SPORTS NUTRITION 2
Academic Standards & Curriculum Resource

Course Code: 5760

Sports Nutrition 2 is an essential course in advancing the knowledge base of nutritional needs. This course emphasizes the metabolic process and management of food choices for optimal health and physical performance. Students are challenged to develop personal fitness and nutrition plans. Sports Nutrition 1 is a prerequisite for Sports Nutrition 2. Integration of the Family and Consumer Sciences organization, Family, Career and Community Leaders of America (FCCLA), greatly enhances the curriculum.

Recommended grade levels: 9-12

Carnegie Units: 1 unit (120 contact hours)

Prerequisite: Sports Nutrition 1

Sports Nutrition related careers:

High School Education: exercise/sports instructor leader, lifeguard, camp counselor, recreation worker

Postsecondary Education: dietetic assistant, physical therapy aide, activity therapy aide, certified nursing assistant, occupational therapy aide

Postgraduate Education: family and consumer sciences teacher, registered dietitian, athletic trainer, exercise scientist, nurse, health and fitness director, physical therapist, occupational therapist, corporate fitness specialist, coach

Standards Revision Committee:

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Textbooks:

Glencoe/McGraw-Hill

Foundations of Personal Fitness Grades 9-12 Copyright 2005

Glencoe presents a well-designed text that provides a sound approach to wellness. The materials are very well organized and user friendly. The comprehensive text includes nutrition, cardio-respiratory endurance, muscular development and flexibility. Information particularly graphs and charts are based on solid medical evidence. A fitness component that includes nutritional references is attached to each unit. The text recommends a variety of approaches that tap all modalities, which addresses multiple intelligences. Higher order thinking skills are incorporated in lessons throughout the book. The size of the print, color variations and graphics make the text very appealing to students. The supplementary materials are designed to address the needs of all students including special needs populations and ESL. Software is included to enhance teacher productivity in lesson planning and assessment development.

Glencoe/McGraw-Hill

Nutrition and Wellness, 2nd Edition Author: Duyff, Hasler
Student Edition 0078463327 09-12 2004 $39.49
Nutrition and Wellness provides a total teaching package. It includes a broad range of food-related topics, including nutrition and wellness, consumer skills, safety, and food preparation techniques. The short stand-alone chapters feature colorful illustrations with short concise text. The nutrition first, then the preparation format of the book, lends itself to easy transition from one semester to the next. The teacher's resource binder contains detailed lesson plans, cooperative learning activities, meal planning and menu activities, handout masters, and transparencies.

Goodheart-Willcox Company

Nutrition, Food, and Fitness Author: West
Student Edition 1566379334 09-12 2004 $39.00
Nutrition, Food and Fitness is a comprehensive textbook that emphasizes the importance of healthful eating and regular physical activity. The text includes weight management, eating disorders, and global hunger in addition to consumer issues and careers.

http://www.mysctextbooks.com/

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A. Academics

English Language Arts
A1. The student will read and comprehend a variety of literary text in print and non-print format.
A2. The student will read and comprehend a variety of informational texts in print and non-print.
A3 The student will use word analysis and vocabulary strategies to read fluently.
A4. The student will create written work that has a clear focus, sufficient detail, coherent organization, effective use of voice, and correct use of the conventions of written Standard American English.
A5. The student will write for a variety of purposes and audiences
A6. The student will access and use information from a variety of sources.
Economics
A7. The student will demonstrate an understanding of how scarcity and choice impact the economic activity of individuals, facilities, communities, and nations.
A8. The student will demonstrate and understanding of markets and the role of supply and demand in determining price and resource allocation.
A9. The student will demonstrate an understanding of the sources of income and growth in a free-enterprise economy.
A10. The student will demonstrate an understanding of personal decision making to maximize the net benefits of personal income.
Elementary Algebra
A11. The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Intermediate Algebra
A12. The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
A13. The student will demonstrate through the mathematical processes an understanding of quadratic equations and the complex number system
Geometry
A14. The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Data Analysis
A15. The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Precalculus
A16. The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
A17. The student will demonstrate through the mathematical processes an understanding of the behaviors of polynomial and rational functions.

Course Code: 5760

Physical Science
A18: The student will 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.
A19: The student will demonstrate an understanding of various properties and classifications of matter.
Biology
A20: The student will 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.
A21: The student will demonstrate an understanding of the flow of energy within and between living systems.
Chemistry
A22: The student will 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.
Physical Science
A23: The student will 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.
Physics
A24: The student will 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.
A25: The student will demonstrate an understanding of the conservation, transfer, and transformation of mechanical energy.
Health
A26: Comprehend health promotion and disease prevention concepts.
A27: Access valid health information products and services.
A28: Demonstrate the ability to practice behaviors that enhance and reduce risk.
A29: Analyze the influence of personal beliefs, culture, mass media, technology, and other factors on health.
A30: Use interpersonal communication skills to enhance health.
A31: Use goal setting and decision making skills to enhance health.
A32: The student will analyze the influence of family, peers, culture, media, technology, and other factors on behavior.
A33: The student will demonstrate the ability to use decision-making skills to enhance health.
A34: The student will demonstrate the ability to use goal-setting skills to enhance health.
A35: The student will demonstrate the ability to practice health-enhancing behaviors and to avoid or reduce health risks.

Course Code: 5760

Technology (2007 International Society for Technology in Education-ISTE)
A36. Students demonstrate creative thinking, construct knowledge, and develop innovative products and process using technology.
A37. Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
A38. Students apply digital tools to gather, evaluate, and use information.
A39. Student use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
A40. Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
A41. Students demonstrate a sound understanding of technology concepts, systems and operations.
United States History
A42. The student will demonstrate an understanding of major social, political, and economic developments that took place in the United States during the second half of the nineteenth century.

Course Code: 5760

SPORTS NUTRITION 2 ACADEMIC STANDARDS AND INDICATORS

B. Metabolism of Nutrients

B1. Describe the processes of digestions and metabolism.

1. Explain the Adenosine Triphosphate (ATP) conversion.
2. Apply knowledge of digestion and metabolism when making decisions related to food intake and physical fitness.
3. Explain factors that influence metabolic rate.
4. Summarize the main functions of each nutrient.
5. Identify factors that influence metabolic rates.

C. Physical Performance of Individuals and Athletes

C1. Research the effect of nutrients on physical performance.

1. Develop a physical fitness plan.
2. Explain how exercise can be used to treat health conditions.
3. Describe how nutrition impacts wellness

C2. **Evaluate ergogenic aids.**

1. Evaluate products and information related to sports nutrition, food fads and fallacies, and overall health and wellness.
2. Assess the impact of the media on sports nutrition and wellness.
3. Compare the impact of nutrient supplements to athletic performance.

C3. Explain the therapeutic benefits of nutrition and exercise.

1. Implement individual physical fitness plan.
2. Explain how exercise can be used to treat health conditions.
3. Evaluate various types of exercise (weight-bearing, aerobic, cardio-vascular, flexibility, low-intensity).
4. Describe how nutrition impacts wellness.

C4. **Evaluate the impact of lifestyle choices on physical performance.**

1. Explore trends related to nutrition, exercise, stress management, tobacco, alcohol, and other drugs.
2. Evaluate short- and long-term effects of daily physical activity and healthy eating.
3. Analyze the impact of technology on lifestyle. to nutrition, exercise, stress management, tobacco, alcohol, and other drugs.

Course Code: 5760

D. DIETARY MODIFICATIONS

D1. Analyze the effects of overall individual dietary choices.

1. Create a plan to meet individual nutrition and wellness needs throughout the lifespan.
2. Apply current USDA Dietary Guidelines to plan foods that meet nutritional needs.
3. Prepare healthy foods.
4. Discuss how nutritional wellness and physical activity promote healthy weight.

D2. Analyze dietary modifications.

1. Explain reasons why dietary modifications are necessary.
2. Describe dietary modification needed for different life stages
3. Identify health challenges that require dietary modifications.
4. Analyze the relationship between dietary modifications and alternative medicine.

E. CAREERS

E1. Analyze education and training requirements and opportunities for a variety of career paths related to sports nutrition and wellness.

1. Identify sports nutrition and related careers.
2. Demonstrate employability skills.
3. Develop a career portfolio.

Course Code: 5760

A. ACADEMIC STANDARDS WITH INDICATORS AND COMMON CORE ALIGNMENTS FOR ELA AND MATHEMATICS

English Language Arts
http://ed.sc.gov/agency/programs-services/59/documents/StateBoardApprovedFinalMay14.pdf

A1. Reading: Understanding and Using Literary Texts (SC E1-1)
The student will read and comprehend a variety of literary text in print and non-print format.
Indicator(s):

- Compare/contrast ideas within and across literary text to make inferences.
- Create responses to literary text through a variety of methods.
- Read independently for extended periods of time for pleasure.

Common Core Alignments – Anchor Standards:
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_ELAStandards.pdf
READING STANDARDS – PAGE 35
Key Ideas and Details
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.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Range of Reading and Level of Text Complexity
10. Read and comprehend complex literary and informational texts independently and proficiently.

WRITING STANDARDS – PAGE 41
Text Types and Purposes*
1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

SPEAKING AND LISTENING – PAGE 48
Comprehension and Collaboration
1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

Course Code: 5760

2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

LANGUAGE – PAGE 51

Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

A2. Reading: Understanding And Using Informational Text (SC E1-2)

The student will read and comprehend a variety of informational texts in print and non-print.

Indicator(s):

- Create responses to informational texts through a variety of methods.
- Analyze information from graphic features (charts and graphs) in informational texts.

Common Core Alignments – Anchor Standards:
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_ELAStandards.pdf

READING STANDARDS – PAGE 35

Integration of Knowledge and Ideas

7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.*
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.
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

Course Code: 5760

10. Read and comprehend complex literary and informational texts independently and proficiently.

WRITING STANDARDS

Text Types and Purposes*

1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
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A3 Reading: Building Vocabulary (SC E1-3)

The student will use word analysis and vocabulary strategies to read fluently.

Indicator(s):

- Use context clues to determine the meaning of technical terms and other unfamiliar words.

Common Core Alignments – Anchor Standards:

http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_ELAStandards.pdf

READING STANDARDS – PAGE 35

Course Code: 5760

Craft and Structure

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.

LANGUAGE – PAGE 51

Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

A4. Writing: Developing Written Communications (SC E1-4)

The student will create written work that has a clear focus, sufficient detail, coherent organization, effective use of voice, and correct use of the conventions of written Standard American English.

Indicator(s):

- Organize written works using prewriting techniques, discussions, graphic organizers, models, and outlines.
- Use complete sentences in a variety of types (including simple, compound, complex, and compound-complex).
- Use grammatical conventions of written Standard American English.
- Edit written pieces for correct use of Standard American English including reinforcement of the mechanics previously taught.

Common Core Alignments – Anchor Standards:
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_ELAStandards.pdf

READING STANDARDS – PAGE 35

Craft and Structure

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.

LANGUAGE – PAGE 51

Knowledge of Language

Course Code: 5760

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

A5. Writing: Producing Written Communications In A Variety Of forms (SC E1-5)

The student will write for a variety of purposes and audiences

Indicator:

- Create informational pieces that use language appropriate for the specific audience.
- Create technical pieces that use clear and precise language appropriate for the purpose and audience.

Common Core Alignments – Anchor Standards:
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_ELAStandards.pdf

WRITING STANDARDS – PAGE 41

Text Types and Purposes*

1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

Research to Build and Present Knowledge

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

LANGUAGE – PAGE 51

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

Course Code: 5760

2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

A6. Researching: Applying The Skills Of Inquiry And Oral Communication (SC E1-6)

The student will access and use information from a variety of sources.

Indicator(s):

- Clarify and refine a research topic.
- Use vocabulary including Standard American English that is appropriate for the particular audience or purpose.
- Use a variety of print and electronic reference materials.
- Design and carry out research projects by selecting a topic, constructing inquiry questions, accessing resources, evaluating credibility, and organizing information.

Common Core Alignments – Anchor Standards:

http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_ELAStandards.pdf

WRITING STANDARDS – PAGE 41

Text Types and Purposes*

1. Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Research to Build and Present Knowledge

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

Course Code: 5760

Range of Writing

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

SPEAKING AND LISTENING – PAGE 48

Comprehension and Collaboration

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

LANGUAGE – PAGE 51

Conventions of Standard English

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

Knowledge of Language

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

Vocabulary Acquisition and Use

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Course Code: 5760

SOCIAL STUDIES ACADEMIC STANDARDS
https://ed.sc.gov/agency/se/Instructional-Practices-and-Evaluations/documents/FINALAPPROVEDSSStandardsAugust182011.pdf

Economics

A7. Economics (SC ECON-1)

The student will demonstrate an understanding of how scarcity and choice impact the economic activity of individuals, facilities, communities, and nations.

Indicator(s):

- Illustrate the relationship between scarcity- limited resources and unlimited human wants- and the economic choices made by individuals, families, communities, and nations, including how families must budget their income and expenses.
- Explain the concept of opportunity costs and how individuals, families, communities, and nations make economic decisions on that basis, including analyzing marginal costs and marginal benefits and assessing how their choices may result in trade-offs.

A8. Economics (SC ECON-2)

The student will demonstrate and understanding of markets and the role of supply and demand in determining price and resource allocation.

Indicator(s):

- Explain the law of supply and demand, including the relationships of critical determinants (e.g., consumer income, tastes, and preferences; technology; the price of inputs) and the effects of change on equilibrium, price, and quantity.

A9. Economics (SC ECON-3)

The student will demonstrate an understanding of the sources of income and growth in a free-enterprise economy.

Indicator(s):

- Explain the causes and effects of economic growth, including the relationship between investment in human resources and in real capital, the alleviation of poverty, the increase in standards of living, and the creation of new employment opportunities..

A10. Economics (SC ECON- 4)

The student will demonstrate an understanding of personal decision making to maximize the net benefits of personal income.

Indicator(s)

- Summarize types of personal economic decisions and choices
- Explain influences on personal economic decision making and choices, including the effect of education, career choices, and family obligations on future income; the influence of advertising on consumer choices; the risks and benefits involved in short- and long-term saving and investment strategies; and the effect of taxation and interest rates on household consumption and savings.

Course Code: 5760

MATHEMATICS ACADEMIC STANDARDS
http://ed.sc.gov/agency/programs-services/60/documents/2007_SC_Academic_Standards_for_Mathematics.pdf

Elementary Algebra
A11. Elementary Algebra (SCEA-1)
The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Indicator(s):

- Apply algebraic methods to solve problems in real – world context.
- Communicate a knowledge of algebraic relationships by using mathematical terminology appropriately.
- Judge the reasonableness of mathematical solutions.

Common Core Alignments – MATHEMATICS | HIGH SCHOOL
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_MathStandards.pdf
MATHEMATICS | HIGH SCHOOL—ALGEBRA – PAGE 63
Seeing Structure in Expressions
• Interpret the structure of expressions
• Write expressions in equivalent forms to solve problems
Arithmetic with Polynomials and Rational Expressions
• Perform arithmetic operations on polynomials
• Understand the relationship between zeros and factors of polynomials
• Use polynomial identities to solve problems
• Rewrite rational expressions
Creating Equations
• Create equations that describe numbers or relationships
Reasoning with Equations and Inequalities
• Understand solving equations as a process of reasoning and explain the reasoning
• Solve equations and inequalities in one variable
• Solve systems of equations
• Represent and solve equations and inequalities graphically

Intermediate Algebra
A12. Intermediate Algebra (SC IA-1)
The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Indicator(s):

- Apply algebraic methods to solve problems in real-world contexts.
- Judge the reasonableness of mathematical solutions.
- Communicate a knowledge of algebraic relationships by using mathematical terminology appropriately.
- Demonstrate an understanding of algebraic relationships by using a variety of representations (including verbal, graphic, numerical, and symbolic).

Course Code: 5760

- Understand how algebraic relationships can be represented in concrete models, pictorial models, and diagrams.

Common Core Alignments – MATHEMATICS | HIGH SCHOOL
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_MathStandards.pdf
MATHEMATICS | HIGH SCHOOL—ALGEBRA – PAGE 63
Seeing Structure in Expressions
• Interpret the structure of expressions
• Write expressions in equivalent forms to solve problems
Arithmetic with Polynomials and Rational Expressions
• Perform arithmetic operations on polynomials
• Understand the relationship between zeros and factors of polynomials
• Use polynomial identities to solve problems
• Rewrite rational expressions
Creating Equations
• Create equations that describe numbers or relationships
Reasoning with Equations and Inequalities
• Understand solving equations as a process of reasoning and explain the reasoning
• Solve equations and inequalities in one variable
• Solve systems of equations
• Represent and solve equations and inequalities graphically

A13. Intermediate Algebra (SC IA-3)
The student will demonstrate through the mathematical processes an understanding of quadratic equations and the complex number system
Indicator(s):

- Carry out a procedure to perform operations with complex numbers (including addition, subtraction, multiplication, and division).

Common Core Alignments – MATHEMATICS | HIGH SCHOOL
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_MathStandards.pdf
MATHEMATICS | HIGH SCHOOL—ALGEBRA – PAGE 63
Seeing Structure in Expressions
• Interpret the structure of expressions
• Write expressions in equivalent forms to solve problems
Arithmetic with Polynomials and Rational Expressions
• Perform arithmetic operations on polynomials
• Understand the relationship between zeros and factors of polynomials
• Use polynomial identities to solve problems
• Rewrite rational expressions
Creating Equations
• Create equations that describe numbers or relationships

Course Code: 5760

Reasoning with Equations and Inequalities
- Understand solving equations as a process of reasoning and explain the reasoning
- Solve equations and inequalities in one variable
- Solve systems of equations
- Represent and solve equations and inequalities graphically

Geometry

A14. Geometry (G-1)

The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.

Indicator(s):

- Demonstrate an understanding of how geometry applies to in real-world contexts (including architecture, construction, farming, and astronomy).
- Communicate knowledge of geometric relationships by using mathematical terminology appropriately

Common Core Alignments – MATHEMATICS | HIGH SCHOOL

http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_MathStandards.pdf

MATHEMATICS | HIGH SCHOOL—GEOMETRY – PAGE 75

Congruence
- Experiment with transformations in the plane
- Understand congruence in terms of rigid motions
- Prove geometric theorems
- Make geometric constructions

Similarity, Right Triangles, and Trigonometry
- Understand similarity in terms of similarity transformations
- Prove theorems involving similarity
- Define trigonometric ratios and solve problems involving right triangles
- Apply trigonometry to general triangles

Circles
- Understand and apply theorems about circles
- Find arc lengths and areas of sectors of circles

Expressing Geometric Properties with Equations
- Translate between the geometric description and the equation for a conic section
- Use coordinates to prove simple geometric theorems algebraically

Geometric Measurement and Dimension
- Explain volume formulas and use them to solve problems
- Visualize relationships between two dimensional and three-dimensional objects

Modeling with Geometry
- Apply geometric concepts in modeling situations

Data Analysis

A15. Data Analysis (SC DA-1)

The student will understand and utilize the mathematical processes of problem solving,

Course Code: 5760
reasoning and proof, communication, connections, and representation.
Indicator(s):

- Design and conduct a statistical research project and produce a report that summarizes the findings.
- Apply the principles of probability and statistics to solve problems in real-world contexts.
- Communicate a knowledge of data analysis and probability by using mathematical terminology appropriately.
- Judge the reasonableness of mathematical solutions on the basis of the source of the data, the design of the study, the way the data are displayed, and the way the data are analyzed.
- Compare data sets by using graphs and summary statistics.

Common Core Alignments – MATHEMATICS | HIGH SCHOOL
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_MathStandards.pdf
MATHEMATICS | HIGH SCHOOL—GEOMETRY – PAGE 75
Congruence
• Experiment with transformations in the plane
• Understand congruence in terms of rigid motions
• Prove geometric theorems
• Make geometric constructions
Similarity, Right Triangles, and Trigonometry
• Understand similarity in terms of similarity transformations
• Prove theorems involving similarity
• Define trigonometric ratios and solve problems involving right triangles
• Apply trigonometry to general triangles
Circles
• Understand and apply theorems about circles
• Find arc lengths and areas of sectors of circles
Expressing Geometric Properties with Equations
• Translate between the geometric description and the equation for a conic section
• Use coordinates to prove simple geometric theorems algebraically
Geometric Measurement and Dimension
• Explain volume formulas and use them to solve problems
• Visualize relationships between two dimensional and three-dimensional objects
Modeling with Geometry
• Apply geometric concepts in modeling situations

Precalculus
A16. Precalculus (SC PC-1)
The student will understand and utilize the mathematical processes of problem solving, reasoning and proof, communication, connections, and representation.
Indicator(s):

- Apply algebraic methods to solve problems in real-world contexts.
- Judge the reasonableness of mathematic solutions.

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Common Core Alignments – MATHEMATICS | HIGH SCHOOL
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_MathStandards.pdf

MATHEMATICS | HIGH SCHOOL—NUMBER and QUANTITY – PAGE 59
The Real Number System
• Extend the properties of exponents to rational exponents
• Use properties of rational and irrational numbers.
Quantities
• Reason quantitatively and use units to solve problems
The Complex Number System
• Perform arithmetic operations with complex numbers
• Represent complex numbers and their operations on the complex plane
• Use complex numbers in polynomial identities and equations
Vector and Matrix Quantities
• Represent and model with vector quantities.
• Perform operations on vectors.
• Perform operations on matrices and use matrices in applications.

A17. Precalculus (SC PC-3)
The student will demonstrate through the mathematical processes an understanding of the behaviors of polynomial and rational functions.
Indicator(s):

- Apply algebraic methods to solve problems in real-world contexts.

- Judge the reasonableness of mathematic solutions.

Common Core Alignments – MATHEMATICS | HIGH SCHOOL
http://ed.sc.gov/agency/programs-services/190/documents/CCSSI_MathStandards.pdf
MATHEMATICS | HIGH SCHOOL—NUMBER and QUANTITY – PAGE 59
The Real Number System
• Extend the properties of exponents to rational exponents
• Use properties of rational and irrational numbers.
Quantities
• Reason quantitatively and use units to solve problems
The Complex Number System
• Perform arithmetic operations with complex numbers
• Represent complex numbers and their operations on the complex plane
• Use complex numbers in polynomial identities and equations
Vector and Matrix Quantities
• Represent and model with vector quantities.
• Perform operations on vectors.
• Perform operations on matrices and use matrices in applications.

Course Code: 5760

SCIENCE ACADEMIC STANDARDS

http://ed.sc.gov/agency/se/Instructional-Practices-and-Evaluations/documents/SC_AcademicStandards_and_PerformanceIndicators_forScience2013_EOC_Feb2014.pdf

A18: Scientific Inquiry (SC PS-1)
The student will 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.
Indicator(s):

- Organize and interpret the data by using mathematics, graphs, models, and/or technology.

A19: Chemistry: Structure and Properties of Matter (SC PS-3)
The student will demonstrate an understanding of various properties and classifications of matter.
Indicator(s):

- Explain the effects of temperature on the rate at which a solid dissolves in a liquid.

Biology
A20: Biology (SC B-1)
The student will 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.
Indicator(s):

- Organize and interpret the data from a controlled scientific investigation by using mathematics, graphs, models, and/or technology.
- Evaluate a technological design or product on the basis of designated criteria (including cost, time, and materials).

A21: Biology (SC B-3)
The student will demonstrate an understanding of the flow of energy within and between living systems.
Indicator(s):

- Summarize the functions of proteins, carbohydrates, and fats in the human body.
- Recognize the overall structure of adenosine triphosphate (ATP)—namely, adenine, the sugar ribose, and three phosphate groups—and summarize its function (including the ATP-ADP [adenosine diphosphate] cycle).
- Summarize how the structures of organic molecules (including proteins, carbohydrates, and fats) are related to their relative caloric values.

Chemistry
A22: Scientific Inquiry (SC C-1)
The student will 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.
Indicator(s):

Course Code: 5760

- Organize and interpret the data from a controlled scientific investigation by using mathematics (including formulas, scientific notation, and dimensional analysis), graphs, models, and/or technology.
- Use appropriate laboratory techniques safely and accurately when conducting a scientific investigation.
- Use scientific instruments to record measurement data in appropriate metric units that reflect the precision and accuracy of each particular instrument.
- Evaluate a product on the basis of designated criteria.
- Use appropriate safety procedures when conducting investigations.

Physical Science

A23: Scientific Inquiry (SC PS-1)

The student will 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.

Indicator(s):

- Organize and interpret the data from a controlled scientific investigation by using mathematics (including formulas and dimensional analysis), graphs, models, and/or technology.
- Evaluate a technological design or product on the basis of designated criteria (including cost, time, and materials).

Physics

A24: Scientific Inquiry (SC P-1)

The student will 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.

Indicator(s):

- Use appropriate laboratory apparatuses, technology, and techniques safely and accurately when conducting a scientific investigation.
- Use appropriate safety procedures when conducting investigations.

A25: Scientific Inquiry (SC P-3)

The student will demonstrate an understanding of the conservation, transfer, and transformation of mechanical energy.

Indicator(s):

- Apply energy formulas to determine potential and kinetic energy and explain the transformation from one to the other.
- Apply the law of conservation of energy to the transfer of mechanical energy through work
- Explain, both conceptually and quantitatively, how energy can transfer from one system to another (including work, power, and efficiency).

Course Code: 5760

HIGH SCHOOL ACADEMIC STANDARDS FOR HEALTH AND SAFETY EDUCATION

http://ed.sc.gov/agency/se/Instructional-Practices-and-Evaluations/documents/2009HealthEducationStandards.pdf

Health

A26: Personal Health and Wellness (SC H1-1)

Comprehend health promotion and disease prevention concepts.

Indicator(s):

- Evaluate risk relationships between healthy lifestyle behavior and disease prevention
- Evaluate the risk and benefits of personal health practices.

A27: Personal Health and Wellness (SC H1-2)

Access valid health information products and services.

Indicator(s):

- Evaluate factors that influence personal selection of health products and services.
- Demonstrate the ability to access school and community health services.
- Analyze the cost and accessibility of medical care services.
- Evaluate resources and services that promote a safe and healthy environment.

A28: Personal Health and Wellness (SC H1-3)

Demonstrate the ability to practice behaviors that enhance and reduce risk.

Indicator(s):

- Design and evaluate a health and wellness plan that is adaptable to changing needs.

A29: Personal Health and Wellness (SC H1-4)

Analyze the influence of personal beliefs, culture, mass media, technology, and other factors on health.

Indicator(s):

- Analyze how the environment influences the health of the community.
- Analyze how research, technology, and medical advances influence the prevention and control of health problems.

Course Code: 5760

A30: Personal Health and Wellness (SC H1-5)
Use interpersonal communication skills to enhance health.
Indicator(s):

- Demonstrate refusal and negotiation skills to enhance health and reduce risk.
- Demonstrate effective verbal and non-verbal communication skills to enhance health.

A31: Personal Health and Wellness (SC H1-6)
Use goal setting and decision making skills to enhance health.
Indicator(s):

- Demonstrate the ability to use various strategies when making decisions related to health needs.
- Design, implement, and evaluate a personal plan for lifelong health and wellness.

A32: Health and Safety Education (SC 2)
The student will analyze the influence of family, peers, culture, media, technology, and other factors on behavior.
Indicators:

- Analyze ways that emotions and feelings influence food choices, eating behaviors, and physical activity of individuals.
- Examine ways that media, advertising, and marking practices affect the nutrition and physical activities of individuals
- Examine ways that media messages and marketing techniques **i**nfluence ATOD use.
- Analyze the connection between ATOD use and personal safety (including motor vehicle accidents, violence, and sexual assault)

A33: Health and Safety Education (SC 5)
The student will demonstrate the ability to use decision-making skills to enhance health.
Indicators:

- Examine barriers to healthy decision making
- Analyze the ways that ATOD affects an individual's thinking and decision making and therefore increases the risk of violence and other illegal activities.

A34: Health and Safety Education (SC 6)
The student will demonstrate the ability to use goal-setting skills to enhance health.
Indicators:

- Set a goal to attain the federally recommended levels of physical activity and physical fitness for Americans
- Create a long-term personal health plan that is adaptable to changing health needs based on genetics, family history, and personal health behaviors.

Course Code: 5760

A35: Health and Safety Education (SC 7)
The student will demonstrate the ability to practice health-enhancing behaviors and to avoid or reduce health risks.
Indicators:
- Develop and implement a wellness plan that meets the federal dietary guidelines and the federal physical activity guidelines for Americans
- Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of him- or herself and others.
- Evaluate strategies for dealing with family, peer, and cultural pressure regarding ATOD
- Develop and implement a wellness plan that meets the federal dietary guidelines and the federal physical activity guidelines for Americans.

Technology (2007 International Society for Technology in Education-ISTE)
A36. Creativity and Innovation
Students demonstrate creative thinking, construct knowledge, and develop innovative products and process using technology.
- Apply existing knowledge to generate new ideas, products, or processes.
- Create original works as a means of personal or group expression.
- Use models and simulations to explore complex systems and issues.

A37. Communication and Collaboration
Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- Develop cultural understanding and global awareness by engaging with learners of other cultures.
- Contribute to project teams to produce original works or solve problems.

NETS.S, ONE-PAGE PDF:
http://www.iste.org/standards/nets-for-students/nets-student-standards-2007

A38. Research and Information Fluency
Students apply digital tools to gather, evaluate, and use information.
- Plan strategies to guide inquiry.
- Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- Process data and report results.

Course Code: 5760

A39. Critical Thinking, Problem Solving, and Decision Making

Student use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- Identify and define authentic problems and significant questions for investigation.
- Plan and manage activities to develop a solution or complete a project.
- Collect and analyze data to identify solutions and/or make informed decisions.
- Use multiple processes and diverse perspectives to explore alternative solutions.

A40. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- Advocate and practice safe, legal, and responsible use of information and technology
- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- Exhibit leadership for digital citizenship
- Demonstrate personal responsibility for life long learning.

A41. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems and operations.

- Understand and use technology systems.
- Select and use applications effectively and productively.
- Troubleshoot systems and applications.
- Transfer current knowledge to learning of new technologies.

NETS for Students:
National Educational Technology Standards for Students, Second Edition, ©2007, ISTE® (International Society for Technology in Education), www.iste.org. All rights reserved.

United States History

A42. United States History (USHC-5)

The student will demonstrate an understanding of major social, political, and economic developments that took place in the United States during the second half of the nineteenth century.

Indicator(s):

- Explain the transformation of America from an agrarian to an industrial economy, including the effects of mechanized farming, the role of American farmers in facing economic problems, and the rise of the Populist movement.

SPORTS NUTRITION 2
Academic Standards & Curriculum Resource

Course Code: 5760

A. Metabolism of Nutrients

SC Standard B1. Describe the processes of digestion and metabolism.

FACS Nat'l Standard: 14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.

Academic Alignment: English Language Arts A1, A2, A3, A4, A5 & A6; Elementary Algebra A11; Intermediate Algebra A12; Data Analysis A15; Precalculus A16 & A17; Biology A21; Health A31, A35; Technology A36, A37, A38, & A39

Essential Question(s):
1. What is the connection between your mouth and your muscles?

Indicators:

What Students Should Know:
1. Adenosine Triphosphate (ATP)
2. Digestion and metabolism
3. Basal Metabolic Rate (BMR)
4. Main function of each nutrient group
5. Adenosine Triphosphate (ATP)

What Students Should Be Able to Do:
1. Explain the Adenosine Triphosphate (ATP) conversion.
2. Apply knowledge of digestion and metabolism when making decisions related to food intake and physical fitness.
3. Explain factors that influence metabolic rate.
4. Summarize the main functions of each nutrient.
5. Identify factors that influence metabolic rates.

Course Code: 5760

Learning Strategies:

• Create a graphic organizer of the effects on basal metabolism.

• Research the ATP pathway of nutrient conversion to energy.Chart the ATP pathway conversion.

- Calculate personal BMI and BMR.

• Design a game explaining how food energy is converted to muscle use.

• List sports that function within the anaerobic pathway; list sports that function in the aerobic pathway.

• Prepare a daily meal plan to meet the metabolic requirements for a designated sport. Consider snacks, hydration, and meals for pre-event, during the event, and post event.

• Role-play the effects of energy depletion.

• Make a 3-D model of the digestive system. Explain the digestive process.

• Participate in a Web search to determine the calories in popular restaurant menus.

• Make a hydration frequency chart. Complete the chart for one week and evaluate the results.

• Write a book report using MLA format on selection from David Zinczenko's *Eat This, Not That* series.

FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Families First: Parent Practice

Power of One: A Better You

STAR Events: Illustrated Talk

Student Body: nutrition education; eating disorders education

Course Code: 5760
CIP Code 190101
SPORTS NUTRITION 2 ACADEMIC STANDARDS
Course Code: 5760

B. Metabolism of Nutrients
Resources:
www.onhealth.com (On Health) health resources
www.timeforfitness.com (Time for Fitness) articles, resources and links for fitness
www.walksport.com (WalkSport America) about walking
www.whybiotech.com (Council for Biotechnology Information) funded by biotechnology companies
www.Nutrio.com (Nutrio.com) food analyzer and other nutrition
www.caloriecontrol.org (Calorie Control Council) resources for calorie control**www.oxygen.com/health (Oxygen.com)** calculators such as body mass index calculator and other resources

SPORTS NUTRITION 2
Academic Standards & Curriculum Resource

Course Code: 5760

C. Physical Performance of Individuals and Athletes

SC Standard C1. Research the effect of nutrients on physical performance.

FACS Nat'l Standard: 14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.

Academic Alignment: English A1, A2, A3, A4, A5 & A6; B A20 (Scientific Inquiry); Physical Science A23 (Scientific Inquiry); Chemistry A22 (Scientific Inquiry); Physics A24 (Scientific Inquiry); IA A12; DA A15; Economics A7 & A8; Data Analysis A16; Health A26, A27, A28, A29, A30, & A31; Technology A36, A37, A38, & A39

Essential Question(s):
1. How do my food choices affect my performance?

Indicators:

What Students Should Know:
1. Food choices and performance and energy levels
2. Local, state, and national regulations pertaining to nutrition, wellness, and physical activity
3. Role of nutrition and exercise on sports performance

What Students Should Be Able to Do:
1. Evaluate relationships among food choices, sports, and appropriate energy level to participate in various sports.
2. Analyze legislation and regulations related to nutrition, wellness, and physical activity.
3. Examine harmful effects of poor nutrition and excessive exercise (stress fractures, bone loss, osteoporosis, or amenorrhea).

Learning Strategies:

• Keep daily food journal and evaluate choices relative to energy level.

• Select foods that positively impact performance and energy levels.

• Examine local school wellness policy and Students Health and Fitness Act 2005.

• Compare nutritional value of "fast foods" and home-cooked foods.

• Calculate how much exercise it takes to burn calories of specific food choices (e.g., walking, running, swimming, cycling, skating, weight-lifting).

Course Code: 5760

C. Physical Performance of Individuals and Athletes
Learning Strategies:

• Compare different types of foods on individual performance (alertness, academics, speed, stamina, etc.).

• Develop a presentation focusing on harmful effects of poor nutrition and/or excessive exercise.

• Create a multimedia presentation outlining potential harmful effects of inappropriate exercise or exercise techniques.

FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Families First: Parent Practice

Power of One: A Better You

STAR Events: Illustrated Talk

Student Body: nutrition education; eating disorders education

Resources:
www.timeforfitness.com (Time for Fitness) articles, resources and links for fitness
www.walksport.com (WalkSport America) about walking
www.orst.edu/dept/ehe/nutrition.htm (Nutrition Information from Oregon State University Extension Family and Community Development) resources for teaching nutrition
www.cyberdiet.com (Cyberdiet) with "Daily Food Planer"

Course Code: 5760

C. Physical Performance of Individuals and Athletes

SC Standard C2. Evaluate ergogenic aids.

FACS Nat'l Standard: 14.1 Analyze factors that influence nutrition and wellness practices across the lifespan.

Academic Alignment: English Language Arts A1, A2, A3, A4, A5 & A6; Intermediate Algebra: A12; Data Analysis: A15; Economics: A8; Precalculus A16; Biology A20 (Scientific Inquiry); Health A26, A27, A28, A29, A30, & A31, A32; Technology A36, A37, A38, A39, A40, A41

Essential Question(s):
1. How are ergogenic aids helpful?

Indicators:

What Students Should Know:
1. Ergogenic aids and products
2. Media impact
3. Nutrient supplements

What Students Should Be Able to Do:
1. Evaluate products and information related to sports nutrition, food fads and fallacies, and overall health and wellness.
2. Assess the impact of the media on sports nutrition and wellness.
3. Compare the impact of nutrient supplements to athletic performance.

Course Code: 5760
Learning Strategies:

- Define ergogenic aids.
- Determine fact from myth related to ergogenic aids (food supplements, sports drinks, caffeine pills, steroid replacers, and vitamins).
- Compare cost versus benefit of ergogenic aids.
- Evaluate claims of advertisements for ergogenics using pre-established criteria.
- Compare hydration sources (e.g., water, soda, juice, sports drinks, energy drinks).
- Define and categorize nutrition supplements.
- List, name, and describe the commercials and infomercials that promote ergogenic aids in a given time period.
- Keep a daily fitness and activity log.

Course Code: 5760

C. Physical Performance of Individuals and Athletes
FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Power of One: Family Ties

STAR Events: Applied Technology; Illustrated Talk

Student Body: projects that explore psychological, cultural and social influences related to food choice; food marketing and labeling education

Resources:
www.cfsan.fda.gov/~dms/ds-savvy.html (Center for Food Safety and Applied Nutrition-FDA) "Tips for the Savvy Supplement User"
www.cfsan.fda.gov/~dms/supplmnt.html (Center for Food Safety and Applied Nutrition-FDA): Dietary Supplements
www.cspinet.org (Consumer Science in the Public Interest) nutrition advocacy organization
www.herbalgram.org (Herbalgram) resources from American Botanical Council
www.herbs.org (Herb Research Council) resources about health benefits of herbs

SPORTS NUTRITION 2
Academic Standards & Curriculum Resource

Course Code: 5760

C. Physical Performance of Individuals and Athletes

SC Standard C3. Explain the therapeutic benefits of nutrition and exercise.

FACS Nat'l Standard: 14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span**.**

Academic Alignment: English Language Arts A1, A2, A3, A4, A5 & A6; Intermediate Algebra A12; Data Analysis A15; Biology A20 (Scientific Inquiry); Chemistry A22 (Scientific Inquiry); Physical Science A23 (Scientific Inquiry); Physics A24 (Scientific Inquiry); Health A26, A27, A28, A29, A30, A31, A34, A35; Technology A36, A37, A38, A39

Essential Question(s):
1. Why are eating right and exercising important?

Indicators:

What Students Should Know:
1. Fitness plan
2. Exercise treatments
3. Nutrition and wellness

What Students Should Be Able to Do:
1. Develop a physical fitness plan.
2. Explain how exercise can be used to treat health conditions.
3. Describe how nutrition impacts wellness.

Learning Strategies:

- Create an individual physical fitness plan.
- Determine body composition and record results over time.
- Evaluate various types of exercise (weight-bearing, aerobic, cardio-vascular, flexibility, low-intensity).
- Create a fitness plan that addresses health challenges for those with physical limitations (wheelchair, limited mobility, elderly, asthma, stroke, obesity, orthopedic, accident/injury, amputees, etc.).
- Develop a meal plan that addresses needs of people with chronic diseases.

Course Code: 5760

C. Physical Performance of Individuals and Athletes
FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Families First: Parent Practice

Power of One: A Better You

STAR Events: Illustrated Talk

Student Body: nutrition education; eating disorders education

Resources:
www.eatright.org (American Dietetics Association) resources about nutrition
www.healthyfridge.org (The Healthy Refrigerator) heart healthy food.
www.homebaking.org (Home Baking Association) resources for educators including lesson plans
www.kidseatwell.org (Kids Eat Well-Illinois Nutrition Education and Training Program) downloadable resources for teaching nutrition
www.onhealth.com (On Health) health resources
www.timeforfitness.com (Time for Fitness) articles, resources and links for fitness
www.walksport.com (WalkSport America) about walking

SPORTS NUTRITION 2
Academic Standards & Curriculum Resource

Course Code: 5760

C. Physical Performance of Individuals and Athletes

SC Standard C4. Evaluate the impact of lifestyle choices on physical performance.

FACS Nat'l Standard: 14.3 Evaluate various dietary guidelines in planning to meet nutrition and wellness needs.

Academic Alignment: English Language Arts A1, A2, A3, A4, A5 & A6; Elementary Algebra A11; Intermediate Algebra A12; Geometry A14; Data Analysis A15; Health A26, A27, A28, A29, A30, A31, A32, A33, A34, A35; Technology A36, A37, A38, A39

Essential Question(s):
1. How can lifestyles choices impact physical performance?

Indicators:

What Students Should Know:
1. Lifestyle trends
2. Short- and long-term effects
3. Technology

What Students Should Be Able to Do:
1. Explore lifestyle trends related to nutrition, exercise, stress management, tobacco, alcohol, and other drugs.
2. Evaluate short- and long-term effects of daily physical activity and healthy eating.
3. Analyze the impact of technology on lifestyle.

Learning Strategies:

• Create and complete a personal health assessment.

• Use case studies on long-term impact of lifestyle on health and wellness (include alcohol, tobacco, drug use, and physical activity).

• Write and perform a skit on healthy habits to prevent chronic disease.

• Keep a log on individual screen time (including phone, TV, computer, texting, twitter, facebook, e-mail, movie/video, and YouTube) versus time spent in physical activity.

• Wear a pedometer to measure how many steps you take daily and chart results.

SPORTS NUTRITION 2
Academic Standards & Curriculum Resource

Course Code: 5760

C. Physical Performance of Individuals and Athletes
FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Community Service: nutrition education and services for people with special nutritional needs

Leaders at Work: Food Production and Services leadership projects

Power of One: A Better You

Resources:
www.cyberdiet.com **(Cyberdiet)** with "Daily Food Planer"
www.arborcom.com **(Arbor Nutrition Guide)** resources for applied nutrition, clinical nutrition and food science
www.Nutrio.com **(Nutrio.com)** food analyzer and other nutrition
www.nutrition.about.com **(About Nutrition)** products and information about nutrition
www.Nutritionfocus.com **(Nutrition Focus)** healthy-eating resource with links to several resources
www.kelloggs.com/index.html **(Kellogg's)** with nutrition university, recipes and learning games
www.newcenturynutrition.com **(New Century Nutrition)** nutrition resources with emphasis on Chinese Culture

Course Code: 5760

D. Dietary Planning

SC Standard D1. Analyze the effects of overall individual dietary choices.

FACS Nat'l Standard: 14.3 Evaluate various dietary guidelines in planning to meet nutrition and wellness needs.
Academic Alignment: English Language Arts A1, A2, A3, A4, A5 & A6; Economics A7; Biology A20 (Scientific Inquiry); Chemistry A22 (Scientific Inquiry); Physical Science A23 (Scientific Inquiry); Health A26, A27, A28, A29, A30, A31, A35; Technology A36, A37, A38, A39; A40, A41; United States History A42
Essential Question(s):
1. What might happen to a person who skips meals?

Indicators:

What Students Should Know:
1. Nutrition and wellness plans
2. USDA Dietary Guidelines
3. Healthy food preparation
4. Healthy weight

What Students Should Be Able to Do:
1. Create a plan to meet individual nutrition and wellness needs throughout the lifespan.
2. Apply current USDA Dietary Guidelines to plan foods that meet nutritional needs.
3. Prepare healthy foods.
4. Discuss how nutritional wellness and physical activity promote healthy weight.

Learning Strategies:

- Keep a food and activity log/journal for a given period of time and evaluate the results.
- Plan meals using on-line resources.
- Create personal cookbook of healthy recipes.
- Develop from food labels a chart comparing nutritional values.
- Research historical factors that contribute to nutritional wellness in the United States.

SPORTS NUTRITION 2
Academic Standards & Curriculum Resource

Course Code: 5760
FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Community Service: nutrition education and services for people with special nutritional needs

Leaders at Work: Food Production and Services leadership projects

Power of One: A Better You

Resources:
www.cyberdiet.com **(Cyberdiet)** with "Daily Food Planer"
www.arborcom.com **(Arbor Nutrition Guide)** resources for applied nutrition, clinical nutrition and food science
www.Nutrio.com **(Nutrio.com)** food analyzer and other nutrition
www.nutrition.about.com **(About Nutrition)** products and information about nutrition
www.Nutritionfocus.com **(Nutrition Focus)** healthy-eating resource with links to several resources
www.kelloggs.com/index.html **(Kellogg's)** with nutrition university, recipes and learning games
www.newcenturynutrition.com **(New Century Nutrition)** nutrition resources with emphasis on Chinese Culture

Course Code: 5760

D. Dietary Modifications

SC Standard D2. Analyze dietary modifications for individuals with health challenges.

FACS Nat'l Standard: 14.3 Evaluate various dietary guidelines in planning to meet nutrition and wellness needs.

Academic Alignment: English Language Arts A1, A2, A3, A4, A5 & A6; Economics A8; Elementary Algebra A11; Intermediate Algebra A12; Data Analysis A15; Health A26, A27, A28, A29, A30, A31; Technology A36, A37, A38, A39, A40, A41

Essential Question(s):
1. Why are dietary modifications important for individuals with health challenges?

Indicators:

What Students Should Know:
1. Dietary modifications
2. Life stages
3. Health challenges
4. Alternative medicine

What Students Should Be Able to Do:
1. Explain reasons why dietary modifications are necessary.
2. Describe dietary modifications needed for different life stages
3. Identify health challenges that require dietary modifications.
4. Analyze the relationship between dietary modifications and alternative medicine.

Learning Strategies:

Outline reasons for dietary modifications. Include the reason and an example of the modification.

Research special dietary modifications for different life stages and present findings.

Research health challenges that require dietary modifications. Present information to different audiences.

Conduct a survey to collect information regarding allergies or special dietary needs and graph results.

Discuss various nutritional challenges and the dietary modifications needed.

Explain the relationship between dietary modifications and alternative medicine.

Course Code: 5760
FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Community Service: nutrition education and services for people with special nutritional needs

Leaders at Work: Food Production and Services leadership projects

Power of One: A Better You

Resources:
www.jointogether.org/home (Join Together) resource center for taking action against abuse and gun violence
www.mayohealth.org (Mayo Health Clinic) Mayo Clinic resources
www.modimes.org (March of Dimes) birth defects, healthy baby and other information
www.shapeup.org (Shape Up America) resources for weight management, healthy eating and physical fitness
www.tobaccofreekids.org (Campaign for Tobacco-Free Kids) resources and data
www.women.americanheart.org (Take Wellness to Heart) the American Heart Association's women's Web site
www.cancer.org (Cancer.org) from American Cancer Society; patient resource center
www.diabetes.org (Diabetes Information from American Diabetes Association) resources include timing exercise and eating to lower blood sugar levels and others
www.foodallergy.org (Food Allergy) Food Allergy and Anaphylaxis information
www.nhlbi.nih.gov/chd (National Heart, Lung and Blood Institute) interactive site with resources on how to lower cholesterol

Course Code: 5760

E. Careers

SC Standard E1. Analyze education and training requirements and opportunities for a variety of career paths related to sports nutrition and wellness.

FACS Nat'l Standard: 1.2 Demonstrate transferable and employability skills in school, community and workplace settings.

Academic Alignment: English Language Arts A1, A2, A3, A4, A5 & A6; Economics A9, A10; Elementary Algebra A11; Intermediate Algebra A12, A13; Geometry A14; Data Analysis A15; Technology A36, A37, A38, A39; A40, A41

Essential Question(s):
1. Why is education and training important?

Indicators:

What Students Should Know:	What Students Should Be Able to Do:
1. Sports Nutrition careers	1. Identify sports nutrition and related careers.
2. Employability skills	2. Demonstrate employability skills.
3. Career portfolio development	3. Develop a career portfolio.

Learning Strategies:

- Research and discuss sports nutrition and related careers. Select a career of interest and present findings.
- Create a sports nutrition careers brochure.
- Create a resume. Organize a list of references and network of employers.
- Develop an employability skills checklist. Conduct weekly employability skills peer evaluations.
- Complete a job application.
- Compile a career portfolio.
- Evaluate interviewing skills.
- Develop a portfolio for use in job search.
- Design a bulletin board displaying sports nutrition career choices including salaries.

Course Code: 5760

FACS Student Organization:

APPLICATION/ASSESSMENT THROUGH FCCLA

Career Connection: leadership and planning in career-related projects; PLUG IN to Careers; SIGN ON to the Career Connection; INTEGRATE Work and Life; LINK UP to Jobs; ACCESS SKILLS for Career Success

Community Service: leadership and planning in service projects

Dynamic Leadership: Character for Leaders; Problem Solving for Leaders; Relationships for Leaders; Conflict Management for Leaders; Team Building for Leaders; Peer Education for Leaders

Families First: leadership and planning in family-related projects; Balancing Family and Career; You-Me-Us

FCCLA FACTS: leadership and planning in traffic safety projects

Financial Fitness: leadership and planning in money management projects; Consumer Clout; Making Money

Fundraising: demonstration of work ethics and professionalism

Leaders at Work: planning and self-direction of on-the-job leadership projects

Power of One: Take the Lead; Working on Working

STAR Events: Applied Technology; Career Investigation, Chapter Service Project, Early Childhood, Focus on Children, Hospitality, Job Interview, National Programs in Action, Parliamentary Procedures, Promote and Publicize FCCLA!, Recycle and Redesign, Teach and Train

STOP the Violence: projects to promote youth violence prevention in work and community environments

Student Body: leadership and planning in nutrition, fitness and self-esteem projects

Resources:
www.ahcpr.gov/ (Agency for Health Care Policy and Research)
consumer health information, practice guidelines, data and news on health policy and research
www.nih.gov (National Institutes of Health) research information and information about institutes at NIH