COURSE SYLLABUS

Nutrition and Diet Therapy

BIOL 1322

Fall 2015

3 — 0 — 3
Lecture—Lab—Credit

Prerequisites/Co-Requisites: None

This syllabus has been reviewed and is current on the date indicated below.

Prepared By: Miranda Newberry Submitted On: July 16, 2015
Instructor/Course Designer

Reviewed By: Troy Williamson Approved On: August 11, 2015
Director of General Education
I. Instructor Information

Name: Miranda Newberry Phone: 325-734-3616
Office: Abilene, Room 410 Email: miranda.newberry@tstc.edu
Advisement Hours: N/A Office Hours: Mon/Wed/Fri 9:00-11:00 a.m.,
Tue/Thu 1:00-3:00 p.m., or by appt.

Department Chair: Troy Williamson (troy.williamson@tstc.edu)

Email is the most effective way to reach me; please remember to identify yourself and the course in which you are enrolled. Emails can be sent at any time; responses can be expected, within reason, during weekday hours of 8a-8p. Likewise, I expect to be able to reach you reliably by TSTC email throughout the semester, and this serves as our official notification pathway should there be any updates or changes to the course information, activities, or assignments.

II. Class Time & Location

This is an online class, but that does not mean the class is ‘self-paced.’ There are lecture assignments corresponding to each instructional unit to be completed weekly, weekly laboratory assignments, and scheduled quizzes, exams, and reports. The entirety of the class will be conducted through TSTC’s Moodle learning management system and the resources and links found there or associated with your textbook. You can access our Moodle site through the TSTC portal (https://portal.tstc.edu/) or by going directly to https://mycourses.tstc.edu. If you have difficulty with this site, technical support is available by phone at 800-592-8784, by email at tstchelpdesk@tstc.edu, or via YahooMessenger @tstchelpdesk.

Please note that a portion of each examination may be proctored, meaning you must take it in person at a testing location. Specific information will be provided regarding the examination proctoring requirements. Students are responsible for securing an appropriate testing facility, showing up at the correct time, and paying any fees incurred in the process. (No fees will be required of students who choose to complete their testing at one of the TSTC locations.) Should inclement weather interrupt any in-person testing schedules, students will be notified of alternative testing options via Moodle and/or email by 5:00 pm on the date of the cancellation.

III. Core Curriculum Objectives

The Texas Higher Education Coordinating Board has established six Core Curriculum Objectives which apply to general academic courses. These objectives are:

1) Critical Thinking Skills (including creative thinking, innovation, inquiry, and the analysis, evaluation, and synthesis of information);

2) Communication Skills (including the effective development, interpretation, and expression of ideas through written, oral, and visual communication);

3) Empirical and Quantitative Skills (including the manipulation and analysis of numerical data or observable facts, resulting in informed conclusions);
4) Teamwork (including the ability to consider different points of view and to work effectively with others to support a shared purpose or goal);

5) Social Responsibility (including intercultural competency, a knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities); and

6) Personal Responsibility (including the ability to connect choices, actions, and consequences to ethical decision-making).

In keeping with the guidelines established by the Texas Higher Education Coordinating Board, this course (BIOL 1322) will address the following Core Curriculum Objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, and Teamwork.

IV. Course Description & Introduction

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.

The course material will be presented in a manner and depth that prepares the student to be successful in future courses and careers, and to the improved health and self-awareness of the student.

This course is eligible for credit transfer to other institution of higher education. However, some degree programs have very specific science course requirements; students should consult the specific department at their proposed transfer institution to confirm this course will apply toward their intended degree program.

V. Learning Outcomes

The following learning outcomes are found in the Lower-Division Academic Course Guide Manual, published by the Texas Higher Education Coordinating Board.

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

A. 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.

B. 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.

C. Discuss functions, sources, deficiencies, and toxicities of macro- and micronutrients, including carbohydrates, lipids, proteins, water, vitamins, and minerals.

D. 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.
E. Utilize concepts of aerobic and anaerobic energy systems, and knowledge about macronutrients, vitamins, minerals, ergogenics, and supplements and relate them to fitness and health.

F. 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.

VI. Assessment Methods & Grading Policy

Exams may consist of several types of questions, including true/false, multiple choice, fill-in-the-blanks, short answer, and essay. Any content that has been addressed in the reading, lecture notes, an assignment, or other course materials is fair game for an assessment. You will be not only required to know the information, but to understand it, think critically using it as a basis, apply it, and build upon its foundation. I believe that conceptual comprehension is much more valuable than ungrounded memorization, and my questions will reflect this standard.

Never be afraid to ask if you are uncertain about anything related to the course. The process of learning is just as important as the content. You are welcome to ask for suggestions to alternative solutions to any problem, or a different angle from which to understand any topic. If there is a problem with an activity, bring it to the instructor’s attention for review. The “Grading Standards,” published on page 26 of the TSTC College Catalog & Student Handbook 2015, apply to this course. These standards can be found on the TSTC website at http://www.tstc.edu/student_life/catalog.

TSTC has adopted a mandatory midterm grade posting policy. Midterm grades will be calculated during week 8, the week of 19 October 2015, and posted in WebAdvisor (https://webadvisor.tstc.edu/). The grade is calculated by dividing the student’s total number of earned points to date by the overall total of points available to date, then multiplying by 100 to find an equivalent letter average. Please note that this grade is simply an indicator of progress to-date and has no predictive power regarding the student’s final score in the course.

Student grades will include the following assignments:

- Chapter Assignments (20 assignments worth 10 points each) = 200 points
- Diet Analysis Project (6 components worth 25 points each) = 150 points
- Unit Examinations (2 exams worth 100 points each) = 200 points
- Comprehensive Final Exam = 150 points

Total = 700 points

Final grades will be based upon the number of points earned, as follows:

- A = 627-700 points (≥89.5%)
- B = 557-626 points (≥79.5% but < 89.5%)
- C = 487-556 points (≥69.5% but < 79.5%)
- D = 417-486 points (≥59.5% but < 69.5%)
- F = 0-416 points (< 59.5%)
All work must be completed during the scheduled time period or a grade of zero (or an incomplete average) will result. Late assignments are not accepted and make-up work will not be available. Communicate any issues with assignments as early as possible (do not wait until the due date) to avoid missing the deadline.

No extra credit or make-up opportunities will be offered. By choosing to miss an assignment, you voluntarily choose to forgo any grade given. You are an adult, it is your decision, and I will respect your judgment. If you know in advance of a scheduling conflict due to an officially recognized circumstance, please notify me as soon as possible. In extreme circumstances accommodations may be discussed, provided you have appropriate documentation.

This is a fully online course, and as such, enrolled students are expected to have access to the computer hardware and software necessary to be successful. No extensions or exceptions will be granted based on technical difficulties, unless the issue can be verified as originating from Moodle, Mastering, Connect, or another course-related website, and the technical support team has confirmed that user error did not play a role in the inability to complete an assignment.

VII. Textbook & Reference Materials

The textbook, in hardcopy and/or virtual form, is required and necessary during the entirety of this course and should be acquired prior to the class’s start date. Required materials can be reserved and purchased through the TSTC West Texas Bookstore, especially if you are using financial aid monies; go to www.tstc.edu/student_life/bookstore and click the “Shop online” link for the Sweetwater bookstore.

The textbook required for this course is:


Print copy with Connect Plus ISBN 9781259203442
eBook with Connect Plus ISBN 9780078124655

Students are welcome to independently acquire a used copy of the textbook, though used bookstores and unofficial vendors usually do NOT provide the required Connect Plus access codes. Regardless of how the book is procured, access to Connect Plus is still a requirement to complete BIOL 1322. Note that Connect Plus can be purchased directly during class registration using the instructions found in Moodle and does not have to be acquired from a third party seller. The price should be the same for all access options.

In Connect Plus, this course is titled **Biol 1322: Nutrition and Diet Therapy**. This class section is called **Fall 2015**. You should register using the following link:


If you have any difficulties, please visit http://bit.ly/StudentRegistration for more information.

Assigned exercises will be graded in Connect Plus and feedback will always appear in your personal gradebook. However, final Connect Plus points will be imported into Moodle, so you will have a single grade for the course. **It is not possible to pass the class without participating in the**
**Connect Plus online portion.** Registration in Connect Plus and completion of the Chapter 1 module will also count as your “SHOW” assignment, allowing for official census presence and financial aid disbursement.

VIII. Additional Resources & Supplies

This is an online course; efficient internet access and reliable communication are required. The entirety of the course content will be delivered through the TSTC Moodle learning management system, references found therein, and McGraw-Hill’s Connect Plus website.

It will be necessary to read and edit documents created in the Microsoft Office suite and using Adobe software products. If you do not have Microsoft Office (or Open Office) and Adobe, you will need to regularly commute to a TSTC campus location to view and edit our class activities. **Access to only a mobile device or tablet is NOT enough to succeed in this fully online computer-based course.**

IX. Class Participation Policy & Student Conduct

This class will require effort, organization, dedication, and critical thinking; you will receive the grade you earn. Fully utilizing your resources will be crucial. If you feel you are struggling despite your efforts, do not be afraid to ask for help! Keep the following in mind.

- No student will be discouraged from discussion, and no topic will be prohibited.
- Students are expected to maintain all necessary class materials as instructed.
- If a problem arises with an online assignment or module, students should contact the instructor and/or appropriate technical support service immediately – any delay will result in loss of points for the assignment.
- Students should spend a minimum of 9-12 hours each week on class-related activities (studying, completing assignments, reading ahead, etc.). This minimum is the higher education standard for the general student to achieve a “C” average course grade. Higher grades will require greater expenditure of time and focus to earn.

Accountability and integrity are the sole two most important attributes a person can hold during academic evaluation and in the workplace. Do not do anything that may be perceived as questionable during the completion of this course. **Specifically, plagiarism is a serious offense that, even when not intentionally malicious in nature, is inexcusable and unacceptable.** Bamboozling, hoodwinking, defrauding, or any other form of impropriety will result in a zero on the assignment in question; no make-ups will be allowed. Extreme or flagrant offenses will be reported to the proper administrative authorities. Don’t do anything to disrespect others.

Students should review the *TSTC College Catalog & Student Handbook 2015* (which can be found at [www.tstc.edu/student_life/catalog](http://www.tstc.edu/student_life/catalog)) for information on Academic Integrity (page 40), Plagiarism and Collusion (page 61), and the Code of Student Conduct (pages 59-61). Students are required to abide by all of the policies stated within that publication.
X. Safety

There are no course-specific safety requirements for this class, because this is an online class. However, it is important for students to be aware of biological safety procedures, personal protective equipment, and laboratory safety guidelines. A working knowledge of biological safety is an expected outcome of BIOL 1322.

Additionally, students are expected to comply with all of the general safety requirements and guidelines published in the *TSTC College Catalog & Student Handbook 2015* (which can be found online through the college website at [http://www.tstc.edu/student_life/catalog](http://www.tstc.edu/student_life/catalog)).

XI. Special Needs

If you have a documented disability that will impact your work in this class, please contact the ADA Coordinator so that appropriate arrangements for your accommodations can be made. The counselor on your campus can assist you in this process. In accordance with the federal law, a student requesting accommodations must provide documentation of his/her disability to the ADA Coordinator. For more information call (325) 236-8292 or email amy.freeman@tstc.edu.

XII. Course Schedule

The semester is divided into fifteen weeks; each week will be treated as a learning unit and structured around assigned textbook chapter topics. Should any changes to the following schedule be made, the instructor will notify students via the course Moodle website and by TSTC MyMail.

**Each weekly module opens on Saturday morning at midnight.** Once opened, each will remain open for reference during the duration of the semester. The reading should be completed as soon as possible, and activities are spread throughout the coming week. Posted deadlines are the latest acceptance date, but students are encouraged to submit earlier. It is okay to submit everything at the same time. Easier/shorter assignments are due earlier in the week, while more time-consuming assignments are staggered throughout the remaining days. Do not wait until the last day to begin an assignment; those due later will take more time and focus to complete.

There will be continuous reading assignments, both from the textbook and outside reading, and students will be expected to apply this information on weekly activities, quizzes, and exams. All instructions for scheduled activities will be posted in Moodle with submission guidelines, including reminders for those exercises found in Connect Plus. Consideration will be given for spelling, punctuation, and grammar as these elements are non-negotiable in the workplace and reflect strongly upon the author regardless of profession. Have your assignments proofread by a third party if unsure. All major assessments are comprehensive unless otherwise noted.

All weekly chapter-based textbook assignments are to be completed on the Connect Plus course website, and each is due by 8:00 pm every Thursday. The grades will be available in the online Connect Plus gradebook and also imported into Moodle’s gradebook as a unit. Please note that it is not possible to pass the course without participating in the Connect Plus portion.

Gradebooks in both Moodle and Connect will be maintained throughout the semester, and updated after each assignment. Feedback and correct answers will be available after the class deadline as
applicable, and remain open for studying reference throughout the remained of the semester. Students can always check progress in this course by logging into the gradebooks to observe his/her total score to date, which should simply be divided by the total number of points available to date, and multiplied by 100% to estimate a current letter grade.

XIII. Instructor Credentials (CV) – Miranda Newberry

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Degree Earned</th>
<th>Date Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Texas at Arlington</td>
<td>Master of Science, Quantitative Biology</td>
<td>December 2009</td>
</tr>
<tr>
<td>The University of Texas at Arlington</td>
<td>Bachelor of Science, Microbiology, Chemistry</td>
<td>December 2006</td>
</tr>
<tr>
<td>Dallas County Community College</td>
<td>Associate of Science</td>
<td>May 2005</td>
</tr>
<tr>
<td>Northlake</td>
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</table>

<p>| Industry, Teaching or Training, and Other (examples: publications and memberships) Experience Relevant to the Course |</p>
<table>
<thead>
<tr>
<th>Description of Experience Related to the Course</th>
<th>Date Began–Ended</th>
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<tbody>
<tr>
<td>Texas State Technical College West Texas, Abilene campus Instructor of life sciences</td>
<td>2014-current</td>
</tr>
<tr>
<td>Tarrant County College District, Fort Worth, Northwest campus Instructor of life sciences</td>
<td>2010-2013</td>
</tr>
<tr>
<td>The University of Texas at Arlington Graduate teaching assistant, microbiology and cell biology</td>
<td>2007-2009</td>
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## Course Calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Connect Plus</th>
<th>Moodle Lecture Topic</th>
<th>Deadlines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 31-</td>
<td>Ch 1 Ch 2</td>
<td>Nutrition, Food Choices, and Health; Guidelines for Designing a Healthy Diet</td>
<td>8pm Thu 3 Sep: Connect Exercises</td>
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<td></td>
<td>Sep 4</td>
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<td></td>
<td>3pm Fri 4 Sep: Diet Project 1a</td>
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<tr>
<td>2</td>
<td>Sep 8-11 (*</td>
<td>Ch 3</td>
<td>The Human Body: A Nutrition Perspective</td>
<td>8pm Thu 10 Sep: Connect Exercise</td>
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<td>required for census, Ch2)</td>
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<td>3pm Fri 11 Sep: Diet Project 1b</td>
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<td>3</td>
<td>Sep 14-18</td>
<td>Ch 4 Ch 5</td>
<td>Carbohydrates; Lipids</td>
<td>8pm Thu 17 Sep: Connect Exercises</td>
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<td></td>
<td>(15th census)</td>
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<td>3pm Fri 18 Sep: Diet Project 2a</td>
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<td>4</td>
<td>Sep 21-25</td>
<td>Ch 6 Ch 8</td>
<td>Proteins; Overview of the Micronutrients</td>
<td>9pm Thu 24 Sep: Connect Exercises</td>
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<td>3pm Fri 25 Sep: Diet Project 2b</td>
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<tr>
<td>5</td>
<td>Sep 28-</td>
<td>Exam 1</td>
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<td>3pm Fri 2 Oct: Exam 1</td>
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<td></td>
<td>Oct 2</td>
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<tr>
<td>6</td>
<td>Oct 5-9</td>
<td>Ch 7 Ch 14</td>
<td>Energy Balance and Weight Control; Nutrition: Fitness and Sports</td>
<td>8pm Thu 8 Oct: Connect Exercises</td>
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<td>3pm Fri 9 Oct: Diet Project 3a</td>
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<td>7</td>
<td>Oct 12-16</td>
<td>Ch 9 Ch 10</td>
<td>Nutrients Involved in Fluid and Electrolyte Balance; Nutrients and Phytochemicals that Function as Antioxidants</td>
<td>8pm Thu 15 Oct: Connect Exercises</td>
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<td>3pm Fri 16 Oct: Diet Project 3b</td>
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<td>8</td>
<td>Oct 19-23</td>
<td>Ch 11 Ch 13</td>
<td>Nutrients Involved in Bone Health; Nutrients that Support Blood Health and Immunity</td>
<td>8pm Thu 22 Oct: Connect Exercises</td>
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<td>3pm Fri 23 Oct: Diet Project 4a</td>
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<tr>
<td>9</td>
<td>Oct 26-30</td>
<td>Ch 12</td>
<td>Micronutrients that Function in Energy Metabolism</td>
<td>9pm Thu 29 Oct: Connect Exercise</td>
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<td>3pm Fri 30 Oct: Diet Project 4b</td>
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<td>10</td>
<td>Nov 2-6</td>
<td>Exam 2</td>
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<td>3pm Fri 6 Nov: Exam 2</td>
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<tr>
<td>11</td>
<td>Nov 9-13</td>
<td>Ch 15 Ch 16</td>
<td>Eating Disorders; Undernutrition Throughout the World</td>
<td>8pm Thu 12 Nov: Connect Exercises</td>
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<td>3pm Fri 13 Nov: Diet Project 5a</td>
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<td>12</td>
<td>Nov 16-20</td>
<td>Ch 17</td>
<td>Safety of Our Food Supply</td>
<td>8pm Thu 19 Nov: Connect Exercise</td>
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<td>3pm Fri 20 Nov: Diet Project 5b</td>
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<tr>
<td>13</td>
<td>Nov 23-25 (</td>
<td>Ch 18 Ch 19</td>
<td>Nutrition During Pregnancy and Breastfeeding; Nutrition from Infancy through Adolescence</td>
<td>8pm Sat 28 Nov: Connect Exercises</td>
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<td>26-27 are holidays)</td>
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<td>3pm Sun 29 Nov: Diet Project 6a</td>
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<tr>
<td>14</td>
<td>Nov 30-</td>
<td>Ch 20</td>
<td>Nutrition During Adulthood</td>
<td>9pm Thu 3 Dec: Connect Exercise</td>
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<td>Dec 4</td>
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<td></td>
<td>3pm Fri 4 Dec: Diet Project 6b</td>
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<tr>
<td>15</td>
<td>Dec 7-11</td>
<td>Final Exam</td>
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<td>Scheduled 7-11 Dec: Final Exam</td>
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