

Human Food, Nutrition & Wellness					
	Course Code 090107				
Course Description					
<p><i>This course is designed to provide students with the base foundation knowledge of food selection and preparation needed to successfully fuel the human body through consumption of food and resulting food energy. With a beginning foundation of nutrition and food science, students will learn basic preparation skills, the reason behind the reactions of foods and the short-term and long-term wellness consequences as a result of nutritional intake, and exposure to careers related to the food industry.</i></p>					
Program of Study to which the course applies:					
	Course Content	Crosswalk to Common Core Academic Standards	Crosswalk to Nebraska Academic Standards	Crosswalk to Nebraska Career Readiness Standards	Crosswalk Clarifications
Standard 1	<i>Students will understand the basics of the six essential components in food.</i>				
Benchmark 1.1	Identify the six essential nutrients.	ELA.RST.11-12.4	LA.12.1.5 SC.12.3.1.a	N/A	
Sample Performance Indicator 1.1.1	Explain protein, carbohydrates and fats as energy sources for a healthy body function.				
Sample Performance Indicator 1.1.2	Explore how minerals and vitamins affect metabolism in the human body.				
Sample Performance Indicator 1.1.3	Analyze the importance of water for human existence.				
Standard 2	<i>Student will plan, manage, and evaluate a diet using the USDA Guidelines.</i>				
Benchmark 2.1	Interpret food labels, USDA guidelines, and MyPlate resources to manage a healthy weight for a healthy lifestyle.	ELA.RST.11-12.7	LA.12.1.6.f	CR.5.A.1	
Sample Performance Indicator 2.1.1	Interpret and apply nutrient information to food labels.				
Sample Performance Indicator 2.1.2	Create a optimal dietary plan appropriate for personal health needs.				

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Sample Performance Indicator 2.1.3	Identify biologically harmful substances.				
Sample Performance Indicator 2.1.4	Distinguish common foods that cause allergic reactions.				
Sample Performance Indicator 2.1.5	Explain health claim meanings.				
Sample Performance Indicator 2.1.6	Apply the MyPlate recommendations to meet personal nutrition and fitness benefits.				
Standard 3	<i>Student will connect the functions of the gastrointestinal system to the functions of the six essential nutrients.</i>				
Benchmark 3.1	Understand the anatomy of the gastrointestinal system.	ELA.RST.11-12.4	LA.12.1.5 SC.12.3.1.b SC.12.3.1.c	N/A	Alignment presumes that students will be able to describe cellular transport of materials and the basics of protein synthesis to understand the anatomy of gastrointestinal system (NE: SC.12.3.1.c).
Sample Performance Indicator 3.1.1	Explain the gastrointestinal system including ingestion and digestion, utilization, excretion of food, and nutrient absorption.				
Sample Performance Indicator 3.1.2	Explain how the body utilizes proteins.				
Sample Performance Indicator 3.1.3	Associate carbohydrates storage and various disorders.				
Sample Performance Indicator 3.1.4	Identify the impacts of fiber, glucose, and glycogen.				
Sample Performance Indicator 3.1.5	Relate lipids to heart disease, and cancer.				

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Standard 4	<i>Students will connect genetics, obesity, weight control, lifestyle and how they relate.</i>				
Benchmark 4.1	Determine the contributing factors for the obesity epidemic.	N/A	N/A	CR.5.A.1 CR.5.A.4	
Sample Performance Indicator 4.1.1	Identify the causes of obesity.				
Sample Performance Indicator 4.1.2	Explain the relationship between chronic diseases, medical conditions, and eating disorders.				
Sample Performance Indicator 4.1.3	Describe the impact between obesity and diabetes.				
Benchmark 4.2	Examine the energy replacing nutrients in relationship to the role they serve in various body systems.		MA.12.1.3.d SC.12.3.1.c	CR.5.A.1 CR.5.A.4	Alignment presumes will select and apply computations to calculate energy balance using energy balance equations (NE: MA.12.1.3.d). Alignment presumes that students will be able to describe cellular capture and release of energy (NE: SC.12.3.1.c).
Sample Performance Indicator 4.1.1	Apply the major parameters that affect BMR (basal metabolic rate).				
Sample Performance Indicator 4.1.2	Define BMI (body mass index) for their individual fitness level.				
Sample Performance Indicator 4.1.3	Calculate energy balance using energy balance equations.				

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Standard 5	<i>Students will evaluate nutritional needs throughout the lifespan.</i>				
Benchmark 5.1	Explain the nutrient demands associated with prenatal development through childhood years.	ELA.WHST.11-12.2.b ELA.SL.11-12.4	LA.12.2.1.b LA.12.3.1.a SC.12.3.1.a	CR.2.B.1 CR.2.C.1 CR.5.A.1	When students explain information or ideas, they communicate their knowledge through either speaking or writing. To demonstrate full knowledge on the topic, students' written or oral presentations must include all the main ideas and relevant details on the subject (CC: ELA.WHST.11–12.2.b, ELA.SL.11–12.4; NE: CR.2.B.1, CR.2.C.1, LA.12 2.1.b, LA.12.3.1.a). Alignment presumes that students will be able to describe essential nutrients and complex molecules needed by the human body (NE: SC.12.3.1.a).
Sample Performance Indicator 5.1.1	Evaluate a specific diet plan for pregnancy and breast feeding .				
Sample Performance Indicator 5.1.2	Compare and contrast essential nutrients, specifically calcium in the childhood years.				
Benchmark 5.2	Examine the nutritional demand of an adolescent.		SC.12.3.1.a	CR.1.C.2 CR.5.A.1	Alignment presumes that students will be able to describe essential nutrients and complex molecules needed by the human body (NE: SC.12.3.1.a).
Sample Performance Indicator 5.2.1	Compare and contrast between insulin dependent and non-insulin dependent diabetes.				
Sample Performance Indicator 5.2.2	Determine the characteristics that contribute to body image distortion and eating disorders.				
Benchmark 5.3	Critique changes that occur during adulthood.			CR.5.A.1 CR.5.A.4	
Sample Performance Indicator 5.3.1	Summarize the modifications of the diet during the aging process for an older adult .				

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Sample Performance Indicator 5.3.2	Determine the characteristics of osteoporosis and how to prevent this condition.				
Sample Performance Indicator 5.3.3	Determine government agencies that support nutritional needs throughout the lifespan.				

Reference Sheet

Key Code Source

USDA	United States Dietary Guidelines for Americans 2010 MyPlate.gov
WNS	Wisconsin Nutrition Standards
NHS	National Health Standards
UEN	Utah Education Network University of Nebraska Human Nutrition and Metabolism
NUTR	course NUTR 250

Additional Resources for Educators

Suggestions for innovative teaching and learning strategies

Related Assessments

FCCLA STAR Competitions
HOSA

Extended Learning Opportunities

YMCA
Recreational Programs
WIC
State Family Services
Guest Speakers
www.nebraskacareerconnections.org

Professional Development Opportunities

HOSA Conference
NATIONAL RESTAURANT ASSOCIATION, NEBRASKA CAREER EDUCATION
Conference, American Association for Family & Consumer
Sciences, Nebraska Association for Family & Consumer Sciences,
Association of Career and Technical Education, Association of
Career and Technical Education of Nebraska, Family Consumer
Science Teachers of Nebraska, Community College and University
Summer Institutes

Community Links/Resources available

Local Hospitals
Pharmacists
American Heart Association
National Career Common Technical Core
National Restaurant Association National Standards
Community College course outline. E.g. CC (LAW 1000)
National Career Common Technical Core
Weber State University

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