



INSTRUCTIONAL PACKAGE

DHG 243

Nutrition and Dental Health

201820

Spring/2019

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: 201820

COURSE PREFIX: DHG 243

CONTACT HOURS: 2

COURSE TITLE: Nutrition and Dental Health

CREDIT HOURS: 2

RATIONALE FOR THE COURSE:

DHG 243 introduces the Dental Hygiene student to the realm of nutrition and how nutrition pertains to oral health and the role the dental hygienist plays in this aspect of dentistry. This course will provide the student with the knowledge and skills to utilize nutrition as a tool in assessment of their patients' health and wellbeing as it relates to oral health and whole body health.

COURSE DESCRIPTION:

This course provides a study of nutrients, their nature, source and utilization. Emphasis is placed on the relationship between diet and oral health. Oral manifestations of nutritional deficiencies are also studied.

PREREQUISITES:

BIO 211 Anatomy & Physiology I

BIO 225 General Microbiology

AHS 113 Head & Neck Anatomy

DHG 151 Dental Hygiene Principles

DHG 125 Tooth Morphology

CO-REQUISITES:

DHG 141 Periodontology

DHG 165 Clinical Dental Hygiene I

DHG 121 Dental Radiography

DHG 205 Public Speaking

REQUIRED MATERIALS:

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

[BOOKSTORE](#).

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.
WaveNet and D2L email access.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

*Refer to the HGTC Program Manual for additional policies on classroom etiquettes.

Part II: Student Learning Outcomes

Dental hygienists must recognize their role as health professionals in regard to supportive duties in oral health. They often are the first to identify nutritional issues through oral inspections, medical history assessments and patient interaction. It is therefore extremely important that the Dental Hygienist be knowledgeable and able to counsel their patients on their nutritional habits and make informed recommendations to improve their patients' health and wellbeing as it pertains to their oral health and overall health.

1. Discuss the basic classes of nutrients and their relationship to health and disease
2. Explain how dietary/ nutritional practices affect health
3. Discuss oral implications specific to certain nutrients
4. Analyze daily dietary/ nutritional practices
5. Discuss nutritional considerations for:
 - * Pregnancy and lactation
 - * infants through aging population
 - * eating disorders
 - * wound healing
 - * dental and periodontal patients
 - * diabetic patients
 - * special patient groups

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Module 1

Materials Covered: *Davis & Stegeman*, Ch. 1 Overview of Health Eating Habits

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss why dental hygienists, registered dietitians, and nutritionists need to be competent in assessing and providing basic nutritional education to patients.
2. List and describe the general physiologic functions of the six nutrient classifications of foods. Also, describe factors that influence patients' food habits.
3. Discuss government concerns with nutrition, as well as the purpose and objectives of *Healthy People 2020*.
4. Discuss Dietary Reference Intakes (DRIs).
5. Describe the purpose of the *2015-2020 Dietary Guidelines for Americans*, and determine the number of food equivalents needed from each food group and subgroup based on the Healthy U.S.-Style Eating Pattern for various calorie levels.
6. Describe healthy eating patterns, and discuss the importance of vegetables, fruits, dairy, protein foods, and oils.

7. Discuss nutrients to limit, as well as other dietary components such as alcohol and caffeine.
8. Describe how physical activity and physical fitness are important factors for an individual's overall health, and how healthful choices should be supported by all systems.
9. Assess the dietary intake of a patient using the *MyPlate* system. Also, discuss other food guides and how they compare to the *MyPlate* system.
10. Master how to read a nutritional label.

Module 2

Materials Covered: *Davis & Stegeman*, Ch. 2 Concepts in Biochemistry

Assessments: Quizzes, Tests, Projects

Objectives:

1. Explain the role of biochemistry in dental hygiene and nutrition.
2. Discuss the fundamentals of biochemistry, including assigning biomolecules according to functional group.
3. Discuss concepts related to principle biomolecules in nutrition:
 - Compare and contrast the structure, function, and properties of the four major classes of biomolecules (carbohydrates, proteins, nucleic acids, and lipids).
 - Outline the structure, function, and properties of monosaccharides, disaccharides, and polysaccharides.
 - Outline the structure, function, and properties of amino acids and proteins.
 - Compare and contrast the roles of enzymes, coenzymes, and vitamins in nutrition.
 - Outline the structure, function, and property of nucleotides and nucleic acids.
 - Outline the structure, function, and property of fatty acids, triglycerides, and steroids.
4. Summarize metabolism, as well as differentiate catabolism from anabolism. In addition, explain connections between metabolic pathways in carbohydrate, protein, and lipid metabolism.

Module 3

Materials Covered: *Davis & Stegeman*, Ch. 3 The Alimentary Canal

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the physiology of the gastrointestinal tract, including the two basic types of actions on food.
2. Discuss the following related to the oral cavity:
 - Identify oral factors that influence food intake.
 - Explain to patients why saliva flow is important for oral health and overall well-being.
 - Describe the role that teeth play in digestion.
3. Discuss the following related to the esophagus and gastric digestion:
 - Describe how the esophagus works.
 - Discuss gastric digestion, as well as list the two major enzymes found in gastric juice.
4. Discuss the following related to the small intestine:
 - Recognize the nutrients requiring digestion and the absorbable products.
 - Explain the process of osmosis.
 - Discuss with patients how digestion and absorption may affect nutritional status and oral health.
5. Discuss the following related to the large intestine:

- Describe the function of the large intestine.
- Discuss the side effects of undigested residue.
- Define the purpose of microflora.
- Explain the role of gastrointestinal motility in digestion and absorption.
- State the purpose of peristalsis

Module 4

Materials Covered: *Davis & Stegeman*, Ch. 4 Carbohydrate

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss various concepts related to the classification of carbohydrates, including:
 - Identify major carbohydrates in foods and in the body.
 - Differentiate among monosaccharides, disaccharides, and polysaccharides.
 - Describe ways glucose can be used by the body.
 - Summarize the functions of dietary carbohydrates.
 - Explain the importance of dietary carbohydrates.
 - Recognize dietary sources of lactose, other sugars, and starches.
 - Summarize the role and sources of dietary fiber.
2. Discuss the physiologic role of carbohydrates.
3. Discuss the acceptable macronutrient distribution range (AMDR) as related to carbohydrates, as well as sources of various types of carbohydrates.
4. Compare and contrast concepts related to hyperstates and hypostates, such as carbohydrate excess, obesity, cardiovascular disease (CVD), carbohydrate deficiency, and dental caries. In addition, formulate recommendations for patients concerning carbohydrate consumption to reduce risk for dental caries.
5. Discuss the use of nonnutritive sweeteners and sugar substitutes.

Module 5

Materials Covered: *Davis & Stegeman*, Ch. 5 Protein

Assessments: Quizzes, Tests, Projects

Objectives:

1. Explain the possible fates of amino acids.
2. Categorize amino acids as indispensable or dispensable; categorize foods as sources of high-quality or low-quality proteins.
3. List and describe the seven categories of the physiologic functions of proteins.
4. Discuss protein requirements for health, and plan individualized menus to meet the recommended protein level for a diet containing animal foods, a vegetarian diet, and a vegan diet containing only plant proteins.
5. Discuss the following related to underconsumption and overconsumption of protein:
 - a. List the problems associated with protein deficiency or excess.
 - b. Appraise a patient's protein consumption to determine protein deficiency or excess.
 - c. Explain how protein foods can be used to complement one another.
 - d. Discuss how protein energy malnutrition affects oral health in children.
 - e. Identify and explain nutrition principles regarding food intake to prevent a patient consuming too much or inadequate amounts of protein.

Module 6

Materials Covered: *Davis & Stegeman*, Ch. 6 Lipids

Assessments: Quizzes, Tests, Projects

Objectives:

1. Related to the classification, chemical structure, and characteristics of lipids:
 - Describe how fatty acids affect the properties of fat.
 - Explain the function of fat in the body.
 - Discuss the chemical structure of lipids.
 - Describe the characteristics of lipids.
2. Describe the function of various compound lipids, and identify foods that contain each. Also, discuss the function and sources of cholesterol.
3. List and describe the physiologic roles of lipids in the body.
4. Discuss the effects of dietary fats on oral health.
5. Related to dietary requirements of lipids:
 - Calculate the recommendation for a person's consumption of dietary fat.
 - Evaluate a patient's food intake for appropriate amounts of saturated fats.
 - Suggest appropriate foods when dietary modification of fat intake has been recommended to a patient.
 - Compare the types of fatty acids in various fats and oils.
6. Discuss nutritional directions for various patient issues related to the overconsumption and underconsumption of fat.

Module 7

Materials Covered: *Davis & Stegeman*, Ch. 7 Use of the Energy Nutrients

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the roles of the liver and the kidneys in metabolism. In addition, describe carbohydrate metabolism.
2. Discuss protein metabolism.
3. Discuss lipid metabolism, alcohol metabolism, metabolic relationships, and metabolic energy.
4. Identify factors affecting the basal metabolic rate.
5. Calculate energy needs according to a patient's weight and activities.
6. Assess factors affecting energy balance; explain physiologic and psychologic sources of energy.
7. Discuss the following related to inadequate energy intake:
 - Summarize the effects of inadequate energy intake.
 - Explain the principles for and importance of regulating energy balance to a patient.
 - Individualize dental hygiene considerations to patients regarding energy metabolism.
 - Relate nutritional directions to meet patients' needs regarding energy metabolism.

Module 8

Materials Covered: *Davis & Stegeman*, Ch. 8 Vitamins Required for Calcified Structures

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the following related to vitamins:

- Discuss requirements and deficiencies of vitamins.
 - List the fat-soluble vitamins, as well as the water-soluble vitamins.
 - Compare the characteristics of water-soluble vitamins with those of fat-soluble vitamins.
2. Discuss the following related to vitamin A:
 - Identify functions, deficiencies, surpluses, toxicities, and oral symptoms for vitamin A.
 - Select food sources for vitamin A.
 - Individualize dental hygiene considerations for patients regarding vitamin A.
 - Relate nutritional directions to meet patients' needs regarding vitamin A.
 3. Discuss the following related to vitamin D:
 - Identify functions, deficiencies, surpluses, toxicities, and oral symptoms for vitamin D.
 - Select food sources for vitamin D.
 - Individualize dental hygiene considerations for patients regarding vitamin D.
 - Relate nutritional directions to meet patients' needs regarding vitamin D.
 4. Discuss the following related to vitamin E:
 - Identify functions, deficiencies, surpluses, toxicities, and oral symptoms for vitamin E.
 - Select food sources for vitamin E.
 - Individualize dental hygiene considerations for patients regarding vitamin E.
 - Relate nutritional directions to meet patients' needs regarding vitamin E.
 5. Discuss the following related to vitamin K:
 - Identify functions, deficiencies, surpluses, toxicities, and oral symptoms for vitamin K.
 - Select food sources for vitamin K.
 - Individualize dental hygiene considerations for patients regarding vitamin K.
 - Relate nutritional directions to meet patients' needs regarding vitamin K.
 6. Discuss the following related to vitamin C:
 - Identify functions, deficiencies, surpluses, toxicities, and oral symptoms for vitamin C.
 - Select food sources for vitamin C.
 - Individualize dental hygiene considerations for patients regarding vitamin C.
 - Relate nutritional directions to meet patients' needs regarding

Module 9

Materials Covered: *Davis & Stegeman*, Ch. 9 Minerals Essential for Calcified Structures

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the following related to bone mineralization and growth, formation of teeth, and the mineral elements of the body.
 - List the minerals found in collagen, bones, and teeth, and describe their main physiologic roles and sources.
 - List the three calcified tissues of which teeth are composed.
 - List and discuss major minerals and trace elements of the body.
2. Discuss the following related to calcium:
 - Describe the physiologic roles of calcium.
 - Discuss the RDA and estimated average requirement for calcium.

- Discuss the importance of calcium balance in the body, and name common sources of calcium.
 - Individualize dental hygiene considerations to patients regarding calcium.
 - Discuss clinical conditions associated with excesses and deficiencies of calcium, and utilize nutritional directions to provide patient education regarding calcium.
3. Discuss the following related to phosphorus:
 - Describe the physiologic roles of phosphorus.
 - Discuss the RDA and Tolerable Upper Intake level for phosphorus.
 - Explain how dietary phosphorus is absorbed, and name common sources of phosphorus.
 - Individualize dental hygiene considerations to patients regarding phosphorus.
 - Discuss clinical conditions associated with excesses and deficiencies of phosphorus, and utilize nutritional directions to provide patient education regarding phosphorus.
 4. Discuss the following related to magnesium:
 - Describe the physiologic roles of magnesium.
 - Discuss the RDA for magnesium.
 - Name common sources of magnesium.
 - Individualize dental hygiene considerations to patients regarding magnesium.
 - Discuss clinical conditions associated with excesses and deficiencies of magnesium, and utilize nutritional directions to provide patient education regarding magnesium.
 5. Discuss the following related to fluoride:
 - Describe the physiologic roles of fluoride.
 - Discuss the average intake of fluoride for both men and women.
 - Name common sources of fluoride.
 - Individualize dental hygiene considerations to patients regarding fluoride.
 - Discuss clinical conditions associated with excesses and deficiencies of fluoride, and utilize nutritional directions to provide patient education regarding fluoride.
 - Discuss the role of water fluoridation in the prevention of dental caries.

Module 10

Materials Covered: *Davis & Stegeman*, Ch. 10 Nutrients Present in Calcified Structures

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the following related to copper:
 - Describe the physiologic roles of copper and how they apply to oral health, state the recommended dietary allowance (RDA) for copper, and list sources of copper.
 - Discuss hyper states and hypo states related to copper, and apply dental considerations for when either occurs.
2. Discuss the following related to selenium:
 - Describe the physiologic roles of selenium and how they apply to oral health, state the RDA for selenium, and list sources of selenium.
 - Discuss hyper states and hypo states related to selenium, and apply dental considerations for when either occurs.
3. Discuss the following related to chromium:
 - Describe the physiologic roles of chromium and how they apply to oral health, state the RDA for chromium, and list sources of chromium.

- Discuss hyper states and hypo states related to chromium, and apply dental considerations for when either occurs.
4. Discuss the following related to manganese and molybdenum:
 - Describe the physiologic roles of manganese and molybdenum and how they apply to oral health, state the RDA for manganese and molybdenum, and list sources of manganese and molybdenum.
 - Discuss hyper states and hypo states related to manganese and molybdenum, and apply dental considerations for when either occurs.
 5. List ultratrace elements present in the body.

Module 11

Materials Covered: *Davis & Stegeman*, Ch. 11 Vitamins Required for Oral Soft Tissues and Salivary Glands

Assessments: Quizzes, Tests, Projects

Objectives:

1. Describe the physiology of soft tissues.
2. Discuss the following related to thiamin (Vitamin B₁):
 - Describe the physiologic roles of thiamin, as well as list the Recommended Dietary Allowance (RDA) and sources of thiamin.
 - Identify dental considerations and nutritional directions for hypo states related to thiamin.
3. Discuss the following related to riboflavin (Vitamin B₂):
 - Describe the physiologic roles of riboflavin, as well as list the Recommended Dietary Allowance (RDA) and sources of riboflavin.
 - Identify dental considerations and nutritional directions for hypo states related to riboflavin.
4. Discuss the following related to niacin (Vitamin B₃), pantothenic acid (Vitamin B₅), and Vitamin B₆ (Pyridoxine):
 - Describe the physiologic roles of each vitamin, as well as list the Recommended Dietary Allowance (RDA) and sources of each.
 - Identify dental considerations and nutritional directions for hyper and hypo states related to each vitamin.
5. Discuss the following related to folate/folic acid, vitamin B₁₂ (Cobalamin), and biotin (vitamin B₇):
 - Describe the physiologic roles of each vitamin, as well as list the Recommended Dietary Allowance (RDA) and sources of each.
 - Explain to a patient who is vegan why vitamin B₁₂ is important.
 - Identify dental considerations and nutritional directions for hyper and hypo states related to each vitamin.
6. Discuss the importance of vitamins C, A, and E in oral soft tissues and salivary glands.

Module 12

Materials Covered: *Davis & Stegeman*, Ch. 12 Fluids and Minerals Required for Oral Soft Tissues and Salivary Glands

Assessments: Quizzes, Tests, Projects

Objectives:

1. In relation to fluids:

- Describe the physiologic roles of fluid, and list the fluid requirements for both men and women. Also, identify factors that may affect those requirements.
 - List and discuss the various sources of fluid.
 - Discuss hyper and hypo states related to fluid imbalances in the body, identify oral signs and symptoms of fluid imbalances, and discuss areas of nutritional concern with patients who have fluid imbalances.
2. Explain how electrolytes affect hydration status.
3. Pertaining to sodium and chloride:
- Describe the physiologic roles of sodium and chloride, and list the sodium and chloride requirements for both men and women.
 - List and discuss the various sources of sodium and chloride, and discuss with patients how to decrease dietary sources of sodium.
 - Discuss hyper and hypo states related to sodium and chloride imbalances in the body, identify oral signs and symptoms of sodium imbalances, and discuss areas of nutritional concern with patients who have sodium imbalances.
 - Identify diseases and medications associated with restriction of sodium intake.
4. In relation to potassium:
- Describe the physiologic roles of potassium, and list and potassium requirements for both men and women.
 - List and discuss the various sources and potassium, and discuss with patients how to increase dietary sources of potassium.
 - Discuss hyper and hypo states related to potassium imbalances in the body, identify oral signs and symptoms of potassium imbalances, and discuss areas of nutritional concern with patients who have potassium imbalances.
5. Related to iron:
- Describe the physiologic roles of iron, and list the iron requirements for both men and women.
 - List and discuss the various sources of iron.
 - Discuss hyper and hypo states related to iron imbalances in the body, identify oral signs and symptoms of iron imbalances, and discuss areas of nutritional concern with patients who have iron imbalances.
6. Related to zinc and iodine:
- Describe the physiologic roles of zinc and iodine, and list the zinc and iodine requirements for both men and women.
 - List and discuss the various sources of zinc and iodine, and discuss with patients how to increase dietary sources of zinc and iodine.
 - Discuss hyper and hypo states related to zinc and iodine imbalances in the body, identify oral signs and symptoms of zinc and iodine imbalances, and discuss areas of nutritional concern with patients who have zinc and iodine imbalances.

Module 13

Materials Covered: *Davis & Stegeman*, Ch. 13 Nutritional Requirements Affecting Oral Health in Women

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the following related to factors affecting fetal development:
 - Explain the importance of prenatal weight and weight gain during pregnancy.
 - Advise prenatal patients who have unusual dietary patterns.
 - Discuss why good oral health is important before and during a pregnancy.
 - List foods pregnant women should avoid to decrease risk of foodborne illness.
2. Discuss factors affecting oral development.
3. Discuss nutritional requirements for pregnancy, including:
 - Name nutrients needed in larger amounts by pregnant women and explain why those increases are needed.
 - Identify nutrients frequently consumed in inadequate amounts by pregnant women and suggest ways to improve their intake.
 - Discuss nutrients commonly supplemented during pregnancy.
4. Discuss nutritional requirements for lactation, including:
 - Name nutrients needed in larger amounts by lactating women and explain why those increases are needed.
 - Identify nutrients frequently consumed in inadequate amounts by lactating women and suggest ways to improve their intake.
 - Discuss nutrients commonly supplemented during lactation.
5. List the nutrients affected by oral contraceptive agents (OCAs), as well as the increased risks associated with use of OCAs.
6. Describe the many hormonal changes that occur in a woman's body during menopause, as well as nutritional approaches that can be used to reduce menopausal symptoms.

Module 14

Materials Covered: *Davis & Stegeman*, Ch. 14 Nutritional Requirements during Growth and Development and Eating Habits Affecting Oral Health

Assessments: Quizzes, Tests, Projects

Objectives:

1. The following are related to the growth and development of infants:
 - Discuss the growth and nutritional requirements of infants.
 - Describe how breast milk and artificial milk affect the oral health of infants.
 - Outline the timetable for introducing complementary foods and list reasons for their introduction.
 - Discuss ways to handle typical feeding problems that occur in infants.
 - Discuss oral health concerns and physiologic changes that alter the nutritional status of infants.
2. Discuss dietary recommendations for children older than 2 years of age as described in the *Dietary Guidelines, Healthy People 2020*, and *MyPlate*.
3. With regard to growth and development of toddlers and preschool children:
 - Discuss the growth and nutritional requirements of toddlers and preschool children.
 - Describe feeding patterns of toddlers and preschool children and how they relate to oral health.

4. Describe various theories behind the root cause of attention-deficit/hyperactivity disorder (ADHD), as well as oral hygiene implications related to children who have various special needs.
5. Discuss the dental caries and food habits of school-age children.
6. Discuss growth and nutrient requirements of adolescents, as well as influential factors that may affect food choices in an adolescent, and how to give nutritional advice to an adolescent.

Module 15

Materials Covered: *Davis & Stegeman*, Ch. 15 Nutritional Requirements for Older Adults and Eating Habits Affecting Oral Health

Assessments: Quizzes, Tests, Projects

Objectives:

1. Identify oral nutritional problems typically observed in older adults.
2. Predict physiologic changes that may alter an older individual's nutritional status.
3. Name socioeconomic and psychological factors influencing food intake of older patients.
4. Explain why nutrient requirements of older patients differ from younger patients.
5. Describe typical eating patterns of older adults, relate *Dietary Guidelines* and *MyPlate* to the diet of an older adult, and suggest implementation of dietary changes to provide optimum nutrient intake for older patients.

Module 16

Materials Covered: *Davis & Stegeman*, Food Factors Affecting Health

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss health care disparities and how they relate to oral health.
2. Regarding (or With regard to) food patterns:
 - Explain how a patient can obtain adequate nutrients from different cultural food patterns.
 - Identify reasons for food patterns.
 - Respect cultural and religious food patterns while providing nutritional recommendations for patients.
3. Pertaining to food budgets:
 - Explain to a patient how to prepare and store food to retain nutrient value.
 - Inform patients of ways to make economical food purchases.
 - Explain to a patient how food processing, convenience foods, and fast foods affect overall intake.
 - Discuss reasons why food additives are used.
4. Describe food fads, and list reasons why health quackery can be dangerous. Also, identify common themes of health quackery and why they are contrary to evidence-based research.
5. Provide referrals for nutritional resources, and describe the role of dental hygienists in combating nutrition fads and misinformation.

Module 17

Materials Covered: *Davis & Stegeman*, Ch. 17 Effects of Systemic Disease on Nutritional Status and Oral Health

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the effects of anorexia, taste and smell disorders, and xerostomia on intake and oral health. Also, critically assess the implications of these chronic diseases, and plan appropriate dental interventions for patients with these disorders.
2. Describe the effects of various types of anemias, as well as neutropenia, on nutritional status and oral health. Also, critically assess the implications of these conditions, and plan appropriate dental interventions for patients with these symptoms.
3. Discuss the effects of various gastrointestinal and cardiovascular conditions on nutritional status and oral health. Also, critically assess the implications of these conditions, and plan appropriate dental interventions for patients who have these issues.
4. Discuss the effects of systemic bone disturbances, as well as metabolic problems, on nutritional status and oral health. Also, critically assess the implications of these conditions, and plan appropriate dental interventions for patients who have these issues.
5. Discuss the effects of neuromuscular problems, as well as neoplasia, on nutritional status and oral health. Also, critically assess the implications of these conditions, and plan appropriate dental interventions for patients who have these issues.
6. Discuss the effects of acquired immunodeficiency, as well as mental health problems, on nutritional status and oral health. Also, critically assess the implications of these conditions, and plan appropriate dental interventions for patients who have these symptoms.

Module 18

Materials Covered: *Davis & Stegeman*, Ch. 18 Nutritional Aspects of Dental Caries

Assessments: Quizzes, Tests, Projects

Objectives:

1. Explain the role each of the following play in the caries process: tooth, saliva, food, and plaque biofilm.
2. Discuss the following related to cariogenic foods, as well as cariostatic and noncariogenic properties of food:
 - List cariogenic food and beverages.
 - List examples of fermentable carbohydrates potentially increasing risk to dental health.
 - Identify foods that stimulate salivary flow.
 - Suggest food and beverage choices and their timing to reduce the cariogenicity of a patient's diet.
 - Describe characteristics of foods having noncariogenic or cariostatic properties.
3. Provide nutrition education to a patient at risk for dental caries.

Module 19

Materials Covered: *Davis & Stegeman*, Ch. 19 Nutritional Aspects of Gingivitis and Periodontal Disease

Assessments: Quizzes, Tests, Projects

Objectives:

1. Describe the role that nutrition plays in periodontal health and disease to a patient.
2. List the effects of food consistency and composition in periodontal disease.
3. Describe nutritional factors associated with gingivitis and periodontitis.
4. Discuss the following related to periodontal surgery and necrotizing periodontal disease:
 - Discuss components of nutritional education for a periodontal patient.
 - List major differences between full liquid, mechanically altered, bland, and regular diets.

- Discuss nutrient deficiencies and oral health issues related to necrotizing periodontal disease.

Module 20

Materials Covered: *Davis & Stegeman*, Ch. 20 Nutritional Aspects of Alterations in the Oral Cavity

Assessments: Quizzes, Tests, Projects

Objectives:

1. Describe the common signs and symptoms of xerostomia. Also, synthesize appropriate dietary and oral hygiene recommendations for a patient with orthodontics, xerostomia, root caries, or dentin hypersensitivity.
2. Discuss normal dentition, and identify *Dietary Guidelines* appropriate for a patient undergoing oral surgery and a patient with a new denture, before and after insertion.
3. Describe the common signs and symptoms of glossitis. Also, synthesize appropriate dietary and oral hygiene recommendations for a patient with a loss of alveolar bone, glossitis, or temporomandibular disorder.

Module 21

Materials Covered: *Davis & Stegeman*, Ch. 21 Nutritional Assessment and Education for Dental Patients

Assessments: Quizzes, Tests, Projects

Objectives:

1. Discuss the importance of a thorough health, social, and dental history in relation to assessment of nutritional status.
2. Describe the components needed to assess the nutritional status of a patient.
3. Explain the types of diet histories and determine situations in which each may be used effectively.
4. Discuss the following related to dietary treatment plans and nutrition education sessions:
 - Formulate a dietary treatment plan for a dental problem influenced by nutrition.
 - Identify steps and considerations in implementing a dietary treatment plan.
 - Assimilate the steps of a nutrition education session.
 - Integrate EXPLORE-GUIDE-CHOOSE techniques of motivational interviewing into a clinical setting.
5. Practice several communication skills that the dental professional should employ when educating a patient.

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students’ performance will be assessed and the weight associated with the various measures/artifacts are listed below.

Evaluation:

Quizzes	20%
Written tests	40%
Final Exam	20%

Vitamin Project	10%
<u>Nutritional Packet</u>	<u>10%</u>
	100%

****Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

GRADING SYSTEM:

A=90-100

B=80-89

C=77-79

D=70-76

F=69 and below

*Students must pass with a 77% or higher to continue in the DH Program.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop ([ACADEMIC CALENDAR](#)). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

*Refer to the HGTC Dental Sciences Program Manual for additional attendance policies

Part V: Student Resources

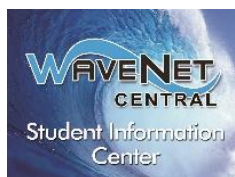


The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

1. **Academic coaches** for most subject areas, **Writing Center Support**, and **college success skills**.
2. **On-line student success and academic support resources**.

Visit the SSTC website: [Student Success & Tutoring Center](#) and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

1. **Getting around HGTC**: General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) for COMPASS support, technology education, and online tools.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: [Wavenet Central](#). Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Jocelyn Williams, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:	
Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Associate Vice President for Student Affairs.	Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Associate Vice President for Human Resources.
Dr. Melissa Batten, AVP Student Affairs <i>Title IX Coordinator</i> Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu	Jacquelyne Snyder, AVP Human Resources <i>Section 504, Title II, and Title IX Coordinator</i> Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu