

THE BRAIN: UNDERSTANDING NEUROBIOLOGY THROUGH THE STUDY OF ADDICTION		
Georgia Science Performance Standards – Biology and Anatomy & Physiology		
Lesson	Standard	Description
4	SCSh1	Evaluate the importance of curiosity, honesty, openness, and skepticism in science.
1, 2, 3, 4	SCSh1.b	Recognize that different explanations often can be given for the same evidence.
1, 3, 4	SCSh1.c	Explain that further understanding of scientific problems relies on the design and execution of new experiments, which may reinforce or weaken opposing explanations.
3, 4	SCSh2.b	Demonstrate appropriate technique in all laboratory situations.
1, 2, 3, 4	SCSh3	Identify and investigate problems scientifically.
1, 2, 3, 4	SCSh3.a	Suggest reasonable hypotheses for identified problems.
1, 2, 3, 4	SCSh3.b	Develop procedures for solving scientific problems.
All lessons	SCSh3.c	Collect, organize and record data appropriately.
1, 2, 3, 4	SCSh3.d	Graphically compare and analyze data points and/or summary statements.
All lessons	SCSh3.e	Develop reasonable conclusions based on data collected.
1, 2, 3, 4	SCSh3.f	Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.
4	SCSh4.b	Use technology to produce tables and graphs.
3, 4	SCSh4.c	Use technology to develop, test, and revise experimental or mathematical models.
3, 4	SCSh5.d	Express appropriate numbers of significant figures for calculated data, using scientific notation where appropriate.
2, 3, 4	SCSh6.a	Write clear, coherent laboratory reports related to scientific investigations.
All lessons	SCSh6.b	Write clear, coherent accounts of current scientific issues, including possible alternative interpretations of the data.
All lessons	SCSh6.c	Use data as evidence to support scientific arguments and claims in written or oral presentations.
All lessons	SCSh6.d	Participate in group discussions of scientific investigation and current scientific issues.
1, 3, 4, 5	SCSh7.c	From time to time, major shifts occur in the scientific view of how the world works. More often,

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		however, the changes that take place in the body of scientific knowledge are small modifications of prior knowledge. Major shifts in scientific views typically occur after the observation of a new phenomenon or an insightful interpretation of existing data by an individual or research group.
1, 3, 4	SCSh7.d	Hypotheses often cause scientists to develop new experiments that produce additional data.
1, 3, 4, 5	SCSh7.e	Testing, revising, and occasionally rejecting new and old theories never ends.
All lessons	SCSh9.a	Read technical texts related to various subject areas.
All lessons	SCSh9.c	Demonstrate an understanding of contextual vocabulary in various subjects, use content vocabulary in writing and speaking, and explore understanding of new words found in subject area texts.
4	SB4.f	Relate animal adaptations, including behaviors, to the ability to survive stressful environmental conditions.
1, 2, 3	SAP1.a	Apply correct terminology when explaining the orientation of body parts and regions.
3, 4	SAP1.b	Investigate the interdependence of the various body systems to each other and to the body as a whole.
2, 3, 4	SAP1.c	Explain the role of homeostasis and its mechanisms as these relate to the body as a whole and predict the consequences of the failure to maintain homeostasis.
3	SAP1.d	Relate cellular metabolism and transport to homeostasis and cellular reproduction.
2, 3, 4	SAP1.e	Describe how structure and function are related in terms of cell and tissue types.
2, 3, 4	SAP3.b	Investigate the physiology of electrochemical impulses and neural integration and trace the pathway of an impulse, relating biochemical changes involved in the conduction of the impulse.
2, 3, 4	SAP3.c	Describe how the body perceives internal and external stimuli and responds to maintain a stable internal environment, as it relates to biofeedback.
Georgia Mathematics Performance Standards – Mathematics I		
Lesson	Standard	Description
3, 4	MM1D1.a	Apply the addition and multiplication principles of counting.
3, 4	MM1P1.b	Solve problems that arise in mathematics and in other contexts.
3, 4	MM1P1.c	Apply and adapt a variety of appropriate strategies to solve problems.
3, 4	MM1P4.c	Recognize and apply mathematics in contexts outside of mathematics.
3, 4	MM1P5.a	Create and use representations to organize, record, and communicate mathematical ideas.

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3, 4	MM1P5.b	Select, apply, and translate among mathematical representations to solve problems.
2, 3, 4	MM1P5.c	Use representations to model and interpret physical, social, and mathematical phenomena.
Georgia English Language Arts Performance Standards – Grades 9 & 10		
Lesson	Standard	Description
All lessons	ELA9RC1 ELA10RC1	Read both informational and fictional texts in a variety of genres and modes of discourse, including technical texts related to various subject areas.
All lessons	ELA9RC2 ELA10RC2	Participates in discussions related to curricular learning in all subject areas.
All lessons	ELA9RC3.a ELA10RC3.a	Demonstrates an understanding of contextual vocabulary in various subjects.
All lessons	ELA9RC3.b ELA10RC3.b	Uses context vocabulary in writing and speaking.
All lessons	ELA9RC3.c ELA10RC3.c	Explores understanding of new words found in subject area texts.
1, 3, 4, 5	ELA9RC4.a ELA10RC4.a	Explores life experiences related to subject area content.
All lessons	ELA9W1.b ELA10W1.b	Selects a focus, structure, and point of view relevant to the purpose, genre, expectations, audience, length, and format requirements.
All lessons	ELA9W1.f ELA10W1.f	Uses traditional structure for conveying information (i.e., chronological order, cause and effect, similarity and difference, and posing and answering a question).
All lessons	ELA9W1.g ELA10W1.g	Supports statements and claims with anecdotes, descriptions, facts and statistics, and specific tasks.
All lessons	ELA9W2 ELA10W2	Produces technical writing that reports technical information and/or conveys ideas clearly, logically, and purposefully to a particular audience.
3, 4, 5	ELA9W3.b ELA10W3.b	Uses supporting evidence from multiple sources to develop the main ideas within the body of an essay, composition, or technical document.
All lessons	ELA9C1.a ELA10C1.a	Demonstrates an understanding of proper English usage and control of grammar, sentence and paragraph structure, diction, and syntax.

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All lessons	ELA9C1.c ELA10C1.c	Demonstrates an understanding of sentence construction and proper English usage.
All lessons	ELA9C2.b ELA10C2.b	Produces legible work that shows accurate spelling and correct use of the conventions of punctuation and capitalization.
All lessons	ELA9LSV1.a ELA10LSV1.a	Initiates new topics and responds to adult-initiated topics.
All lessons	ELA9LSV1.b ELA10LSV1.b	Asks relevant questions.
All lessons	ELA9LSV1.c ELA10LSV1.c	Responds to questions with appropriate information.
All lessons	ELA9LSV1.d ELA10LSV1.d	Actively solicits another person’s comments or opinions.
All lessons	ELA9LSV1.e ELA10LSV1.e	Offers own opinion forcefully without domineering.
All lessons	ELA9LSV1.f ELA10LSV1.f	Volunteers contributions and responds when directly solicited by teacher or discussion leader.
All lessons	ELA9LSV1.g ELA10LSV1.g	Gives reasons in support of opinions expressed.
2, 3, 4, 5	ELA9LSV1.i ELA10LSV1.i	Employs group decisions-making techniques such as brainstorming or a problem-solving sequence (i.e., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).
All lessons	ELA9LSV2.c	Formulates judgments about ideas under discussion and supports those judgments with convincing evidence.
National Health Education Standards – Grades 9 – 12: cited from pre-publication document of National Health Education Standards, Pre K-12, American Cancer Society, December 2005 – August 2006		
Lesson	Standard	Performance Indicator
4, 5	1.12.1	Predict how healthy behaviors can impact health status.
5	1.12.2	Describe the interrelationships of emotional, intellectual, physical, and social health.
4, 5	1.12.4	Analyze how genetics and family history can impact personal health.

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4, 5	1.12.5	Propose ways to reduce or prevent injuries and health problems.
4, 5	1.12.7	Compare and contrast the benefits and barriers to practicing a variety of healthy behaviors.
4	1.12.8	Analyze personal susceptibility to injury, illness, or death if engaging in unhealthy behaviors.
4	1.12.9	Analyze the potential severity of injury or illness if engaging in unhealthy behaviors.
5	2.12.1	Analyze how family influences the health of individuals.
4, 5	2.12.8	Analyze the influence of personal values and beliefs on individual health practices and behaviors.
4, 5	2.12.9	Analyze how some health risk behaviors can influence the likelihood of engaging in unhealthy behaviors.
4, 5	2.12.10	Analyze how public health policies and government regulations can influence health promotion and disease.
4, 5	3.12.1	Evaluate the validity of health information, products, and services.
5	3.12.4	Determine when professional health services may be required.
5	4.12.1	Utilize skills for communicating effectively with family, peers, and others to enhance health.
4, 5	5.12.1	Examine barriers that can hinder healthy decision-making.
4, 5	5.12.2	Determine the value of applying a thoughtful decision-making process in health related situations.
4, 5	5.12.3	Justify when individual or collaborative decision-making is appropriate.
4, 5	5.12.5	Predict the potential short and long-term impact of each alternative on self and others.
4, 5	5.12.6	Defend the healthy choice when making decisions.
4, 5	5.12.7	Evaluate the effectiveness of health-related decisions.
4, 5	7.12.1	Analyze the role of individual responsibility for enhancing health.
5	7.12.2	Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.
4, 5	7.12.3	Demonstrate a variety of behaviors to avoid or reduce health risks to self and others.
4, 5	8.12.2	Demonstrate how to influence and support others to make positive health choices.
4, 5	8.12.4	Adapt health messages and communication techniques to a specific target audience.