BIOD 121 Essentials in Nutrition

**Prerequisites:** General biology and chemistry (recommended but not required)

**Instructor:** Tammie Kephart, MS, RD, LDN

**Facilitators:**
- Renee Correll, DPT
- Brittany Martinez, Ph.D.
- Jerrod A. Poe, Ph.D.
- Christine Bowman, DMD
- Heidi Burtt, DPT
- Crista Bush, MOT, OTR/L
- Alycia Dalbey, MPAS, PA-C
- Tammie Kephart, MS, RDN, LDN
- Rebekah Stepp, MS, CRNP
- Kelly Straley, CRNP
- Brandon Zangus, MOT, OTR/L

**Contact Information:** Faculty may be contacted through the Portage messaging system

**Additional Information:** www.portagelearning.com

**Course Meeting Times:** BIOD 121 is offered continuously

**Course Description:** This course will provide the student with the fundamentals of nutrition, both in theory and application. The digestion, absorption, metabolism, and functional importance of nutrients are emphasized. Basic principles of applied nutrition such as energy balance, weight control, and the role of nutrition from birth to death are discussed. The mechanisms and onset of disease states as a result of insufficient nutritional intake are examined. Case studies encourage students to apply the information and prepare them for healthy living. Upon course completion, students will be able to apply nutrition principles to their own lives and be able to make informed nutrition choices.

**Course Outcomes:** As a result of this course experience a student should be able to:

- Outline the components of nutrition
- Describe diseases and complications caused by nutrient deficiencies
- Explain nutrient composition and classifications
- Identify and utilize tools to promote healthy food choices
- Describe the physiologic process of digestion and digestive disorders
- Explain the composition and digestion of carbohydrates, fats, and proteins

*Portage Learning college courses are offered by Geneva College, which is regionally accredited by the Middle States Commission on Higher Education. Portage Learning is included in the College’s Department of Professional and Online Graduate Studies; courses are delivered through the PortageLearning.com platform.*
• Explain the concept of energy balance
• Define the keys to healthy weight loss and be able to recognize unhealthy weight loss
• Explain the composition and digestion of vitamins and minerals
• Differentiate between and recognize eating disorders
• Identify nutritional needs throughout the life span

*Please see the Module Topics section below for expanded course outcomes.

Each of these BIOD 121 student learning outcomes is measured:

Directly by:
1. Module application problems (with instructor feedback)
2. Exams
3. Case studies
4. Comparison of pre-course / final exam results

Indirectly: Through use of an end of course student-completed evaluation survey

**Course Delivery:** This course is asynchronously delivered online. Contact hours include 50 - 60 hours of reviewed module assignments with instructor feedback and video lectures. There are 6 additional contact hours composed of secure online exams as well as 6 hours of case studies.

**Course Progression:** It is the policy for all Portage Learning courses that only one lecture module and the accompanying exam be completed each day. Research on the best practices in learning indicates that time is needed to process material for optimal learning. This means that once an exam has been completed, the next exam will not unlock until the following day. This allows for instructor feedback/class expectations as the student moves through the material. Instructors, like the College, are not available during the weekend; grading, therefore, is M-F and may take up to 72 hours during these days. Also, it is the policy of Portage Learning to support a minimum of 21 days; this is not a negotiable time period. Please plan your time accordingly.

**Required readings, lectures and assignments:** Portage courses do not use paper textbooks. Students are required to read the online lesson modules written by the course author which contain the standard information covered in a typical course. Please note the exam questions are based upon the readings. Video lectures which support each lesson module subject should be viewed as many times as is necessary to fully understand the material.

**Module Review Questions:** The practice problems within the modules are not quantitatively part of your final grade, but the module work is a pass/fail component of the course and will be reviewed for completeness by the instructor. **Be sure to answer all of the problems, being careful to answer the questions in your own**
words at all times since this is an important part of adequate preparation for the exams. After you answer the practice problems, compare your answers to the solutions at the end of the module. If your answers do not match those at the end, attempt to figure out why there is a difference. If you have any questions please contact the instructor via the My Messages tab.

**Academic Integrity** is a serious matter. In the educational context, any dishonesty violates freedom and trust, which are essential for effective learning. Dishonesty limits a student's ability to reach his or her potential. Portage places a high value on honest independent work. In a distance learning situation, we depend on the student's desire to succeed in the program he or she is entering. It is in a student's own best interests not to cheat on an exam, as this would compromise the student's preparation for future work. It is required of each student to take exams without consulting course materials or study aids including another person, the lesson pages, printed materials, or the Internet. **Students may not copy and paste responses in the answer boxes from any source, including their own notes or drafts in a word processing document, unless explicitly instructed to do so.** To this end, your instructor will be alert to any indications that a student may be violating this principle. It will be necessary to show all your work on exams. When the nature of the course does not require numerical or symbolic determination (perhaps instead just requires recitation of learned descriptions), our experienced staff is able to detect the unauthorized consultation of study aids when answering exam questions. A violation of the academic integrity policy may result in a score of zero on the exam and possible expulsion from the course, at the discretion of the instructor with consultation with an administrative-instructional committee.

Review the Student Handbook for more specifics. If you have any questions regarding the academic integrity policy, please consult your instructor prior to taking module exam one.

**Required Computer Accessories**: It is recommended that students use a desktop or laptop computer, PC or Mac, when taking the course. Some tablet computers are potentially compatible with the course, but not all features are available for all tablet computers. The latest full version of Google Chrome, Firefox, Edge, or Safari browser is required for the optimal operation of the Canvas Learning Management System. In addition, some courses will use the Respondus Lockdown Browser for exams. Instructions on downloading and installing this browser will be given at the start of the course. It is recommended to also have the latest version of Flash installed as a browser plugin as some sections of the course may require it. We highly recommend using a high-speed Internet connection to view the video lectures and labs. You may experience significant difficulties viewing the videos using a dial-up connection.

For more information on basic system and browser requirements, please reference the following:

System requirements:  [https://community.canvaslms.com/docs/DOC-10721-67952720328](https://community.canvaslms.com/docs/DOC-10721-67952720328)

Browser requirements:  [https://community.canvaslms.com/docs/DOC-10720](https://community.canvaslms.com/docs/DOC-10720)
Module Topics

Module 1: In this module students are introduced to the study of nutrition and aspects of health. Content also includes an overview of the calculating calories and energy needs as well as an introduction to tools used in making healthy food choices.

Module 2: In this module students will cover the physiologic process of digestion and have an overview of common digestive disorders. Macronutrients (carbohydrates, proteins, and fats) are covered in detail including composition and digestion of each.

Module 3: In this module students are introduced to the idea of energy balance with a discussion of healthy weight loss. Content also includes a brief overview of fad diets so that students can recognize unhealthy weight loss techniques.

Module 4: In this module students will have a thorough overview of fat and water soluble vitamins as well as minerals. They will be provided with specific examples of each as well as digestion of each class. Complications and the various states of disease caused by deficiencies in vitamins/minerals will be addressed.

Module 5: In this module students will learn the importance of physical fitness and the types of energy utilized in various forms of exercise. Content also includes a discussion on various eating disorders and treatment as well as a brief discussion on undernutrition.

Module 6: This module covers the nutritional needs throughout the lifespan. Content includes a discussion on pregnancy and goes on to discuss specific needs from infancy through older adulthood.

Suggested Timed Course Schedule (to complete the course within a typical college semester)

All Portage courses are offered asynchronously with no required schedule to better fit the normal routine of adult students, but the schedule below is suggested to allow a student to complete the course within a typical college semester. Despite this suggestion, the students may feel free to complete the course at their desired pace and on a schedule determined by them.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Assignments</th>
<th>Subject Matter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days 1-16</td>
<td>Module 1, Exam 1</td>
<td>Overview of nutrition and energy needs</td>
</tr>
<tr>
<td></td>
<td>Case study #1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Days</th>
<th>Module, Exam</th>
<th>Case study</th>
<th>Major Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-33</td>
<td>2, Exam 2</td>
<td>#2</td>
<td>Overview of digestion and macronutrients</td>
</tr>
<tr>
<td>34-50</td>
<td>3, Exam 3</td>
<td>#3</td>
<td>Energy balance and weight loss</td>
</tr>
<tr>
<td>51-67</td>
<td>4, Exam 4</td>
<td>#4</td>
<td>Overview of vitamins and minerals</td>
</tr>
<tr>
<td>68-84</td>
<td>5, Exam 5</td>
<td>#5</td>
<td>Physical fitness and eating disorders</td>
</tr>
<tr>
<td>85-101</td>
<td>6, Exam 6</td>
<td>#6</td>
<td>Nutrition throughout the life span</td>
</tr>
<tr>
<td>102-108</td>
<td>Final Exam</td>
<td></td>
<td>Based upon module material</td>
</tr>
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**Grading Rubric:**

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
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<tbody>
<tr>
<td>6 Module exams</td>
<td>100 points each x 6 = 600 points</td>
</tr>
<tr>
<td>6 Case studies</td>
<td>30 points each x 6 = 180 points</td>
</tr>
<tr>
<td>Final exam</td>
<td>120 pts.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>900 points</strong></td>
</tr>
</tbody>
</table>

The current course grade and progress is continuously displayed on the student desktop.

**Grading Scale:**

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>89.5% - 100% (806 - 900 pts)</td>
<td>A</td>
</tr>
<tr>
<td>79.5% - 89.4% (716 - 805 pts)</td>
<td>B</td>
</tr>
<tr>
<td>69.5% - 79.4% (626 - 715 pts)</td>
<td>C</td>
</tr>
<tr>
<td>59.5% - 69.4% (536 - 625 pts)</td>
<td>D</td>
</tr>
<tr>
<td>&lt;59.4% (&lt; 535 pts)</td>
<td>F</td>
</tr>
</tbody>
</table>
**Suggested External References:**
If the student desires to consult a reference for additional information, the following textbooks are recommended as providing complete treatment of the course subject matter:


**Learning Support Services:**
Each student should be sure to take advantage of and use the following learning support services provided to increase student academic performance:

- **Video lectures:** Supports diverse learning styles in conjunction with the text material of each module
- **Messaging system:** Provides individual instructor/student interaction
- **Tech support:** Available by submitting a help ticket through the student dashboard

**Accommodations for Students with Learning Disabilities:**
Students with documented learning disabilities may receive accommodations in the form of an extended time limit on exams, when applicable. To receive the accommodations, the student should furnish documentation of the learning disability at the time of registration, if possible. Scan and e-mail the documentation to studentservices@portagelearning.com. Upon receipt of the learning disability documentation, Portage staff will provide the student with instructions for a variation of the course containing exams with extended time limits. This accommodation does not alter the content of any assignments/exams, change what the exam is intended to measure or otherwise impact the outcomes of objectives of the course.

**One-on-one Instruction:**
Each student is assigned to his/her own instructor. Personalized questions are addressed via the student dashboard messaging system.

Online learning presents an opportunity for flexibility; however, a discipline to maintain connection to the course is required; therefore, communication is essential to successful learning. **Check your messages daily.** Instructors are checking messages daily Monday-Friday to be sure to answer any questions that may arise from you. It is important that you do the same so you do not miss any pertinent information from us.
**Holidays:** During the following holidays, all administrative and instructional functions are suspended, including the grading of exams and issuance of transcripts.

- New Year’s Day
- Memorial Day
- Labor Day
- Christmas Break
- Easter
- Independence Day
- Thanksgiving weekend

The schedule of holidays for the current calendar year may be found under the Student Services menu at www.portagelearning.com

**Code of Conduct:** Students are expected to conduct themselves in a way that supports learning and teaching and promotes an atmosphere of civility and respect in their interactions with others. Verbal and written aggression, abuse, or misconduct is prohibited and may be grounds for immediate dismissal from the program.

This is a classroom; therefore, instructors have the academic freedom to set forth policy for their respective class. Instructors send a welcome e-mail detailing the policy of their class, which students are required to read prior to beginning the course.

**Grievances:** If for any reason a student has a complaint about the course work or the instructor, the student is advised to first consult the instructor, who will be willing to listen and consider your concern. However, if you don't feel you have received a satisfactory reply, you are encouraged to contact the Academic Dean of Portage Learning for further consideration of your complaint. The formal grievances process must be initiated via written communication. If desired, please file a written grievance to academics@portagelearning.com to initiate the process.

**Remediation:** At Portage Learning we allow a "one-time" only opportunity to re-take an alternate version of one module exam on which a student has earned a grade lower than 70%. This option must be exercised before the final exam is started. If an exam is retaken, the original exam grade will be erased and the new exam grade will become a permanent part of the course grade. However, before scheduling and attempting this retest, the student must resolve the questions they have regarding the material by reviewing both the old exam and the lesson module material. Once ready to attempt the retest of the exam they must contact their instructor to request that the exam be reset for the retest. Remember, any module retest must be requested and completed before the final exam is opened.

**Note:** Exams on which a student has been penalized for a violation of the academic integrity policy may not be re-taken.