

A Guide for Parents and Families About What Your **ELEVENTH GRADER** Should Be Learning In School This Year



This guide shares important information about the South Carolina Academic Standards. These standards outline state requirements for your child's learning program and what students across the state should be able to do in certain subjects.

A good educational system provides many tools that help children learn. Academic standards are useful for making sure:

- teachers know what is to be taught;
- children know what is to be learned; and
- parents and the public can determine how well the concepts are being learned.

The following pages provide information about the South Carolina Academic Standards for mathematics, English language arts, science and social studies for **Eleventh Grade**. The information can help you become familiar with what your child is learning at school and may include activities to reinforce and support your child's learning, selected book titles for additional reading, and Web site addresses for extended learning. Because sites change, please preview before students begin work. This version does not include every standard taught in **Eleventh Grade**. The complete South Carolina Academic Standards for each subject area can be found at www.ed.sc.gov.

Sample and release assessment questions for the High School Assessment Program (HSAP) and End-of-Course Tests can be found at www.eoc.sc.gov/informationforeducators/TestItems.htm.

South Carolina Academic Standards

Here are seven key reasons parents should be in the know about the academic standards:

1. Standards set clear, high expectations for student achievement. Standards tell what students need to do in order to progress through school on grade level.
2. Standards guide efforts to measure student achievement. Results of tests (PASS) on grade-level academic standards and end-of-course examinations show if students have learned and teachers have taught for mastery.
3. Standards promote educational equity for all. Instruction in every school in the state will be based on the same academic standards.

4. Standards help parents determine if children in South Carolina are taught the same subject content as children across the nation. South Carolina Academic Standards have been compared with and matched to national standards as well as standards of other states to make sure that they are challenging.
5. Standards inform parents about the academic expectations for their child. Standards give parents more specific information for helping their child at home. Parents no longer have to guess the type of help their child needs to do better in school.
6. Standards enable parents to participate more actively in parent/teacher conferences. Knowledge of the academic standards helps parents understand more about what their child is learning and what they can do at each grade level. Parents are able to have conversations with teachers about student progress in specific areas and understand more completely the progress of their child.
7. Standards help parents see how the current grade level expectations are related to successive years' expectations. Parents are able to see how their child's knowledge is growing from one year to the next.

WEB RESOURCES

South Carolina Department of Education (SCDE):
www.ed.sc.gov

South Carolina Education Oversight Committee (EOC):
www.eoc.sc.gov

South Carolina Education Television (SCETV):
www.knowitall.org

Sample and Release HSAP and End-of-Course Test Items:
www.eoc.sc.gov/informationforeducators/TestItems.htm

ENGLISH LANGUAGE ARTS

Students enrolled in grade eleven are generally enrolled in **English 3** or **Communication in the Workplace 3**. Those students who took **English 3** in the tenth grade may be enrolled in **English 4** in grade eleven.

Students should be able to:

Reading

- Make inferences and draw conclusions by comparing and contrasting information within one or more texts
- Evaluate the thesis in informational texts
- Evaluate the impact point of view and figurative language (including, extended metaphor, oxymoron, and paradox) have on a text
- Understand the effects of imagery, flashback, foreshadowing, symbolism, irony, and allusion on tone and meaning
- Evaluate the relationship among character, plot, and theme in texts
- Create responses to reading through writing, drawing, acting, speaking, and media productions
- Read independently for various reasons
- Understand that an author can reveal his/her preference about a subject by including or leaving out relevant information
- Explain how text structures and graphic features are used in nonfiction texts
- Identify propaganda techniques in nonfiction texts
- Use context clues to determine the meaning of unfamiliar words or technical terms
- Use a knowledge of Greek and Latin root words to analyze the meaning of English words

Writing

- Use planning strategies to organize writing such as creating lists, discussing ideas, or by using graphic organizers, models, or outlines
- Use a variety of sentence types to make writing interesting
- Create multi-paragraph writing that has an introduction and conclusion, a clear main idea, and support for ideas such as definitions and descriptions
- Use correct grammar, punctuation, and spelling
- Use editing strategies to improve writing
- Use revision strategies to improve the organization, development, and voice in writing
- Create career-oriented and technical writing (for example, memos, business letters, resumes, technical reports, and information analyses)
- Write essays, memoirs or poems that tell a story and use descriptive language to enhance voice and tone
- Create descriptions for use in other modes of written works such as narrative, expository, or persuasive pieces
- Create persuasive pieces (including, editorials, essays, speeches, or reports) that address a specific audience and use logical arguments supported by facts or expert opinions

Research

- Use direct quotations, paraphrases, or summaries to incorporate information from sources into writing or speaking
- Use a standard method to document sources and properly credit the work of others
- Create written assignments and oral presentations that are designed for a specific audience and purpose
- Select graphics for oral or written presentations from print and electronic sources
- Design and present research projects

Activities

- Discuss an author's use of narrative strategies, such as flashback or allusion, in a book read with your child
- Take your child to a play by an American playwright to understand character, plot, and theme
- Discuss a movie or book with your child and evaluate it for the use of point of view and figurative language
- Have your child compare and contrast movies and plays with books focusing on American Literature
- Provide access to a library where your child can retrieve books
- Encourage your child to research a topic of interest and present the information gathered in a variety of formats including written, oral, or visual presentations
- Read a variety of magazines to judge which one uses illustrations, logos, white space, and headings the best to achieve the greatest impact on the reader
- Attend a lecture with your child where an expert speaks about an issue. Use that information in a persuasive speech or paper about the same topic.
- Discuss how American history and culture have influenced the development of the English language

Books

- Brokaw, Tom. *The Greatest Generation*
- Burns, Olive Ann. *Cold Sassy Tree*
- Cisneros, Sandra. *Woman Hollering Creek and Other Stories*
- Collins, Billy. *Sailing Alone Around the Room*
- Conroy, Pat. *The Lords of Discipline*
- Conroy, Pat. *The Water is Wide*
- Dove, Rita. *On the Bus with Rosa Parks: Poems*
- Faulkner, William. *The Sound and the Fury*
- Korman, Gordon. *Jake Reinvented*
- Mitchell, Margaret. *Gone With the Wind*
- Wright, Richard. *Black Boy*

Web Sites

- United States Department of Education – <http://www2.ed.gov/parents>
- Online Dictionary – <http://www.onelook.com>
- The Write Source – <http://www.thewritesource.com>

MATHEMATICS

The mathematics standards for grades nine through twelve contained in the South Carolina Mathematics Academic Standards 2007 provide the essential content students are expected to learn during their entire high school mathematics career. Academic standards are specified for five high school core areas: elementary algebra, intermediate algebra, geometry, precalculus, and data analysis and probability. Content topics contained in intermediate algebra and geometry are given below. Students in **11th grade** are generally enrolled in **Intermediate Algebra, Geometry, or Mathematics for the Technologies 3**. Since mathematics is taught in specific mathematics courses rather than as an integrated system in most high schools, standards for courses are incorporated into course outlines in the document *Outlines of High School Mathematics Courses* found on the State Department of Education web site <http://www.ed.sc.gov/>. Other courses may be available as well for students in schools on a semester block schedule.

Intermediate Algebra

The academic standards for the intermediate algebra core area establish the process skills and core content for Algebra 2.

The content of the intermediate algebra standards includes:

- Functions
- Systems of equations
- Systems of linear inequalities
- Quadratic equations
- Complex numbers
- Algebraic expressions
- Nonlinear relationships including exponential, logarithmic, radical, polynomial, and rational
- Conic sections
- Sequences and series

Hand-held calculators are required as part of instruction and assessment. Students should use a variety of representations (concrete, numerical, algorithmic, graphical), tools and technologies to model situations to solve meaningful problems.

Geometry

The academic standards for the geometry core area establish the process skills and core content for Geometry and Mathematics for the Technologies 3.

The content of the geometry standards includes:

- Properties of basic geometric figures
- Properties of triangles
- Properties of quadrilaterals and other polygons
- Properties of circles, lines, and special segments intersecting circles
- Transformations
- Coordinate geometry
- Vectors
- Surface area and volume of three-dimensional objects
- Proofs

Students are expected to use technology throughout the course, particularly interactive, dynamic software.

Sample Assessment Questions

Sample questions for Algebra 2, Geometry, and Mathematics for the Technologies 3 are not available at this time.

Activities:

Have your child:

- Construct models of an ellipse. Fasten the ends of a string to a piece of cardboard with thumbtacks. Make sure the string has some slack. Keeping the string taut, draw a curve on the cardboard. Describe the curve traced by the pencil. Repeat the experiment by moving the tacks farther apart or closer together.
- Copy a figure onto a coordinate grid. Use the coordinate grid to translate and dilate the figure. Repeat the exercise by putting the coordinate pairs into a matrix and performing the same translation and dilation. Compare the answers

Books:

- Abbott, Edwin A. *Flatland: A Romance of Many Dimensions*
- Yandell, Benjamin H. *The Honors Class: Hilbert's Problems and Their Solvers*

Web Sites:

- <http://mathforum.org/library/problems/geometry.html>
- www.mathworld.wolfram.com
- <http://illuminations.nctm.org>

SCIENCE

Chemistry

Overview: Students in grade eleven are generally enrolled in **Chemistry**. The standards for chemistry establish scientific inquiry skills and core content for all chemistry courses in South Carolina schools. In Chemistry, students acquire a fundamental knowledge of the substances in our world—their composition, properties, and interactions—that should not only serve them as a foundation for the more advanced science courses in secondary and postsecondary education but should also provide them with the science skills that are necessary in chemistry-oriented technical careers.

The standards addressed in chemistry include:

- Demonstrate an understanding of how scientific inquiry and technological design, including mathematical analysis, can be used appropriately to pose questions, seek answers, and develop solutions
- Demonstrate an understanding of atomic structure and nuclear processes
- Demonstrate an understanding of the structures and classifications of chemical compounds
- Demonstrate an understanding of the types, the causes, and the effects of chemical reactions
- Demonstrate an understanding of the structure and behavior of the different phases of matter
- Demonstrate an understanding of the nature and properties of various types of chemical solutions

Activities:

Have your child:

- Investigate the SC Junior Academy of Science and participate with your child in workshops and activities
- Visit museums, industrial exhibits, and electrical generating plants and discuss the physics observed in everyday life
- Discuss current science events as they appear in the nightly news and in the newspaper
- Visit with your child a local science fair, the Roper Mountain Science Center in Greenville, and a planetarium

Websites:

- Exploratorium— www.exploratorium.edu
- Frank Potter's Science Gems—more than 14000 science resources sorted by category and grade level — www.sciencegems.com
- Center for Improved Engineering and Science Education — <http://www.k12science.org/currichome.html>
- The Particle Adventure, The Fundamentals of Matter and Forces — www.particleadventure.org/
- The Smithsonian Institution — www.si.edu
- What Should I Look For in the Science Program in My Child's School: A Guide for Parents — <http://www.scimathmn.org>

Physics

The standards for Physics establish the scientific inquiry skills and core content for all Physics courses in South Carolina schools. In these courses, students acquire a fundamental knowledge of motion, matter, and energy that should not only serve them as the foundation for their study of science in institutions of higher education but should also provide them with the science skills that are necessary in physics-oriented technical careers.

A total of seven high school core area standards for Physics must be taught: the required standards for physics are standards 1 through 5; any two of standards 6 through 10 are required in addition. The decision about which two of standards 6 through 10 to address in any particular physics course should be based on the objectives for that course. Teachers, schools, and districts should therefore use these standards to make decisions concerning the structure and content of all their courses in physics.

The standards addressed in Physics include:

- Demonstrate an understanding of how scientific inquiry and technological design, including mathematical analysis, can be used appropriately to pose questions, seek answers, and develop solutions
- Demonstrate an understanding of the principles of force and motion and the relationships between them
- Demonstrate an understanding of the conservation, transfer, and transformation of mechanical energy
- Demonstrate an understanding of the properties of electricity and magnetism and the relationships between them
- Demonstrate an understanding of the properties and behaviors of mechanical and electromagnetic waves
- Demonstrate an understanding of the properties and behaviors of sound
- Demonstrate an understanding of the properties and behaviors of light and optics
- Demonstrate an understanding of nuclear physics and modern physics
- Demonstrate an understanding of the principles of fluid mechanics
- Demonstrate an understanding of the principles of thermodynamics



SOCIAL STUDIES

A separate document is available at www.eoc.sc.gov containing Family-Friendly Standards for the required courses of Economics, United States Government, and United States History and the Constitution