



Course Syllabus

BIOL 1322 Nutrition & Diet Therapy

Revision Date: 1/10/2017

Catalog Description:

This course introduces general nutritional concepts in health and disease and includes practical applications of that knowledge. Special emphasis is given to nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism. Food safety, availability, and nutritional information including food labels, advertising, and nationally established guidelines are addressed. (Cross-listed as HECO 1322)

Lecture hours = 3, Lab hours = 0

Prerequisites: None

Semester Credit Hours: 3

Lecture Hours per Week: 3

Lab Hours per Week: 0

Extended Hours per Week: 0

Contact Hours per Semester: 48

State Approval Code: 19.0501.51 09

Core Components and Related College Student Learning Outcomes

This course counts as part of the academic requirements of the Panola College Core Curriculum and an Associate of Arts or Associate of Science degree. Yes No: If no, skip to Instructional Goals.

The items below marked with an X reflect the state-mandated outcomes for this course **IF this is a CORE course:**

- Critical Thinking Skills – to include creative thinking, innovation, inquiry and analysis, evaluation and syntheses of information
 - CT1: Generate and communicate ideas by combining, changing, or reapplying existing information
 - CT2: Gather and assess information relevant to a question
 - CT3: Analyze, evaluate, and synthesize information
- Communication Skills – to include effective development, interpretation, and expression of ideas through written, oral, and visual communication
 - CS1: Develop, interpret, and express ideas through written communication
 - CS2: Develop, interpret, and express ideas through oral communication
 - CS3: Develop, interpret, and express ideas through visual communication
- Empirical and Quantitative Skills – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

- EQS1: Manipulate and analyze numerical data and arrive at an informed conclusion
- EQS2: Manipulate and analyze observable facts and arrive at an informed conclusion
- Teamwork – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
 - TW1: Integrate different viewpoints as a member of a team
 - TW2: Work with others to support and accomplish a shared goal
- Personal Responsibility – to include the ability to connect choices, actions, and consequences to ethical decision-making
 - PR1: Evaluate choices and actions and relate consequences to decision-making
- Social Responsibility – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
 - SR1: Demonstrate intercultural competence
 - SR2: Identify civic responsibility
 - SR3: Engage in regional, national, and global communities

Instructional Goals and Purposes:

The purpose of this course is to familiarize the student with the concepts, principles and theories of science and provide an opportunity to experience and appreciate the processes and methodology of science.

Learning Outcomes: *[from the ACGM catalog]*

After studying all materials and resources presented in the course, the student will be able to:

1. Apply nutritional knowledge to analyze personal dietary intakes, to plan nutritious meals using nationally established criteria to meet recommended goals and to evaluate food labels and the validity of nutritional claims.
2. Trace the pathways and processes that occur in the body to handle nutrients and alcohol through consumption, digestion, absorption, transport, metabolism, storage and waste excretion.
3. Discuss functions, sources, deficiencies and toxicities of macro- and micronutrients, including carbohydrates, lipids, proteins, water, vitamins and minerals.
4. Apply the concept of energy balance and its influences at the physical, emotional, societal, and cellular level to evaluate advantages and disadvantages of various methods used to correct energy imbalances.
5. Utilize concepts of aerobic and anaerobic energy systems, and knowledge about macronutrients, vitamins, minerals, ergogenic, and supplements and relate them to fitness and health.
6. Describe health and disease issues related to nutrition throughout the life cycle, including food safety, corrective dietary modifications, and the influence of specific nutrients on diseases.

Course Content:

A general description of lecture/discussion topics included in this course are listed in the Learning Outcomes section of this syllabus.

Students in all sections of this course will learn the following content:

1. Identify nutrients and the role they contribute to the overall health of an individual.
2. Identify different tools used to assess and evaluate the dietary intake of nutrients.
3. Discuss the role of the various body systems as they contribute to nutrient digestion, absorption, transport and regulation and the removal of wastes from the body.
4. Discuss the structure, dietary sources, biological functions, digestion and absorption of carbohydrates, lipids and proteins.
5. Discuss the sources, functions, potentials for deficiencies or toxicities and recommended intakes for each vitamin and mineral.
6. Identify the importance of energy balance in the maintenance of a healthy body weight.
7. Identify the advantages of a healthy active lifestyle and discuss the utilization of glucose during times of physical exertion.
8. Identify the causes, physical effects, and treatment options for various eating disorders.
9. Identify the role of proper nutrition in assessing growth and development through various stages of life.
10. Discuss food safety as related to foodborne illness, environmental contamination, public health and food preservation.

Methods of Instruction/Course Format/Delivery:

This course is offered in the traditional face-to-face classroom environment and online. Students in the traditional class and in the online class will have access to this course using Canvas, a learning management system. Student learning outcomes, outlines/notes, power points, reviews and other study aids are provided within Canvas. A Connect Nutrition access code (provides access to the publisher's digital learning environment that helps to improve performance) is required to provide access to an eBook and homework (participation) assignments that help in the understanding of learning outcomes. Connect also contains the LearnSmart study tool that can help improve memory recall and increase student performance and retention and a NutritionCalc program to assess dietary intake and physical activity.

Students in the traditional class will meet regularly for lectures over the course content and follow class attendance guidelines as indicated in the Panola College catalog. Face-to-face students will complete their exams in the classroom environment while students in the online class will be required to schedule their examinations at an approved testing center. Online students should be responding weekly and that can be accomplished by submissions to the nutrition participation assignments that are posted in Connect. Students should feel free to email any questions or concerns associated with this course to the instructor. Please be sure to check and appropriately respond to your emails in Canvas. Students should also feel free to communicate by phone or in person during scheduled office hours.

Students in both the traditional and online classes should use e-mail within Canvas to communicate with the instructor. Using Canvas email gives you access to the instructor and other classmates--you just select a name from the list. If there is an issue in contacting your instructor using email in Canvas, you may use their Panola College email address (located in the "Getting Started" module in Canvas). I will attempt to respond to all emails within 24 hours.

Major Assignments / Assessments:

The following items will be assigned and assessed during the semester and used to calculate the student's final grade.

Assignments

1. 20+ participation assignments are provided in Connect (publisher's digital learning environment that helps to improve performance) and these assignments include a variety of question types to assist in the learning process.
2. Discussion topics and postings are provided in Canvas and include topics related to food behaviors, food labels and evaluating current popular diets.

- Projects include: 1) a research paper on a popular diet to determine advantages and disadvantages of the diet and an evaluation to determine if the diet is a sound weight loss diet. 2) a dietary analysis and energy expenditure analysis to evaluate food intake, nutrient quantity/quality, potential deficiency and or toxicity issues and physical activity.
- Unit exams occur at various intervals during the semester and a Final examination occurs at the end of the semester. A variety of question types are used to assess learning outcomes.

Assessment(s):

- Participation assignments are assessed in Connect. These weekly assignments can be retaken/corrected (prior to the due date) to improve your grade. Cumulatively, these assignments represent 15% of the total grade in the course.
- The major projects are assessed using a grading rubric that is provided along with detailed instructions within the Canvas modules. The Popular Diet project represents ~6.4% of the course grade while the Dietary Analysis and Energy Assessment project component represents ~16% of the total grade. Cumulatively, these two projects represent 22.5% of the total grade in the course.
- Unit exams are computer-based in the online nutrition course and scantron-graded in face-to-face nutrition courses. Cumulatively, these exams represent 45% of the total grade in the course. The number of exams and the content within them varies depending on if the course is a regular semester course, a summer session course or a mini-mester course. Test information and specific exam content are provided within the course information sheet and within the Canvas modules provided at the start of the course. In a regular semester, each unit exam represents 9% of the total grade and (content-wise), the exams are divided as follows:

Exam #	Major Topic(s)
Unit #1	Nutrition: A Key to Health
Unit #2	Energy Yielding Nutrients
Unit #3	Energy Balance/Vitamins/Minerals
Unit #4	Fitness & Sports/Eating Disorders/Food Safety
Unit #5	Nutrition During Various Life Stages

- The Final Exam is a major assessment and includes a variety of multiple choice questions assessing the content from the entire course. The final exam is computer-based in the online nutrition course and scantron-graded in face-to-face nutrition courses.

Course Grade:

The grading scale for this course is as follows:

- Participation** activities will represent **15%** of your total grade and will be evaluated from homework assignments provided in Connect. **Due dates will be supplied with the homework assignments in Connect and within your modules within Canvas; it is the student's responsibility to properly submit responses in a timely manner (Late responses will not be accepted!).**
- Discussion** postings will represent **2.5%** of your total grade. Topics will be posted for discussion on the Canvas discussion board. On postings on the discussion board, everyone in the course can read what you post (so watch spelling, grammar, message content, etc). On topics that are posted, there will be instructions and a deadline date for your posted submissions/responses. **Late responses will not be accepted!**
- Unit Exams** will represent **45%** of your total grade. Scheduled examination dates are provided within the course information sheet, within your modules in Canvas and on your calendar. **Examinations will be computer based and must be completed at approved testing centers or classroom locations (depending if you are completing an online or face-to-face class) on the scheduled completion date and time.** Exam questions will be drawn from a variety of sources including your course outlines/notes/power points, review sheets, student learning outcomes, vocabulary terms and

textbook/online (Connect) review questions. Missed examinations due to legitimate reasons should be rescheduled as soon as possible (ASAP). **The student will have one week to schedule/complete a missed Unit Exam.** The instructor reserves the right to change the exam format on any make-up exam. Each exam is worth 100 points and may consist of multiple choice, matching, short answer (completion), true and false and/or essay type questions.

- **Projects** will represent **22.5%** of your total grade. The student is responsible for completing 1) a report on a current "popular" diet and 2) a dietary analysis and energy assessment project. **Due dates and specific printable instructions and grading rubrics for these projects are provided within your Canvas module.**
- **Final Exam:** A final comprehensive examination will be given during final exams and will cover content from each of your assigned units during the course. The final examination is comprehensive and is worth **15%** of your grade. **Finals should not be missed unless there is a serious situation; prompt contact with the instructor is vital or a grade of "0" will be assigned.**

- **Grade Determination**

Final course grades are determined by the following scale:

A=100-90 B=89-80 C=79-70 D=69-60 F=<59.5

Required Texts, Materials, and Supplies:

- Smith, Anne M. and Angela L. Collene. Wardlaw's Contemporary Nutrition. Tenth Edition. 2016. McGraw-Hill Publishers, Dubuque, Iowa.
- Access Code for McGraw-Hill Connect Nutrition with Learnsmart (digital teaching assignment/assessment tool used to increase engagement and learning).

Required Readings:

- Smith, Anne M. and Angela L. Collene. Wardlaw's Contemporary Nutrition. Tenth Edition

Recommended Readings:

- There are not any recommended readings for this course at this time.

Other:

- For current texts and materials, use the following link to access bookstore listings: <http://www.panolacollegestore.com>
- For testing services, use the following link: <http://www.panola.edu/elearning/testing.html>
- If any student in this class has special classroom or testing needs because of a physical learning or emotional condition, please contact the ADA Student Coordinator in Support Services located in the Administration Building or go to <http://www.panola.edu/student-success/disability-support-services/> for more information.
- Withdrawing from a course is the student's responsibility. Students who do not attend class and who do not withdraw will receive the grade earned for the course.
- Student Handbook, *The Pathfinder*: <http://www.panola.edu/student-success/documents/pathfinder.pdf>