Nutrition and Wellness

Rationale Statement:
According to the Center for Disease Control and Prevention, 23 % of South Dakota high-school students are overweight or at risk of becoming overweight. Nationally, "obesity rates continue to rise in the United States. Since 1980, being overweight has doubled for children and tripled for adolescents. Being overweight puts children and teenagers at greater risk for developing type 2 diabetes, risk factors for heart disease at an earlier age, and other health conditions including asthma, sleep apnea, and decreased self esteem." (National Conference of State Legislatures – Childhood Obesity Update – 2005) Nutrition and Wellness course is designed to help students develop eating behaviors that will have a positive affect on their current and future lifestyles.

Suggested Grade Level: 10th, 11th and 12th graders.

Course Topics
- Factors that influence food choices and nutritional status
- Making nutritional food choices
- Nutrients and nutrition guidelines
- Physical health and fitness
- Food safety and sanitation
- Preparing and serving of nutritious foods
- Using resources effectively

Indicator #1: Analyze factors that influence nutrition and wellness of individuals and families.	
Bloom's Taxonomy Level	Standard and Examples
Analysis	**NW 1.1 Identify physical, emotional, social, psychological, and cultural influences on food choices and nutrition.** Examples: • In research paper format, research components that affect individual and family wellness. • Create a visual (mobile, poster, collage, etc.) of individual and family wellness factors. • Interview family members to identify influences on family food choices and present information gained in oral or written form. • Write a reflection of influences on personal food choices. • Conduct local surveys on influences on food and nutrition practices.
Analysis	**NW 1.2 Apply dietary guidelines to meet nutrition and wellness needs.** Examples: • Develop learning centers for each of the six dietary guidelines • Create a concept/mind map illustrating the use of dietary guidelines to meet various needs. • Examine case studies to determine possible connections between food choices and nutrition and wellness. • Develop a personal nutrition and wellness plan based on dietary guidelines.

	NW 1.3 Determine the effects of nutrients on health, appearance, and peak performance. Examples: • Compose a newspaper editorial describing the effects of nutrition on health, appearance, and peak performances. • Examine diets to predict the possible effects of deficiencies/excesses of various nutrients. • Evaluate diets with on-line dietary analysis programs. • Prepare a chart comparing nutrients' functions and sources.
	NW 1.4 Describe the effect of physical activity on health, appearance, and peak performance. Examples: • Develop a personal fitness plan. • Use on-line physical activity calculators to determine calorie needs. • Analyze calories in foods using fat/protein/carbohydrate content information. • Interview a personal trainer for fitness advice and report information in an oral or written form.
Indicator #2: Evaluate factors that affect food safety.	
Evaluation	**NW 2.1 Apply practices to promote safe food handling.** Examples: • Demonstrate on how germs/bacteria spread (example: Glow Germ). • Create a PowerPoint presentation describing safe food handling practices. • Role play safe and unsafe food handling. • Examine and discuss SD State Health Inspection forms.
Analysis	**NW 2.2 Describe food borne illness that cause health issues.** Examples: • Diagnose case studies to determine causes and types of food-borne illnesses. • Perform a bacteria culture experiment. • Research and share current events involving food borne illness. • Develop a "wanted" poster depicting common food-borne pathogens and illnesses.
Indicator #3 Evaluate nutrition from production to consumption.	
Application	**NW 3.1 Explain how the steps in the food-processing system affect nutritional content.** Examples: • Interview personnel in food-processing careers and present information in an oral or written form. • Research and share current events involving food-processing issues. • Use a concept map to trace the production steps of common snack foods.

	• Compare organic foods with processed foods for nutritional and additive content.
Synthesis	**NW 3.2 Evaluate how resources affect nutritional decisions and planning**. Examples: • Create a "Wellness Show" that showcases wellness requirements for a variety of individuals. • Create a wellness plan for school and community and compare it to the current plan. • Use case studies to plan nutritional meals for different income levels and/or family lifestyles. • Compare the costs of "green" foods with processed foods. • Prepare brochures giving advice on managing time and energy when planning family meals.
Application	**NW 3.3 Evaluate how food preparation techniques affect nutrition.** Examples: • Participate in foods labs. • Take a field trip to local grocery store to choose food for case studies incorporating several limitations (time, money, preparation requirements, nutrition requirements, etc.). • Compare and contrast ready to serve foods with "from scratch" foods for nutritional content. • Choose and prepare foods for various dietary restrictions.