PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

PRINCIPLES OF NUTRITION
BIOL 2400 (formerly BIO 2400)

Class Hours: 3.0
Laboratory Hours: 0.0
Credit Hours: 3.0
Date Revised: Spring 00

Catalog Course Description:

Human nutrition for the lifespan, including biochemistry of body nutrients, health and disease, government and scientific guidelines.

Entry Level Standards:

College-level English skills and completion of DSPM 0800 (college level math preferred).

Prerequisites:

BIOL 2010 or CHEM 1010

Textbook(s) and Other Reference Materials Basic to the Course:


I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Introductory Material</td>
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<tr>
<td>2</td>
<td>Digestion and Absorption</td>
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<td>3</td>
<td>Carbohydrates</td>
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<td>4</td>
<td>Lipids</td>
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<td>5</td>
<td>Proteins; Exam I</td>
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<td>6</td>
<td>Metabolism</td>
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<td>7</td>
<td>Energy Balance and Body Composition</td>
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<td>8</td>
<td>Weight Control</td>
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<tr>
<td>9</td>
<td>Water-Soluble Vitamins; Exam II</td>
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<tr>
<td>10</td>
<td>Fat-Soluble Vitamins</td>
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<tr>
<td>11</td>
<td>Water and Major Minerals/Trace Minerals</td>
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II. Course Objectives*:

A. Understand food chemistry so as to know the appropriate and adequate food source of nutrition. I.5

B. Understand scientific research methods and of educational methods of nutrition for the public so as to discern value of popular diets, teaching tools for various nutritional concerns. III.1, III.2

C. Understand the digestion, absorption and utilization of nutrients in the body and the implications for normal health as well as a variety of nutrition-related health concerns. III.2

D. Understand consumer concerns related to food and nutrition and government policy as well as private group response to include the individual’s role in education and behavior. VI.3

E. Apply knowledge about nutrition in a practical circumstance(s). VII.4

*Roman numerals after course objectives reference goals of the university parallel program.

III. Instructional Processes*:

Students will:

1. Obtain evaluate and present in both written and oral format information from nutrition journals in the ERC and from the World Wide Web. Information Literacy Outcome, Communication Outcome, Technological Literacy Outcome

2. Use software designed for personal dietary assessment which they will evaluate in comparison to known standards as well as change and reevaluate over the course of the semester. Technological Literacy Outcome, Numerical Literacy Outcome, Personal Development Outcome

3. Develop a vocabulary that enables them to communicate more effectively with both the public and with a variety of health care providers. Transitional Strategies

4. Participate in an outreach program for the public as a team of students. Problem Solving and Decision Making Outcome, Active Learning Strategies, Cultural Diversity and Social Adaptation Outcome

5. Present case studies of clinical importance. Transitional Strategies, Communication Outcome

6. Research, experience and report on a culturally different (to the individual) nutrition tradition. Cultural Diversity and Social Adaptation Outcome, Communication Outcome

7. Examine ethical issues related to nutrition to include regulation of media claims,
advertisements, information, pesticides, food irradiation, food substitutes, alternative nutrition, and other similar topics. *Personal Development Outcome, Cultural Diversity and Social Adaptation Outcome*

*Strategies and outcomes listed after instructional processes reference Pellissippi State's goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.*

**IV. Expectations for Student Performance***:

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

1. Describe basic food chemistry, digestive, absorptive and utilization processes in the human body. A,C
2. Identify risk factors, elements of current disease state/healthy lifespan, therapeutic measures, and future implications of health concerns related to nutrition. C
3. Identify use of various research and educational tools for nutrition. B
4. Discuss consumer concerns and responses/policies on the government, private and individual level. D
5. Enhance knowledge with ERC journals and web site information and apply knowledge to such practical circumstances as case studies, consumer concerns, nutritional choices, food labeling, consumer and patient education, personal dietary practices. E

*Letters after performance expectations reference the course objectives listed above.*

**V. Evaluation:**

A. Testing Procedures:

Each lecture unit will be evaluated using one exam worth 100 points. Exams consist of both objective (multiple choice) and discussion questions. Alternative forms of the exam are available for prior excused absences from a scheduled exam.

B. Laboratory Expectations:

Additional assignments are worth 20 points each. Total points for the course equals 360 points.

C. Field Work:

N/A

D. Other Evaluation Methods:

N/A

E. Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
<td>80-89</td>
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<tr>
<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
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<tr>
<td>F</td>
<td>&lt; 59</td>
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VI. Policies:

A. Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.

B. Academic Dishonesty:

With any form of valid proof of dishonesty with regard to student work or testing, the instructor may elect from a range of actions. Academic dishonesty could lead to failure for the entire course on consultation with the department head and dean. Additionally, the option of dismissal from the college may be sought.

C. Other Policies:

Classroom disruptions during lecture, any form of communication during testing, and any other behavior that may prove distracting to other students or the instructor will not be tolerated.

Students are expected to work on nutrition related material and participate in class discussion when time permits. Food and drink are not allowed in the classroom. Cellular phones and pagers must be turned off or set on the vibrating mode. Students are expected to stay for the entire length of the class lecture unless they have obtained prior approval to leave early from the instructor. Visitors are not allowed in the classroom.