

THE UNITED STATES ACADEMIC DECATHLON® AND CURRICULUM AND CONTENT STANDARDS

OVERVIEW

The United States Academic Decathlon’s curriculum is an interdisciplinary curriculum in which a selected theme is integrated across six different subject areas: art, economics, literature, music, science, and social science. Students also study mathematics and participate in essay-writing, speech, and interview events. The theme for the 2016–2017 U.S. Academic Decathlon® (USAD) curriculum is *World War II*. While in most subjects the majority of the topics relate to the overall curricular theme, some topics that cover fundamentals may also be included to encourage a thorough understanding of the subject area as a whole. The U.S. Academic Decathlon® mathematics curriculum is unrelated to the theme and focuses on standard high school mathematics topics.

This document provides a summary of the Common Core Standards for high school Mathematics and Reading that are addressed in the U.S. Academic Decathlon’s 2016–2017 curriculum as well as the national content standards met by the U.S. Academic Decathlon 2016–2017 curriculum.

THE UNITED STATES ACADEMIC DECATHLON’S CURRICULUM AND THE COMMON CORE STANDARDS

Standards Background

The Common Core State Standards Initiative is a state-led effort to establish a common set of educational standards for English language arts and mathematics. The standards aim to ensure that students graduating from high school are prepared to attend college or enter the workforce. The Common Core Standards were developed by states and content experts under the guidance of governors and state education chiefs, and, as of May 2016, they have been adopted by forty-two states, the District of Columbia, four territories, and the Department of Defense Education Activity (DoDEA).

The United States Academic Decathlon® and the Common Core Standards for High School Mathematics

The Common Core High School Mathematics Standards consist of six broad categories. The U.S. Academic Decathlon’s 2016–2017 mathematics curriculum addresses, at least in part, five of these six categories: Number and Quantity, Algebra, Functions, Modeling, and Geometry.

Mathematical Practice Standards Addressed

In addition to the content standards, the Common Core High School Mathematics standards emphasize eight practice standards. These standards are meant to address the manner in which students approach and reason during their learning of mathematics. The U.S. Academic Decathlon’s 2016–2017 mathematics curriculum encourages students to apply seven of these eight practice standards:

- *CCSS.Math.Practice.MP1: Make sense of problems and persevere in solving them*
- *CCSS.Math.Practice.MP2: Reason abstractly and quantitatively*
- *CCSS.Math.Practice.MP4: Model with mathematics*
- *CCSS.Math.Practice.MP5: Use appropriate tools strategically*
- *CCSS.Math.Practice.MP6: Attend to precision*
- *CCSS.Math.Practice.MP7: Look for and make use of structure*
- *CCSS.Math.Practice.MP8: Look for and express regularity in repeated reasoning*

The United States Academic Decathlon® and the Common Core Reading Standards for Literature

The U.S. Academic Decathlon’s 2016–17 literature curriculum in concert with other Academic Decathlon® subject areas addresses aspects of all ten of the Common Core College and Career Readiness Anchor Standards for Reading for students in grades K–12:

Key Ideas and Details

- *CCSS.ELA-LITERACY.CCRA.R.1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.*
- *CCSS.ELA-LITERACY.CCRA.R.2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.*
- *CCSS.ELA-LITERACY.CCRA.R.3: Analyze how and why individuals, events, or ideas develop and interact over the course of a text.*

Craft and Structure

- *CCSS.ELA-LITERACY.CCRA.R.4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.*
- *CCSS.ELA-LITERACY.CCRA.R.5: Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.*

- *CCSS.ELA-LITERACY.CCRA.R.6: Assess how point of view or purpose shapes the content and style of a text.*

Integration of Knowledge and Ideas

- *CCSS.ELA-LITERACY.CCRA.R.7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.*
- *CCSS.ELA-LITERACY.CCRA.R.8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.*
- *CCSS.ELA-LITERACY.CCRA.R.9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.*

Range of Reading and Level of Text Complexity

- *CCSS.ELA-LITERACY.CCRA.R.10: Read and comprehend complex literary and informational texts independently and proficiently.*

The U.S. Academic Decathlon’s 2016–17 literature curriculum in concert with other Academic Decathlon® subject areas addresses aspects of all Common Core Reading Standards for Literature for students in grades 9–10.

Key Ideas and Details

- *CCSS.ELA-LITERACY.RL.9-10.1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.*
- *CCSS.ELA-LITERACY.RL.9-10.2: Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.*
- *CCSS.ELA-LITERACY.RL.9-10.3: Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.*

Craft and Structure

- *CCSS.ELA-LITERACY.RL.9-10.4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the*

cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).

- *CCSS.ELA-LITERACY.RL.9-10.5: Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.*
- *CCSS.ELA-LITERACY.RL.9-10.6: Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.*

Integration of Knowledge and Ideas

- *CCSS.ELA-LITERACY.RL.9-10.7: Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment.*
- *CCSS.ELA-LITERACY.RL.9-10.8 is not applicable to literature.*
- *CCSS.ELA-LITERACY.RL.9-10.9: Analyze how an author draws on and transforms source material in a specific work.*

Range of Reading and Level of Text Complexity

- *CCSS.ELA-LITERACY.RL.9-10.10: By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9-10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9-10 text complexity band independently and proficiently. By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9-10 text complexity band independently and proficiently.*

The U.S. Academic Decathlon's 2016–17 literature curriculum in concert with other Academic Decathlon® subject areas addresses aspects of seven Common Core Reading Standards for Literature for students in grades 11–12.

Key Ideas and Details

- *CCSS.ELA-LITERACY.RL.11-12.1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.*
- *CCSS.ELA-LITERACY.RL.11-12.2: Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they*

interact and build on one another to produce a complex account; provide an objective summary of the text.

- *CCSS.ELA-LITERACY.RL.11-12.3: Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama.*

Craft and Structure

- *CCSS.ELA-LITERACY.RL.11-12.4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful.*
- *CCSS.ELA-LITERACY.RL.11-12.5: Analyze how an author's choices concerning how to structure specific parts of a text contribute to its overall structure and meaning as well as its aesthetic impact.*
- *CCSS.ELA-LITERACY.RL.11-12.6: Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).*

Integration of Knowledge and Ideas

Range of Reading and Level of Text Complexity

- *CCSS.ELA-LITERACY.RL.11-12.10: By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11-CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11-CCR text complexity band independently and proficiently. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11-CCR text complexity band independently and proficiently.*

THE UNITED STATES ACADEMIC DECATHLON[®] CURRICULUM AND NATIONAL CONTENT STANDARDS

The U.S. Academic Decathlon's 2016–2017 curriculum addresses aspects of the following:

- *All twenty of the Voluntary National Content Standards in Economics*
- *Eleven of the twelve Curriculum and Content Area Standards for English Language Arts developed by the International Reading Association (IRA) and the National Council of Teachers of English (NCTE)*

- *Four of five content areas of the high school mathematics curriculum delineated by the National Council of Teachers of Mathematics (NCTM) and provides students with opportunities to utilize all four reasoning habits delineated by the NCTM*
- *Four of the nine National Content Standards for Music*
- *Five of the six National Content Standards for Visual Arts*
- *Nine of twelve physical science Disciplinary Core Ideas for Grades 9–12 as outlined by the Next Generation Science Standards*
- *Three of the ten historical eras of focus delineated by the National Content Standards for U.S. History and two of the nine historical eras of focus delineated by the National Content Standards for World History*

Economics

Standards Background

The National Council on Economic Education (NCEE), in partnership with the National Association of Economic Educators and the Foundation for Teaching Economics, has outlined a set of curriculum standards based on the essential principles of economics. This document, titled Voluntary National Content Standards in Economics, includes twenty content standards, each of which were developed by a panel of economists and economic educators.

United States Academic Decathlon[®] and the Voluntary National Content Standards in Economics

The U.S. Academic Decathlon’s 2016–2017 economics curriculum addresses all twenty of the NCEE’s Voluntary National Content Standards in Economics:

STANDARD 1: Scarcity

STANDARD 2: Marginal Cost/Benefit

STANDARD 3: Allocation of Goods and Services

STANDARD 4: Role of Incentives

STANDARD 5: Gain from Trade

STANDARD 6: Specialization and Trade

STANDARD 7: Markets – Price and Quantity Determination

STANDARD 8: Role of Price in Market System

STANDARD 9: Role of Competition

STANDARD 10: Role of Economic Institutions

STANDARD 11: Role of Money

STANDARD 12: Role of Interest Rates

STANDARD 13: Role of Resources in Determining Income

STANDARD 14: Profit and the Entrepreneur

STANDARD 15: Growth

STANDARD 16: Role of Government

STANDARD 17: Using Cost/Benefit Analysis to Evaluate Government Programs
STANDARD 18: Macroeconomy-Income/Employment, Prices
STANDARD 19: Unemployment and Inflation
STANDARD 20: Monetary and Fiscal Policy

English Language Arts

Standards Background

The Standards for English Language Arts were developed by the International Reading Association (IRA) and the National Council of Teachers of English (NCTE). The book of standards published by the IRA and NCTE, *Standards for the English Language Arts*, presents a vision of literacy education that encompasses the use of print, oral, and visual language and addresses six interrelated English language arts: reading, writing, speaking, listening, viewing, and visually representing. *Standards for the English Language Arts* presents twelve Curriculum and Content Area Standards for English Language Arts.

United States Academic Decathlon® and the Standards for the English Language Arts

The U.S. Academic Decathlon's literature curriculum as well as the U.S. Academic Decathlon's essay, speech, and interview events meet eleven of the twelve Curriculum and Content Area Standards for English Language Arts. The only standard not directly met (*STANDARD 10: students whose first language is not English make use of their first language to develop competency in the English language arts and to develop understanding of content across the curriculum*) can easily be incorporated as a part of the U.S. Academic Decathlon® curriculum by having students use their first language as needed while preparing for the Academic Decathlon®.

The U.S. Academic Decathlon's 2016–2017 literature curriculum as well as the U.S. Academic Decathlon® essay and speech events address aspects of the following Curriculum and Content Area Standards for English Language Arts:

STANDARD 1: Students read a wide range of print and nonprint texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

STANDARD 2: Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (e.g., philosophical, ethical, and aesthetic) of human experience.

STANDARD 3: Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their

word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, and graphics).

STANDARD 4: Students adjust their use of spoken, written, and visual language (e.g., conventions, style, and vocabulary) to communicate effectively with a variety of audiences and for different purposes.

STANDARD 5: Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

STANDARD 6: Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.

STANDARD 7: Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, and people) to communicate their discoveries in ways that suit their purpose and audience.

STANDARD 8: Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, and video) to gather and synthesize information and to create and communicate knowledge.

STANDARD 9: Students develop an understanding of and respect for diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.

STANDARD 11: Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

STANDARD 12: Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion, and the exchange of information).

Mathematics

Standards Background

In 2009, the National Council of Teachers of Mathematics (NCTM) published *Focus in High School Mathematics: Reasoning and Sense Making*, a document which proposes curricular emphases that make reasoning and sense-making foundational to high school mathematics content and teaching. *Focus in High School Mathematics: Reasoning and Sense Making* organizes reasoning habits into four broad categories:

- *Analyzing a problem*

- *Implementing a strategy*
- *Seeking and using connections*
- *Reflecting on a solution*

The Academic Decathlon’s 2016–2017 mathematics curriculum provides students with ample opportunities to apply all of these four reasoning habits.

In addition, *Focus in High School Mathematics* highlights reasoning opportunities in five specific content areas, and the Academic Decathlon’s 2016–2017 mathematics curriculum provides students with reasoning opportunities in four of these five content areas:

- *Reasoning with Numbers and Measurements*
- *Reasoning with Algebraic Symbols*
- *Reasoning with Functions*
- *Reasoning with Geometry*

Music and Visual Arts

Standards Background

The National Standards for Arts Education were developed by the Consortium of National Arts Education Associations (under the guidance of the National Committee for Standards in the Arts). The standards outline basic arts learning outcomes integral to the comprehensive K-12 education of every American student. The National Standards for Arts Education are organized into four disciplines: Dance, Music, Theatre, and Visual Arts.

United States Academic Decathlon® and the National Standards for Music

The U.S. Academic Decathlon’s curriculum allows students and teachers to address four of the nine content standards for music. The five standards that are not met all involve the performance, composition, or notation of music. The U.S. Academic Decathlon’s music curriculum is centered on musicology (as opposed to composition or performance) and is designed to be accessible to all students, including those who cannot read musical notation and those who have no formal training in musical performance.

The U.S. Academic Decathlon’s 2016–2017 music curriculum addresses aspects of the following national content standards for music:

STANDARD 6: Listening to, Analyzing, and Describing Music

STANDARD 7: Evaluating Music and Music Performances

STANDARD 8: Understanding Relationships between Music, the Other Arts, and Disciplines outside the Arts

STANDARD 9: Understanding Music in Relation to History and Culture

United States Academic Decathlon® and the National Standards for Visual Arts

The U.S. Academic Decathlon’s curriculum allows students and teachers to address five of the six content standards for visual arts. The only standard not directly met by the U.S. Academic Decathlon® curriculum (Standard 1: Understanding and Applying Media Techniques and Processes), can easily be incorporated as a part of the U.S. Academic Decathlon® curriculum by having students create their own works of art in addition to studying the works of others.

The U.S. Academic Decathlon’s 2016–2017 art curriculum addresses aspects of the following national content standards for visual arts:

STANDARD 2: Using Knowledge of Structures and Functions

STANDARD 3: Choosing and Evaluating a Range of Subject Matter, Symbols, and Ideas

STANDARD 4: Understanding the Visual Arts in Relation to History and Cultures

STANDARD 5: Reflecting Upon and Assessing the Characteristics and Merits of their Work and the Work of Others

STANDARD 6: Making Connections between Visual Arts and Other Disciplines

Science

Standards Background

The *Next Generation Science Standards* were developed by the National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve (an independent, bipartisan, non-profit education reform organization) and were released for adoption in the spring of 2013. Each of the *Next Generation Science Standards* is comprised of three dimensions: Practices, Crosscutting Concepts, and Disciplinary Core Ideas.

The focus of this document will be on the dimension of Disciplinary Core Ideas. Rather than cover a broad spectrum of topics and scientific fields of study, the U.S. Academic Decathlon’s science curriculum explores a specific topic in greater depth than is typical for a high school-level curriculum. As a result, the number of the *Next Generation Science Standards* that are addressed each year by the U.S. Academic Decathlon’s science curriculum may be limited; however, when viewed over the course of several years, Academic Decathlon® science curricula have met many of the standards.

United States Academic Decathlon® and the Next Generation Science Standards

The *Next Generation Science Standards* delineate four main domains for Disciplinary Core Ideas: 1) earth and space science, 2) life science, 3) physical sciences, and 4) engineering, technology, and applications of science. The U.S. Academic Decathlon’s

2016–2017 science curriculum addresses aspects of nine of twelve physical science Disciplinary Core Ideas for Grades 9–12:

- *PS1.A: Structure of Matter (Includes PS1.C Nuclear Processes)*
- *PS1.B: Chemical Reactions*
- *PS2.C: Stability and Instability in Physical Systems*
- *PS3.A: Definitions of Energy*
- *PS3.B: Conservation of Energy and Energy Transfer*
- *PS3.C: Relationship between Energy and Forces*
- *PS3.D: Energy in Chemical Processes and Everyday Life*
- *PS4.A: Wave Properties*
- *PS4.B: Electromagnetic Radiation*

Social Science

Standards Background

The Curriculum Standards for Social Studies were developed by a Task Force of the National Council for the Social Studies (NCSS) and approved by the NCSS Board of Directors in April 1994 and revised in 2010. The NCSS standards focus on ten overarching themes, and the content standards include aspects of several different fields of study, including civics, geography, U.S. history, and world history.

The United States Academic Decathlon® and the Curriculum Standards for Social Studies

Rather than cover a broad spectrum of topics, time periods, and cultures, the U.S. Academic Decathlon’s social science curriculum explores a specific topic in greater depth than is typical for a high school-level curriculum. As a result, the number of the NCSS standards that are addressed each year by the U.S. Academic Decathlon® social science curriculum may be limited; however, when viewed over the course of several years, Academic Decathlon® social science curricula have met many of the NCSS standards.

The U.S. Academic Decathlon’s 2016–2017 curriculum addresses aspects of the standards within the following eras of focus delineated by the NCSS standards for United States History and World History for Grades 5–12:

- *U.S. HISTORY: NSS-USH.5-12.7 – Era 7: The Emergence of Modern America (1890–1930)*
- *U.S. HISTORY: NSS-USH.5-12.8 – Era 8: The Great Depression and World War II (1929–1945)*
- *U.S. HISTORY: NSS-USH.5-12.9 – Era 9: Postwar United States (1945 to Early 1970s)*
- *WORLD HISTORY: NSS-WH.5-12.8 – ERA 8: A Half-Century of Crisis and Achievement, 1900–1945*

- *WORLD HISTORY: NSS-WH.5-12.9 – ERA 9: The Twentieth Century Since 1945: Promises and Paradoxes*

Source List

- Common Core State Standards Initiative. 6 May 2014 <<http://www.corestandards.org/>>.
- “Focus in High School Mathematics: Reasoning and Sense Making.” National Council of Teachers of Mathematics. 6 May 2014 <<http://www.nctm.org/standards/content.aspx?id=23749> >.
- “K–12 Standards.” National Council on Economic Education. 21 May 2013 <<http://www.ncee.net/ea/standards/>>.
- “National Curriculum Standards for Social Studies.” National Council for the Social Studies. 6 May 2014 <<http://www.socialstudies.org/standards>>.
- “Next Generation Science Standards: For States, By States.” 6 May 2014 <<http://www.nextgenscience.org/>>.
- “Next Generation Science Standards.” National Science Teachers Association. 21 May 2013 <<http://www.nsta.org/about/standardsupdate/>>.
- “Standards for the English Language Arts.” The National Council of Teachers of English. 9 May 2013 <<http://www.ncte.org/standards/ncte-ira> >.
- “Standards for the Performing and Visual Arts for Grades 9-12.” The Kennedy Center: ArtsEdge. 21 May 2013 <<http://artsedge.kennedy-center.org/educators/standards/full-text/9-12-standards.aspx>>.