-cutting concepts that build conceptual understanding and spiral throughout the course.

Course Skills

The table that follows presents the skill categories and related skills that students should develop during the AP Human Geography course. These skills form the basis of tasks on the AP Exam.

The unit guides that follow embed and spiral these practices throughout the course, providing teachers with one way to integrate the skills into the course content with sufficient repetition to prepare students to transfer those skills when taking the AP Human Geography Exam.

More detailed information about the teaching of the course skills can be found in the Instructional Approaches section of this publication.

AP HUMAN GEOGRAPHY

Course Skills



Skill Category 1	Skill Category 2	Skill Category 3	Skill Category 4	Skill Category 5
<p>Concepts and Processes 1 Analyze geographic theories, approaches, concepts, processes, or models in theoretical and applied contexts.</p> <p>SKILLS</p>	<p>Spatial Relationships 2 Analyze geographic patterns, relationships, and outcomes in applied contexts.</p>	<p>Data Analysis 3 Analyze and interpret quantitative geographic data represented in maps, tables, charts, graphs, satellite images, and infographics.</p>	<p>Source Analysis 4 Analyze and interpret qualitative geographic information represented in maps, images (e.g., satellite, photographs, cartoons), and landscapes.</p>	<p>Scale Analysis 5 Analyze geographic theories, approaches, concepts, processes, and models across geographic scales to explain spatial relationships.</p>

Course Content

Based on the Understanding by Design® (Wiggins and McTighe) model, this course framework provides a clear and detailed description of the course requirements necessary for student success. The framework specifies what students must know, understand, and be able to do, with a focus on big ideas that encompass core principles, theories, and processes of the discipline. The framework also encourages instruction that prepares students for advanced geography coursework and active global citizenship.

Big Ideas

The big ideas serve as the foundation of the course and enable students to create meaningful connections among course concepts. Often, these big ideas are abstract concepts or themes that become threads that run throughout the course. Revisiting the big ideas and applying them in a variety of contexts allow students to develop a deeper conceptual understanding. Below are the big ideas of the course and a brief description of each.

BIG IDEA 1: PATTERNS AND SPATIAL ORGANIZATION (PSO)

Spatial patterns and organization of human society are arranged according to political, historical, cultural, and economic factors.

BIG IDEA 2: IMPACTS AND INTERACTIONS (IMP)

Complex relationships of cause and effect exist among people, their environments, and historical and contemporary actions.

BIG IDEA 3: SPATIAL PROCESS AND SOCIETAL CHANGE (SPS)

A spatial perspective allows for a focus on the ways phenomena are related to one another in particular places, which in turn allows for the examination of human organization and its environmental consequences.

UNITS

The course content is organized into commonly taught units. The units have been arranged in a logical sequence frequently found in many college courses and textbooks.

The seven units in AP Human Geography, and their weightings on the multiple-choice section of the AP Exam, are listed below.

Pacing recommendations at the unit level and in the Course at Glance tables provide suggestions for how the required course content can be taught and how the Personal Progress Checks can be administered. The suggested class periods are based on a schedule in

which the class meets five days a week for 45 minutes each day. While these recommendations have been made to aid in your planning, you are free to adjust the pacing based on the needs of your students, alternate schedules (e.g., block scheduling), or your school's academic calendar.

TOPICS

Each unit is broken down into teachable segments called topics. The topic pages (starting on page 30) contain all required content for each topic. Although most topics can be taught in one or two class periods, you are again encouraged to pace your course to suit the needs of your students and school.

Units	Exam Weighting
Unit 1: Thinking Geographically	8–10%
Unit 2: Population and Migration Patterns and Processes	12–17%
Unit 3: Cultural Patterns and Processes	12–17%
Unit 4: Political Patterns and Processes	12–17%
Unit 5: Agriculture and Rural Land-Use Patterns and Processes	12–17%
Unit 6: Cities and Urban Land-Use Patterns and Processes	12–17%
Unit 7: Industrial and Economic Development Patterns and Processes	12–17%

Spiraling the Big Ideas

The following table demonstrates how the big ideas spiral across units by showing the units in which each big idea appears. In AP Human Geography students will encounter each big idea in every unit so that their knowledge, skills, and understanding related to the big ideas become more complex.

Big Ideas	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7
	Thinking Geographically	Population and Migration Patterns and Processes	Cultural Patterns and Processes	Political Patterns and Processes	Agriculture and Rural Land-Use Patterns and Processes	Cities and Urban Land-Use Patterns and Processes	Industrial and Economic Development Patterns and Processes
Patterns and Spatial Organization PSO							
Impacts and Interactions IMP							
Spatial Processes and Societal Change SPS							

Course at a Glance

Plan

The Course at a Glance table provides a useful visual organization of the AP Human Geography curricular components, including:

- Sequence of units, along with approximate weighting and suggested pacing. Please note that pacing is based on 45-minute class periods meeting five days each week for a full academic year.
- Progression of topics within each unit.
- Spiraling of the big ideas and course skills across units.

Teach

SKILL CATEGORIES

Skill categories spiral throughout the course.

1	Concepts and Processes	3	Data Analysis
2	Spatial Relationships	4	Source Analysis

BIG IDEAS

Big Ideas spiral across topics and units.

PSO	Patterns and Spatial Organization
IMP	Impacts and Interactions
SPS	Spatial Processes and Societal Change

Assess

Assign the Personal Progress Checks—either as homework or in class—for each unit. Each Personal Progress Check contains formative multiple-choice and free-response questions. The feedback from the Personal Progress Checks shows students the areas where they need to focus.

UNIT 1 Thinking Geographically		UNIT 2 Population and Migration Patterns and Processes	
~9–10 Class Periods	8–10% AP Exam Weighting	~19–20 Class Periods	12–17% AP Exam Weighting
IMP 3	1.1 Introduction to Maps	PSO 3	2.1 Population Distribution
IMP 3	1.2 Geographic Data	PSO 2	2.2 Consequences of Population Distribution
IMP 3	1.3 The Power of Geographic Data	PSO 2	2.3 Population Composition
PSO 3	1.4 Spatial Concepts	IMP 3	2.4 Population Dynamics
PSO 1	1.5 Human–Environmental Interaction	IMP 3	2.5 The Demographic Transition Model
PSO 5	1.6 Scales of Analysis	IMP 2	2.6 Malthusian Theory
SPS 1	1.7 Regional Analysis	SPS 2	2.7 Population Policies
		SPS 3	2.8 Women and Demographic Change
		SPS 2	2.9 Aging Populations
		IMP 2	2.10 Causes of Migration
		IMP 1	2.11 Forced and Voluntary Migration
		IMP 2	2.12 Effects of Migration

Personal Progress Check 1

Multiple-choice: ~20 questions
Free-response: 1 question
▪ 1 stimulus

Personal Progress Check 2

Multiple-choice: ~35 questions
Free-response: 1 question
▪ 1 stimulus

UNIT 3		Cultural Patterns and Processes		UNIT 4		Political Patterns and Processes		UNIT 5		Agriculture and Rural Land-Use Patterns and Processes	
~19–20 Class Periods		12–17% AP Exam Weighting		~19–20 Class Periods		12–17% AP Exam Weighting		~19–20 Class Periods		12–17% AP Exam Weighting	
PSO	4	3.1 Introduction to Culture		PSO	4	4.1 Introduction to Political Geography		PSO	2	5.1 Introduction to Agriculture	
PSO	4	3.2 Cultural Landscapes		PSO	3	4.2 Political Processes		PSO	4	5.2 Settlement Patterns and Survey Methods	
PSO	4	3.3 Cultural Patterns		PSO	5	4.3 Political Power and Territoriality		SPS	2	5.3 Agricultural Origins and Diffusions	
IMP	1	3.4 Types of Diffusion		IMP	1	4.4 Defining Political Boundaries		SPS	4	5.4 The Second Agricultural Revolution	
SPS	2	3.5 Historical Causes of Diffusion		IMP	5	4.5 The Function of Political Boundaries		SPS	2	5.5 The Green Revolution	
SPS	5	3.6 Contemporary Causes of Diffusion		IMP	5	4.6 Internal Boundaries		PSO	2	5.6 Agricultural Production Regions	
IMP	4	3.7 Diffusion of Religion and Language		IMP	2	4.7 Forms of Governance		PSO	2	5.7 Spatial Organization of Agriculture	
SPS	2	3.8 Effects of Diffusion		SPS	3	4.8 Defining Devolutionary Factors		PSO	5	5.8 Von Thünen Model	
				SPS	5	4.9 Challenges to Sovereignty		PSO	5	5.9 The Global System of Agriculture	
				SPS	5	4.10 Consequences of Centrifugal and Centripetal Forces		IMP	2	5.10 Consequences of Agricultural Practices	
								IMP	4	5.11 Challenges of Contemporary Agriculture	
								IMP	3	5.12 Women in Agriculture	

Personal Progress Check 3

Multiple-choice: ~25 questions
Free-response: 1 question
▪ 2 stimuli

Personal Progress Check 4

Multiple-choice: ~30 questions
Free-response: 1 question
▪ 1 stimulus

Personal Progress Check 5

Multiple-choice: ~35 questions
Free-response: 1 question
▪ 2 stimuli

**UNIT
6****Cities and
Urban Land-Use
Patterns and
Processes****~19–20** Class Periods**12–17%** AP Exam Weighting

PSO	6.1 The Origin and Influences of Urbanization
2	
PSO	6.2 Cities Across the World
2	
PSO	6.3 Cities and Globalization
5	
PSO	6.4 The Size and Distribution of Cities
2	
PSO	6.5 The Internal Structure of Cities
1	
IMP	6.6 Density and Land Use
3	
IMP	6.7 Infrastructure
3	
IMP	6.8 Urban Sustainability
2	
IMP	6.9 Urban Data
3	
SPS	6.10 Challenges of Urban Changes
4	
SPS	6.11 Challenges of Urban Sustainability
2	

**UNIT
7****Industrial and
Economic
Development
Patterns and
Processes****~19–20** Class Periods**12–17%** AP Exam Weighting

SPS	7.1 The Industrial Revolution
4	
SPS	7.2 Economic Sectors and Patterns
2	
SPS	7.3 Measures of Development
3	
SPS	7.4 Women and Economic Development
3	
SPS	7.5 Theories of Development
1	
PSO	7.6 Trade and the World Economy
5	
SPS	7.7 Changes as a Result of the World Economy
4	
IMP	7.8 Sustainable Development
5	

Personal Progress Check 6

Multiple-choice: ~35 questions

Free-response: 1 question

▪ no stimulus

Personal Progress Check 7

Multiple-choice: ~25 questions

Free-response: 1 question

▪ no stimulus

AP HUMAN GEOGRAPHY

Unit Guides

Developed with extensive input from the community of AP Human Geography educators, these unit guides offer teachers helpful guidance in building students' skills and knowledge. The suggested sequence was identified through a thorough analysis of the syllabi of highly effective AP teachers and the organization of typical college textbooks.

This unit structure respects new AP teachers' time by providing one possible sequence they can adopt or modify, rather than having to build from scratch. An additional benefit is that these units enable the AP Program to provide interested teachers with formative assessments—the Personal Progress Checks—that they can assign their students at the end of each unit to gauge progress toward success on the AP exam. However, experienced AP teachers who are satisfied with their current course organization and exam results should feel no pressure to adopt these units, which comprise an optional sequence for this course.

Using the Unit Guides

UNIT 1 **8–10%** AP EXAM WEIGHTING | **~9–10** CLASS PERIODS

Thinking Geographically

Developing Understanding

This first unit sets the foundation for the course by asking students how geographers approach the study of places. Students are encouraged to reflect on the “why of events” to better understand geographic perspectives. Many other high school courses ask students to read and analyze data, but for this course, students also apply a spatial perspective when reading and analyzing qualitative and quantitative data.

BIG IDEA 1 Patterns and Spatial Organization

- Why do geographers study relationships and patterns among and between places?

BIG IDEA 2 Impacts and Interactions

- How do geographers use maps to help them analyze patterns and relationships in the world?

BIG IDEA 3 Spatial Processes and Societal Change

- How do geographers use a spatial perspective to analyze complex issues and relationships?

AP Human Geography Course and Exam Description Course Framework V.1 | 27

UNIT OPENERS

Developing Understanding provides an overview that contextualizes and situates the key content of the unit within the scope of the course.

The **big ideas** connect students' learning of concepts and skills throughout the course to develop understanding. The thought-provoking **essential questions** that follow motivate students and inspire inquiry.

Enduring Understanding	Topic	Suggested Skill	Class Periods
MPs-1	1.1 Introduction to Maps	1.1 Identify the different types of data presented in maps and in quantitative and geospatial data.	~9–10 CLASS PERIODS
	1.2 Geographic Data	1.2 Identify the different types of data presented in maps and in quantitative and geospatial data.	
	1.3 The Power of Geographic Data	1.3 Describe spatial patterns presented in maps and in quantitative and geospatial data.	
	1.4 Spatial Concepts	1.4 Describe spatial patterns presented in maps and in quantitative and geospatial data.	
	1.5 Human–Environmental Interaction	1.5 Explain geographic concepts, processes, models, and theories.	
	1.6 Scales of Analysis	1.6 Identify the scales of analysis presented by maps, quantitative and geospatial data, images, and landscapes.	
	1.7 Regional Analysis	1.7 Describe geographic concepts, processes, models, and theories.	

Go to [AP Classroom](#) to assign the Personal Progress Check for Unit 1. Review the results in class to identify and address any student misunderstandings.

28 | Course Framework V.1 AP Human Geography Course and Exam Description

The **Unit at a Glance** table shows the topics, related enduring understandings, and suggested skills. The “class periods” column has been left blank so you can customize the time you spend on each topic.

The table includes **suggested skills** for each topic to show possible ways to link the content in that topic to specific AP Human Geography skills. The individual skills have been thoughtfully chosen in a way that allows you to scaffold them throughout the course. The questions on the Personal Progress Checks are based on this pairing. However, AP Exam questions can pair the content with any of the skills.

Using the Unit Guides

Thinking Geographically

UNIT 1

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	1.1	Quickwrite Set aside a short, specific amount of time during a class period for students to perform a quickwrite on the power of maps. As preparation for answering free-response questions later in the course, have students identify two different types of map projections and explain why different map projections exist.
2	1.5	Critique Reasoning Using the two major schools of thought regarding human–environment interaction—environmental determinism and possibilism—have students identify the strengths of each, evaluate the reasoning behind each, and find relevant real-world examples supporting and/or refuting each. Allow for collaborative discussion at multiple levels—pairs, small groups, and whole group—to achieve understanding.
3	1.6	Debriefing Scales of analysis is a challenging topic for students. They tend to struggle with understanding the significance of examining issues at multiple scales. Possible issues, leading to a facilitated discussion of data that illustrates scale change can help students develop an understanding of context. For example, you can take a set of data and show what the global patterns are, zoom in to illustrate the national level, then zoom in again to show the difference in the local level analysis. Finish by leading a discussion on the significance of the differences in patterns.

Unit Planning Notes
Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

AP Human Geography Course and Exam Description Course Framework V.1 | 29

The **Sample Instructional Activities** page includes optional activities that can help you connect the content and suggested skill of a particular topic. Additionally, this page offers space for you to make notes on your approach to the individual topics and the unit as a whole.

Thinking Geographically

UNIT 1

TOPIC 1.1 Introduction to Maps

Required Course Content

ENDURING UNDERSTANDING

LEARNING OBJECTIVE

ESSENTIAL KNOWLEDGE

SUGGESTED SKILL

AVAILABLE RESOURCES

30 | Course Framework V.1 AP Human Geography Course and Exam Description

TOPIC PAGES

The **suggested skill** is one that complements the content in that topic.

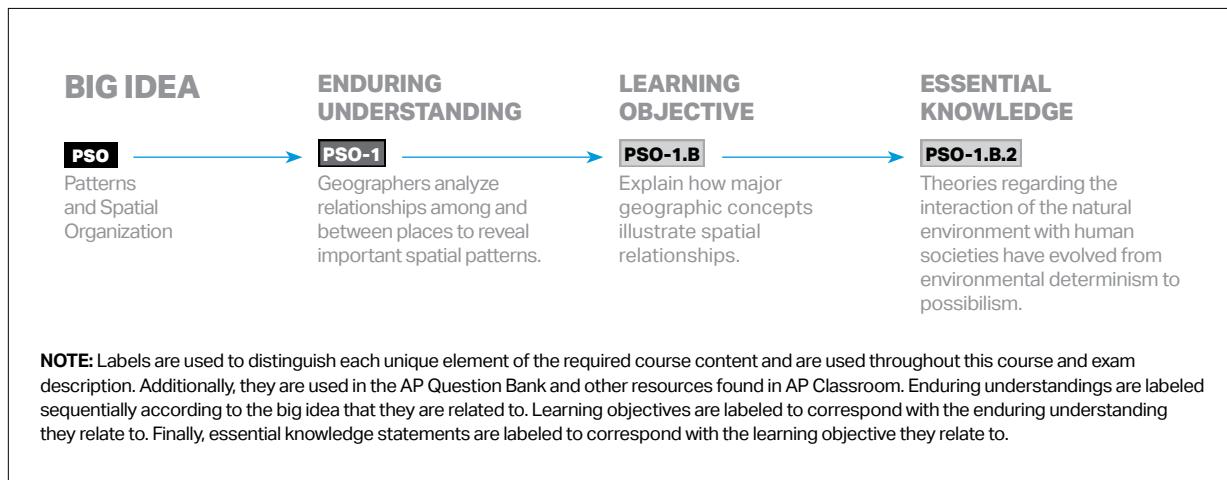
Where possible, **available resources** are included that might help you address a particular topic in your classroom.

Enduring understandings are the intended long-term takeaways related to the big ideas that leave a lasting impression on students. Students develop these understandings over time by exploring and applying course content throughout the year.

Essential knowledge statements describe the knowledge required to perform the learning objectives.

Learning objectives define what a student needs to be able to do with content knowledge in order to progress toward the enduring understandings.

REQUIRED COURSE CONTENT LABELING SYSTEM



AP HUMAN GEOGRAPHY

UNIT 1

Thinking Geographically



8–10%
AP EXAM WEIGHTING



~9–10
CLASS PERIODS



Remember to go to [AP Classroom](#) to assign students the online **Personal Progress Check** for this unit.

Whether assigned as homework or completed in class, the **Personal Progress Check** provides each student with immediate feedback related to this unit's topics and skills.

Personal Progress Check 1

Multiple-choice: ~20 questions

Free-response: 1 question

- 1 stimulus

Thinking Geographically



Developing Understanding

BIG IDEA 1

Patterns and Spatial Organization **PSO**

- Why do geographers study relationships and patterns among and between places?

BIG IDEA 2

Impacts and Interactions **IMP**

- How do geographers use maps to help them discover patterns and relationships in the world?

BIG IDEA 3

Spatial Processes and Societal Change **SPS**

- How do geographers use a spatial perspective to analyze complex issues and relationships?

This first unit sets the foundation for the course by teaching students how geographers approach the study of places. Students are encouraged to reflect on the “why of where” to better understand geographic perspectives. Many other high school courses ask students to read and analyze data, but for this course, students also apply a spatial perspective when reading and analyzing qualitative and quantitative data.

Students learn the ways information from data sources such as maps, tables, charts, satellite images, and infographics informs policy decisions such as voting redistricting or expanding transportation networks. They also learn about how people influence and are influenced by their environment; the resulting impact on topography, natural resources, and climate; and the differences between and consequences of environmental determinism and possibilism.

Finally, students are introduced to the language of geography, learning discipline-specific terminology and applying that language to contemporary, real-world scenarios so they can better study population processes and patterns in the next unit.

UNIT AT A GLANCE

Enduring Understanding	Topic	Suggested Skill	Class Periods
IMP-1 PSO-1 SPS-1	1.1 Introduction to Maps	3.A Identify the different types of data presented in maps and in quantitative and geospatial data.	
	1.2 Geographic Data	3.A Identify the different types of data presented in maps and in quantitative and geospatial data.	
	1.3 The Power of Geographic Data	3.B Describe spatial patterns presented in maps and in quantitative and geospatial data.	
	1.4 Spatial Concepts	3.B Describe spatial patterns presented in maps and in quantitative and geospatial data.	
	1.5 Human–Environmental Interaction	1.B Explain geographic concepts, processes, models, and theories.	
	1.6 Scales of Analysis	5.A Identify the scales of analysis presented by maps, quantitative and geospatial data, images, and landscapes.	
	1.7 Regional Analysis	1.A Describe geographic concepts, processes, models, and theories.	
 Go to AP Classroom to assign the Personal Progress Check for Unit 1. Review the results in class to identify and address any student misunderstandings.			

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	1.1	Quickwrite Set aside a short, specific amount of time during a class period for students to perform a quickwrite on the power of maps. As preparation for answering free-response questions later in the course, have students identify two different types of map projections and explain why different map projections exist.
2	1.5	Critique Reasoning Using the two major schools of thought regarding human–environmental interaction—environmental determinism and possibilism—have students identify the claims of each, explain the reasoning behind each, and find current real-world examples supporting and/or refuting each. Allow for collaborative discussion at multiple levels—pairs, small groups, and whole group—to achieve understanding.
3	1.6	Debriefing Scales of analysis is a challenging topic for students. They tend to struggle with understanding the significance of examining issues at multiple scales. For complex issues, leading a facilitated discussion of data that illustrate scale concepts can help solidify and deepen understanding of content. For example, you can take a set of data and show what the global patterns are, zoom in to illustrate the national level, then zoom in again to show the difference in the local level analysis. Finish by leading a discussion on the significance of the differences in patterns.



Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

SUGGESTED SKILL**3.A**

Identify the different types of data presented in maps and in quantitative and geospatial data.

**AVAILABLE RESOURCES**

- Classroom Resources > **Maps and Spatial Thinking Skills in the AP Human Geography Classroom**
- Classroom Resources > **Defining Geography: What Is Where, Why There, and Why Care?**
- Classroom Resources > **Scale**

TOPIC 1.1

Introduction to Maps

Required Course Content

ENDURING UNDERSTANDING

IMP-1

Geographers use maps and data to depict relationships of time, space, and scale.

LEARNING OBJECTIVE

IMP-1.A

Identify types of maps, the types of information presented in maps, and different kinds of spatial patterns and relationships portrayed in maps.

ESSENTIAL KNOWLEDGE

IMP-1.A.1

Types of maps include reference maps and thematic maps.

IMP-1.A.2

Types of spatial patterns represented on maps include absolute and relative distance and direction, clustering, dispersal, and elevation.

IMP-1.A.3

All maps are selective in information; map projections inevitably distort spatial relationships in shape, area, distance, and direction.

TOPIC 1.2

Geographic Data

SUGGESTED SKILL**3.A**

Identify the different types of data presented in maps and in quantitative and geospatial data.

**AVAILABLE RESOURCES**

- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)
- Classroom Resources > [Defining Geography: What is Where, Why There, and Why Care?](#)

Required Course Content

ENDURING UNDERSTANDING

IMP-1

Geographers use maps and data to depict relationships of time, space, and scale.

LEARNING OBJECTIVE

IMP-1.B

Identify different methods of geographic data collection.

ESSENTIAL KNOWLEDGE

IMP-1.B.1

Data may be gathered in the field by organizations or by individuals.

IMP-1.B.2

Geospatial technologies include geographic information systems (GIS), satellite navigation systems, remote sensing, and online mapping and visualization.

IMP-1.B.3

Spatial information can come from written accounts in the form of field observations, media reports, travel narratives, policy documents, personal interviews, landscape analysis, and photographic interpretation.

SUGGESTED SKILL**3.B**

Describe spatial patterns presented in maps and in quantitative and geospatial data.

**AVAILABLE RESOURCES**

- Classroom Resources > **Maps and Spatial Thinking Skills in the AP Human Geography Classroom**
- Classroom Resources > **Defining Geography: What Is Where, Why There, and Why Care?**
- Classroom Resources > **Scale**

TOPIC 1.3

The Power of Geographic Data

Required Course Content

ENDURING UNDERSTANDING

IMP-1

Geographers use maps and data to depict relationships of time, space, and scale.

LEARNING OBJECTIVE

IMP-1.C

Explain the geographical effects of decisions made using geographical information.

ESSENTIAL KNOWLEDGE

IMP-1.C.1

Geospatial and geographical data, including census data and satellite imagery, are used at all scales for personal, business and organizational, and governmental decision-making purposes.

TOPIC 1.4

Spatial Concepts

Required Course Content

ENDURING UNDERSTANDING

PSO-1

Geographers analyze relationships among and between places to reveal important spatial patterns.

LEARNING OBJECTIVE

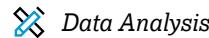
PSO-1.A

Define major geographic concepts that illustrate spatial relationships.

ESSENTIAL KNOWLEDGE

PSO-1.A.1

Spatial concepts include absolute and relative location, space, place, flows, distance decay, time-space compression, and pattern.

SUGGESTED SKILL**3.B**

Describe spatial patterns presented in maps and in quantitative and geospatial data.

**AVAILABLE RESOURCES**

- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)
- Classroom Resources > [Defining Geography: What Is Where, Why There, and Why Care?](#)

SUGGESTED SKILL Concepts and Processes**1.B**

Explain geographic concepts, processes, models, and theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Understanding Land Use Patterns](#)

TOPIC 1.5

Human-Environmental Interaction

Required Course Content

ENDURING UNDERSTANDING**PSO-1**

Geographers analyze relationships among and between places to reveal important spatial patterns.

LEARNING OBJECTIVE**PSO-1.B**

Explain how major geographic concepts illustrate spatial relationships.

ESSENTIAL KNOWLEDGE**PSO-1.B.1**

Concepts of nature and society include sustainability, natural resources, and land use.

PSO-1.B.2

Theories regarding the interaction of the natural environment with human societies have evolved from environmental determinism to possibilism.

TOPIC 1.6

Scales of Analysis

SUGGESTED SKILL
 Scale Analysis

5.A

Identify the scales of analysis presented by maps, quantitative and geospatial data, images, and landscapes.



AVAILABLE RESOURCES

- Classroom Resources > Scale

Required Course Content

ENDURING UNDERSTANDING

PSO-1

Geographers analyze relationships among and between places to reveal important spatial patterns.

LEARNING OBJECTIVE

PSO-1.C

Define scales of analysis used by geographers.

PSO-1.D

Explain what scales of analysis reveal.

ESSENTIAL KNOWLEDGE

PSO-1.C.1

Scales of analysis include global, regional, national, and local.

PSO-1.D.1

Patterns and processes at different scales reveal variations in, and different interpretations of, data.

SUGGESTED SKILL Concepts and Processes**1.A**

Describe geographic concepts, processes, models, and theories.

TOPIC 1.7
Regional Analysis**Required Course Content****ENDURING UNDERSTANDING****SPS-1**

Geographers analyze complex issues and relationships with a distinctively spatial perspective.

LEARNING OBJECTIVE**SPS-1.A**

Describe different ways that geographers define regions.

ESSENTIAL KNOWLEDGE**SPS-1.A.1**

Regions are defined on the basis of one or more unifying characteristics or on patterns of activity.

SPS-1.A.2

Types of regions include formal, functional, and perceptual/vernacular.

SPS-1.A.3

Regional boundaries are transitional and often contested and overlapping.

SPS-1.A.4

Geographers apply regional analysis at local, national, and global scales.

AP HUMAN GEOGRAPHY

UNIT 2

Population and Migration Patterns and Processes



12–17%
AP EXAM WEIGHTING



~19–20
CLASS PERIODS



Remember to go to [AP Classroom](#) to assign students the online **Personal Progress Check** for this unit.

Whether assigned as homework or completed in class, the **Personal Progress Check** provides each student with immediate feedback related to this unit's topics and skills.

Personal Progress Check 2

Multiple-choice: ~35 questions

Free-response: 1 question

- 1 stimulus

Population and Migration Patterns and Processes



Developing Understanding

BIG IDEA 1

Patterns and Spatial Organization **PSO**

- How does where and how people live impact global cultural, political, and economic patterns?

BIG IDEA 2

Impacts and Interactions **IMP**

- How does the interplay of environmental, economic, cultural, and political factors influence changes in population?

BIG IDEA 3

Spatial Patterns and Societal Change **SPS**

- How do changes in population affect a place's economy, culture, and politics?

This unit addresses the patterns associated with human populations. Populations may increase or decrease as a result of a combination of natural changes (births and deaths) and migration patterns (emigration and immigration). Students examine population distributions at different scales—local, national, regional, and global. Population pyramids demonstrate age-sex structures, revealing the growth or decline of generations and allowing geographers to predict economic needs based on reproductive and aging patterns.

Students learn about factors that influence changes in population as well as the long- and short-term effects of those population changes on a place's economy, culture, and politics. For example, environmental degradation and natural hazards may prompt population redistribution at various scales, which in turn creates new pressures on the environment and on cultural, economic, and political institutions. The study of migration patterns allows students to examine factors contributing to voluntary and forced relocation and the impact of these migrating populations on existing settlements.

Combined, the concepts and theories encountered in this unit help students develop connections and transfer their learning in upcoming units to course topics such as cultural patterns, the political organization of space, food production issues, natural resource use, and urban systems.

UNIT AT A GLANCE

Enduring Understanding	Topic	Suggested Skill	Class Periods
PSO-2	2.1 Population Distribution	3.A Identify the different types of data presented in maps and in quantitative and geospatial data.	
	2.2 Consequences of Population Distribution	2.C Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.	
	2.3 Population Composition	2.A Describe spatial patterns, networks, and relationships.	
IMP-2	2.4 Population Dynamics	3.C Explain patterns and trends in maps and in quantitative and geospatial data to draw conclusions.	
	2.5 The Demographic Transition Model	3.B Describe spatial patterns presented in maps and in quantitative and geospatial data.	
SPS-2	2.6 Malthusian Theory	2.B Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.	
	2.7 Population Policies	2.C Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.	
	2.8 Women and Demographic Change	3.B Describe spatial patterns presented in maps and in quantitative and geospatial data.	
IMP-2	2.9 Aging Populations	2.C Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.	
	2.10 Causes of Migration	2.B Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.	
	2.11 Forced and Voluntary Migration	1.D Describe a relevant geographic concept, process, model, or theory in a specified context.	
	2.12 Effects of Migration	2.B Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.	
	Go to AP Classroom to assign the Personal Progress Check for Unit 2. Review the results in class to identify and address any student misunderstandings.		



Go to [AP Classroom](#) to assign the Personal Progress Check for Unit 2.
Review the results in class to identify and address any student misunderstandings.

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	2.3	Create Representations Although population pyramids are most often used to illustrate the population composition of countries, they may also be used to illustrate the age-sex population of subnational units. Provide students with scenarios regarding the characteristics of different subnational units. Then have the students draw a population pyramid based on the scenarios and explain their thinking.
2	2.5	Making Connections Give students this list of terms: <i>crude birth rate</i> , <i>crude death rate</i> , <i>rate of natural increase</i> , and <i>total population</i> . Allow students a few minutes to gather and recall information about the terms or concepts and then pair students to discuss how the relationships among the terms are represented in the demographic transition model. Then, ask students to take different population pyramids and place them at the appropriate stage of the demographic transition model. Have them justify their choice of stage.
3	2.12	Jigsaw Assign students different countries, some with negative net migration rates and others with positive net migration rates, and have them use a variety of resources to examine the effects of migration on their assigned country. Then, create two groups—one with countries with positive net migration rates and one with countries with negative net migration rates—and have them discuss and compile information gathered on migration effects. Lastly, create groups with mixed positive and negative net migration rate countries and have students summarize and present information on the impacts for these different countries.



Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

**UNIT
2****SUGGESTED SKILL****3.A**

Identify the different types of data presented in maps and in quantitative and geospatial data.

**AVAILABLE RESOURCES**

- Classroom Resources >
Maps and Spatial Thinking Skills in the AP Human Geography Classroom

Population and Migration Patterns and Processes

TOPIC 2.1

Population Distribution

Required Course Content

ENDURING UNDERSTANDING

PSO-2

Understanding where and how people live is essential to understanding global cultural, political, and economic patterns.

LEARNING OBJECTIVE

PSO-2.A

Identify the factors that influence the distribution of human populations at different scales.

ESSENTIAL KNOWLEDGE

PSO-2.A.1

Physical factors (e.g., climate, landforms, water bodies) and human factors (e.g., culture, economics, history, politics) influence the distribution of population.

PSO-2.A.2

Factors that illustrate patterns of population distribution vary according to the scale of analysis.

PSO-2.B

Define methods geographers use to calculate population density.

PSO-2.B.1

The three methods for calculating population density are arithmetic, physiological, and agricultural.

PSO-2.C

Explain the differences between and the impact of methods used to calculate population density.

PSO-2.C.1

The method used to calculate population density reveals different information about the pressure the population exerts on the land.

TOPIC 2.2

Consequences of Population Distribution

Required Course Content

ENDURING UNDERSTANDING**PSO-2**

Understanding where and how people live is essential to understanding global cultural, political, and economic patterns.

LEARNING OBJECTIVE**PSO-2.D**

Explain how population distribution and density affect society and the environment.

ESSENTIAL KNOWLEDGE**PSO-2.D.1**

Population distribution and density affect political, economic, and social processes, including the provision of services such as medical care.

PSO-2.D.2

Population distribution and density affect the environment and natural resources; this is known as carrying capacity.

SUGGESTED SKILL

 *Spatial Relationships*

2.C

Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources >
[Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

SUGGESTED SKILL *Spatial Relationships***2.A**

Describe spatial patterns, networks, and relationships.

**AVAILABLE RESOURCES**

- Classroom Resources >
- Maps and Spatial Thinking Skills in the AP Human Geography Classroom**

TOPIC 2.3

Population Composition

Required Course Content

ENDURING UNDERSTANDING**PSO-2**

Understanding where and how people live is essential to understanding global cultural, political, and economic patterns.

LEARNING OBJECTIVE**PSO-2.E**

Describe elements of population composition used by geographers.

PSO-2.F

Explain ways that geographers depict and analyze population composition.

ESSENTIAL KNOWLEDGE**PSO-2.E.1**

Patterns of age structure and sex ratio vary across different regions and may be mapped and analyzed at different scales.

PSO-2.F.1

Population pyramids are used to assess population growth and decline and to predict markets for goods and services.

TOPIC 2.4

Population Dynamics

SUGGESTED SKILL
 Data Analysis

3.C

Explain patterns and trends in maps and in quantitative and geospatial data to draw conclusions.

Required Course Content

ENDURING UNDERSTANDING

IMP-2

Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.

LEARNING OBJECTIVE

IMP-2.A

Explain factors that account for contemporary and historical trends in population growth and decline.

ESSENTIAL KNOWLEDGE

IMP-2.A.1

Demographic factors that determine a population's growth and decline are fertility, mortality, and migration.

IMP-2.A.2

Geographers use the rate of natural increase and population-doubling time to explain population growth and decline.

IMP-2.A.3

Social, cultural, political, and economic factors influence fertility, mortality, and migration rates.

SUGGESTED SKILL**3.B**

Describe spatial patterns presented in maps and in quantitative and geospatial data.

**AVAILABLE RESOURCES**

- Classroom Resources >
- Maps and Spatial Thinking Skills in the AP Human Geography Classroom**

TOPIC 2.5

The Demographic Transition Model

Required Course Content

ENDURING UNDERSTANDING**IMP-2**

Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.

LEARNING OBJECTIVE**IMP-2.B**

Explain theories of population growth and decline.

ESSENTIAL KNOWLEDGE**IMP-2.B.1**

The demographic transition model can be used to explain population change over time.

IMP-2.B.2

The epidemiological transition explains causes of changing death rates.

TOPIC 2.6

Malthusian Theory

SUGGESTED SKILL *Spatial Relationships***2.B**

Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.

Required Course Content

ENDURING UNDERSTANDING**IMP-2**

Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.

LEARNING OBJECTIVE**IMP-2.B**

Explain theories of population growth and decline.

ESSENTIAL KNOWLEDGE**IMP-2.B.3**

Malthusian theory and its critiques are used to analyze population change and its consequences.

SUGGESTED SKILL *Spatial Relationships***2.C**

Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.

TOPIC 2.7

Population Policies

Required Course Content

ENDURING UNDERSTANDING**SPS-2**

Changes in population have long- and short-term effects on a place's economy, culture, and politics.

LEARNING OBJECTIVE**SPS-2.A**

Explain the intent and effects of various population and immigration policies on population size and composition.

ESSENTIAL KNOWLEDGE**SPS-2.A.1**

Types of population policies include those that promote or discourage population growth, such as pronatalist, antinatalist, and immigration policies.

TOPIC 2.8

Women and Demographic Change

Required Course Content

ENDURING UNDERSTANDING

SPS-2

Changes in population have long- and short-term effects on a place's economy, culture, and politics.

LEARNING OBJECTIVE

SPS-2.B

Explain how the changing role of females has demographic consequences in different parts of the world.

ESSENTIAL KNOWLEDGE

SPS-2.B.1

Changing social values and access to education, employment, health care, and contraception have reduced fertility rates in most parts of the world.

SPS-2.B.2

Changing social, economic, and political roles for females have influenced patterns of fertility, mortality, and migration, as illustrated by Ravenstein's laws of migration.

SUGGESTED SKILL**3.B**

Describe spatial patterns presented in maps and in quantitative and geospatial data.

**AVAILABLE RESOURCES**

- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

SUGGESTED SKILL *Spatial Relationships***2.C**

Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > **Maps and Spatial Thinking Skills in the AP Human Geography Classroom**
- Classroom Resources > **Scale**

TOPIC 2.9

Aging Populations

Required Course Content

ENDURING UNDERSTANDING**SPS-2**

Changes in population have long- and short-term effects on a place's economy, culture, and politics.

LEARNING OBJECTIVE**SPS-2.C**

Explain the causes and consequences of an aging population.

ESSENTIAL KNOWLEDGE**SPS-2.C.1**

Population aging is determined by birth and death rates and life expectancy.

SPS-2.C.2

An aging population has political, social, and economic consequences, including the dependency ratio.

TOPIC 2.10

Causes of Migration

SUGGESTED SKILL *Spatial Relationships***2.B**

Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.

Required Course Content

ENDURING UNDERSTANDING**IMP-2**

Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.

LEARNING OBJECTIVE**IMP-2.C**

Explain how different causal factors encourage migration.

ESSENTIAL KNOWLEDGE**IMP-2.C.1**

Migration is commonly divided into push factors and pull factors.

IMP-2.C.2

Push/pull factors and intervening opportunities/obstacles can be cultural, demographic, economic, environmental, or political.

SUGGESTED SKILL *Concepts and Processes***1.D**

Describe a relevant geographic concept, process, model, or theory in a specified context.

TOPIC 2.11

Forced and Voluntary Migration

Required Course Content

ENDURING UNDERSTANDING

IMP-2

Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.

LEARNING OBJECTIVE

IMP-2.D

Describe types of forced and voluntary migration.

ESSENTIAL KNOWLEDGE

IMP-2.D.1

Forced migrations include slavery and events that produce refugees, internally displaced persons, and asylum seekers.

IMP-2.D.2

Types of voluntary migrations include transnational, transhumance, internal, chain, step, guest worker, and rural-to-urban.

TOPIC 2.12

Effects of Migration

SUGGESTED SKILL *Spatial Relationships***2.B**

Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.

Required Course Content

ENDURING UNDERSTANDING**IMP-2**

Changes in population are due to mortality, fertility, and migration, which are influenced by the interplay of environmental, economic, cultural, and political factors.

LEARNING OBJECTIVE**IMP-2.E**

Explain historical and contemporary geographic effects of migration.

ESSENTIAL KNOWLEDGE**IMP-2.E.1**

Migration has political, economic, and cultural effects.

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AP HUMAN GEOGRAPHY

UNIT 3

Cultural Patterns and Processes



12–17%
AP EXAM WEIGHTING



~19–20
CLASS PERIODS



Remember to go to [AP Classroom](#) to assign students the online **Personal Progress Check** for this unit.

Whether assigned as homework or completed in class, the **Personal Progress Check** provides each student with immediate feedback related to this unit's topics and skills.

[Personal Progress Check 3](#)

Multiple-choice: ~25 questions

Free-response: 1 question

- 2 stimuli

Cultural Patterns and Processes



Developing Understanding

BIG IDEA 1

Patterns and Spatial Organization **PSO**

- How does where people live and what resources they have access to impact their cultural practices?

BIG IDEA 2

Impacts and Interactions **IMP**

- How does the interaction of people contribute to the spread of cultural practices?

BIG IDEA 3

Spatial Patterns and Societal Change **SPS**

- How and why do cultural ideas, practices, and innovations change or disappear over time?

The main focus of this unit is on cultural patterns and processes that create recognized cultural identities. Students consider the physical environment to determine the effects of geographical location and available resources on cultural practices. Visuals representing artifacts, mentifacts and sociofacts all shed light on cultural landscapes and how they change over time. Practice in analyzing images of different places at different times for evidence of their ethnicity, language, religion, gender roles and attitudes, and other cultural attributes builds students' understanding of cultural patterns and processes.

This unit also considers from a temporal and spatial perspective how culture spreads, through traditional forces such as colonialism and imperialism and through contemporary influences such as social media. Rather than emphasize the details of cultural practices associated with specific languages and religions, this unit instead focuses on the distribution of cultural practices and on the causes and effects of their diffusion. For example, students might study the distribution of Chinese versus English languages or the diffusion patterns of religions such as Hinduism and Islam, at local, national, or global scales.

An understanding of the diffusion of cultural practices provides a foundation for the study of political patterns and processes in the next unit.

UNIT AT A GLANCE

Enduring Understanding	Topic	Suggested Skill	Class Periods
PSO-3	3.1 Introduction to Culture	4.A Identify the different types of information presented in visual sources.	
	3.2 Cultural Landscapes	4.B Describe the spatial patterns presented in visual sources.	
	3.3 Cultural Patterns	4.C Explain patterns and trends in visual sources to draw conclusions.	
IMP-3	3.4 Types of Diffusion	1.D Describe a relevant geographic concept, process, model, or theory in a specified context.	
SPS-3	3.5 Historical Causes of Diffusion	2.C Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.	
	3.6 Contemporary Causes of Diffusion	5.B Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.	
	3.7 Diffusion of Religion and Language	4.E Explain how maps, images, and landscapes illustrate or relate to geographic principles, processes, and outcomes.	
IMP-3	3.8 Effects of Diffusion	2.B Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.	
 Go to AP Classroom to assign the Personal Progress Check for Unit 3. Review the results in class to identify and address any student misunderstandings.			

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	3.2	Discussion Group Arrange students into small groups (4–6 students per group is recommended) and have them analyze a set of images from a place. Have groups look for evidence of different languages, religions, and ethnicities in the landscape. If students are not accustomed to “reading” images, you may first want to demonstrate reading the cultural landscape with a set of images from the community surrounding the school and walk students through the analytical process as a whole class. If student groups are given different places to analyze, you may ask each group to share with the rest of the class.
2	3.3	Look for a Pattern Using different data sets, have students analyze regional patterns associated with religions and languages. Have students hypothesize as to the reasons behind the existence of the patterns they identify along with the consequences of the observed patterns. Students will confirm or alter their reasons and consequences as they progress through the unit. They can also reflect back on Topic 3.2 and predict how the cultural landscape would reflect the identified patterns.
3	3.6	Fishbowl Using secondary sources about the current spread of different phenomena and the process of globalization, ask students to discuss how we became so connected globally. The inner group models discussion while the outer group listens, responds, and evaluates. Then the groups switch roles. You might also ask students to reflect back on Topic 3.5 and explain why the historical causes of diffusion have changed.



Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

SUGGESTED SKILL *Source Analysis***4.A**

Identify the different types of information presented in visual sources.

**AVAILABLE RESOURCES**

- Classroom Resources > [Understanding Land Use Patterns](#)

TOPIC 3.1

Introduction to Culture

Required Course Content

ENDURING UNDERSTANDING**PSO-3**

Cultural practices vary across geographical locations because of physical geography and available resources.

LEARNING OBJECTIVE**PSO-3.A**

Define the characteristics, attitudes, and traits that influence geographers when they study culture.

ESSENTIAL KNOWLEDGE**PSO-3.A.1**

Culture comprises the shared practices, technologies, attitudes, and behaviors transmitted by a society.

PSO-3.A.2

Cultural traits include such things as food preferences, architecture, and land use.

PSO-3.A.3

Cultural relativism and ethnocentrism are different attitudes toward cultural difference.

TOPIC 3.2

Cultural Landscapes

SUGGESTED SKILL
 Source Analysis

4.B

Describe the spatial patterns presented in visual sources.



AVAILABLE RESOURCES

- Classroom Resources > [Understanding Land Use Patterns](#)
- Classroom Resources > [Cultural Landscape Study](#)

Required Course Content

ENDURING UNDERSTANDING

PSO-3

Cultural practices vary across geographical locations because of physical geography and available resources.

LEARNING OBJECTIVE

PSO-3.B

Describe the characteristics of cultural landscapes.

ESSENTIAL KNOWLEDGE

PSO-3.B.1

Cultural landscapes are combinations of physical features, agricultural and industrial practices, religious and linguistic characteristics, evidence of sequent occupancy, and other expressions of culture including traditional and postmodern architecture and land-use patterns.

PSO-3.C

Explain how landscape features and land and resource use reflect cultural beliefs and identities.

PSO-3.C.1

Attitudes toward ethnicity and gender, including the role of women in the workforce; ethnic neighborhoods; and indigenous communities and lands help shape the use of space in a given society.

SUGGESTED SKILL *Source Analysis***4.C**

Explain patterns and trends in visual sources to draw conclusions.

**AVAILABLE RESOURCES**

- Classroom Resources > **Cultural Landscape Study**
- Classroom Resources > **Maps and Spatial Thinking Skills in the AP Human Geography Classroom**

TOPIC 3.3
Cultural Patterns**Required Course Content****ENDURING UNDERSTANDING****PSO-3**

Cultural practices vary across geographical locations because of physical geography and available resources.

LEARNING OBJECTIVE**PSO-3.D**

Explain patterns and landscapes of language, religion, ethnicity, and gender.

ESSENTIAL KNOWLEDGE**PSO-3.D.1**

Regional patterns of language, religion, and ethnicity contribute to a sense of place, enhance placemaking, and shape the global cultural landscape.

PSO-3.D.2

Language, ethnicity, and religion are factors in creating centripetal and centrifugal forces.

TOPIC 3.4

Types of Diffusion

SUGGESTED SKILL Concepts and Processes**1.D**

Describe a relevant geographic concept, process, model, or theory in a specified context.

Required Course Content

ENDURING UNDERSTANDING**IMP-3**

The interaction of people contributes to the spread of cultural practices.

LEARNING OBJECTIVE**IMP-3.A**

Define the types of diffusion.

ESSENTIAL KNOWLEDGE**IMP-3.A.1**

Relocation and expansion—including contagious, hierarchical, and stimulus expansion—are types of diffusion.

SUGGESTED SKILL *Spatial Relationships***2.C**

Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.

TOPIC 3.5
Historical Causes of Diffusion**Required Course Content****ENDURING UNDERSTANDING****SPS-3**

Cultural ideas, practices, and innovations change or disappear over time.

LEARNING OBJECTIVE**SPS-3.A**

Explain how historical processes impact current cultural patterns.

ESSENTIAL KNOWLEDGE**SPS-3.A.1**

Interactions between and among cultural traits and larger global forces can lead to new forms of cultural expression; for example, creolization and lingua franca.

SPS-3.A.2

Colonialism, imperialism, and trade helped to shape patterns and practices of culture.

TOPIC 3.6

Contemporary Causes of Diffusion

SUGGESTED SKILL Scale Analysis**5.B**

Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Scale](#)
- Classroom Resources > [Globalization](#)

Required Course Content

ENDURING UNDERSTANDING

SPS-3

Cultural ideas, practices, and innovations change or disappear over time.

LEARNING OBJECTIVE

SPS-3.A

Explain how historical processes impact current cultural patterns.

ESSENTIAL KNOWLEDGE

SPS-3.A.3

Cultural ideas and practices are socially constructed and change through both small-scale and large-scale processes such as urbanization and globalization. These processes come to bear on culture through media, technological change, politics, economics, and social relationships.

SPS-3.A.4

Communication technologies, such as the internet and the time-space convergence, are reshaping and accelerating interactions among people; changing cultural practices, as in the increasing use of English and the loss of indigenous languages; and creating cultural convergence and divergence.

SUGGESTED SKILL *Source Analysis***4.E**

Explain how maps, images, and landscapes illustrate or relate to geographic principles, processes, and outcomes.

**AVAILABLE RESOURCES**

- Classroom Resources > **Maps and Spatial Thinking Skills in the AP Human Geography Classroom**
- Classroom Resources > **Cultural Landscape Study**

TOPIC 3.7

Diffusion of Religion and Language

Required Course Content

ENDURING UNDERSTANDING**IMP-3**

The interaction of people contributes to the spread of cultural practices.

LEARNING OBJECTIVE**IMP-3.B**

Explain what factors lead to the diffusion of universalizing and ethnic religions.

ESSENTIAL KNOWLEDGE**IMP-3.B.1**

Language families, languages, dialects, world religions, ethnic cultures, and gender roles diffuse from cultural hearths.

IMP-3.B.2

Diffusion of language families, including Indo-European, and religious patterns and distributions can be visually represented on maps, in charts and toponyms, and in other representations.

IMP-3.B.3

Religions have distinct places of origin from which they diffused to other locations through different processes. Practices and belief systems impacted how widespread the religion diffused.

IMP-3.B.4

Universalizing religions, including Christianity, Islam, Buddhism, and Sikhism, are spread through expansion and relocation diffusion.

IMP-3.B.5

Ethnic religions, including Hinduism and Judaism, are generally found near the hearth or spread through relocation diffusion.

TOPIC 3.8

Effects of Diffusion

SUGGESTED SKILL *Spatial Relationships***2.B**

Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > Scale

Required Course Content

ENDURING UNDERSTANDING**SPS-3**

Cultural ideas, practices, and innovations change or disappear over time.

LEARNING OBJECTIVE**SPS-3.B**

Explain how the process of diffusion results in changes to the cultural landscape.

ESSENTIAL KNOWLEDGE**SPS-3.B.1**

Acculturation, assimilation, syncretism, and multiculturalism are effects of the diffusion of culture.

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AP HUMAN GEOGRAPHY

UNIT 4

Political Patterns and Processes



12–17%
AP EXAM WEIGHTING



~19–20
CLASS PERIODS



Remember to go to [AP Classroom](#) to assign students the online **Personal Progress Check** for this unit.

Whether assigned as homework or completed in class, the **Personal Progress Check** provides each student with immediate feedback related to this unit's topics and skills.

Personal Progress Check 4

Multiple-choice: ~30 questions

Free-response: 1 question

- 1 stimulus

Political Patterns and Processes

Developing Understanding

BIG IDEA 1

Patterns and Spatial Organization PSO

- How do historical and current events influence political structures around the world?

BIG IDEA 2

Impacts and Interactions IMP

- How are balances of power reflected in political boundaries and government power structures?

BIG IDEA 3

Spatial Patterns and Societal Change SPS

- How can political, economic, cultural, or technological changes challenge state sovereignty?

This unit addresses the political organization of the world. Building on knowledge of populations and cultural patterns learned in previous units, students examine the contemporary political map and the impact of territoriality on political power and on issues of identity for peoples. Students also look at the different types of political boundaries, how they function, and their scale, as they consider both internal and international boundaries. The interplay of political and cultural influences may cause tensions over boundaries to arise, such as sovereign states making claims on what other states consider to be international waters.

Students also examine forms of government and how forces such as devolution may alter the functioning of political units and cause changes to established political boundaries. Separatist and independence movements that challenge the sovereignty of political states may arise from economic and nationalistic forces, as seen in Scotland, Northern Ireland, and Spain. The influence of supranational organizations such as the United Nations or European Union and their role in global affairs presents another challenge to nationalist sovereignty. Student understanding of cultural patterns and processes helps inform their understanding of the consequences of centrifugal and centripetal forces.

UNIT AT A GLANCE

Enduring Understanding	Class Periods
Topic	Suggested Skill
PSO-4 IMP-4 SPS-4	4.1 Introduction to Political Geography 4.A Identify the different types of information presented in visual sources.
	4.2 Political Processes 3.E Explain what maps or data imply or illustrate about geographic principles, processes, and outcomes.
	4.3 Political Power and Territoriality 5.B Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.
	4.4 Defining Political Boundaries 1.D Describe a relevant geographic concept, process, model, or theory in a specified context.
	4.5 The Function of Political Boundaries 5.D Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects across various geographic scales.
	4.6 Internal Boundaries 5.A Identify the scales of analysis presented by maps, quantitative and geospatial data, images, and landscapes.
	4.7 Forms of Governance 2.A Describe spatial patterns, networks, and relationships.
	4.8 Defining Devolutionary Factors 3.E Explain what maps or data imply or illustrate about geographic principles, processes, and outcomes.
	4.9 Challenges to Sovereignty 5.C Compare geographic characteristics and processes at various scales.
	4.10 Consequences of Centrifugal and Centripetal Forces 5.C Compare geographic characteristics and processes at various scales.
	Go to AP Classroom to assign the Personal Progress Check for Unit 4. Review the results in class to identify and address any student misunderstandings.



Go to [AP Classroom](#) to assign the **Personal Progress Check** for Unit 4. Review the results in class to identify and address any student misunderstandings.

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	4.6	Think-Pair-Share Have students individually think through the question, How can the way voting district boundaries are drawn impact election outcomes? Then have students gather evidence/examples to refine and/or support their thoughts. Students can then discuss their response with a peer. A whole-class discussion can follow focused on the issue of scale and how, due to internal political boundaries, it can appear that a subnational unit is in support of one candidate or party when in fact changing the scale may reveal variation in candidate or party loyalties.
2	4.8	Guided Discussion This umbrella strategy allows a teacher to use multiple techniques with students in a lesson. For this topic, use brainstorming and quickwrite as strategies to help students understand how division of groups by physical geography, ethnic separatism, ethnic cleansing, terrorism, economic and social problems, and irredentism may prompt devolutionary movements in a state.
3	4.10	Graphic Organizer Students should use a cause-and-effect graphic organizer to learn about the differing potential results of centrifugal and centripetal forces. Once students have identified the consequences of each, you can then ask them to look for contemporary examples of the consequences, which may be negative or positive. Ask students to discuss how different groups might have different interpretations of the nature of the consequences. For example, the breakup of a state will be viewed negatively by the formal state government but positively by separatists.



Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

SUGGESTED SKILL *Source Analysis***4.A**

Identify the different types of information presented in visual sources.

**AVAILABLE RESOURCES**

- Classroom Resources > [Scale](#)

TOPIC 4.1

Introduction to Political Geography

Required Course Content

ENDURING UNDERSTANDING**PSO-4**

The political organization of space results from historical and current processes, events, and ideas.

LEARNING OBJECTIVE**PSO-4.A**

For world political maps:

- a. Define the different types of political entities.
- b. Identify a contemporary example of political entities.

ESSENTIAL KNOWLEDGE**PSO-4.A.1**

Independent states are the primary building blocks of the world political map.

PSO-4.A.2

Types of political entities include nations, nation-states, stateless nations, multinational states, multistate nations, and autonomous and semiautonomous regions, such as American Indian reservations.

TOPIC 4.2

Political Processes

SUGGESTED SKILL**3.E**

Explain what maps or data imply or illustrate about geographic principles, processes, and outcomes.

**AVAILABLE RESOURCES**

- Classroom Resources >
[Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

Required Course Content

ENDURING UNDERSTANDING**PSO-4**

The political organization of space results from historical and current processes, events, and ideas.

LEARNING OBJECTIVE**PSO-4.B**

Explain the processes that have shaped contemporary political geography.

ESSENTIAL KNOWLEDGE**PSO-4.B.1**

The concepts of sovereignty, nation-states, and self-determination shape the contemporary world.

PSO-4.B.2

Colonialism, imperialism, independence movements, and devolution along national lines have influenced contemporary political boundaries.

SUGGESTED SKILL *Scale Analysis***5.B**

Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Scale](#)

TOPIC 4.3
Political Power and Territoriality**Required Course Content****ENDURING UNDERSTANDING****PSO-4**

The political organization of space results from historical and current processes, events, and ideas.

LEARNING OBJECTIVE**PSO-4.C**

Describe the concepts of political power and territoriality as used by geographers.

ESSENTIAL KNOWLEDGE**PSO-4.C.1**

Political power is expressed geographically as control over people, land, and resources, as illustrated by neocolonialism, shatterbelts, and choke points.

PSO-4.C.2

Territoriality is the connection of people, their culture, and their economic systems to the land.

TOPIC 4.4

Defining Political Boundaries

SUGGESTED SKILL

 Concepts and Processes

1.D

Describe a relevant geographic concept, process, model, or theory in a specified context.

Required Course Content

ENDURING UNDERSTANDING

IMP-4

Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been negotiated or imposed.

LEARNING OBJECTIVE

IMP-4.A

Define types of political boundaries used by geographers.

ESSENTIAL KNOWLEDGE

IMP-4.A.1

Types of political boundaries include relic, superimposed, subsequent, antecedent, geometric, and consequent boundaries.

SUGGESTED SKILL**5.D**

Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects across various geographic scales.

**AVAILABLE RESOURCES**

- Classroom Resources > Scale

TOPIC 4.5

The Function of Political Boundaries

Required Course Content

ENDURING UNDERSTANDING**IMP-4**

Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been negotiated or imposed.

LEARNING OBJECTIVE**IMP-4.B**

Explain the nature and function of international and internal boundaries.

ESSENTIAL KNOWLEDGE**IMP-4.B.1**

Boundaries are defined, delimited, demarcated, and administered to establish limits of sovereignty, but they are often contested.

IMP-4.B.2

Political boundaries often coincide with cultural, national, or economic divisions. However, some boundaries are created by demilitarized zones or policy, such as the Berlin Conference.

IMP-4.B.3

Land and maritime boundaries and international agreements can influence national or regional identity and encourage or discourage international or internal interactions and disputes over resources.

IMP-4.B.4

The United Nations Convention on the Law of the Sea defines the rights and responsibilities of nations in the use of international waters, established territorial seas, and exclusive economic zones.

TOPIC 4.6

Internal Boundaries

Required Course Content

ENDURING UNDERSTANDING

IMP-4

Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been negotiated or imposed.

LEARNING OBJECTIVE

IMP-4.B

Explain the nature and function of international and internal boundaries.

ESSENTIAL KNOWLEDGE

IMP-4.B.5

Voting districts, redistricting, and gerrymandering affect election results at various scales.

SUGGESTED SKILL *Scale Analysis***5.A**

Identify the scales of analysis presented by maps, quantitative and geospatial data, images, and landscapes.

**AVAILABLE RESOURCES**

- Classroom Resources > **Scale**
- Classroom Resources > **Maps and Spatial Thinking Skills in the AP Human Geography Classroom**

SUGGESTED SKILLS *Spatial Relationships***2.A**

Describe spatial patterns, networks, and relationships.

**AVAILABLE RESOURCES**

- Classroom Resources > **Scale**

TOPIC 4.7
Forms of Governance**Required Course Content****ENDURING UNDERSTANDING****IMP-4**

Political boundaries and divisions of governance, between states and within them, reflect balances of power that have been negotiated or imposed.

LEARNING OBJECTIVE**IMP-4.C**

Define federal and unitary states.

IMP-4.D

Explain how federal and unitary states affect spatial organization.

ESSENTIAL KNOWLEDGE**IMP-4.C.1**

Forms of governance include unitary states and federal states.

IMP-4.D.1

Unitary states tend to have a more top-down, centralized form of governance, while federal states have more locally based, dispersed power centers.

TOPIC 4.8

Defining Devolutionary Factors

Required Course Content

ENDURING UNDERSTANDING**SPS-4**

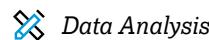
Political, economic, cultural, or technological changes can challenge state sovereignty.

LEARNING OBJECTIVE**SPS-4.A**

Define factors that lead to the devolution of states.

ESSENTIAL KNOWLEDGE**SPS-4.A.1**

Factors that can lead to the devolution of states include the division of groups by physical geography, ethnic separatism, ethnic cleansing, terrorism, economic and social problems, and irredentism.

SUGGESTED SKILL

Data Analysis

3.E

Explain what maps or data imply or illustrate about geographic principles, processes, and outcomes.

**AVAILABLE RESOURCES**

- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

SUGGESTED SKILL *Scale Analysis***5.C**

Compare geographic characteristics and processes at various scales.

TOPIC 4.9

Challenges to Sovereignty

Required Course Content

ENDURING UNDERSTANDING**SPS-4**

Political, economic, cultural, or technological changes can challenge state sovereignty.

LEARNING OBJECTIVE**SPS-4.B**

Explain how political, economic, cultural, and technological changes challenge state sovereignty.

ESSENTIAL KNOWLEDGE**SPS-4.B.1**

Devolution occurs when states fragment into autonomous regions; subnational political-territorial units, such as those within Spain, Belgium, Canada, and Nigeria; or when states disintegrate, as happened in Sudan and the former Soviet Union.

SPS-4.B.2

Advances in communication technology have facilitated devolution, supranationalism, and democratization.

SPS-4.B.3

Global efforts to address transnational and environmental challenges and to create economies of scale, trade agreements, and military alliances help to further supranationalism.

SPS-4.B.4

Supranational organizations—including the United Nations (UN), North Atlantic Treaty Organization (NATO), European Union (EU), Association of Southeast Asian Nations (ASEAN), Arctic Council, and African Union—can challenge state sovereignty by limiting the economic or political actions of member states.

TOPIC 4.10

Consequences of Centrifugal and Centripetal Forces

SUGGESTED SKILL Scale Analysis**5.C**

Compare geographic characteristics and processes at various scales.

Required Course Content

ENDURING UNDERSTANDING**SPS-4**

Political, economic, cultural, or technological changes can challenge state sovereignty.

LEARNING OBJECTIVE**SPS-4.C**

Explain how the concepts of centrifugal and centripetal forces apply at the state scale.

ESSENTIAL KNOWLEDGE**SPS-4.C.1**

Centrifugal forces may lead to failed states, uneven development, stateless nations, and ethnic nationalist movements.

SPS-4.C.2

Centripetal forces can lead to ethnonationalism, more equitable infrastructure development, and increased cultural cohesion.

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AP HUMAN GEOGRAPHY

UNIT 5

Agriculture and Rural Land-Use Patterns and Processes



12–17%
AP EXAM WEIGHTING



~19–20
CLASS PERIODS



Remember to go to [AP Classroom](#) to assign students the online **Personal Progress Check** for this unit.

Whether assigned as homework or completed in class, the **Personal Progress Check** provides each student with immediate feedback related to this unit's topics and skills.

Personal Progress Check 5

Multiple-choice: ~35 questions

Free-response: 1 question

- 2 stimuli

Agriculture and Rural Land-Use Patterns and Processes



Developing Understanding

BIG IDEA 1

Patterns and Spatial Organization **PSO**

- How do a people's culture and the resources available to them influence how they grow food?

BIG IDEA 2

Impacts and Interactions **IMP**

- How does what people produce and consume vary in different locations?

BIG IDEA 3

Spatial Patterns and Societal Change **SPS**

- What kind of cultural changes and technological advances have impacted the way people grow and consume food?

This unit examines the origins of agriculture and its subsequent diffusion. Students learn about the ways agricultural practices have changed over time as a result of technological innovations, such as equipment mechanization and improvements in transportation that create global markets. In addition, they examine the consequences of agricultural practices such as the use of high-yield seeds and chemicals, revisiting the human–environmental relationships studied in Unit 1.

Course emphasis on spatial patterns is evident in this unit as students consider the differences in what foods or resources are produced and where they are produced. These agricultural production regions are impacted by economic and technological forces that increase the size of agricultural operations and the carrying capacity of the land. This has in turn created a global system of agriculture and the interdependence of regions of agricultural consumption and production.

Student understanding of this global system of agriculture based on government cooperation lays the foundation for a deeper understanding of economic development in the final unit of the course.

UNIT AT A GLANCE

Enduring Understanding	Topic	Suggested Skill	Class Periods
PSO-5	5.1 Introduction to Agriculture	2.D Explain the significance of geographic similarities and differences among different locations and/or at different times.	~19–20 CLASS PERIODS
SPS-5	5.2 Settlement Patterns and Survey Methods	4.D Compare patterns and trends in visual sources to draw conclusions.	
PSO-5	5.3 Agricultural Origins and Diffusions	2.B Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.	
SPS-5	5.4 The Second Agricultural Revolution	4.D Compare patterns and trends in visual sources to draw conclusions.	
PSO-5	5.5 The Green Revolution	2.D Explain the significance of geographic similarities and differences among different locations and/or at different times.	
SPS-5	5.6 Agricultural Production Regions	2.E Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects in different contexts and regions of the world.	
PSO-5	5.7 Spatial Organization of Agriculture	2.D Explain the significance of geographic similarities and differences among different locations and/or at different times.	
IMP-5	5.8 Von Thünen Model	5.B Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.	
IMP-5	5.9 The Global System of Agriculture	5.D Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects and across various geographic scales.	
IMP-5	5.10 Consequences of Agricultural Practices	2.E Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects in different contexts and regions of the world.	
IMP-5	5.11 Challenges of Contemporary Agriculture	4.D Compare patterns and trends in visual sources to draw conclusions.	
IMP-5	5.12 Women in Agriculture	3.D Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.	

Go to [AP Classroom](#) to assign the **Personal Progress Check** for Unit 5.

Review the results in class to identify and address any student misunderstandings.



SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	5.3	Close Reading Have students read materials regarding the Columbian Exchange and the subsequent diffusion of plants and animals across the world. In their reading, students can highlight claims of changes to agriculture as a result of the Columbian Exchange. Next, have students hypothesize how their diets would be different than they are today had the Columbian Exchange not occurred.
2	5.8	Shared Inquiry Have students read "Understanding Land Use Patterns" by Robert Bednarz, available under Classroom Resources on the AP Central site. Have students discuss the factors of land-use patterns identified by Bednarz in his article and how and why they have changed from Von Thünen's time.
3	5.10	Socratic Seminar By holding a focused discussion around the essential question, <i>How does society change as agricultural practices change?</i> you can provide students with an opportunity to illustrate their understanding in depth. Students can be encouraged to address environmental, social, economic, and cultural opportunities and challenges for both commercial and subsistence agriculture.



Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

SUGGESTED SKILL *Spatial Relationships***2.D**

Explain the significance of geographic similarities and differences among different locations and/or at different times.

**AVAILABLE RESOURCES**

- Classroom Resources > [Understanding Land Use Patterns](#)

TOPIC 5.1

Introduction to Agriculture

Required Course Content

ENDURING UNDERSTANDING**PSO-5**

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

LEARNING OBJECTIVE**PSO-5.A**

Explain the connection between physical geography and agricultural practices.

ESSENTIAL KNOWLEDGE**PSO-5.A.1**

Agricultural practices are influenced by the physical environment and climatic conditions, such as the Mediterranean climate and tropical climates.

PSO-5.A.2

Intensive farming practices include market gardening, plantation agriculture, and mixed crop/livestock systems.

PSO-5.A.3

Extensive farming practices include shifting cultivation, nomadic herding, and ranching.

TOPIC 5.2

Settlement Patterns and Survey Methods

SUGGESTED SKILL *Source Analysis***4.D**

Compare patterns and trends in visual sources to draw conclusions.

Required Course Content

ENDURING UNDERSTANDING**PSO-5**

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

LEARNING OBJECTIVE**PSO-5.B**

Identify different rural settlement patterns and methods of surveying rural settlements.

ESSENTIAL KNOWLEDGE**PSO-5.B.1**

Specific agricultural practices shape different rural land-use patterns.

PSO-5.B.2

Rural settlement patterns are classified as clustered, dispersed, or linear.

PSO-5.B.3

Rural survey methods include metes and bounds, township and range, and long lot.

SUGGESTED SKILL *Spatial Relationships***2.B**

Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Scale](#)

TOPIC 5.3

Agricultural Origins and Diffusions

Required Course Content

ENDURING UNDERSTANDING**SPS-5**

Agriculture has changed over time because of cultural diffusion and advances in technology.

LEARNING OBJECTIVE**SPS-5.A**

Identify major centers of domestication of plants and animals.

SPS-5.B

Explain how plants and animals diffused globally.

ESSENTIAL KNOWLEDGE**SPS-5.A.1**

Early hearths of domestication of plants and animals arose in the Fertile Crescent and several other regions of the world, including the Indus River Valley, Southeast Asia, and Central America.

SPS-5.B.1

Patterns of diffusion, such as the Columbian Exchange and the agricultural revolutions, resulted in the global spread of various plants and animals.

TOPIC 5.4

The Second Agricultural Revolution

Required Course Content

ENDURING UNDERSTANDING

SPS-5

Agriculture has changed over time because of cultural diffusion and advances in technology.

LEARNING OBJECTIVE

SPS-5.C

Explain the advances and impacts of the second agricultural revolution.

ESSENTIAL KNOWLEDGE

SPS-5.C.1

New technology and increased food production in the second agricultural revolution led to better diets, longer life expectancies, and more people available for work in factories.

SUGGESTED SKILL *Source Analysis***4.D**

Compare patterns and trends in visual sources to draw conclusions.

SUGGESTED SKILL *Spatial Relationships***2.D**

Explain the significance of geographic similarities and differences among different locations and/or at different times.

TOPIC 5.5
The Green Revolution**Required Course Content****ENDURING UNDERSTANDING****SPS-5**

Agriculture has changed over time because of cultural diffusion and advances in technology.

LEARNING OBJECTIVE**SPS-5.D**

Explain the consequences of the Green Revolution on food supply and the environment in the developing world.

ESSENTIAL KNOWLEDGE**SPS-5.D.1**

The Green Revolution was characterized in agriculture by the use of high-yield seeds, increased use of chemicals, and mechanized farming.

SPS-5.D.2

The Green Revolution had positive and negative consequences for both human populations and the environment.

TOPIC 5.6

Agricultural Production Regions

SUGGESTED SKILL *Spatial Relationships***2.E**

Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects in different contexts and regions of the world.

**AVAILABLE RESOURCES**

- Classroom Resources > [Understanding Land Use Patterns](#)

Required Course Content

ENDURING UNDERSTANDING**PSO-5**

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

LEARNING OBJECTIVE**PSO-5.C**

Explain how economic forces influence agricultural practices.

ESSENTIAL KNOWLEDGE**PSO-5.C.1**

Agricultural production regions are defined by the extent to which they reflect subsistence or commercial practices (monocropping or monoculture).

PSO-5.C.2

Intensive and extensive farming practices are determined in part by land costs (bid-rent theory).

SUGGESTED SKILL *Spatial Relationships***2.D**

Explain the significance of geographic similarities and differences among different locations and/or at different times.

TOPIC 5.7

Spatial Organization of Agriculture

Required Course Content

ENDURING UNDERSTANDING**PSO-5**

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

LEARNING OBJECTIVE**PSO-5.C**

Explain how economic forces influence agricultural practices.

ESSENTIAL KNOWLEDGE**PSO-5.C.3**

Large-scale commercial agricultural operations are replacing small family farms.

PSO-5.C.4

Complex commodity chains link production and consumption of agricultural products.

PSO-5.C.5

Technology has increased economies of scale in the agricultural sector and the carrying capacity of the land.

TOPIC 5.8

Von Thünen Model

SUGGESTED SKILL Scale Analysis**5.B**

Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Understanding Land Use Patterns](#)
- Classroom Resources > [Scale](#)

Required Course Content

ENDURING UNDERSTANDING**PSO-5**

Availability of resources and cultural practices influence agricultural practices and land-use patterns.

LEARNING OBJECTIVE**PSO-5.D**

Describe how the von Thünen model is used to explain patterns of agricultural production at various scales.

ESSENTIAL KNOWLEDGE**PSO-5.D.1**

Von Thünen's model helps to explain rural land use by emphasizing the importance of transportation costs associated with distance from the market; however, regions of specialty farming do not always conform to von Thünen's concentric rings.

SUGGESTED SKILL *Scale Analysis***5.D**

Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects across various geographic scales.

**AVAILABLE RESOURCES**

- Classroom Resources > [Scale](#)

TOPIC 5.9

The Global System of Agriculture

Required Course Content

ENDURING UNDERSTANDING**POS-5**

Availability of resources and cultural practices influence agricultural practices and land use patterns.

LEARNING OBJECTIVE**PSO-5.E**

Explain the interdependence among regions of agricultural production and consumption.

ESSENTIAL KNOWLEDGE**PSO-5.E.1**

Food and other agricultural products are part of a global supply chain.

PSO-5.E.2

Some countries have become highly dependent on one or more export commodities.

PSO-5.E.3

The main elements of global food distribution networks are affected by political relationships, infrastructure, and patterns of world trade.

TOPIC 5.10

Consequences of Agricultural Practices

Required Course Content

ENDURING UNDERSTANDING

IMP-5

Agricultural production and consumption patterns vary in different locations, presenting different environmental, social, economic, and cultural opportunities and challenges.

LEARNING OBJECTIVE

IMP-5.A

Explain how agricultural practices have environmental and societal consequences.

ESSENTIAL KNOWLEDGE

IMP-5.A.1

Environmental effects of agricultural land use include pollution, land cover change, desertification, soil salinization, and conservation efforts.

IMP-5.A.2

Agricultural practices—including slash and burn, terraces, irrigation, deforestation, draining wetlands, shifting cultivation, and pastoral nomadism—alter the landscape.

IMP-5.A.3

Societal effects of agricultural practices include changing diets, role of women in agricultural production, and economic purpose.

SUGGESTED SKILL

 *Spatial Relationships*

2.E

Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects in different contexts and regions of the world.

**AVAILABLE RESOURCES**

- Classroom Resources > [Understanding Land Use Patterns](#)

SUGGESTED SKILL *Source Analysis***4.D**

Compare patterns and trends in visual sources to draw conclusions.

**AVAILABLE RESOURCES**

- Classroom Resources > [Understanding Land Use Patterns](#)

TOPIC 5.11

Challenges of Contemporary Agriculture

Required Course Content

ENDURING UNDERSTANDING

IMP-5

Agricultural production and consumption patterns vary in different locations, presenting different environmental, social, economic, and cultural opportunities and challenges.

LEARNING OBJECTIVE

IMP-5.B

Explain challenges and debates related to the changing nature of contemporary agriculture and food-production practices.

ESSENTIAL KNOWLEDGE

IMP-5.B.1

Agricultural innovations such as biotechnology, genetically modified organisms, and aquaculture have been accompanied by debates over sustainability, soil and water usage, reductions in biodiversity, and extensive fertilizer and pesticide use.

IMP-5.B.2

Patterns of food production and consumption are influenced by movements relating to individual food choice, such as urban farming, community-supported agriculture (CSA), organic farming, value-added specialty crops, fair trade, local-food movements, and dietary shifts.

IMP-5.B.3

Challenges of feeding a global population include lack of food access, as in cases of food insecurity and food deserts; problems with distribution systems; adverse weather; and land use lost to suburbanization.

IMP-5.B.4

The location of food-processing facilities and markets, economies of scale, distribution systems, and government policies all have economic effects on food-production practices.

TOPIC 5.12

Women in Agriculture

SUGGESTED SKILL*Data Analysis***3.D**

Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.

Required Course Content

ENDURING UNDERSTANDING**IMP-5**

Agricultural production and consumption patterns vary in different locations, presenting different environmental, social, economic, and cultural opportunities and challenges.

LEARNING OBJECTIVE**IMP-5.C**

Explain geographic variations in female roles in food production and consumption.

ESSENTIAL KNOWLEDGE**IMP-5.C.1**

The role of females in food production, distribution, and consumption varies in many places depending on the type of production involved.

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AP HUMAN GEOGRAPHY

UNIT 6

Cities and Urban Land- Use Patterns and Processes



12–17%
AP EXAM WEIGHTING



~19–20
CLASS PERIODS



Remember to go to **AP Classroom** to assign students the online **Personal Progress Check** for this unit.

Whether assigned as homework or completed in class, the **Personal Progress Check** provides each student with immediate feedback related to this unit's topics and skills.

Personal Progress Check 6

Multiple-choice: ~30 questions

Free-response: 1 question

- no stimulus

Cities and Urban Land-Use Patterns and Processes



Developing Understanding

BIG IDEA 1

Patterns and Spatial Organization PSO

- How do physical geography and resources impact the presence and growth of cities?

BIG IDEA 2

Impacts and Interactions IMP

- How are the attitudes, values, and balance of power of a population reflected in the built landscape?

BIG IDEA 3

Spatial Patterns and Societal Change SPS

- How are urban areas affected by unique economic, political, cultural, and environmental challenges?

Unit 6 addresses the origins and influences, particularly site and situation, of urban settlements as students explore cities across the world and the role of those cities in globalization. They examine the spatial distribution of the world's largest cities, comparing them across regions and analyzing patterns of connectivity and accessibility. Within cities, students identify patterns of development and make inferences about their economic and political influences at regional, national, and international levels of scale. Students examine the hierarchy of urban settlements on the landscape, applying the rank-size rule and central place theory at regional and national scales to evaluate mobility patterns and economic and political relationships. Statistics such as census data are used to reveal the challenges of urban places, including density, sprawl, demands of infrastructure, and mobility.

Students examine patterns of change over time and modern challenges to sustainability from urban growth. On both local and global scales, they look at the ways that cities are improving sustainability through new approaches to growth, such as mixed-land-use zoning, smart growth policies, and public transportation-oriented development at local and international scales.

This unit reinforces what students learned in the units on politics and culture as they consider the role cities play as key centers of global markets, culture, and politics and contrast the roles of urban and rural areas.

UNIT AT A GLANCE

Enduring Understanding	Topic	Suggested Skill	Class Periods
PSO-6 IMP-6 SPS-6	6.1 The Origin and Influences of Urbanization	2.D Explain the significance of geographic similarities and differences among different locations and/or at different times.	
	6.2 Cities Across the World	2.D Explain the significance of geographic similarities and differences among different locations and/or at different times.	
	6.3 Cities and Globalization	5.B Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.	
	6.4 The Size and Distribution of Cities	2.C Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.	
	6.5 The Internal Structure of Cities	1.E Explain the strengths, weaknesses, and limitations of different geographic models and theories in a specified context.	
	6.6 Density and Land Use	3.D Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.	
	6.7 Infrastructure	3.C Explain patterns and trends in maps and in quantitative and geospatial data to draw conclusions.	
	6.8 Urban Sustainability	2.C Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.	
	6.9 Urban Data	3.E Explain what maps or data imply or illustrate about geographic principles, processes, and outcomes.	
	6.10 Challenges of Urban Changes	4.E Explain how maps, images, and landscapes illustrate or relate to geographic principles, processes, and outcomes.	
	6.11 Challenges of Urban Sustainability	2.D Explain the significance of geographic similarities and differences among different locations and/or at different times.	
	 Go to AP Classroom to assign the Personal Progress Check for Unit 6. Review the results in class to identify and address any student misunderstandings.		

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	6.5	Discussion Groups Small groups of students can engage in discussions about the similarities and differences of different urban models, along with reasons behind those similarities and differences. A graphic organizer might help students organize their thoughts. Then, as a class, students should explore the limitations of the urban models in predicting the internal structure of cities.
2	6.9	Fishbowl Divide the class in half, with one group gathering quantitative data on urban areas and the other gathering qualitative data. Depending on the size of the class you may wish to have data focusing on one city or several cities. Have them take turns being in the inner circle, leading the discussion and bringing evidence to support their opinions, and being in the outer circle, listening, responding, and evaluating. After students have participated in both the inner and outer circles, you can lead a whole-class discussion on the differences between and the importance of both qualitative and quantitative data.
3	6.10	Debate A debate gives students the opportunity to collect evidence in support of their position and then orally present and defend it. Be sure to direct students to uncover both the affirming and contradictory evidence toward their position. For this topic, you could have students debate the pros and cons of gentrification or how governments should address squatter settlements—but it is important for students to recognize that these issues are more complex than a simple pro or con.



Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

SUGGESTED SKILL *Spatial Relationships***2.D**

Explain the significance of geographic similarities and differences among different locations and/or at different times.

**AVAILABLE RESOURCES**

- Classroom Resources > **Urban Geography**

TOPIC 6.1

The Origin and Influences of Urbanization

Required Course Content

ENDURING UNDERSTANDING

PSO-6

The presence and growth of cities vary across geographical locations because of physical geography and resources.

LEARNING OBJECTIVE

PSO-6.A

Explain the processes that initiate and drive urbanization and suburbanization.

ESSENTIAL KNOWLEDGE

PSO-6.A.1

Site and situation influence the origin, function, and growth of cities.

PSO-6.A.2

Changes in transportation and communication, population growth, migration, economic development, and government policies influence urbanization.

TOPIC 6.2

Cities Across the World

SUGGESTED SKILL

 Spatial Relationships

2.D

Explain the significance of geographic similarities and differences among different locations and/or at different times.



AVAILABLE RESOURCES

- Classroom Resources > [Urban Geography](#)
- Classroom Resources > [Understanding Land Use Patterns](#)

Required Course Content

ENDURING UNDERSTANDING

PSO-6

The presence and growth of cities vary across geographical locations because of physical geography and resources.

LEARNING OBJECTIVE

PSO-6.A

Explain the processes that initiate and drive urbanization and suburbanization.

ESSENTIAL KNOWLEDGE

PSO-6.A.3

Megacities and metacities are distinct spatial outcomes of urbanization increasingly located in countries of the periphery and semiperiphery.

PSO-6.A.4

Processes of suburbanization, sprawl, and decentralization have created new land-use forms—including edge cities, exurbs, and boomburbs—and new challenges.

SUGGESTED SKILL**5.B**

Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)
- Classroom Resources > [Scale](#)
- Classroom Resources > [Globalization](#)

TOPIC 6.3

Cities and Globalization

Required Course Content

ENDURING UNDERSTANDING**PSO-6**

The presence and growth of cities vary across geographical locations because of physical geography and resources.

LEARNING OBJECTIVE**PSO-6.B**

Explain how cities embody processes of globalization.

ESSENTIAL KNOWLEDGE**PSO-6.B.1**

World cities function at the top of the world's urban hierarchy and drive globalization.

PSO-6.B.2

Cities are connected globally by networks and linkages and mediate global processes.

TOPIC 6.4

The Size and Distribution of Cities

Required Course Content

SUGGESTED SKILL

 *Spatial Relationships*

2.C

Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > **Urban Geography**

ENDURING UNDERSTANDING**PSO-6**

The presence and growth of cities vary across geographical locations because of physical geography and resources.

LEARNING OBJECTIVE**PSO-6.C**

Identify the different urban concepts such as hierarchy, interdependence, relative size, and spacing that are useful for explaining the distribution, size, and interaction of cities.

ESSENTIAL KNOWLEDGE**PSO-6.C.1**

Principles that are useful for explaining the distribution and size of cities include rank-size rule, the primate city, gravity, and Christaller's central place theory.

SUGGESTED SKILL Concepts and Processes**1.E**

Explain the strengths, weaknesses, and limitations of different geographic models and theories in a specified context.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)

TOPIC 6.5
The Internal Structure of Cities**Required Course Content****ENDURING UNDERSTANDING****PSO-6**

The presence and growth of cities vary across geographical locations because of physical geography and resources.

LEARNING OBJECTIVE**PSO-6.D**

Explain the internal structure of cities using various models and theories.

ESSENTIAL KNOWLEDGE**PSO-6.D.1**

Models and theories that are useful for explaining internal structures of cities include the Burgess concentric-zone model, the Hoyt sector model, the Harris and Ullman multiple-nuclei model, the galactic city model, bid-rent theory, and urban models drawn from Latin America, Southeast Asia, and Africa.

TOPIC 6.6

Density and Land Use

SUGGESTED SKILL**3.D**

Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)
- Classroom Resources > [Understanding Land Use Patterns](#)
- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

Required Course Content

ENDURING UNDERSTANDING

IMP-6

The attitudes and values of a population, as well as the balance of power within that population, are reflected in the built landscape.

LEARNING OBJECTIVE

IMP-6.A

Explain how low-, medium-, and high-density housing characteristics represent different patterns of residential land use.

ESSENTIAL KNOWLEDGE

IMP-6.A.1

Residential buildings and patterns of land use reflect and shape the city's culture, technological capabilities, cycles of development, and infilling.

SUGGESTED SKILL**3.C**

Explain patterns and trends in maps and in quantitative and geospatial data to draw conclusions.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)
- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

TOPIC 6.7
Infrastructure**Required Course Content****ENDURING UNDERSTANDING****IMP-6**

The attitudes and values of a population, as well as the balance of power within that population, are reflected in the built landscape.

LEARNING OBJECTIVE**IMP-6.B**

Explain how a city's infrastructure relates to local politics, society, and the environment.

ESSENTIAL KNOWLEDGE**IMP-6.B.1**

The location and quality of a city's infrastructure directly affects its spatial patterns of economic and social development.

TOPIC 6.8

Urban Sustainability

SUGGESTED SKILL *Spatial Relationships***2.C**

Explain a likely outcome in a geographic scenario using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)
- Classroom Resources > [Understanding Land Use Patterns](#)

Required Course Content

ENDURING UNDERSTANDING

IMP-6

The attitudes and values of a population, as well as the balance of power within that population, are reflected in the built landscape.

LEARNING OBJECTIVE

IMP-6.C

Identify the different urban design initiatives and practices.

IMP-6.D

Explain the effects of different urban design initiatives and practices.

ESSENTIAL KNOWLEDGE

IMP-6.C.1

Sustainable design initiatives and zoning practices include mixed land use, walkability, transportation-oriented development, and smart-growth policies, including New Urbanism, greenbelts, and slow-growth cities.

IMP-6.D.1

Praise for urban design initiatives includes the reduction of sprawl, improved walkability and transportation, improved and diverse housing options, improved livability and promotion of sustainable options. Criticisms include increased housing costs, possible de facto segregation, and the potential loss of historical or place character.

SUGGESTED SKILL**3.E**

Explain what maps or data imply or illustrate about geographic principles, processes, and outcomes.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)
- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

TOPIC 6.9
Urban Data**Required Course Content****ENDURING UNDERSTANDING****IMP-6**

The attitudes and values of a population, as well as the balance of power within that population, are reflected in the built landscape.

LEARNING OBJECTIVE**IMP-6.E**

Explain how qualitative and quantitative data are used to show the causes and effects of geographic change within urban areas.

ESSENTIAL KNOWLEDGE**IMP-6.E.1**

Quantitative data from census and survey data provide information about changes in population composition and size in urban areas.

IMP-6.E.2

Qualitative data from field studies and narratives provide information about individual attitudes toward urban change.

TOPIC 6.10

Challenges of Urban Changes

SUGGESTED SKILL**4.E**

Explain how maps, images, and landscapes illustrate or relate to geographic principles, processes, and outcomes.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)
- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

Required Course Content

ENDURING UNDERSTANDING

SPS-6

Urban areas face unique economic, political, cultural, and environmental challenges.

LEARNING OBJECTIVE

SPS-6.A

Explain causes and effects of geographic change within urban areas.

ESSENTIAL KNOWLEDGE

SPS-6.A.1

As urban populations move within a city, economic and social challenges result, including: issues related to housing and housing discrimination such as redlining, blockbusting, and affordability; access to services; rising crime; environmental injustice; and the growth of disamenity zones or zones of abandonment.

SPS-6.A.2

Squatter settlements and conflicts over land tenure within large cities have increased.

SPS-6.A.3

Responses to economic and social challenges in urban areas can include inclusionary zoning and local food movements.

SPS-6.A.4

Urban renewal and gentrification have both positive and negative consequences.

SPS-6.A.5

Functional and geographic fragmentation of governments—the way government agencies and institutions are dispersed between state, county, city, and neighborhood levels—presents challenges in addressing urban issues.

SUGGESTED SKILL *Spatial Relationships***2.D**

Explain the significance of geographic similarities and differences among different locations and/or at different times.

**AVAILABLE RESOURCES**

- Classroom Resources > [Urban Geography](#)

TOPIC 6.11

Challenges of Urban Sustainability

Required Course Content

ENDURING UNDERSTANDING**SPS-6**

Urban areas face unique economic, political, cultural, and environmental challenges.

LEARNING OBJECTIVE**SPS-6.B**

Describe the effectiveness of different attempts to address urban sustainability challenges.

ESSENTIAL KNOWLEDGE**SPS-6.B.1**

Challenges to urban sustainability include suburban sprawl, sanitation, climate change, air and water quality, the large ecological footprint of cities, and energy use.

SPS-6.B.2

Responses to urban sustainability challenges can include regional planning efforts, remediation and redevelopment of brownfields, establishment of urban growth boundaries, and farmland protection policies.

AP HUMAN GEOGRAPHY

UNIT 7

Industrial and Economic Development Patterns and Processes



12–17%
AP EXAM WEIGHTING



~19–20
CLASS PERIODS



Remember to go to **AP Classroom** to assign students the online **Personal Progress Check** for this unit.

Whether assigned as homework or completed in class, the **Personal Progress Check** provides each student with immediate feedback related to this unit's topics and skills.

Personal Progress Check 7

Multiple-choice: ~25 questions

Free-response: 1 question

- no stimulus

Industrial and Economic Development Patterns and Processes



Developing Understanding

BIG IDEA 1

Patterns and Spatial Organization PSO

- Why does economic and social development happen at different times and rates in different places?

BIG IDEA 2

Impacts and Interactions IMP

- How might environmental problems stemming from industrialization be remedied through sustainable development strategies?

BIG IDEA 3

Spatial Patterns and Societal Change SPS

- Why has industrialization helped improve standards of living while also contributing to geographically uneven development?

This unit addresses the origins and influences of industrial development, along with the role industrialization plays in economic development and globalization. Concepts learned in the political unit, such as territoriality, help students build an understanding of the measures of social and economic development and to explain development theories, such as dependency theory and Rostow's Stages of Economic Growth. The theories they explore are in turn useful in explaining spatial variations in development such as core-periphery relationships.

Students examine contemporary spatial patterns of industrialization and the resulting geography of uneven development—for example, the differences between urban and rural China or Brazil. They explore changes to places resulting from the growth or loss of industry and the role of industry in the world economy. Measurements of development provide the quantitative data to analyze the spatial relationships of the global market. Statistics and spatial data reveal the impact of development on individual populations, including the role of women in the labor market. Students explore strategies for sustainable development focused on women, children, health, education, the environment, and global cooperation.

This final unit of the course pulls together those aspects of human geography learned in previous units to help students develop a more complete understanding of local and global geographic patterns and processes and of possibilities for the future.

UNIT AT A GLANCE

Enduring Understanding	Topic	Suggested Skill	Class Periods
SPS-7	7.1 The Industrial Revolution	4.D Compare patterns and trends in visual sources to draw conclusions.	
	7.2 Economic Sectors and Patterns	2.B Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.	
	7.3 Measures of Development	3.F Explain possible limitations of the data provided.	
	7.4 Women and Economic Development	3.D Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.	
	7.5 Theories of Development	1.E Explain the strengths, weaknesses, and limitations of different geographic models and theories in a specified context.	
	7.6 Trade and the World Economy	5.B Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.	
	7.7 Changes as a Result of the World Economy	4.F Explain possible limitations of visual sources provided.	
	7.8 Sustainable Development	5.D Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects across various geographic scales.	
IMP-7	 Go to AP Classroom to assign the Personal Progress Check for Unit 7. Review the results in class to identify and address any student misunderstandings.		

SAMPLE INSTRUCTIONAL ACTIVITIES

The sample activities on this page provide ways to integrate the teaching of skills and content from the unit into your classroom instruction. They are completely optional and may be altered to suit the needs of your class. Please refer to the Instructional Approaches section beginning on page 133 for more examples of activities and strategies.

Activity	Topic	Sample Activity
1	7.3	Look for a Pattern Using maps of different measures of development—both social and economic—have students analyze the patterns present. Have students compare the different measures to see which patterns are similar across multiple measures and the advantages of using multiple measures when addressing levels of development. You may want students to extend the depth of their thinking by having them reflect on what they have learned throughout the course to first predict what patterns of development will be present before they look at the maps.
2	7.5	Graphic Organizer Students use a Venn diagram graphic organizer to compare and contrast different theories of development, such as Rostow's Stages of Economic Growth, Wallerstein's World System theory, dependency theory, and commodity dependence. You may then have students discuss how different countries are classified according to the different theories.
3	7.8	Self/Peer Review Students are asked to read the United Nation's Sustainable Development Goals. After reading the goals, students select the one goal they believe is the most important to achieve, and then justify their response in writing with evidence and reasoning. Students then pass their paper to a peer, who can respond to their piece with challenging questions regarding the choice of goal and with evidence that may contradict the first student's position.



Unit Planning Notes

Use the space below to plan your approach to the unit. Consider how you want to pace your course and your methods of instruction and assessment.

SUGGESTED SKILL *Source Analysis***4.D**

Compare patterns and trends in visual sources to draw conclusions.

TOPIC 7.1

The Industrial Revolution

Required Course Content

ENDURING UNDERSTANDING**SPS-7**

Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.

LEARNING OBJECTIVE**SPS-7.A**

Explain how the Industrial Revolution facilitated the growth and diffusion of industrialization.

ESSENTIAL KNOWLEDGE**SPS-7.A.1**

Industrialization began as a result of new technologies and was facilitated by the availability of natural resources.

SPS-7.A.2

As industrialization spread it caused food supplies to increase and populations to grow; it allowed workers to seek new industrial jobs in the cities and changed class structures.

SPS-7.A.3

Investors in industry sought out more raw materials and new markets, a factor that contributed to the rise of colonialism and imperialism.

TOPIC 7.2

Economic Sectors and Patterns

SUGGESTED SKILL *Spatial Relationships***2.B**

Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.

Required Course Content

ENDURING UNDERSTANDING**SPS-7**

Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.

LEARNING OBJECTIVE**SPS-7.B**

Explain the spatial patterns of industrial production and development.

ESSENTIAL KNOWLEDGE**SPS-7.B.1**

The different economic sectors—including primary, secondary, tertiary, quaternary, and quinary—are characterized by distinct development patterns.

SPS-7.B.2

Labor, transportation (including shipping containers), the break-of-bulk point, least cost theory, markets, and resources influence the location of manufacturing such as core, semiperiphery, and periphery locations.

SUGGESTED SKILL**3.F**

Explain possible limitations of the data provided.

TOPIC 7.3

Measures of Development

Required Course Content

ENDURING UNDERSTANDING

SPS-7

Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.

LEARNING OBJECTIVE

SPS-7.C

Describe social and economic measures of development.

ESSENTIAL KNOWLEDGE

SPS-7.C.1

Measures of social and economic development include Gross Domestic Product (GDP); Gross National Product (GNP); and Gross National Income (GNI) per capita; sectoral structure of an economy, both formal and informal; income distribution; fertility rates; infant mortality rates; access to health care; use of fossil fuels and renewable energy; and literacy rates.

SPS-7.C.2

Measures of gender inequality, such as the Gender Inequality Index (GII), include reproductive health, indices of empowerment, and labor-market participation.

SPS-7.C.3

The Human Development Index (HDI) is a composite measure used to show spatial variation among states in levels of development.

TOPIC 7.4

Women and Economic Development

Required Course Content

ENDURING UNDERSTANDING

SPS-7

Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.

LEARNING OBJECTIVE

SPS-7.D

Explain how and to what extent changes in economic development have contributed to gender parity.

ESSENTIAL KNOWLEDGE

SPS-7.D.1

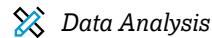
The roles of women change as countries develop economically.

SPS-7.D.2

Although there are more women in the workforce, they do not have equity in wages or employment opportunities.

SPS-7.D.3

Microloans have provided opportunities for women to create small local businesses, which have improved standards of living.

SUGGESTED SKILL**3.D**

Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.

**AVAILABLE RESOURCES**

- Classroom Resources > [Maps and Spatial Thinking Skills in the AP Human Geography Classroom](#)

SUGGESTED SKILL *Concepts and Processes***1.E**

Explain the strengths, weaknesses, and limitations of different geographic models and theories in a specified context.

TOPIC 7.5

Theories of Development

Required Course Content

ENDURING UNDERSTANDING**SPS-7**

Industrialization, past and present, has facilitated improvements in standards of living, but it has also contributed to geographically uneven development.

LEARNING OBJECTIVE**SPS-7.E**

Explain different theories of economic and social development.

ESSENTIAL KNOWLEDGE**SPS-7.E.1**

Different theories, such as Rostow's Stages of Economic Growth, Wallerstein's World System Theory, dependency theory, and commodity dependence, help explain spatial variations in development.

TOPIC 7.6

Trade and the World Economy

SUGGESTED SKILL Scale Analysis**5.B**

Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.

**AVAILABLE RESOURCES**

- Classroom Resources > [Globalization](#)
- Classroom Resources > [Scale](#)

Required Course Content

ENDURING UNDERSTANDING

PSO-7

Economic and social development happen at different times and rates in different places.

LEARNING OBJECTIVE

PSO-7.A

Explain causes and geographic consequences of recent economic changes such as the increase in international trade, deindustrialization, and growing interdependence in the world economy.

ESSENTIAL KNOWLEDGE

PSO-7.A.1

Complementarity and comparative advantage establish the basis for trade.

PSO-7.A.2

Neoliberal policies, including free trade agreements, have created new organizations, spatial connections, and trade relationships, such as the EU, World Trade Organization (WTO), Mercosur, and OPEC, that foster greater globalization.

PSO-7.A.3

Government initiatives at all scales may affect economic development, including tariffs.

PSO-7.A.4

Global financial crises (e.g., debt crises), international lending agencies (e.g., the International Monetary Fund), and strategies of development (e.g., microlending) demonstrate how different economies have become more closely connected, even interdependent.

SUGGESTED SKILL *Source Analysis***4.F**

Explain possible limitations of visual sources provided.

TOPIC 7.7

Changes as a Result of the World Economy

Required Course Content

ENDURING UNDERSTANDING**PSO-7**

Economic and social development happen at different times and rates in different places.

LEARNING OBJECTIVE**PSO-7.A**

Explain causes and geographic consequences of recent economic changes such as the increase in international trade, deindustrialization, and growing interdependence in the world economy.

ESSENTIAL KNOWLEDGE**PSO-7.A.5**

Outsourcing and economic restructuring have led to a decline in jobs in core regions and an increase in jobs in newly industrialized countries.

PSO-7.A.6

In countries outside the core, the growth of industry has resulted in the creation of new manufacturing zones—including special economic zones, free-trade zones, and export-processing zones—and the emergence of an international division of labor in which developing countries have lower-paying jobs.

PSO-7.A.7

The contemporary economic landscape has been transformed by post-Fordist methods of production, multiplier effects, economies of scale, agglomeration, just-in-time delivery, the emergence of service sectors, high technology industries, and growth poles.

TOPIC 7.8

Sustainable Development

SUGGESTED SKILL Scale Analysis**5.D**

Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects across various geographic scales.

**AVAILABLE RESOURCES**

- Classroom Resources > Scale

Required Course Content

ENDURING UNDERSTANDING**IMP-7**

Environmental problems stemming from industrialization may be remedied through sustainable development strategies.

LEARNING OBJECTIVE**IMP-7.A**

Explain how sustainability principles relate to and impact industrialization and spatial development.

ESSENTIAL KNOWLEDGE**IMP-7.A.1**

Sustainable development policies attempt to remedy problems stemming from natural-resource depletion, mass consumption, the effects of pollution, and the impact of climate change.

IMP-7.A.2

Ecotourism is tourism based in natural environments—often environments that are threatened by looming industrialization or development—that frequently helps to protect the environment in question while also providing jobs for the local population.

IMP-7.A.3

The UN's Sustainable Development Goals help measure progress in development, such as small-scale finance and public transportation projects.

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AP HUMAN GEOGRAPHY

Instructional Approaches



Selecting and Using Course Materials

Using a wide array of source materials will help students become proficient with the course skills and develop a conceptual understanding of geography as a field of inquiry. In addition to using a college-level textbook that will provide required course content, it's a good idea to provide regular opportunities for students to examine primary and secondary source material in various forms, including graphic content (maps, graphs, charts, photographs), since many geographic concepts are presented spatially in such formats. Using rich, diverse source materials encourages students to engage in learning about the world they live in and develop the habits of thinking like a geographer that are essential for student success in the course.

Textbooks

The textbook used for this course should be written at the level of an introductory college course. Because skills are fundamental to the teaching of the course, a textbook that focuses on skill instruction would be a plus.

Although nearly all college-level human geography textbooks address the seven units of the AP Human Geography course, no single textbook covers the complete curriculum as described in the framework. It is helpful to obtain and consult multiple textbooks for the introductory human geography course; doing so allows you to better address curricular gaps in the textbook you choose for the AP Human Geography course. College-level human geography textbooks organize content in various ways; if you are following the unit structure of the course framework, you might need to teach the textbook chapters out of order. Ultimately, it is best to select a textbook that closely aligns with the course framework and the course skills.

On the AP Central Course Audit page for this course, you'll find an [example textbook list](#) of college-level textbooks that meet the resource requirements.

TEXT-BASED QUALITATIVE SOURCES (PRIMARY AND SECONDARY SOURCES)

Students in this AP course are required to analyze primary and secondary source material in order to deepen their understanding of the key concepts addressed by the textbook and to practice the required course skills.

Student success in college also depends on exposure to and analysis of multiple secondary sources in which geographers present and explain their arguments. For secondary sources, share with your students editorials, journal articles, news media articles, and essays and books by geographers, choosing a variety of sources that represent different points of view and that will engage students while enhancing learning. You can add new articles to keep up with rapidly changing events.

QUANTITATIVE SOURCES

Geography courses require students to engage with data in a variety of ways. The analysis, interpretation, and application of quantitative information are vital skills for students in AP Human Geography. New textbooks and publishers' resources often contain quantitative information presented via charts, graphs, or other infographics, but those data can quickly become out of date. Research institutions such as the [Pew Research Center](#) are good resources for current data with which to practice quantitative skills with students.

VISUAL SOURCES

Students will encounter a variety of visual sources on the AP Human Geography Exam. Some visuals contain data, such as a chart showing aging population by country across time periods. Other visuals may illustrate geographic principles, processes, or behaviors, such as topographical maps that demonstrate differences in scale. It is important to give students practice with a wide variety of visual sources in addition to those maps or cartoons in their textbook. The following resources provide a wealth of visuals to choose from for bell-ringer exercises and skills practice.

- The [National Geologic Map Database](#) is a national archive of standardized maps.
- [Gapminder](#) is a “fact tank” that offers free teaching resources based on statistics culled from universities, the United Nations, and non-governmental organizations.
- [Worldmapper](#) is a collection of world maps called cartograms, on which the size of different areas is scaled in proportion to a particular variable.

Evaluating the Quality and Credibility of Different Sources and Perspectives

Students have unprecedented access to information, so it is more important than ever to help them determine the credibility of sources. The course skills require students to evaluate the quality and credibility of different information sources and perspectives and derive supportable conclusions. Consider providing students with a list of news media websites that offer different perspectives.

The table below explains how the credibility and/or reliability of various sources might be addressed.

Criteria	Considerations	Examples and Illustrations
Credibility	<ul style="list-style-type: none">▪ Credibility requires students to obtain information from sources with knowledge and expertise in human geography. Sources can be print, online, or expert interviews.▪ Because many students are using the internet or database sources, they should consider the following:<ul style="list-style-type: none">◆ The domain name extensions, which indicate who publishes and owns the domain◆ The author(s) of the website◆ The credibility of sources cited in the materials as well as any websites they link to▪ Commonly used extensions include:<ul style="list-style-type: none">◆ .edu (educational organization);◆ .com (company);◆ .org (any organization);◆ .gov (government agency);◆ .net (network)▪ Read past the first slash in the domain name to see if the page might be someone's personal page. A personal page might be less credible or biased.▪ Investigate who the authors are, their credentials, and the organization(s) they are associated with to determine how the information should be viewed.▪ An article that includes citations of sources is often more credible.	<ul style="list-style-type: none">▪ Design a lesson to help students identify examples of cultural relativism and ethnocentrism by comparing the perspectives of various sources.▪ Have students examine the language used in the lead stories, as well as the pictures that accompany them.▪ Ask students to compare the focus of various sources, such as news accounts or scholarly articles, and how characteristics, attitudes, and traits influence the study of culture.▪ Have students synthesize their findings in a short paper examining how cultural traits vary across societies.

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Criteria	Considerations	Examples and Illustrations
Reliability and Relevance	<ul style="list-style-type: none"> ▪ Students should examine the content of a source (the evidence) to ensure it supports their claims and provides insight and knowledge that relates to the topic. This means that evidence is only relevant when it addresses both the topic in context and the student's argument. ▪ Because we are investigating geographical processes and outcomes that are changing and evolving, it is important to consider whether the information being provided is the most current. 	<ul style="list-style-type: none"> ▪ A biographical article about the life of Thomas Malthus may not be relevant in supporting a claim about a particular alternative viewpoint on effects of population increase. ▪ A country case study from 2000 might not be relevant in 2018.

Instructional Strategies

The AP Human Geography course framework outlines the concepts and skills students must master in order to be successful on the AP Exam. You can help students develop mastery of the course skills by engaging them in learning activities that allow them to apply their understanding of course concepts. The following strategies, organized in alphabetical order, might help you to plan your instruction.

Strategy	Definition	Purpose	Example
Create Representations	Students create tables, graphs, or other infographics to interpret text or data.	Helps students organize information using multiple ways to present data.	Give students a set of data, such as socioeconomic status and ethnicity in megacities, and have them create a graph that best shows the data and the trends.
Critique Reasoning	Through collaborative discussion, students critique the arguments of others, questioning the author's perspective, evidence presented, and reasoning behind the argument.	Helps students learn from others as they make connections between concepts and learn to support their arguments with evidence and reasoning that make sense to peers.	Have students critique an argument from a secondary source. Ask students to examine the author's perspective and the evidence and reasoning he or she uses to support that position.
Close Reading	Reading, rereading, and analyzing small chunks of text word for word, sentence by sentence, and line by line.	Develops comprehensive understanding of text.	When students are reading primary or secondary sources, such as the <i>National Geographic</i> article "Unique Speak," have them highlight relevant words and passages that support the author's claim. Ask students to connect the key concepts of the article to the big ideas in Unit 3: Cultural Patterns and Processes.
Debate	Presenting an informal or formal argument that defends a claim with reasons, while others defend different claims about the same topic or issue. The goal is to debate ideas without attacking the people who defend those ideas.	Gives students an opportunity to collect and orally present evidence supporting the arguments for or against a proposition or issue.	Have students debate the advantages and disadvantages of having a nation-state, using evidence and reasoning to support their claims.

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Strategy	Definition	Purpose	Example
Debriefing	Teachers facilitate a discussion that leads to consensus understanding.	Helps students clarify misconceptions and deepen understanding of content.	For complex issues, such as the global system of agriculture and how it is impacted by economic and political structures, lead students in a debrief to ensure understanding.
Discussion Group	Students engage in an interactive small-group discussion.	Helps students gain information and understanding about a concept, idea, or problem.	Use a learning objective, such as <i>Explain how landscape features and land and resource use reflect cultural beliefs and identities</i> , to help students gain information and show their understanding.
Fishbowl	Discussing specific topics within groups: some students form an inner circle and model appropriate discussion techniques, while an outer circle of students listen, respond, and evaluate.	Provides students with an opportunity to engage in a formal discussion and to experience the roles of both participant and active listener. Students also have the responsibility of supporting their opinions and responses using specific textual evidence.	Use this strategy to discuss the arguments presented in secondary sources and how they relate to the big ideas of the course.
Graphic Organizer	Representing ideas and information visually (e.g., Venn diagrams, flowcharts, cluster maps).	Provides students with a visual system for organizing multiple ideas, details, or textual support to be included in a piece of writing.	Graphic organizers can be helpful when comparing global, national, regional, and local geographic patterns. Make sure students use any organizer thoughtfully and do not simply "fill in the blanks."
Guided Discussion	An umbrella strategy that allows for the use of different techniques to guide students through the lesson.	Helps students see the big picture and builds their confidence when dealing with difficult content or new skills.	Use brainstorming and quickwrite as strategies during a guided discussion to help students understand how language, ethnicity, and religion act as both unifying and divisive forces.
Jigsaw	Each student in a group reads a different text or different passage from one text, taking on the role of "expert" on what was read. Students share the information from that reading with students from other groups and then return to their original groups to share their new knowledge.	Helps students summarize and present information to others in a way that facilitates an understanding of a text (or multiple texts) or issue without having each student read the text in its entirety; by teaching others, they become experts.	Use this strategy to facilitate understanding of high-level readings or readings that incorporate several geographic concepts, such as The Spanish Flu and Its Legacy , which is available on AP Central Human Geography under "Classroom Resources."

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Strategy	Definition	Purpose	Example
Look for a Pattern	Students evaluate data or create visual representations to find a trend.	Helps students to identify patterns that may be used to draw conclusions.	Using a complex graph (with at least two data sets) or map, have students compare the data to find a trend and draw a conclusion.
Making Connections	Students are given a concept, term, or document and asked to write what they know about it. Then, students are paired and asked to determine, describe, and explain the connection between the two concepts.	Reinforces the fact that course concepts are often connected and provides the opportunity for students to make and explain connections between and among these concepts.	Write concepts related to one of the course big ideas on cards, place them in a box, and have students pick a card at random. Give students a few minutes to gather and recall information about the concept, and then pair students and ask them to find the connection between their concepts. Finally, ask the pairs to write a brief explanation of how the concepts are related.
Quickwrite	Students write for a short, specific amount of time about a designated topic.	Helps generate ideas in a short time.	As preparation for the free-response questions, have students write to describe, explain, or apply a geographic situation or scenario. Over the course of the academic year, add stimuli to these free-response prompts.
Self/Peer Review	Working alone or with a partner to examine a piece of writing for accuracy and clarify.	Provides students with an opportunity to edit a written text to ensure the correctness of identified components.	Students should learn to interpret, evaluate, respond to, and write about a variety of written texts and graphic images. After students have completed a writing assignment, have them perform self and peer revisions of their writing.
Shared Inquiry	Students read a provocative text and are asked interpretive questions (for which there are no predetermined "right" answers). Students who offer different responses debate one another, supporting their positions with specific evidence from the text.	To lead students in a deep discussion of a text and encourage a diversity of ideas to emerge as students think deeply and share interpretations.	Ask students to read Edward Relph's "Sense of Place" and discuss the geographical sense of place and its components. Have students evoke a sense of place within their personal and shared communities.

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Strategy	Definition	Purpose	Example
Socratic Seminar	This is a focused discussion on a topic, essential question, or selected text in which students ask questions of one another. The questions initiate a conversation that continues with a series of responses and additional questions.	Helps students arrive at a new understanding by asking questions that clarify; challenging assumptions; probing perspective and point of view; questioning facts, reasons, and evidence; or examining implications and outcomes.	Initiate a discussion of an essential question, such as <i>What are the consequences, including positive, negative, and unintended, of each type of population policy?</i> during which students can illustrate their understanding of the learning objectives and essential knowledge statements.
Think-Pair-Share	Students think through a question or issue alone, pair with a partner to share ideas, and then share results with the class.	Enables the development of initial ideas that are then tested with a partner in preparation for revising ideas and sharing them with a larger group.	To practice comparing the spatial variations of theories of development, ask students to use Think-Pair-Share to come up with similarities, differences and relevance to geographic processes for Rostow's Stages of Economic Growth, Wallerstein's World System Theory, dependency theory, and commodity dependence.

Developing the Course Skills

Throughout the AP Human Geography course, students will develop skills that are fundamental to the discipline of geography. Since these are the skills that adept geographers demonstrate, students will benefit from multiple opportunities to develop them in a scaffolded manner. Through the use of guided questioning, discussion techniques, and other instructional strategies, students can practice applying these skills in new contexts, providing an important foundation for their college and career readiness.

The skill categories articulated in the course framework equip students to understand, analyze, and apply geographic information in a process similar to that followed by geographers. This process involves the analysis of spatial relationships, quantitative and qualitative sources, and scale.

The unit guides feature a suggested skill that students can practice using the content of each topic. You are free to use that structure or create a system of your own, helping students develop skills throughout the course through the sequencing and scaffolding appropriate for them.

The tables on the pages that follow look at each of the skills and provide examples of questions and instructional strategies for incorporating those skills into your instruction.

Skill Category 1: Analyze geographic theories, approaches, concepts, processes, or models in theoretical and applied contexts.

Students should be given ample practice to apply their content knowledge. Geographers practice their discipline by applying their knowledge to different contexts and scenarios.

The table that follows provides examples of activities and instructional strategies for teaching students to analyze geographic theories, approaches, concepts, processes, or models in theoretical and applied contexts.

Skill Category 1: Concepts and Processes

Skill	Key Tasks	Sample Activities	Instructional Strategies
1.A: Describe geographic concepts, processes, models, and theories.	<ul style="list-style-type: none">▪ Describe the characteristics and traits of course aspects, such as economic and social development.	Before beginning a deeper discussion on theories of development, have students describe some different theories and how they vary.	Graphic Organizer
1.B: Explain geographic concepts, processes, models, and theories.	<ul style="list-style-type: none">▪ Explain why there are concerns about development and sustainability.▪ Explain how sustainability principles relate to and impact industrialization and spatial development.	Ask students to explain the interplay of the processes of development and principles of sustainability. What are examples of sustainable development policies?	Debriefing Discussion Group
1.C: Compare geographic concepts, processes, models, and theories.	<ul style="list-style-type: none">▪ Identify the relevant, specific categories for comparing similarities and differences.▪ Explain the reasons for the relevant similarities and differences.▪ Explain the relevance, implications, and/or significance of the similarities and differences.	Ask students to identify and explain relevant, specific similarities and differences between federal and unitary states. Make sure students understand that they need to identify relevant and specific similarities and differences. They should compare like factors.	Graphic Organizer Look for a Pattern Think-Pair-Share

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Skill Category 1: Concepts and Processes (cont'd)

Skill	Key Tasks	Sample Activities	Instructional Strategies
1.D: <i>Describe a relevant geographic concept, process, model, or theory in a specified context.</i>	<ul style="list-style-type: none">▪ Describe how geographic concepts, processes, models, or theories have changed over time.▪ Describe the reasons for causes and effects.▪ Describe the concepts using real-world scenarios.	<p>Ask students to explain how a geographic process, such as migration, has changed over time.</p> <p>Have students explain the reasons why geographic theories, such as environmental determinism, have changed.</p> <p>Ask students to use real-world scenarios to describe how geographic models, such as the demographic transition model, have changed.</p>	<p>Debriefing</p> <p>Discussion Groups</p> <p>Quickwrite</p>
1.E: <i>Explain the strengths, weaknesses, and limitations of different geographic models and theories in a specified context.</i>	<ul style="list-style-type: none">▪ Explain how geographic models and theories have changed over time.▪ Explain the implications of this change over time.▪ Identify and explain the reasons for causes and effects.	<p>Have students examine a geographic model, such as the von Thünen model, and explain its strengths, weaknesses, or limitations. Also, explain how that model has changed over time.</p> <p>Ask students to explain the implications of a geographic theory, such as the Malthusian theory.</p>	<p>Discussion Groups</p> <p>Look for a Pattern</p> <p>Think-Pair-Share</p>

Skill Category 2: Analyze geographic patterns, relationships, and outcomes in applied contexts.

Geographers seek to understand the associations and networks among phenomena in particular places and to explain their implications. You can help students come to understandings about course concepts by giving them ample practice analyzing geographic patterns, relationships, and outcomes.

The table that follows provides examples of questions, activities, and instructional strategies for teaching students to analyze geographic patterns, relationships, and outcomes in different locations or at different times.

Skill Category 2: Spatial Relationships

Skill	Key Questions	Sample Activities	Instructional Strategies
2.A: <i>Describe spatial patterns, networks, and relationships.</i>	<ul style="list-style-type: none">What are spatial patterns, networks, and relationships?	<p>Using maps or quantitative or geospatial data about a topic such as population distribution, ask students to describe spatial patterns.</p>	Look for a Pattern
2.B: <i>Explain spatial relationships in a specified context or region of the world, using geographic concepts, processes, models, or theories.</i>	<ul style="list-style-type: none">How and why do spatial patterns, networks, and relationships occur differently in various parts of the world?	<p>Ask students to identify general factors that influence migration. Then ask them to categorize the factors. Finally, have students list factors associated with different regions and explain why they are applicable there.</p>	<p>Graphic Organizer Think-Pair-Share</p>
2.C: <i>Explain a likely outcome in a geographic scenario, using geographic concepts, processes, models, or theories.</i>	<ul style="list-style-type: none">What outcome do you predict in a particular geographic scenario?Why do you think that outcome would occur in that geographic scenario?	<p>Present students with real-world scenarios from a geographic scenario such as territorial disputes among sovereign states. Ask them to predict and explain outcomes using geographic concepts, processes, models, or theories.</p>	Debriefing
2.D: <i>Explain the significance of geographic similarities and differences among different locations and/or at different times.</i>	<ul style="list-style-type: none">What are the similarities and/or differences of different locations at different times?How and why do those similarities and/or differences of different locations manifest themselves at different times?Why does the similarity or difference matter?	<p>Look at the forms of governance, historical and present, for countries in a particular world region. What geographic factors influenced the formation and change of governments? How do these governments reflect geographic concepts, processes, models, or theories?</p>	<p>Graphic Organizer Jigsaw</p>

continued on next page

Skill Category 2: Spatial Relationships (cont'd)

Skill	Key Questions	Sample Activities	Instructional Strategies
<p>2.E: Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects in different contexts and regions of the world.</p>	<ul style="list-style-type: none">▪ How and why does a geographic concept, process, model, or theory explain geographic effects in different contexts and regions of the world?▪ To what extent does a geographic concept, process, model, or theory explain geographic effects in different contexts and regions of the world?	<p>Ask students to discuss population increase and its checks from a Malthusian perspective. What are some alternative viewpoints to Malthusian theory?</p>	<p>Critique Reasoning Debate</p>

Skill Category 3: Analyze and interpret quantitative geographic data represented in maps, tables, charts, graphs, satellite images, and infographics.

The analysis, interpretation, and application of quantitative information are vital skills for students in AP Human Geography. Analysis can be taught using any type of quantitative information, but students should be provided with current data so that they can draw accurate conclusions and apply that knowledge to the enduring understandings and learning objectives in the curriculum.

The table that follows provides examples of questions, activities, and instructional strategies for teaching students to analyze and interpret quantitative geographic data represented in maps, tables, charts, graphs, satellite images, and infographics.

Skill Category 3: Data Analysis

Skill	Key Questions	Sample Activities	Instructional Strategies
3.A: Identify the different types of data presented in maps and in quantitative geospatial data.	What do the data show?	Present students with maps that showcase different variables, such as population by demographics (e.g., age, income, education). Ask them to identify the categories of data presented in the maps.	Debriefing
3.B: Describe spatial patterns presented in maps and in quantitative and geospatial data.	What patterns can you identify from the data?	Ask students to describe patterns in the data, such as land-use patterns and practices in different agricultural production regions.	Look for a Pattern
3.C: Explain patterns and trends in maps and in quantitative and geospatial data to draw conclusions.	How does the trend in the data inform your conclusion? Why does the trend in the data support your conclusion? What is the reasoning behind your conclusion?	Ask students to identify multiple patterns or trends within a data set and then explain how and why they are related.	Debriefing
3.D: Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.	What conclusions can you draw by comparing the trends you found in the data? How does the pattern or trend in one data set compare to that in another data set?	Ask students to compare the trends and draw a conclusion about the data. They should also explain their reasoning.	Create Representations Look for a Pattern
3.E: Explain what the data imply or illustrate about geographic principles, processes, behaviors, and outcomes.	How do these data relate to a geographic process?	Have students apply the information gleaned from data sources to a geographic principle, process, behavior, or outcome.	Create Representations Look for a Pattern
3.F: Explain possible limitations of the data provided.	What do the data not tell you?	Lead students in analyzing the possible limitations of the data and what is not revealed.	Create Representations Look for a Pattern

Skill Category 4: Analyze and interpret qualitative geographic information represented in maps, images, and landscapes.

The AP Human Geography course requires students to analyze visual sources in order to understand patterns and trends and how they illustrate geographic principles, behaviors, and outcomes.

The following table provides examples of questions and instructional strategies for teaching students to analyze and interpret qualitative geographic information represented in maps, images (e.g., satellite, photographs, cartoons), and landscapes.

Skill Category 4: Source Analysis

Skill	Sample Activity	Key Questions	Instructional Strategies
4.A: Identify the different types of information presented in visual sources.	Provide students with a map, image, or landscape to address the key questions.	What is being shown in the map, image, or landscape? What perspective is being shown in the map or image?	Debriefing Quickwrite
	Provide students with written accounts to address key questions.	What is being presented in this written account? Who created this written account? What perspective can you identify?	Critique Reasoning Quickwrite
4.B: Describe the spatial patterns presented in visual sources.	Provide students with a map, image, or landscape to address the key questions.	What spatial patterns are depicted in this map, image, or landscape?	Look for a Pattern
	Provide students with written accounts to address key questions.	What spatial pattern is articulated in this written account?	Critique Reasoning
4.C: Explain patterns and trends in visual sources to draw conclusions.	Provide students with a map, image, or landscape to address the key questions.	How and why does this pattern or trend emerge in this map, image, or landscape?	Create Representations Think-Pair-Share
	Provide students with written accounts to address key questions.	How and why does this pattern or trend emerge in this written account?	Create Representations Think-Pair-Share

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Skill Category 4: Source Analysis (cont'd)

Skill	Sample Activity	Key Questions	Instructional Strategies
4.D: Compare patterns and trends in visual sources to draw conclusions.	Provide students with a map, image, or landscape to address the key questions.	How do the patterns and trends in one map, image, or landscape compare to patterns and trends in another map, image, or landscape?	Graphic Organizer Quickwrite
		What conclusions can you draw about patterns and trends when comparing different maps, images, or landscapes?	
4.E: Explain how maps, images, and landscapes illustrate or relate to geographic principles, processes, and outcomes.	Provide students with written accounts to address key questions.	How does the pattern and trend in one written account compare to patterns and trends in another written account?	Jigsaw Debate
		What conclusions can you draw about patterns and trends when comparing different written accounts?	
4.F: Explain possible limitations of visual sources provided.	Provide students with a map, image, or landscape to address the key questions.	How does what you see relate to a geographic principle, process, or outcome?	Quickwrite Think-Pair-Share
	Provide students with written accounts to address key questions.	How does what you read relate to a geographic principle, process, or outcome?	Critique Reasoning Jigsaw
	Provide students with a map, image, or landscape to address the key questions.	What does the map, image, or landscape not show?	Debate Quickwrite
	Provide students with written accounts to address key questions.	What does the written account not say?	Critique Reasoning Debate

Skill Category 5: Analyze geographic theories, approaches, concepts, processes, and models across geographic scales to explain spatial relationships.

Geographic analysis requires a sensitivity to scale, not just as a spatial category but as a framework for understanding how events and processes at different scales influence one another and change according to the scale of analysis.

The table that follows provides examples of questions, activities, and instructional strategies for teaching students to analyze geographic theories, approaches, concepts, processes, and models across geographic scales to explain spatial relationships.

Skill Category 5: Scale Analysis

Skill	Key Questions	Sample Activities	Instructional Strategies
5.A: Identify the scales of analysis presented by maps, quantitative and geospatial data, images, and landscapes.	<ul style="list-style-type: none">▪ What are the different scales of analysis?▪ Why is it important to look at data through different scales?	Take a set of data and show students what the global, national, regional, and local patterns are. Have them repeat the exercise with different data.	Graphic Organizer Look for a Pattern
5.B: Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.	<ul style="list-style-type: none">▪ What do scales of analysis reveal about spatial relationships?▪ How do geographic concepts, processes, models, or theories impact spatial relationships?	Ask students to articulate characteristics of spatial relationships at various levels of scale. Ask them to explain why those trends occur.	Quickwrite Think-Pair-Share
5.C: Compare geographic characteristics and processes at various scales.	<ul style="list-style-type: none">▪ How do geographers apply scale analysis at different levels?▪ How do data at one level of scale analysis compare to the data at a different level?	Identify several geographic processes. Using associated data, scale up and down to see patterns and trends at the various levels.	Graphic Organizer Look for a Pattern
5.D: Explain the degree to which a geographic concept, process, model, or theory effectively explains geographic effects across various geographic scales.	<ul style="list-style-type: none">▪ How and why does a geographic concept, process, model, or theory explain geographic processes?▪ To what extent does a geographic concept, process, model, or theory explain geographic processes?	Present students with real-world scenarios, such as maritime boundary disputes, and ask them to use economic or other data for decision-making purposes. Have students justify their decisions.	Debate Jigsaw

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AP HUMAN GEOGRAPHY

Exam Information



Exam Overview

The AP Human Geography Exam assesses student understanding of the skills and learning objectives outlined in the course framework. The exam is 2 hours and 15 minutes long and includes 60 multiple-choice questions and 3 free-response questions. The details of the exam, including exam weighting and timing, can be found below:

Section	Question Type	Number of Questions	Exam Weighting	Timing
I	Multiple-choice questions	60	50%	60 minutes
II	Free-response questions (7 points each)	3	50%	75 minutes

The exam assesses content from each of the three big ideas for the course:

1. Patterns and Spatial Organization
2. Impacts and Interactions
3. Spatial Processes and Societal Change

The exam also assesses each of the seven units of the course with the following relative weightings on the multiple-choice section of the AP Exam:

Units	Exam Weighting
Unit 1: Thinking Geographically	8–10%
Unit 2: Population and Migration Patterns and Processes	12–17%
Unit 3: Cultural Patterns and Processes	12–17%
Unit 4: Political Patterns and Processes	12–17%
Unit 5: Agriculture and Rural Land-Use Patterns and Processes	12–17%
Unit 6: Cities and Urban Land-Use Patterns and Processes	12–17%
Unit 7: Industrial and Economic Development Patterns and Processes	12–17%

How Student Learning Is Assessed on the AP Exam

Section I: Multiple-Choice

The AP Human Geography skill categories are assessed in the multiple-choice section with the following relative weightings:

Skill Category	Exam Weighting
1: Concepts and Processes	25–36%
2: Spatial Relationships	16–25%
3: Data Analysis	13–20%
4: Visual Analysis	13–20%
5: Scale Analysis	13–20%

- The multiple-choice questions will include both individual and set-based questions.
- Approximately 30 to 40% of the multiple-choice questions will reference stimulus material, including maps, tables, charts, graphs, images, infographics, and/or landscapes, roughly evenly divided between quantitative and qualitative sources.

Section II: Free-Response

The second section of the AP Human Geography Exam includes three questions, each one assessing at least two different units of instruction.

All five AP Human Geography skill categories are assessed in the free-response section with the following weightings:

Skill Category	Exam Weighting
1: Concepts and Processes	23–29%
2: Spatial Relationships	33–43%
3: Data Analysis	10–19%
4: Visual Analysis	10–19%
5: Scale Analysis	10–14%

Each free-response question presents students with an authentic geographic situation or scenario and assesses students' ability to describe, explain, and apply geographic concepts, processes, or models, as they analyze geographic patterns, relationships, and outcomes in applied contexts. Free-response question 1 does not include any stimuli; Free-response question 2 includes one stimulus (data, image or map); and Free-response question 3 includes two stimuli (data, images, and/or maps). At least two of the three free-response questions assess students' ability to analyze across geographic scales to explain spatial relationships.

Task Verbs Used in Free-Response Questions

The following **task verbs** are commonly used in the free-response questions:

Compare: Provide a description or explanation of similarities and/or differences.

Define: Provide a specific meaning for a word or concept.

Describe: Provide the relevant characteristics of a specified topic.

Explain: Provide information about how or why a relationship, process, pattern, position, or outcome occurs, using evidence and/or reasoning.

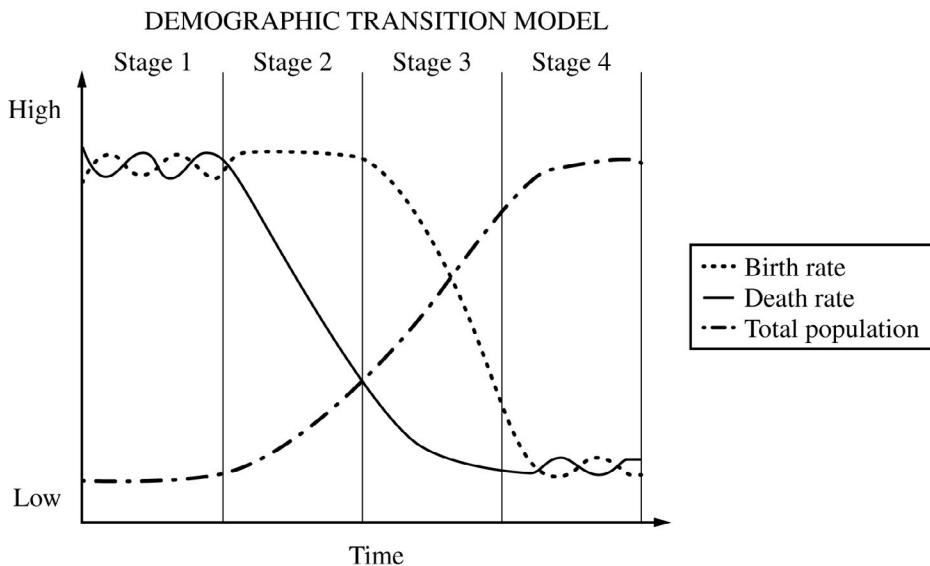
Identify: Indicate or provide information about a specified topic, without elaboration or explanation.

Sample Exam Questions

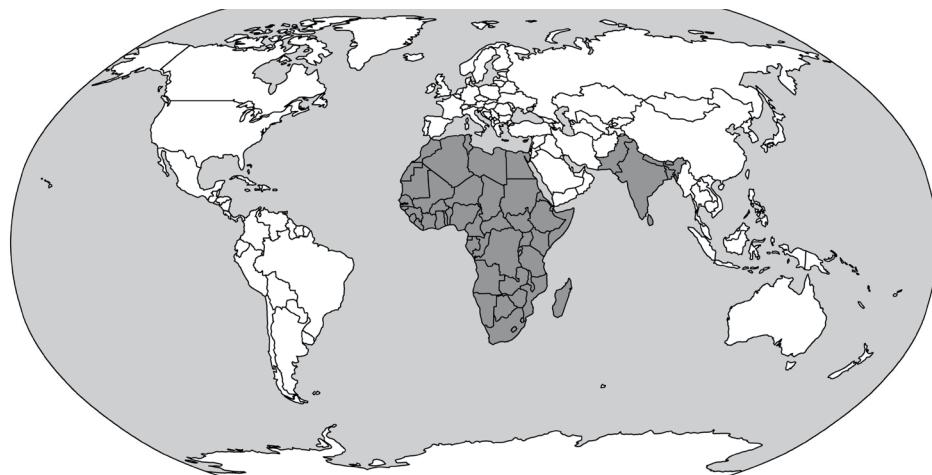
The sample exam questions that follow illustrate the relationship between the course framework and AP Human Geography Exam and serve as examples of the types of questions that appear on the exam. After the sample questions you will find a table that shows which skill, learning objective(s), and unit each question relates to. The table also provides the answers to the multiple-choice questions.

Section I: Multiple-Choice Questions

The following are examples of the kinds of multiple-choice questions found on the exam.



- Which of the following is a characteristic of a country moving from stage 2 to stage 3 of the demographic transition model?
 - Shorter life expectancy
 - Increasing birth rate
 - High level of female education
 - Declining death rate
 - Increasing dependence on farm labor



2. The Berlin Conference of 1884–1885 and the partition of India in 1947 changed borders in Africa and South Asia and are reflected in the current world map. Which of the following best describes the type of political border resulting from these events?
- (A) Relict boundaries
 - (B) Antecedent boundaries
 - (C) Consequent boundaries
 - (D) Superimposed boundaries
 - (E) Subsequent boundaries

Questions 3–5 refer to the image below.



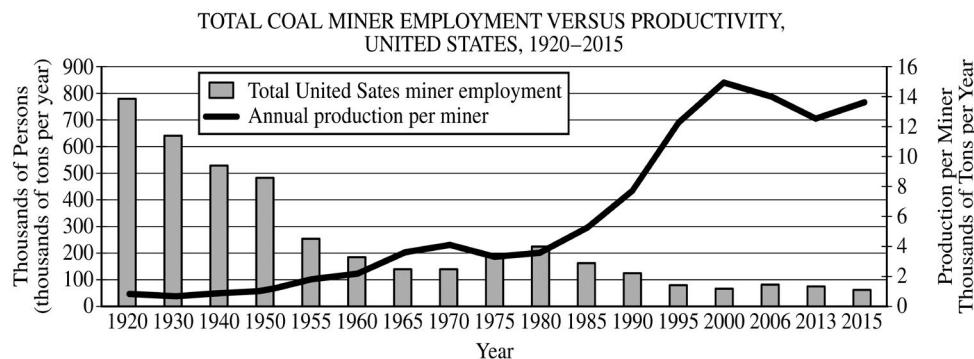
Source: United States Geological Survey

3. Which of the following is the land survey system shown in the satellite image?
 - (A) Multiple nuclei
 - (B) Suburban subdivision
 - (C) Long lots
 - (D) Metes and bounds
 - (E) Township and range

4. In reading the landscape of the image, a geographer will most likely identify the land-survey pattern shown as typical of which of the following locations?
 - (A) A rural agricultural region in the United States
 - (B) An exurb of Paris, France
 - (C) A coastal region of China
 - (D) An agricultural region of eastern Canada
 - (E) A rainforest development in southern Brazil

5. Technologies invented during which of the following periods explain how farmland was divided and cultivated as shown in the satellite image?
 - (A) Columbian Exchange, when the use of Old World farm animals such as cows and horses was introduced.
 - (B) First Agricultural Revolution, when the animal-powered plow and domesticated plants were developed.
 - (C) Second Agricultural Revolution, when land-surveying technology and mechanical plows were developed.
 - (D) Modern era, when local farmers used computers and data analysis.
 - (E) Postindustrial era, when local farmers used global positioning systems and geographic information systems.
6. Which of the following factors best explains the development and expansion of squatter settlements?
 - (A) Gentrification of megacities in more developed countries displacing large numbers of urban dwellers
 - (B) Rapid urbanization and inability of infrastructure to keep pace with the growth of megacities in developing countries
 - (C) Urban dwellers seeking residential housing and shopping outside the congestion of the city
 - (D) Zoning laws in developing countries that prevent current urban dwellers from obtaining land to build residential structures
 - (E) The growth of urban agriculture encouraging migrant farm workers to move to cities requiring more housing
7. The lush golf courses in the United Arab Emirates, the dikes and polders in the Netherlands, and the Three Gorges Dam in China are significant examples of land use.
Which of the following viewpoints of human-environment interaction are best described by these land-use examples?
 - (A) Environmental determinism
 - (B) Ecotourism
 - (C) Possibilism
 - (D) Heartland theory
 - (E) Malthusian theory

Questions 8 and 9 refer to the following chart.

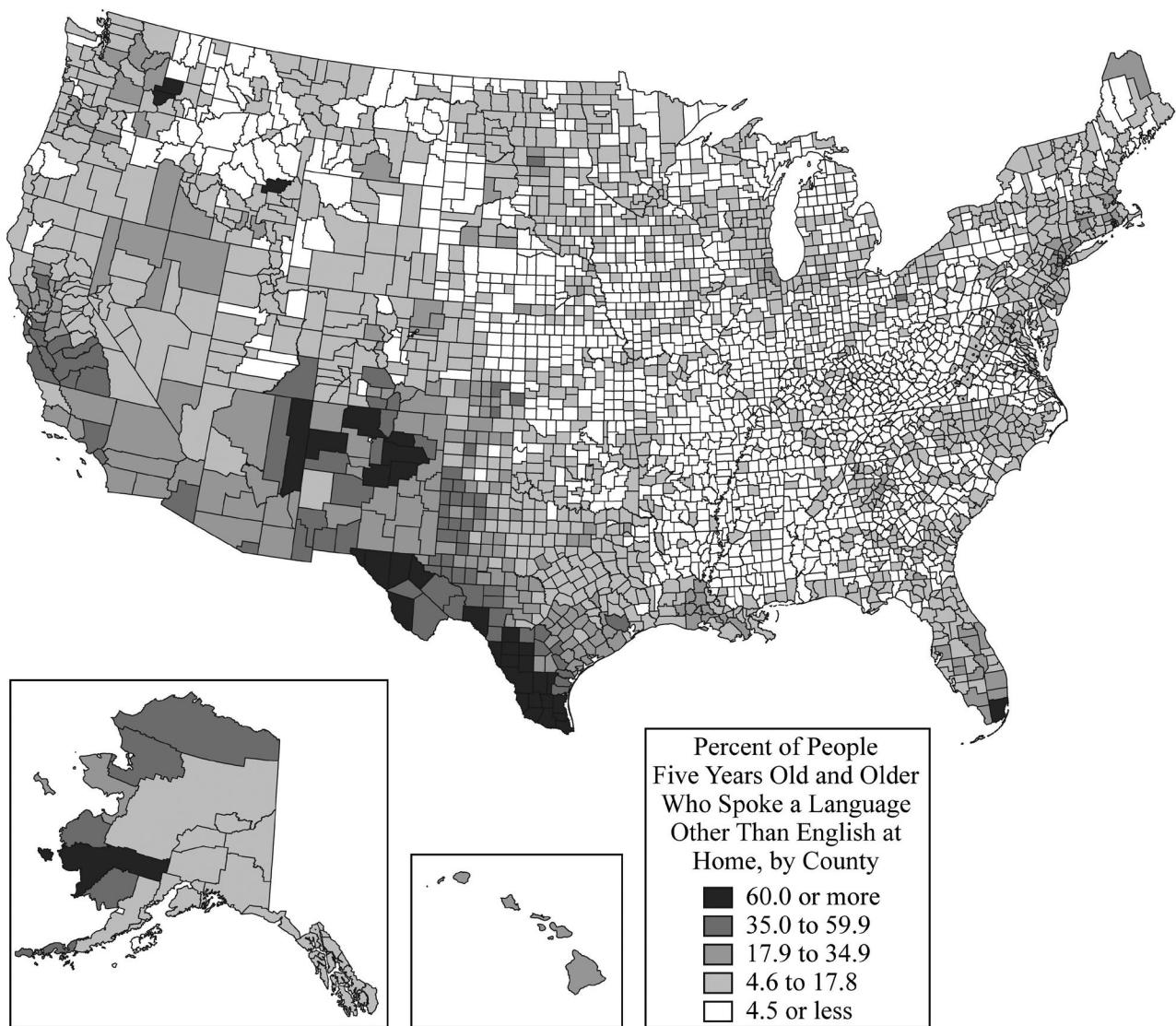


Source: Energy Information Agency

8. Which of the following processes accounts for the change in coal miners employed in the United States from 1950 to 2000?
 - (A) Technological diffusion
 - (B) Just-in-time production
 - (C) Industrial revolution
 - (D) Devolution
 - (E) Deindustrialization

9. Compare the bar graph showing coal mine employment and the line graph showing miner production. Which of the following conclusions can be drawn from trends in this data?
 - (A) Coal mining has been outsourced to less-developed countries.
 - (B) Mechanization and computer automation in mining have increased.
 - (C) Legal restrictions have been imposed on the amount of coal exported overseas.
 - (D) Renewable resources are being used more frequently to power vehicles.
 - (E) Natural gas and oil production of electricity has declined.

10. Which of the following is a pull factor affecting migration to some of the more developed countries?
 - (A) Loss of factory jobs
 - (B) Severe famine
 - (C) The rise of an authoritarian regime
 - (D) Universal health care
 - (E) Religious persecution



Source: United States Census Bureau

11. Based on the map, which of the following languages are most likely to be spoken in counties where 60 percent or more of residents spoke a language other than English at home?
- French and French Creole languages
 - Spanish and American Indian languages
 - German and Dutch
 - Russian and Hindi
 - Chinese and Arabic

12. Which of the following best explains a neo-Malthusian perspective on the Green Revolution?
- (A) The Green Revolution represents a jump in agricultural technology, but population will still grow faster than our ability to produce food will over the long run.
 - (B) The Green Revolution solves the entire problem of feeding the planet, and Malthusian ideas are no longer relevant.
 - (C) Local food production is the key to long-term food production.
 - (D) The distribution of food in a capitalist system results in too many people being unable to afford basic foods.
 - (E) The increase in the food supply and a resulting increase in the population available for farm labor will solve the food crisis.

TOP FIVE URBANIZED AREAS: CHINA AND THE UNITED STATES

China	Population
Shanghai	25.6 million
Beijing	19.6 million
Chongqing	14.8 million
Tianjin	13.2 million
Guangzhou	12.6 million

United States	Population
New York City	18.8 million
Los Angeles	12.5 million
Chicago	8.9 million
Houston	6.1 million
Dallas-Fort Worth	6.1 million

Source: The United Nations *The World's Cities in 2018: Data Booklet*

13. Compare the largest municipality populations for each country, and then select the following statement that correctly draws a conclusion regarding the pattern in the data.
- (A) China has a primate city, and the United States follows the rank-size rule.
 - (B) Both countries follow the rank-size rule.
 - (C) Neither country follows the rank-size rule.
 - (D) Both countries have a primate city.
 - (E) The United States has a primate city, and China follows the rank-size rule.

14. Which of the following correctly pairs a global religion described with its hearth region of origin?
- (A) Buddhism and East Asia
 - (B) Christianity and Latin America
 - (C) Islam and Central Asia
 - (D) Hinduism and South Asia
 - (E) Judaism and eastern Europe
15. The United Nations Convention on the Law of the Sea sets the limit of the exclusive economic zone at 200 nautical miles from a country's coastline. In cases where countries are less than 400 nautical miles apart at sea, which of the following explains how the exclusive economic zone boundary is determined for each country?
- (A) Both countries will state their case to the United Nations during a hearing of the Security Council.
 - (B) Both countries will follow the median-line principle.
 - (C) Both countries will share all of the water area.
 - (D) Neither country can claim the area as an exclusive economic zone because the area is considered international water.
 - (E) Both countries will receive increased territorial sea claims up to 24 nautical miles but will have no exclusive economic zone.

Section II: Free-Response Questions

The following are examples of the kinds of free-response questions found on the exam. Note that on the actual AP Exam, there will be three free-response questions.

Free-Response Question—no stimulus (Question 1 on AP Exam)

In most countries, the concept of the state as a political unit is subject to the tensions between centrifugal and centripetal forces. Governments are often challenged by the devolutionary factors that challenge state sovereignty.

- (A) Define the concept of the multinational state.
- (B) Explain how ethnicity can be a factor that leads to the devolution of a state.
- (C) Explain how communication technology plays an important role in the goals of devolutionary groups and democracy movements.
- (D) Explain the limitations of communication technology in furthering the goals of devolutionary groups and democracy movements.
- (E) Describe ONE centripetal force that governments use to promote the state as a nation.
- (F) Explain how uneven development within a state can act as a centrifugal force.
- (G) For a multinational state facing the realities of devolution, explain why a government would choose to create an autonomous region or choose to maintain a unitary state.

Free-Response Question—two stimuli (Question 3 on AP Exam)

NATIONAL CAPITAL TERRITORY OF DELHI, INDIA, POPULATION CHANGE

Census Year	1991	2001	2011
Total population	9,420,644	13,850,507	16,787,941
Population density per square mile	17,771	26,128	31,669

COMMUTERS IN DELHI, INDIA



Source: Getty Images / Hindustan Times

(See Free-response question 3 on next page.)

The National Capital Territory of Delhi, India, includes the old city of Delhi; the national capital city of New Delhi; and surrounding districts, where much of the city's population resides.

- (A) Describe the data in the table that classifies Delhi as a megacity.
- (B) Describe a pull factor that has contributed to Delhi's total population change over time.
- (C) Explain how local housing development has contributed to the change in Delhi's population density, as shown in the data table.
- (D) Given Delhi's population density, describe a challenge related to urban infrastructure that the city's government is likely to face.
- (E) Explain the challenge to Delhi's local environmental sustainability that is shown in the photograph.
- (F) Explain the degree to which India's level of economic development as a country contributes to Delhi's local challenges to environmental sustainability.
- (G) Explain a possible solution to the challenge of environmental sustainability that is shown in the photograph.

Answer Key and Question Alignment to Course Framework

Multiple-Choice Question	Answer	Skill	Learning Objective	Unit
1	D	1.A	IMP-2.B	2
2	D	4.B	IMP-4.A	4
3	E	4.A	PSO-5.B	5
4	A	4.A	PSO-5.B	5
5	C	4.E	SPS-5.C	5
6	B	2.C	SPS-6.A	6
7	C	1.D	PSO-1.B	1
8	E	3.B	PSO-7.A	7
9	B	3.D	PSO-7.A	7
10	D	2.A	IMP-2.C	2
11	B	3.A	PSO-3.D	3
12	A	2.C	SPS-5.D	5
13	C	3.D	PSO-6.C	6
14	D	1.D	IMP-3.B	3
15	B	2.C	IMP-4.B	4

Free-Response Question	Question Type	Skill	Learning Objective	Unit
1	No stimulus	1.A, 1.B, 1.E, 2.A, 2.C, 5.B	PSO-4.A, SPS-4.A, SPS-4.B, SPS-4.C, SPS-7.B	5
2	Two stimuli	1.D, 2.A, 2.C, 3.B, 3.C, 4.E, 5.D	PSO-6.A, IMP-2.C, IMP-6.A, IMP-6.B, IMP-6.D, SPS-6.B	6

The scoring information for the questions within this course and exam description, along with further exam resources, can be found on the [AP Human Geography Exam Page](#) on AP Central.



Question 1: No stimulus

In most countries, the concept of the state as a political unit is subject to the tensions between centrifugal and centripetal forces. Governments are often challenged by the devolutionary factors that challenge state sovereignty.

- (A) Define the concept of the multinational state.
- (B) Explain how ethnicity can be a factor that leads to the devolution of a state.
- (C) Explain how communication technology plays an important role in the goals of devolutionary groups and democracy movements.
- (D) Explain the limitations of communication technology in furthering the goals of devolutionary groups and democracy movements.
- (E) Describe ONE centripetal force that governments use to promote the state as a nation.
- (F) Explain how uneven development within a state can act as a centrifugal force.
- (G) For a multinational state facing the realities of devolution, explain why a government would choose to create an autonomous region or choose to maintain a unitary state.

Scoring Guidelines for Question 1: No stimulus

7 points

Learning Objectives:

PSO-4.A

SPS-4.A

SPS-4.B

SPS-4.C

SPS-7.B

- (A) Define the concept of the multinational state.

1 point

- A country with multiple culture groups or multiple ethnic groups under a single government.

1.A

- (B) Explain how ethnicity can be a factor that leads to the devolution of a state.

1 point

Accept one of the following:

1.B

- Ethnic differences, ethnocentrism, or ethnic separatism can be the source of conflict between culture groups, or between one ethnic group and a government.
- One or more ethnic groups may control a government, while another ethnic group has limited political power.
- Ethnic nationalist political parties may compete for political power or attempt to gain control of territory.
- An ethnic group existing within a territory shared with other culture groups may attempt to gain control through armed conflict, ethnic cleansing, or terrorism
- Irredentism, as a country may attempt to annex or regain territory in a neighboring state inhabited by people who have ethnic ties back that country.
- An ethnic group may desire to establish its own nation-state or agree to establish an autonomous region within an existing country.

- (C) Explain how communication technology plays an important role in the goals of devolutionary groups and democracy movements.

1 point

1.B

Accept one of the following:

- Personal computers, personal communication devices, or cell phones can be used to connect people who support a common ethnic, religious, or political desire to devolve the state or reform the government.
- Software applications (apps) for social networking can be used to connect people who support a common ethnic, religious, or political desire to devolve the state or reform the government.
- Radio, television, news, or the internet can be used to broadcast ethnic, religious, or political groups intent to devolve the state or reform the government.
- Ethnic, religious, or political groups who intend to devolve the state or reform the government can develop their own apps, websites, channels or news.

- (D) Explain the limitations of communication technology in furthering the goals of devolutionary groups and democracy movements.

1 point

1.E

Accept one of the following:

- Governments can shut down cellular phone towers, data networks, or satellite uplinks to prevent social networking
- Governments can filter or block information entering their country via the Internet or on social network sites.
- Governments can ban media from broadcasting information, news, websites or other media regarding an ethnic, religious, or political groups who intend to devolve the state or reform the government.
- Governments can counter devolutionary groups and democracy movements with pro-government applications, information, news or media.
- Governments can use surveillance software, electronic warfare, or counterespionage (spy) techniques to hack or destroy the networks run by devolutionary groups and democracy movements.

- (E)** Describe ONE centripetal force that governments use to promote the state as a nation. **1 point**
• Governments may promote a political nationalism, ethnic nationalism, or patriotism, through forms of identity, such as symbols, folklore, sports, holidays, military or other traditions. **2.A**
-
- (F)** Explain how uneven development within a state can act as a centrifugal force. **1 point**
Accept one of the following:
• When a part of a country is neglected economically by a government, resentful local residents may attempt to gain local or regional political control.
• Countries with primate cities can have a highly-developed city or capital while the rest of the country is relatively underdeveloped; this can create devolutionary pressures.
-
- (G)** For a multinational state facing the realities of devolution, explain why a government would choose to create an autonomous region or choose to maintain a unitary state. **1 point**
Accept one of the following:
• The creation of an autonomous region would give an ethnic group limited self-determination, but this may weaken the state's control over the region's territory, people, and resources.
• Maintaining a unitary state would give the government full control over territory, people, and resources, but this risks rebellion against the state by the region's ethnic group.

Total for question 1 7 points

Question 3: Two stimuli

NATIONAL CAPITAL TERRITORY OF DELHI, INDIA, POPULATION CHANGE

CENSUS YEAR	1991	2001	2011
Total population	9,420,644	13,850,507	16,787,941
Population density per square mile	17,771	26,128	31,669

COMMUTERS IN DELHI, INDIA



Source: Getty Images / Hindustan Times

(See question 3 on next page.)

The National Capital Territory of Delhi, India, includes the old city of Delhi; the national capital city of New Delhi; and surrounding districts, where much of the city's population resides.

- (A) Describe the data in the table that classifies Delhi as a megacity.
- (B) Describe a pull factor that has contributed to Delhi's total population change over time.
- (C) Explain how local housing development has contributed to the change in Delhi's population density, as shown in the data table.
- (D) Given Delhi's population density, describe a challenge related to urban infrastructure that the city's government is likely to face.
- (E) Explain the challenge to Delhi's local environmental sustainability that is shown in the photograph.
- (F) Explain the degree to which India's level of economic development as a country contributes to Delhi's local challenges to environmental sustainability.
- (G) Explain a possible solution to the challenge of environmental sustainability that is shown in the photograph.

Scoring Guidelines for Question 3: Two stimuli

7 points

Learning Objectives:

PSO-6.A

IMP-2.C

IMP-6.A

IMP6.B

IMP-6.D

SPS-6.B

- (A) Describe the data in the table that classifies Delhi as a megacity.

1 point

3.B

Accept one of the following:

- Delhi is classified as a megacity because it has a total population greater than 10 million.
- From 1991 to 2011, Delhi's total population grew to over 10 million.

- (B) Describe a pull factor that has contributed to Delhi's total population change over time.

1 point

2.A

Many people move to Delhi from rural areas and smaller cities....

AND

One of the following reasons:

- in search of employment opportunities
- in the hopes of improving their income or quality of life
- to join family members or friends already living in Delhi
- to have better access to services, health care, or education

- (C) Explain how local housing development has contributed to the change in Delhi's population density, as shown in the data table.

1 point

3.C

Accept one of the following:

- The city's center increases in the size, height, and/or number of large apartment buildings and condominium that attract a growing population of middle-class workers in the country's capital
- Infilling occurs where open space presents an economic opportunity for landowners to build small multi-family housing units, placing more people into existing city blocks
- The government is increasing its provision of public housing in apartment blocks within the city, which provide larger buildings with multi-family housing units.

- (D) Given Delhi's population density, describe a challenge related to urban infrastructure that the city's government is likely to face.

1 point

1.D

Accept one of the following:

- A need for additional public transportation lines and/or added capacity on existing transit systems
- A need for improved sanitation, water supply, waste disposal, or wastewater treatment facilities
- A need for more housing, especially for lower-income residents
- A need for improved communication or electric utility infrastructure
- A need for additional public schools, colleges, universities, and/or libraries.

(E) Explain a challenge to Delhi's local environmental sustainability that is shown in the photograph. **1 point**

Increased number of vehicles on the roadways results in visible air pollution, fog, smog, and/or airborne chemicals that lead to....

4.E

AND

One of the following:

- health problems
- transportation accidents
- diverting potential economic investment in the city

(F) Explain the degree to which India's level of economic development as a country contributes to Delhi's local challenges to environmental sustainability. **1 point**

5.D

Accept one of the following:

- India is a less developed country which has limited government funding to pay for pollution abatement programs (such as alternative fuels) or large investments in public transit.
- India has a growing industrial sector which has limited environmental regulations such as controls on air pollution. Industrial air emissions contribute to the city's air pollution levels.
- India has a large rural population and urban poor population who are dependent on burning wood for home heating and cooking. The smoke increases the city's air pollution levels.
- During the dry season, farmers in northern India will burn the dead vegetation in their fields (following the harvest) to improve soil nutrients. The smoke can increase the city's air pollution levels.
- As India's economy grows, more people can afford to own cars or buy trucks for their businesses. The additional vehicle increases the total amount of air pollution.

(G) Explain a possible solution to the challenge of environmental sustainability that is shown in the photograph. **1 point**

2.C

Accept one of the following:

- Transportation-oriented development of new housing, industrial and retailing areas. Or, laws requiring new developments be constructed with bus lanes, train lines, and stations.
- Vehicle restrictions, high-occupancy requirements, tolls, or congestion pricing to limit the number of vehicles on the roads.
- Smart-growth policies, slow-growth, or zoning policies that restrict the amount of land that can be developed or create a development boundary or greenbelt around the city.
- Alternative electrical energy and/or alternative fuel programs that are cleaner-burning or have zero emissions.
- New Urbanism or mixed land-use developments where workers live, shop, and work within walkable distances.

Total for question 3

7 points

