COURSE TITLE: Sports Nutrition

Course Description:

Sports Nutrition is designed for students interested in health, fitness, and sports performance. This course examines the relationships among nutrition, physical performance, and overall wellness and emphasizes the metabolic process and management of food choices for optimal health and physical performance. Disease prevention and health through nutrition, physical activity, and wellness practices are essential components of the course. This course must be taught in a fully-equipped, residential-style kitchen.

Potential Certifications/Credentials:

ASK Institute – Concepts of Business Management / ASK Institute – Concepts of Entrepreneurship / Certified Guest Service Professional / Food and Beverage – Skills for Success / ServSafe Food Handler / ServSafe Manager

Course Scope and Sequence

Topic #	Topic Title	Estimated Hours
1	Foundational Standards	20
2	Nutrition and Wellness Practices	20
3	Nutritional and Dietary Needs of Athletes	30
4	Impact of Health and Wellness on Fitness	5
5	Components of Fitness	30
6	Nutrition and Fitness Program Planning	35

Plans of Instruction

Foundational Standards

Supporting–will be taught throughout the course as needed for the unit.

F1. Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces.

F2. Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.

F3. Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-seeking skills including resume-writing and interviewing.

F4. Advocate and practice safe, legal, responsible, and ethical use of information and technology tools specific to the industry pathway.

F5. Participate in a Career and Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork.

Topic 2 Title: Nutritional and Wellness Practices

Content Standards

1. Explain the impact of genetics, gender, age, nutrition, exercise, and fitness on an athlete's performance.
2. Research nutrition and physical activity needed for desired performance results and create a plan to achieve the results in a given scenario.
   Examples: off-season training, training season, endurance training, strength training
3. Determine the essentials of a healthy diet for an athlete in a given sport, including macro and micro nutrient breakdown.

Unpacked Learning Objectives

Students know:
- An athlete's performance is impacted by genetics, gender, age, nutrition, exercise, and fitness.
- How to research information about nutritional and physical activity needed to suggest desired performance results.
- The essentials of a healthy diet for an athlete in a given sport, including macro and micro nutrient breakdown.

Students are able to:
- Explain the impact of genetics, gender, age, nutrition, exercise and fitness on an athlete's performance.
- Research nutritional foods and physical activities needed for desired performance results.
- Create a plan for an individual to achieve the desired results that are presented in a selected scenario.
- Determine the essentials of a healthy diet for an athlete in a given sport.

Students understand:
- That an individual's physical traits impact athletic performance.
- That different nutritional habits and physical activities are needed for desired performance results.
- The essentials of a healthy diet for an athlete.

Driving/Essential Question	How is an athlete's performance impacted by personal traits, nutrition, and fitness? How does nutrition, diet, and physical activity help an athlete meet their goals?
Exemplar High Quality Task	Students create a nutrition and fitness plan that yields an athlete's desired performance results.

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Explain the impact of genetics, gender, age, nutrition, exercise, and fitness has on an athlete's performance.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. **Summative:** Case Study FCCLA STAR Event: Sports Nutrition	Students can take notes on a graphic organizer or guided notes while listening to a lecture or reading. Students can read an article or textbook and take notes on a graphic organizer. Students can work in groups. Assign each group a topic (genetics, gender, age, nutrition, exercise, and fitness). Provide reading (article or text) students read about their assigned topic and make notes about their topic on their poster. Students can share out to class so that all students have	**ELA**: Write an expository paragraph ranking the impact of genetics, gender, age, nutrition, exercise, and fitness in order of greatest to least impact on athletic performance. **Social Studies:** Research various olympic or professional athletes and their gender, age, nutrition, exercise, and fitness. Create a presentation on each athlete. **Science:** Students investigate how nutrition, age, genetic factors, and fitness affect the performance of an athlete. **Math:** Math Activity 1: Analyzing the Impact of	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer https://fcclainc.org/sites/default/files/Sports%20Nutrition.pdf

		information about each topic. Write a case study about an athlete. The students will read the case study and answer questions about how genetics, gender, age, nutrition, exercise, and fitness impact the athlete's performance in the case study. Students should reference their notes and readings in their findings. FCCLA STAR Event: Sports Nutrition	Nutrition and Exercise on Athletic Performance **Math:** Math Activity 2: Evaluating the Impact of Genetics, Gender, and Age on Athletic Performance	
Research nutrition and physical activity needs for performance results and create a plan based on a given scenario.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. Research library resources or texts and report findings. **Summative:** Create a plan that meets an athlete's performance goals. FCCLA STAR Event: Sports Nutrition	take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. Students utilize library resources to find information about nutrition and physical activity needs of athletes. Students utilize the Internet to find examples of performance/training plans and performance/training templates. Students create a plan for an athlete given a	**ELA**: Identify two opposing views regarding nutritional and/or training needs of a particular type of athlete; present the opposing views in a comparison/contrast paragraph. **Social Studies:** Create a meal plan for an olympic athlete from different years. Explain the thought process behind the nutrition for peak performance. **Science:** Research and analyze the different	Computer, printer, monitor or projector Library resources Research articles guided notes sheet graphic organizer

		scenario. Plan includes physical activity and nutritional needs based on the scenario. Students use online templates or templates provided by the teacher. FCCLA STAR Event: Sports Nutrition	nutritional needs of an athlete. **Math:** Math Activity 1: Researching and Analyzing Nutrition Needs for Performance Results **Math:** Math Activity 2: Researching and Planning Physical Activity Needs for Performance Results	
Identify the essentials of a healthy diet for an athlete in a given sport. Identify the macro and micro nutrient breakdown of a healthy diet for an athlete in a given sport.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. Jigsaw with assigned reading. Matching activity Diet analysis software practice. Guest speaker **Summative:** Diet analysis software report review. FCCLA STAR Event: Sports Nutrition	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. Assign reading and provide a graphic organizer. Students use the jigsaw method to read, take notes, and share their notes with others. Students use diet analysis software on the Internet. Input information about an athlete and their diet and identify the macro and micro nutrients. Have a sports nutritionist come to the class and talk about diet needs of athletes.	**ELA**: Write a journal reflection predicting how an athlete's performance could be expected to improve based on adjustments to critical macronutrients. **Science:** Students research and analyze the different nutritional needs of an athlete. **Social Studies:** Research diets for various professional athletes from a single sport. Analyze how the diet changes related to region. **Math:** Math Activity 1: Identifying the Essentials of a Healthy Diet for an Athlete in a Given Sport	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer Diet analysis report of an athlete Diet analysis software https://www.gssiweb.org/toolbox/dietaryanalysis/profile

		Review a diet analysis report for an athlete. Identify the micro nutrients, macronutrients, and components of a healthy diet. FCCLA STAR Event: Sports Nutrition	**Math:** Math Activity 2: Identifying the Macro and Micro Nutrient Breakdown of a Healthy Diet for an Athlete in a Given Sport	

Key Vocabulary

genetics, gender, age, nutrition, exercise, fitness, athlete performance, nutrition, physical activity, performance results, healthy diet, athlete, marco nutrients, micro nutrients

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Simulating nutrition and fitness planning based on a case study or given scenario.

CTSO Connection:

FCCLA STAR Event: Sports Nutrition

Certification/Credential Connection:

ServSafe Food Handler; ServSafe Manager

Topic 3 Title: Nutritional and Dietary Needs of Athletes

Content Standards

4. Evaluate food choices and their impacts on sports performance and energy level.
   Examples: weight management strategies, post-performance recovery

5. Explain the importance of hydration for an athlete's performance.

6. Prepare nutritious foods for a healthy athlete based on the requirements of specific sports.

7. Demonstrate safety and sanitation procedures when receiving, storing, handling, preparing, and serving food.

Unpacked Learning Objectives

Students know:.

- How to evaluate food choices for their impacts on sport performance and energy level.
- The importance of hydration for an athlete's performance.
- How to prepare nutritious foods for a healthy athlete based on the requirements of a specific sport.
- The safety and sanitation procedures to follow when receiving, storing, handling, preparing, and serving food.

Students are able to:

- Evaluate food choices and their impact on sports performance and energy level.
- To explain the importance of hydration for an athlete's performance.
- Prepare nutritious foods for a healthy athlete based on the requirements of a specific sport.
- Demonstrate safety and sanitation procedures throughout the flow of food.

Students understand:

- That food choices will impact a person's sports performance and energy level.
- The importance of hydration for an athlete's performance.
- Food preparation techniques for nutritious foods for healthy athletes.
- Safety and sanitation procedures to follow when receiving, storing, handling, preparing, and serving food.

Driving/Essential Question	How do food choices impact athletes? Why is hydration important? What safety and sanitation practices are needed when planning for and preparing healthy foods for athletes?

Exemplar High Quality Task	Collaborate with athletic coach to develop and prepare nutritious options for an athlete based on the requirements of a specific sport on game day

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Evaluate food choices and the impact it has on sports performance and energy level.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. Turn-and-Talk Case Study **Summative:** 3-2-1	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. Students turn-and-talk to one or two other students. Share their conclusions with the class. Students review a case study and evaluate food choices. Discuss impacts of food choices on energy levels. There are many ways to do a 3-2-1. For example: 3 food choices that provide energy; 2 food choices that negatively impact energy; 1 food that positively impacts sports performance.	**ELA**: Create a flowchart identifying the positive and negative impact of particular food choices on athletic performance. **Science:** Students evaluate how different foods affect the body's ability to produce ATP energy. **Social Studies:** Research various level athletes and the nutrition plans they follow- including high school and JuCO athletes. Create a poster with the best nutrition plan for an athlete according to performance levels. **Math:** Math Activity 1: Evaluating the Impact of	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer Case studies

			Different Food Choices on Sports Performance **Math:** Math Activity 2: Analyzing the Impact of Pre-Game and Post-Game Meals on Energy Levels	
Explain the importance of hydration on an athlete's performance.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. Hydration chart **Summative:** News Headline/Story FCCLA STAR Event: Sports Nutrition	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. students create a hydration chart that includes water and other hydration products used by athletes (Liquid IV; Ultima; Gatorade; Powerade). List the benefits and risks of each. Lists recommended uses. List the side effects of improper hydration. (This can be done individually, as a class, in small groups, electronically, on a handout, on a poster, etc..) Small groups could be assigned a hydration technique to research and add to a shared chart. Students write a news headline or short story that summarizes what they have learned. Scaffold by reducing or increasing the number of words they can	**ELA**: Write a persuasive letter to coaches at the student's local school emphasizing the importance of proper hydration and presenting a specific hydration plan for practice sessions. **Social Studies:** Research and write an essay on the implementation of hydration breaks in high school sports. **Students:** Students analyze the macromolecules of different hydration products and their impact on the body's overall hydration. **Math:** Math Activity 1: Analyzing Hydration Needs for Different Sports **Math:** Math Activity 2: Monitoring Hydration Status and Performance Impact	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer Case studies

		use in their story or headline. FCCLA STAR Event: Sports Nutrition		
Plan and prepare nutritious foods for a healthy athlete based on the requirements of a specific sport.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. Menu planning activity **Summative:** Food Prep Lab FCCLA STAR Event: Sports Nutrition	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. Students plan menus and/or locate appropriate recipes to prepare in a lab setting. Students participate in a food prep lab and prepare appropriate foods/meals. Cooperate with the athletics department to provide appropriate foods to athletes on a game day. FCCLA STAR Event: Sports Nutrition	**ELA**: Write a letter to a local grocer requesting a donation of healthy ingredients for game-day meals. **Social Studies:** Choose a professional athlete from 1920-1960 and create a menu for that specific athlete. **Science:** Students create recipes with the appropriate macromolecules for an athlete on the day of a game or performance. **Math:** Math Activity 1: Creating a Nutritious Meal Plan for an Athlete **Math:** Math Activity 2: Nutritional Evaluation and Adjustment of an Existing Meal Plan	Computer, printer, monitor or projector, bakeware, fire extinguisher, cooking and serving utensils, cookware, cutting equipment, dinnerware, flatware, glassware, linens, microwave, microwave cookware, mixing and measuring equipment, plastic storage containers, thermometers. Research articles guided notes sheet graphic organizer Classroom Kitchen Recipe for food lab ingredients for food lab
Demonstrate safety and sanitation procedures for receiving, storing, handling, preparing, and serving	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer.	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer.	**Science:** Students research practices to lower the production of bacteria when preparing food.	Computer, printer, monitor or projector, bakeware, fire extinguisher, cooking and serving utensils, cookware,

food.	Role Play **Summative:** Food Prep Lab	Students role play safety and sanitation practices. Students demonstrate safety and sanitation practices in a food prep lab.	**Math:** Math Activity 1: Calculating Proper Storage Times and Conditions **Math:** Math Activity 2: Monitoring and Recording Sanitation Procedures	cutting equipment, dinnerware, flatware, glassware, linens, microwave, microwave cookware, mixing and measuring equipment, plastic storage containers, thermometers. Research articles guided notes graphic organizer Cleaning supplies Classroom Kitchen

Key Vocabulary

food choices, sport performance, hydration, nutritious foods, safety, sanitation, receiving, storing, hancling, preparing, serving food

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Food Prep Lab; Live Work - provide food to sports teams.

CTSO Connection:

FCCLA STAR Event: Sports Nutrition

Certification/Credential Connection:

ServSafe Food Handler; ServSafe Manager

Topic 4 Title: Impact of Health and Wellness on Fitness

Content Standards

8. Research and report on the process of digestion and metabolism of various nutrients.

9. Compare and contrast methods for body composition calculations including body mass index (BMI), body fat percentage, waist-to-height ratio, and waist circumference.

10. Create a health profile of a client using various body composition calculations.

11. Outline strategies to prevent dietary deficiencies that result in negative health and performance.
    Examples: muscle wasting, anemia, low estrogen

12. Investigate and report on current research on the effects of eating disorders and performance- enhancing drugs on an athlete's health and performance.

Unpacked Learning Objectives

Students know:

- How to research and present the process of digestion and metabolism of various nutrients.
- How to research the methods for body composition calculations, including body mass index (BMI), body fat percentage, waist-to-height ratio, and waist circumference.
- How to create a health profile for a client.
- How to obtain various body composition calculations.
- How to explain the health profile to a client including their body composition calculations for their client.
- How to research strategies to prevent dietary deficiencies that result in negative health and performance.
- How to conduct current research on the effects of eating disorders and performance-enhancing drugs on an athlete’s health and performance.

Students are able to:

- Present their research findings on the process of digestion and metabolism of various nutrients.
- Compare and contrast methods for body comparison calculations.
- Create a health profile of a client using various body composition calculations.
- Outline strategies to prevent dietary deficiencies that result in negative health and performance.
- Investigate and report current research on the effects of eating disorders and performance enhancing drugs on an athlete’s health and performance.

Students understand:

- The process of digestion and metabolism of various nutrients.
- Similarities and differences of various body composition calculations.
- Body composition calculations can be used to create a health profile for a client.
- Strategies for preventing dietary deficiencies.
- That eating disorders and performance enhancing drugs affect an athlete's health and performance.

Driving/Essential Question	How does the body digest and process food and nutrients? What methods can be used to calculate body composition for a client? How can a client prevent dietary deficiencies? What are the effects of eating disorders and performance enhancing drugs on an athlete's performance?
Exemplar High Quality Task	Create a client profile using body composition calculations

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Conduct research on the process of digestion and metabolism of various nutrients.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. Digestion Process model or Diagram Nutrient Metabolism Chart **Summative:** Exam: Use a diagram to label and explain the process of digestion	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. Students label the process of digestion on a model or diagram. Scaffold/increase rigor by having students draw the process themselves. Students create a chart that lists nutrients, their food sources, and the process of their metabolism. Scaffold/increase rigor by adding factors that impact (negatively or positively) the metabolism of each ingredient.	**ELA**: Write an expository paragraph explaining how the speed at which nutrients are metabolized affects proper food choices and meal timing for athletes. **Social Studies:** Research and compare ancient Egyptian theories on digestion and stomach science. Create a poster comparing it to modern knowledge. **Science:** Students model the process of digestion. Students investigate how different macromolecules impact metabolic rates. **Math:** Math Activity 1: Analyzing the Digestion	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer Digestion model/diagram pencils/colored pencils chart paper

		Students label and explain the process of digestion and nutrient metabolism on a diagram for an exam.	and Absorption Rates of Nutrients **Math:** Math Activity 2: Evaluating the Metabolic Pathways and Energy Yield of Nutrients	
Compare and contrast methods for body composition calculations including body mass index (BMI), body fat percentage, waist-to-height ratio, and waist circumference.	**Formative:** Venn Diagram **Summative:** Simulated Practice	Students research body composition and calculation methods and compare and contrast their features. Students will use a body composition and calculations method to determine body composition for a client in a given scenario.	**ELA**: Create a comparison chart for athletes in two different sports (e.g. a sprinter and a wrestler) that shows the ideal body composition for peak performance in each sport. **Science:** Students evaluate the body composition of different athletes (fat, water, bone, muscle, skin, and other lean tissue). **Social Studies**: Analyze the change in the BMI levels in the US over the past 40 years. **Math:** Math Activity 1: Calculating and Comparing Body Mass Index (BMI) and Body Fat Percentage **Math:** Math Activity 2: Evaluating Waist-to-Height Ratio and Waist Circumference	Computer, printer, monitor or projector calculator venn diagram worksheet

Create the health profile of a client using various body composition calculations.	**Summative:** Simulated practice FCCLA STAR Event: Sports Nutrition	Students will create a health profile for a client based on body composition calculations. FCCLA STAR Event: Sports Nutrition	**ELA**: Write an explanation of findings from body composition calculations related to a client's overall health and fitness goals. **Science:** Students create a nutrition plan based on an athlete's given body composition. **Math**: Math Activity 1: Creating a Health Profile Using BMI and Body Fat Percentage **Math:** Math Activity 2: Creating a Health Profile Using Waist-to-Height Ratio and Waist Circumference	Computer, printer, monitor or projector
Outline strategies to prevent dietary deficiencies that result in negative health and performance.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. **Summative:** Test or Exam	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. Students test on dietary deficiencies and prevention strategies.	**Science:** Students create a nutritional plan to combat different dietary deficiencies. **Math:** Math Activity 1: Developing a Balanced Meal Plan to Prevent Dietary Deficiencies **Math:** Math Activity 2: Evaluating and Supplementing Diets to Prevent Nutrient Deficiencies	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer Dietary deficiencies and prevention strategies Test

Investigate and report on current research on the effects of eating disorders and performance enhancing drugs on an athlete's health and performance.	**Formative or Summative:** Slide or poster presentations	Students utilize library resources to research academic journal articles about eating disorders and performance enhancing drugs. (Individual or small group; as a class - assign each team of students a topic for their research.) Students create a poster, digital slide or infographic about their research.	**ELA**: Write a story about an athlete who struggled with an eating disorder and/or performance enhancing drugs and successfully transitioned to a healthy plan of eating and performance. **Social Studies:** Research various professional athletes that have had an eating disorder or have used performance enhancing drugs. Analyze how these have impacted the athletes overall performance and how their performance changed. **Math:** Math Activity 1: Analyzing the Impact of Eating Disorders on Athletes' Health and Performance **Math:** Math Activity 2: Evaluating the Effects of Performance Enhancing Drugs on Athletes' Health and Performance	Computer, printer, monitor or projector Journal articles about eating disorders poster and markers

Key Vocabulary

process of digestion, metabolism of various nutrients, body composition calculations, body mass index (BMI), body fat percentage, waist-to-height ratio, waist circumference, profile, client, body composition calculations, dietary deficiencies, negative health performance, eating disorders performance enhancing drugs, health, performance

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Create a simulated client profile using body composition information.

CTSO Connection:

FCCLA STAR Event: Sports Nutrition

Certification/Credential Connection:

ServSafe Food Handler; ServSafe Manager

Topic 5 Title: Components of Fitness

Content Standards

13. Explain how cardiovascular endurance, muscular endurance, muscle strength, flexibility, and body composition impact the fitness of an athlete.

Unpacked Learning Objectives

Students know:

- Factors impact the fitness of an athlete.

Students are able to:

- Explain how cardiovascular and muscular endurance, muscle strength, flexibility, and body composition impact the fitness of an athlete.

Students understand:

- That cardiovascular and muscular endurance, muscle strength, flexibility, and body composition impact the fitness of an athlete.

Driving/Essential Question	How is an athlete impacted by cardiovascular and muscular endurance, muscle strength, flexibility, and body composition?
Exemplar High Quality Task	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer.

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Explain how cardiovascular and muscular endurance, muscle strength, flexibility, and body composition impact fitness.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. **Summative:** Video Journal or New broadcast Infographic	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. Students create a video journal or news broadcast segment explaining what they learned. Students create an infographic intended to inform a simulated public audience.	**ELA**: Write a transcript of the video journal or news broadcast explaining the impact of endurance, strength, flexibility, and body composition on overall fitness. **Social Studies:** Analyze various fitness routines dating back to 1920 and research their effectiveness. Create a fitness routine to demonstrate to the class from the decade.	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer digital camera/smartphone

Key Vocabulary

cardiovascular endurance, muscular endurance, muscle strength, flexibility, body composition

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Infographic for public audience.

CTSO Connection:

FCCLA STAR Event: Sports Nutrition

Certification/Credential Connection:

ServSafe Food Handler; ServSafe Manager

Topic 6 Title: Nutrition and Fitness Program Planning

Content Standards

14. Explain the therapeutic benefits of nutrition and exercise for an athlete.

15. Create and critique a fitness plan to meet a client's goals for cardiovascular and strength training, including menu planning.

16. Create meal plans to meet an athlete's performance needs in a given scenario.

17. Identify current fitness technologies and describe their benefits for nutrition and fitness program planning.

Unpacked Learning Objectives

Students know:
- Therapeutic benefits of nutrition and exercise for an athlete.
- How to develop a fitness plan to meet a client's goals for cardiovascular and strength training, including menu planning.
- The concept of meal planning to meet an athlete's performance needs in a given scenario.
- How to conduct research to identify current fitness technologies.
- The benefits for nutrition and fitness planning.

Students are able to:
- Explain the therapeutic benefits of nutrition and exercise for an athlete.
- Create and critique a fitness plan to meet a client's goals for cardiovascular and strength training, including menu planning.
- Create meal plans to meet an athlete's performance needs from a given scenario.
- Identify and describe the benefits of current fitness technologies.

Students understand:
- That nutrition and exercise have therapeutic benefits for athletes.
- That effective fitness plans should meet a client's goals for cardiovascular and strength training, including menu planning.
- That meal plans can be created to meet an athlete's performance needs.
- Current fitness technologies and their benefits.

Driving/Essential Question	What are the therapeutic benefits of nutrition and exercise? What are appropriate meal and fitness plans for clients?

	What technological platforms or apps are available to assist with nutrition and fitness planning?
Exemplar High Quality Task	Meal planning to meet the needs of a specific client.

Map of Student Learning by Learning Objective

Unpacked Learning Objective SWBAT	Potential Subtasks for Assessments Formative/Summative	Potential Learning Activities Link to Differentiation Examples	Integrated and Related Academic Content: ELA, Math, Science, and/or Social Studies Concepts and Activities	Equipment, Technology and Materials Equipment List by CTE Cluster Link to Helpful Tech Tools
Explain the therapeutic benefits of nutrition and exercise for an athlete.	**Formative:** Guided reading or mini lecture with guided notes or graphic organizer. FCCLA STAR Event: Sports Nutrition	Students take notes from research articles, texts, or lectures on a guided notes sheet or graphic organizer. FCCLA STAR Event: Sports Nutrition	**ELA**: Interview a former high school or collegiate athlete and ask how their experiences in athletics benefitted them beyond their years of competition. **Social Studies:** Choose a sport and research a typical practice and diet plans for the athletes. Analyze how they have changed and evolved over the past 40 years.	Computer, printer, monitor or projector Research articles guided notes sheet graphic organizer
Create a fitness plan to meet a client's goals for cardiovascular and strength training, including menu planning. Critique fitness plans and determine whether they meet client goals.	**Formative/Summative:** Case Study Simulated Practice FCCLA STAR Event: Sports Nutrition	Students will create and critique a fitness plan for a client scenario or case study. FCCLA STAR Event: Sports Nutrition	**ELA**: Find a fitness plan online and write a paragraph explaining whether the plan will meet the goals of a particular type of athlete. **Science:** Students create a fitness plan based on the	Computer, printer, monitor or projector Client scenario/case study

			performance needs of a different body.	
Create meal plans to meet athlete's performance needs in a given scenario.	**Formative/Summative:** Meal planning FCCLA STAR Event: Sports Nutrition	Students will write/plan a menu to meet the specific needs of athletes. FCCLA STAR Event: Sports Nutrition	**ELA**: Write a detailed meal plan with options built into the plan that address various preferences and possible allergies. **Social Studies:** Create a meal plan for a specific professional athlete for peak performance.	Computer, printer, monitor or projector
Identify current fitness technologies Describe the benefits of fitness technologies for nutrition and fitness planning.	**Formative:** Graphic Organizer FCCLA STAR Event: Sports Nutrition	Students will work independently, as a class, or as a small group to locate and evaluate fitness technologies. Students will create or complete a graphic organizer that identifies fitness technologies and outlines their benefits. FCCLA STAR Event: Sports Nutrition	**ELA**: Create a digital chart that provides links to current fitness technologies and briefly explains the features of each resource. **Social Studies:** Research various fitness technologies and how they have changed as technology has changed. **Social Studies:** Compare and contrast various fitness technologies and the different features they offer.	Graphic organizer

Key Vocabulary

therapeutic benefits, nutrition, exercise, fitness plan, cardiovascular, strength training, menu planning, meal plans, athlete's performance, fitness technologies, nutrition planning, fitness program planning

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Simulated meal planning to meet a specific client's needs.

CTSO Connection:

FCCLA STAR Event: Sports Nutrition

Certification/Credential Connection:

ServSafe Food Handler; ServSafe Manager