Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title - Nutrition
Course Prefix and Number – BIOL 1322
Department - Biology
Division – Life and Physical Sciences
Course Type: (check one)
☐ Academic General Education Course (from ACGM – but not in WCJC Core)
☐ Academic WCJC Core Course
☐ WECM course (This course is a Special Topics or Unique Needs Course: Y ☐ or N ☐)

Semester Credit Hours #: Lecture Hours #: Lab/Other Hours #: 3:3:0
Equated Pay hours for course - 3

Course 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.

Prerequisites/ Co-requisites - TSI satisfied in Reading and Writing

Prepared by Andrew Berezin Date 9-29/14
Reviewed by Department Head Kim Raun Date 9/29/14
Accuracy Verified by Division Chair Kevin Dees Date 10/01/14
Approved by Dean or Vice President of Instruction gghunt Date 5-27-15
I. **Topical Outline** – Each offering of this course must include the following topics:

I. **Introduction to Nutrition**
   A. Food Choices
   B. Nutrients
      1. Classes
      2. Recommended Intakes and Assessments

II. **Planning a Healthy Diet**

III. **Digestion and Metabolism of Carbohydrates, Lipids, and Protein**

IV. **Carbohydrates:** Sugars, Starches, and Fibers.

V. **Lipids:** Triglycerides, Phospholipids, Sterols, and Alcohol

VI. **Proteins and Amino Acids**

VII. **Fat-Soluble Vitamins:** Vitamin A, Vitamin D, Vitamin E and Vitamin K

VIII. **Water-Soluble Vitamins:** B Vitamins and Vitamin C

IX. **Water and Minerals**

X. **Energy Balance and Weight Control**

XI. **Life Cycle Nutrition**
   A. Pregnancy and Lactation
   B. Infancy, Childhood, and Adolescence
   C. Adulthood and the Later Years

XII. **Under nutrition**
## II. Course Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Methods of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upon successful completion of this course, students will:</td>
<td></td>
</tr>
<tr>
<td>1. Apply nutritional knowledge to analyze personal dietary intakes, to plan nutritive meals using nationally established criteria to meet recommended goals, and to evaluate food labels and the validity of nutritional claims.</td>
<td>1. Exam questions and/or diet analysis project</td>
</tr>
<tr>
<td>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.</td>
<td>2. Exam questions</td>
</tr>
<tr>
<td>3. Discuss functions, sources, deficiencies, and toxicities of macro- and micronutrients, including carbohydrates, lipids, proteins, water, vitamins, and minerals.</td>
<td>3. Exam questions</td>
</tr>
<tr>
<td>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.</td>
<td>4. Exam questions</td>
</tr>
<tr>
<td>5. Utilize concepts of aerobic and anaerobic energy systems, and knowledge about macronutrients, vitamins, minerals, ergogenics, and supplements to maximize physical fitness and performance.</td>
<td>5. Exam questions</td>
</tr>
<tr>
<td>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.</td>
<td>6. Exam questions</td>
</tr>
</tbody>
</table>
III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

IV. Suggested Course Maximum - 36

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course

<table>
<thead>
<tr>
<th>Grade Assignments (%)</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-90</td>
</tr>
<tr>
<td>B</td>
<td>89-80</td>
</tr>
<tr>
<td>C</td>
<td>79-70</td>
</tr>
<tr>
<td>D</td>
<td>69-60</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
</tr>
</tbody>
</table>

Exam average (3-4 exams) 80-100%
Other (homework, quizzes, projects, etc.) 0-20%
Total 100%

VII. Curriculum Checklist

- Academic General Education Course (from ACGM – but not in WCJC Core)
  No additional documentation needed

- Academic WCJC Core Course
  Attach the Core Curriculum Review Forms
  • Critical Thinking
  • Communication
  • Empirical & Quantitative Skills
  • Teamwork
  • Social Responsibility
  • Personal Responsibility

- WECM Courses
  If needed, revise the Program SCANS Matrix & Competencies Checklist.