Honolulu Community College
General Education – DIVERSIFICATION DESIGNATION
Certification and Recertification
Application Form
Spring 2012

APPLICANT: Karen Hastings

E-MAIL: karenh@hcc.hawaii.edu

COURSE ALPHA and NUMBER: FSHN 185

COURSE TITLE: The Science of Human Nutrition

ESTIMATED NUMBER OF SECTIONS:
Fall: 4
Spring: 3

APPLICATION IS FOR:
☐ New Course ☐ Modified Course ☒ Existing Course ☐ Re-designation

☐ Certification ☒ Re-Certification. Date of last certification: ?

DIVERSIFICATION AREA DESIGNATION SOUGHT:
☐ DA (Arts) ☐ DP (Physical Sciences)
☒ DB (Biological Sciences) ☐ DS (Social Sciences)
☐ DH (Humanities) ☐ DY (Laboratory)
☐ DL (Literature and Language)

What percentage of the CONTENT of this course focuses on this diversification area? 90%

What percentage of CLASS MEETINGS focuses on this diversification area? 90%
1. **Hallmarks and SLOs.** Please explain how course-specific SLOs align with the diversification area’s hallmarks.

   **DB 1:** Uses the terminology of the biological sciences

   All 11 of the SLO’s (listed on course syllabus) require that the students master the terminology of the biological sciences. These terms include the basic information and definitions of all of the nutrients and their biological functions in the body which form the base on which all discussions are held in every SLO. It is the connection between the food we eat and how the body converts it into keeping humans alive.

   **DB 2:** Involves knowledge and theories relating to processes in the biological sciences

   All 11 SLO’s are supported by scientific research, that is knowledge and theories, that explain how the food we consume is converted to energy to run our bodies, nutrients (chemicals) to create body cells, and nutrients (chemicals) to regulate the body processes. This knowledge is used as a basis to support all of the information presented.

   **DB 3:** Demonstrates inquiry that is guided by observation/experiment and reasoning/mathematics

   The information presented in all 11 SLO’s is based on the scientific method, which is a process of asking and answering scientific questions through observation and experimentation. This helps students learn to evaluate information make informed food choices in their everyday lives.

2. **Assessment strategies.** Explain assessment strategies you have used (or plan to use) to measure the degree to which students exit the course with the course-specific SLOs. If there are multiple sections of the course taught by different instructors, please discuss how assessment is (or will be) carried out across instructors.

   Approximately 5 faculty members teach this course each semester. We agree to the content and that we can add some small items. We all teach the main content. We evaluate SLOs with exams, quizzes, a final exam, and 3 assignments. Each semester we meet to determine if we want to modify this to meet new information.

3. **Assessment of assessment.** How have you used (or plan to use) the assessment findings to modify or improve this course? If there are multiple sections of the course taught by different instructors, please discuss how review of assessment results is (or will be) carried out across instructors.

   We meet once a semester during finals week to discuss what has worked and what has not worked. We modify the course to correct the problems and to update the content when new information becomes available.
DIVERSIFICATION BOARD DECISION:

☑ Approved  
Re-Certification Due: Spring 2017 

☐ Not approved  
If not approved, reasons for disapproval:

Diversification Board Chair Signature: ____________________________
Date: 5/3/12
The Science of Human Nutrition
Food Science and Human Nutrition 185

Professor: Karen Hastings, R.D. (Registered Dietitian)
Office: Bldg. 27, Room 210
Phone: 845-9475 (HCC)
Office Hours: M: 12:00 Noon – 1:00 p.m. or by appointment
            T Th: 09:00 – 10:00 a.m. or by appointment

No food or beverages in classroom. Absolutely no cellular phones in class.

When opportunity knocks, you still must get up off the chair and answer the door!

Course Description

FSHN 185 is a 3-credit beginning level biological science course that integrates basic concepts of science with the study of human nutrition. It is designed for the person who wants an introduction to nutrition and who may later choose to major in it. No college-level science background is required; rather the course will provide elementary aspects of the several biological sciences that are needed.

Course content includes information on what nutrients are and what nutrients and foods do for humans; how healthy people can best get the amounts of nutrients and foods they need throughout their lifetime; how people and the environment change foods and their nutrient content; and nutrition issues of current interest.

The primary objective of this course is to provide a science-based nutrition background that will help you make appropriate, informed choices from the vast array of foods available in today's marketplace.

Student Learning Outcomes

Upon completion of this course you should be able to:

1. identify factors that influence why you eat as you do and how to make changes in your diet.
2. compare the various types of nutrition research with respect to type and reliability of information produced.
3. use the U.S. Dietary Guidelines and Food Pyramid to evaluate the nutrient adequacy of your diet.
4. use and understand the components of a food label.
5. describe what nutrients are and state basic information about each of six categories of nutrients (e.g., functions in the body, risks of excesses/deficiencies, sources, guidelines for intake).
6. identify which nutrients are sources of energy for the body and how an excess or a deficiency of energy can affect the body.
7. define malnutrition as over-and undernutrition and discuss its causes, cures, and associated health effects.
8. discuss current issues related to the safety of the food supply using concepts from toxicology.
9. describe physiological changes that occur during the life cycle and explain the changes in nutrient needs that accompany these changes.
10. discuss how alcohol and other drugs interact with nutritional processes.
11. evaluate nutrition information in popular media critically, with respect to its correctness.

HELP is available when you need or want it. If you are having trouble with the course or have questions or comments, please arrange an appointment.


**Required Packet:** "Course Packet for Food Science and Human Nutrition 185" is available at the Honolulu Community College Bookstore

**Course Grade:** The final course grade will be based on three components:

- Four examinations (40 pts. each) 160
- Average of 3 written assignments 40
- Final Examination 100

Total Points 300

**Examinations:** Four exams and a 120-minute final will be given to provide the majority of the input for evaluating your learning in the course. Mark your calendars for the correct dates and times.

**NO MAKE-UP EXAMS WILL BE GIVEN**

If you miss an exam and bring a written doctor's (MD's) excuse for illness, your exam score will be figured on the three remaining exams. If you do not bring a medical excuse within a week of missing the exam, no credit will be given and that portion of your exam grade will be figured on 4 exams, with the unexcused, missed exam entered as a "zero". NO student may miss 2 or more examinations. NO student will pass without taking the final examination.

**BRING A SHARPENED NO. 2 PENCIL TO EVERY EXAM.** Grades for exams taken one week should be available the following week.

A website has been created to help you review the course materials anytime you want. The URL is: http://www.honolulu.hawaii.edu/emc/FSHN
Transfer:

This course transfers to UH-Manoa for 3 credits as FSHN 185 which fulfills one of the core science requirements.

This course may also be used to meet one of the science requirements for an A.S. or an A.A. degree at HCC and the community college system.

Assignments: Three short written projects will be assigned during the semester. The assignments are provided in the course packet. The schedule of their due dates is provided below. Assignments must be turned in during the class period on the day they are due, not after the class; they will not be accepted later in the day. No credit will be given for an assignment turned in after its due date.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>#1: Assessing dietary intake: Food frequency and Using Food Guide Pyramid</td>
<td>Thursday – January 26</td>
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<td>#2: Understanding and using the new food labels</td>
<td>Thursday – February 16</td>
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<td>#3: Determining a daily fat budget</td>
<td>Thursday – March 8</td>
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If you have a disability that will make it difficult for you to carry out the work as I have outlined it or you will need some accommodations in testing, please make an appointment to see me during office hours or after class within the first 2 weeks of the course, so that we may make appropriate arrangements.
<table>
<thead>
<tr>
<th>TUESDAY</th>
<th>THURSDAY</th>
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<tr>
<td><strong>JANUARY</strong>&lt;br&gt;Syllabus and Introduction&lt;br&gt;Preface to the student text&lt;br&gt;Packet pp. 1-8</td>
<td>What you eat and why&lt;br&gt;Chapter 1, pp 2-27&lt;br&gt;Appendix 547-548</td>
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<tr>
<td>What you eat and why (continued)&lt;br&gt;Culture Videos</td>
<td>Tools for diet design&lt;br&gt;Chapter 2, pp. 28-53&lt;br&gt;Packet, pp. 9-19; 53-67</td>
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<td>Tools for diet design (continued)&lt;br&gt;Appendix pp. 501-505, 513-543</td>
<td>The Human Body&lt;br&gt;Chapter 3, pp. 54-85&lt;br&gt;Packet, pp. 20-28&lt;br&gt;Due: Assignment #1</td>
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<td>Exam #1 (covering topics through &quot;The Human Body&quot;)</td>
<td>FEBRUARY&lt;br&gt;Water&lt;br&gt;Chapter 8, pp. 238-247&lt;br&gt;Packet pp. 29-32</td>
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<td>Carbohydrates&lt;br&gt;Chapter 4, pp. 86-117&lt;br&gt;Packet pp. 33</td>
<td>Carbohydrates - continued&lt;br&gt;Labeling - read and bring Assignment #2 to class. Bring a label</td>
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<td>Lipids&lt;br&gt;Chapter 5, pp 118-151&lt;br&gt;Packet pp. 34-35&lt;br&gt;Appendix pp. 512</td>
<td>Lipids (continued)&lt;br&gt;Due: Assignment #2</td>
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<tr>
<td>Proteins&lt;br&gt;Chapter 6, pp 152-183</td>
<td>Exam #2 (covering &quot;Water&quot; through &quot;Proteins&quot;)</td>
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<td>Weight Control&lt;br&gt;Chapter 9, pp 288-329&lt;br&gt;Bring Assignment #3,&lt;br&gt;Packet pp. 36; 84-93&lt;br&gt;Appendix pp. 505-506, 545-546</td>
<td>MARCH&lt;br&gt;Weight control (continued)&lt;br&gt;Chapter 10, pp. 345-353</td>
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<tr>
<td>Weight control (continued)</td>
<td>Anorexia nervosa and bulimia nervosa&lt;br&gt;Chapter 9, pp. 317-329&lt;br&gt;Due: Assignment #3</td>
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<td>Undernutrition throughout the world&lt;br&gt;Chapter 14, pp. 474-495</td>
<td>Exam #3&lt;br&gt;Covering &quot;Weight Control&quot; through &quot;Undernutrition&quot; throughout the World</td>
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Final Examination: 40% "Nutrition for pregnancy, lactation and infancy" to end of semester
60% Comprehensive

Final Examination Schedule

Tuesday – Thursday classes

10:00 - 11:15 class - Thursday, May 10 - 10:00 - 12:00, 27-206
11:30 – 12:45 class - Tuesday, May 08 - 11:30 - 1:30, 27-206

Note: Every effort has been made to insure that the material in this syllabus is accurate and complete. However, occasionally changes must be made in the printed schedule. Thus the instructor reserves the right to make any changes in the contents of this syllabus that she/he deems necessary or desirable. These changes, if any, will be announced as soon as the need for them becomes apparent.