

**ATHENS TECHNICAL COLLEGE
COURSE SYLLABUS
AHS 103**

COURSE TITLE: NUTRITION AND DIET THERAPY

COURSE NUMBER: AHS – 103

PREREQUISITE: PROGRAM ADMISSION

CREDIT HOURS: 2

INSTRUCTOR: Please refer to addendum

COURSE DESCRIPTION:

This course is designed as a study of the nutritional needs of the individual. Topics include: Basic nutrients, standard and modified diets, food sources, meal planning, the role nutrition plays in the maintenance of health and the use of dietary therapy in the treatment of certain pathological conditions, nutrition throughout the lifespan, and client education.

ASSIGNMENT: Please refer to addendum

INSTRUCTOR AVAILABILITY: Please refer to addendum

REQUIRED TEXT:

Roth, R. (2011). Nutrition and diet therapy. (10th Ed.) Clifton Park, N.Y., Delmar.

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, the student will be able to:

1. Identify basic nutritional needs
2. Present an overview of how diet and nutrition effects the human body
3. Explain the relationship of nutrition and illness
4. Understand how to explain the need for good nutritional status

NUTRIENTS	
Introduction to diet	Describe the food guide pyramid and the daily amounts needed.
	Identify the source and functions of foods and nutrients in maintaining good health.
	Identify food fallacies.
	Describe the clinical signs of good nutritional status.
Energy requirements	Identify the energy producing nutrients including their fuel value.
	Calculate the energy needs of an individual based on age, sex, activity level, and health status.

	Discuss the results of over or under consumption of kilocalories.
Carbohydrates	Identify the functions, sources, RDA, and classifications of carbohydrates.
	Discuss the function of fiber including food sources.
Fats	Identify the functions, sources, RDA, and classification of fats.
	Explain the difference between saturated and unsaturated fatty acids including food sources.
Protein	Identify the functions, structure, sources, RDA, and classifications of protein.
	Compare the effects on health of inadequate or excessive protein intake.
Vitamins	Discuss the general functions and classifications of vitamins.
Fat and water soluble vitamins	Identify the functions, sources, RDA, and deficiency states of fat and water soluble vitamins.
Minerals	Identify the function, sources, RDA, and deficiency states of both major and trace minerals.
Water balance	Discuss the function, requirements, movement, and distribution of water in the body.
Digestion and absorption	Describe mechanical and chemical digestion.
	Describe the pathway of nutrients and the digestive processes that occur in the mouth, stomach, small intestine, and large intestine.
Planning and preparing menu	Develop a menu that includes variety and is nutritionally balanced.
	Discuss food habits and cultural diversity by altering a standard diet to accommodate the individual's preference.
	Describe the appropriate methods for handling, storing, processing, and preparing food to conserve nutrients.
NUTRITION THROUGHOUT THE LIFESPAN	
Nutrition for various ages	Identify the nutritional needs for the infant, child, pregnant, lactating, and aged individual.
CLIENT EDUCATION	
	Describe client education as it relates to nutrition and diet therapy.

STANDARD AND MODIFIED DIETS	
	Define the principles of diet therapy.
	Explain the objectives of diet therapy.
	Describe the methods used to adapt a normal diet to treat a client's specific clinical condition.
	Identify general and special diets.
	Serve the correct diet, appropriately, to the client.

SPECIFIC CHAPTER OBJECTIVES:

Fundamentals of Nutrition

1. The Relationship of Food and Health
 - a. Name the six classes of nutrients and their primary functions
 - b. Recognize the common characteristics of well-nourished people
 - c. Recognize symptoms of malnutrition
 - d. Understand the ways in which food and health are related
 - e. List the four basic steps in nutrition assessment.

2. **Planning a Healthy Diet**
 - a. Define a balanced diet
 - b. List the U.S. Government's Dietary Guidelines for Americans and explain the reasons for each.
 - c. Describe the information commonly found on food labels
 - d. List some food customs of various cultural groups
 - e. Describe the development of food customs

3. **Digestion, Absorption, and Metabolism**
 - a. Describe the processes of digestion, absorption, and metabolism
 - b. Name the organs in the digestive system and describe their functions
 - c. Name the enzymes or digestive juices secreted by each organ and gland in the digestive system
 - d. Calculate your basal metabolic rate (BMR)

4. **Carbohydrates**
 - a. Identify the functions of carbohydrates
 - b. Name the primary sources of carbohydrates
 - c. Describe the classification of carbohydrates

5. **Fats or Lipids**
 - a. State the functions of fats in the body
 - b. Identify the sources of dietary fats
 - c. Explain common classifications of fats
 - d. Describe disease conditions with which excessive use of fats is associated

6. Proteins

- a. State the functions of proteins in the body
- b. Identify the elements of which proteins are composed
- c. Describe the effects of protein deficiency
- d. Identify at least six food sources of complete proteins and six food sources of incomplete proteins

7. Vitamins

- a. State one or more functions of each of the 13 vitamins discussed
- b. Identify at least two food sources of each of the vitamins discussed
- c. Identify some symptoms of, or diseases caused by, deficiencies of the vitamins discussed

8. Minerals

- a. List at least two food sources of given minerals
- b. List one or more functions of given minerals
- c. Describe the recommended method of avoiding mineral deficiencies

9. Water

- a. Describe the functions of water in the body
- b. Explain fluid balance and its maintenance
- c. Name causes and consequences of water depletion
- d. Give causes and consequences of positive fluid balance
- e. Describe the acid-base balance of the human body

10. Food-Related Illnesses and Allergies

- a. Identify diseases caused by contaminated food, their signs, and the means by which they are spread
- b. List signs of food contaminated
- c. State precautions for protecting food from contamination
- d. Describe allergies and elimination diets and their uses

11. Diet During Pregnancy and Lactation

- a. Identify nutritional needs during pregnancy and lactation
- b. Describe nutritional needs of pregnant adolescents
- c. Modify the normal diet to meet the needs of pregnant and lactating women

12. Diet During Infancy

- a. State the effect inadequate nutrition has on an infant
- b. Identify the ingredients used in infant formulas
- c. Describe when and how foods are introduced into the baby's diet
- d. Describe inborn errors of metabolism and their dietary treatment

13. Diet and Diabetes Mellitus

- a. Describe diabetes mellitus and identify the types
- b. Describe the symptoms of diabetes mellitus
- c. Explain the relationship of insulin to diabetes mellitus
- d. Discuss appropriate nutritional management of diabetes mellitus

14. Diet and Cardiovascular Disease

- a. Identify factors that contribute to heart disease
- b. Explain why cholesterol and saturated fats are limited in some cardiovascular conditions
- c. Identify foods to avoid or limit in a cholesterol-controlled diet
- d. Explain why sodium is limited in some cardiovascular conditions
- e. Identify foods that are limited or prohibited in sodium-controlled diets

15. Diet and Surgery, Enteral and Parenteral Nutrition, Burns, Infections, and Aids

- a. Describe the body's reactions to stress and relate them to nutrition
- b. Explain the special dietary needs of surgical and burn clients
- c. Discuss enteral and parenteral nutrition
- d. Explain the special dietary needs of clients with fever and infection
- e. Explain the special dietary needs of AIDS clients

INSTRUCTIONAL DELIVERY METHODS:

Any or all of the following methods may be utilized to facilitate learning: lecture, discussion, audiovisual aids, independent reading and outlines, handouts, and examinations / pop quizzes. Although every attempt will be made by the instructor to cover assigned material in class, **THE STUDENT IS RESPONSIBLE FOR ALL MATERIALS OR COMPETENCIES LISTED IN THE SYLLABUS.**

You are responsible for the information contained in each chapter for testing purposes whether or not the entire chapter is covered fully in class. It is the student's responsibility to read each chapter and study the information and come prepared for testing on the materials included within those chapters.

Exams may be a combination of multiple choice, matching, true/false, and fill in the blank

The final exam will be a comprehensive exam which will cover all materials covered over the entire quarter. The student should not merely memorize the material for each exam, but, incorporate the new knowledge into his / her long-term memory.

ATTENDANCE POLICY: Regular class attendance is important and expected. The college considers both tardiness and early departure from class as forms of absenteeism. Students absent from class for any reason are still responsible for all work missed. Instructors have the right to determine whether work missed can be made up and have the liberty to set reasonable expectations for attendance based on frequency of class meetings and on the instructional delivery method, subject, type, and level of the class. Class attendance policies will be clearly stated for students by their respective instructors on separate documents or appendices to the master syllabus.

COMMUNICATION: In concordance with the communication policies of ATC, any and all electronic communication shall be conducted via the students' ATC email accounts. It is the student's responsibility to ensure ATC sponsored email accounts are working properly. Please go to <http://www.athenstech.edu/studentssupport.cfm> if problems arise. Course instructors communicate information to class participants on a regular basis, is the student's responsibility to check ATC email accounts **minimum of every other day**.

EVALUATION PROCEDURES: Please refer to course addendum

GRADING SCALE: According to the Athens Technical College student handbook on page 41, a student is considered absent when that student misses class time in excess of 10 minutes. Therefore, students who arrive to class at 11 minutes past the hour will be considered absent and will be given a make-up exam. The make-up exam will consist of unit material in a 10 question, short-answer format.

Athens Technical College grading system, as stated in the ATC Student Handbook on p. 41 is as follows:

A	(90-100) Excellent	GP 4.0
B	(80-89) Good	GP 3.0
C	(70-79) Satisfactory	GP 2.0
D	(60-69) Poor	GP 1.0
F	(59 and lower) Failing	GP 0.0
I	Incomplete	Not computed
W	Withdrew (no grade)	Not computed
WP	Withdrew Passing	Not computed
WF	Withdrew Failing	GP 0.0 (computed)

Evaluation of the student's achievement of the course objectives will be based on satisfactory completion of all required classroom activities. Grading will be computed as

Unit exams may consist of multiple choice, matching and short answer or a combination there of. The student may NOT use the textbook or written notes while taking an exam. If found using any of these items they will automatically receive a zero (0) for that test and will be reprimanded by administration.

The final examination is a comprehensive exam which will cover **ALL** material presented during the course. Therefore, the student would not merely memorize the material for each scheduled unit exam, but incorporate this new knowledge into his / her long-term memory. The student is encouraged to take every opportunity to acquire the broadest theory base possible.

MAKE-UP WORK: Please refer to addendum.

WORK ETHICS:

Athens Technical College agrees with industry that work ethics is an important attribute of a successful employee. Therefore, a Work Ethics grade will be given each quarter. The Work Ethics grade is designed to evaluate and encourage good work habits. The rating scale is:

- 3 – Exceeds expectations
- 2 – Meets expectations
- 1 – Needs improvement
- 0 – Unacceptable

2008-2010. Athens Technical College Student Catalog; pp. 42-43

ACADEMIC HONESTY:

Academic honesty is expected at all times. Any student found to have engaged in academic misconduct such as cheating, plagiarism, or collusion is subject to disciplinary sanctions as outlined in the Student Code of Conduct details in the *ATC Catalog and Student Handbook*. The term “plagiarism” includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. The term “collusion” includes, but is not limited to, the unauthorized collaboration with any other person in preparing work offered for academic credit. Students are advised that faculty routinely use **turnitin.com** both to prevent plagiarism and to assist in verifying when/if it has occurred. Refer to the *ATC Catalog and Student Handbook* pp. 87-90 for further details.

COURSE WITHDRAWAL:

Students may withdraw from a course without academic penalty until the midpoint of the quarter (as stated by the Academic Calendar published in the *ATC Catalog and Student Handbook*). By withdrawing before the midpoint of the quarter, the student is automatically assigned a grade of W, which does not affect quarterly or cumulative grade point average. Grades of W will affect satisfactory academic progress for financial aid purposes. **Students who stop attending class(es) without formally withdrawing risk earning a final grade of F, which will appear on the academic transcript.** Refer to the *ATC Catalog and Student Handbook* pp. 36-39 for further details.

ACADEMIC SUPPORT CENTER:

The Academic Support Centers of Athens Technical College (ATC) provide free tutoring for enrolled students. Both instructors and peer tutors provide tutoring in almost all subjects offered by the college. Information about the Center is accessible via the ATC website at www.athenstech.edu. To find out the specific services available on the Athens, Greene, and Walton Campuses, please call (706) 583-2839. To contact the Academic Support Center on the Elbert County Campus, please call (706) 213-2129.

AMERICANS WITH DISABILITIES ACTS:

Any student who believes he/she is eligible for accommodations in the classroom and/or during testing due to a documented disability is encouraged to contact the Director of Student Support Services at (706) 355-5081, or the Coordinator of Disability Services at (706) 355-5006, to apply for assistance. It is our goal at Athens Technical College to provide equal access to education for all students.

CELL PHONES AND ELECTRONIC DEVICES:

Students are strictly prohibited from using cell phones and personal electronic devices within college-owned/operated facilities without the explicit permission of a faculty or staff member.

FOOD/DRINKS IN CLASSROOM:

Food and beverages (other than water) are not allowed in classrooms/lab.

DRESS CODE

Students are expected to dress appropriately at all times. Dress requirements will vary in the classroom, laboratory and shop areas. Students enrolled in internships and clinical courses are required to dress appropriately according to the requirements of the work for which they are being trained. Students shall not dress, groom, wear or use emblems, insignias, badges, or other symbols where the effect thereof is to detract unreasonably the attention of the other students or otherwise to cause disruption or interfere with the operation of the College. The President or duly authorized administrator shall determine whether any particular mode of dress, apparel, grooming, or use of emblems, insignias, badges, or other symbols result in such interference or disruption, as to violate this rule and shall give notice of such interference or disruption, as its cause, to all students by announcements or posting at the College.

WARRANTY OF GRADUATES:

The Department of Technical and Adult Education warrants every graduate of technical programs in which students may earn technical certificates of credit, diplomas, or associate degrees. The warranty guarantees that graduates demonstrate the knowledge and skills and can perform each competency as identified in the industry-validated standards established for every program of study. If one of our graduates educated under a standard program or his/her employer finds that the graduate is deficient in one or more competencies as defined in the course/program standards, Athens Technical College will retrain the employee at no instructional cost to the employee or the employer. The guarantee is in effect for two years after graduation.

TEACH ACT:

According to the TEACH act of 2002, Athens Technical College is obligated to advise you that instructional material included in this course may be subject to copyright protection. As such, you must not share, duplicate, transmit, or store the material of this course beyond the purpose and time frame explicitly stated in the syllabus of your course. If you are not certain whether a particular piece of material is covered by copyright protection, you should contact your instructor and obtain his/her written clarification. Failing to observe copyright protection is a violation of law.

June 2010

AHS 103
Acknowledgement Statement

I, _____ have received a copy of the course syllabus, course outline,
Student's Name (Printed)

course addendum, and course calendar for AHS 103. I understand it is my responsibility to obtain any information for those days that I am absent from class and making up any missed assignments. By not signing this form, does not exclude the student from following the policies and procedures outlined in this document or the catalog for Athens Technical College.

Student's Signature

Date