New Course Justifications
FSHN 785 - Diet and Cancer Seminar

1. **What is the new course?** This course will be a 1-credit seminar/discussion course. Faculty from the Cancer Research Center of Hawaii (CRCH) will present their current research (and background material) relating diet to cancer in a seminar format followed by questions and discussion led by the presenter and the course instructor(s).

2. **Why is this course needed?** The roles of diet in cancer etiology and treatment are rapidly growing and important areas of research. Since diet is a major modifiable risk factor in many cancers, our MS and PhD students in nutrition deserve the best training in these areas that they can get. HNFAS students as well as students from biomedical disciplines across the campus would greatly benefit from increased instructional and research interactions with the high-quality faculty from the CRCH. The CRCH faculty have expertise in cancer and diet that HNFAS faculty do not have.

There is no formal diet and cancer course currently offered at UH. The CRCH faculty do not regularly teach a course at UH. Individual CRCH faculty often present guest lectures when asked, but not in an organized diet and cancer course, as proposed here. This course would formally put such a course within CTAHR. Without this course, we would have to rely on spotty guest lectures within other courses.

The course was offered experimentally in 2004 (see attached syllabus for FSHN 682 - Topics in Nutritional Sciences offered in 2004 and #11 below). The experimental course was well received and appreciated by students. There is a demand for it.

3. **How will the content be organized?** The course instructor(s) will work with CRCH faculty to develop a series of seminar presentations throughout the semester based on the availability of CRCH faculty to present. Following each 40-45 minute seminar presentation a 20-25 minute question and discussion session will follow, lead by the presenter and the instructor. Reprints of the presenter’s research publications, which form the basis of the presentation, will be given to the students prior to class. Alternatively, an abstract of the presentation will be provided. Examples of seminar topics are shown in the attached syllabus for the experimental course done in 2004.

4. **What other courses at UH closely parallel the proposed course and in what way will the latter make a distinct contribution?** No other course at UH offers a series of current research topics in diet and cancer presented by experts in their respective cancer areas. A basic introduction to diet-cancer relationships is covered within FSHN 631-Nutritional Epidemiology, and FSHN 685- Nutrition and Disease: Cellular and Molecular Aspects. However, these courses are not taught by cancer experts and provide only the basic principals of diet and cancer interactions and research methods. This new proposed course would build on those basic concepts with current research findings, methods, and new hypotheses presented by experts in the field. It will also provide a means to apply the basic principals learned in FSHN 631 and 685.

5. **Where or how does the proposed course fit into the current curriculum?** The course would be an elective for MS and PhD students in nutrition. The course would be taken after the
completion of statistics, FSHN 631-Nutritional Epidemiology, and FSHN 685- Nutrition and Disease: Cellular and Molecular Aspects, in the student’s program of study. It will build on the content learned in these prerequisites by asking students to apply their knowledge to understand and critique current research in diet-disease relationships presented by experts in the field. The course is not intended, and cannot be used, as a substitute for FSHN 681 -Seminar in Nutritional Sciences where students present seminars themselves.

6. **Why is the number of credits and level justified? Explain the prerequisites.** The students will have 70 minutes of contact per week in the classroom, about 1 hour of preparation before class, and 1 hour per week of homework assignments, justifying the 1-credit load.

The 700 level is appropriate since the material presented at the seminars and discussions will be focused on current, journal-level, research on epidemiological and cellular/molecular aspects of diet and disease relationships. It will build on information learned in 600 level classes (FSHN 631 and 685). The target audience is graduate students in nutrition and biomedical sciences.

The prerequisites (FSHN 631-Nutritional Epidemiology and FSHN 685- Nutrition and Disease: Cellular and Molecular Aspects) will provide the basic concepts needed to understand the seminar and discussion material. Instructor consent is included as an option so that students in biomedical sciences that may lack the prerequisites noted above will be able to take the course if they have an appropriate background as determined by the instructor (e.g. are in medical school, are doing a post-doc at the CRCH, etc).

7. **How will the course assist students to achieve the critical skills and competencies expected of CTAHR graduates?**

   **Oral Communication**- Each student will be required to listen carefully to the speakers, and formulate and ask one question of at least three different presenters (total of 3 questions for the course). In addition, students will be asked to participate in discussions after each presentation. Questions and class participation will be part of the student’s evaluation. These requirements will give students experience in listening effectively and speaking extemporaneously using analytical and problem solving skills to formulate good questions and discussion/debate dialogue. Also, they will become more familiar with various presentation styles and visual aids.

   **Written communication**- Students will be required to write critiques of any two presentations of their choice. The critiques will be 1-2 pages long and identify at least two strengths and 2 limitations of the research presented. This requires logical, analytical writing, such as a good manuscript or grant reviewer might have to do. It will foster consideration of the scientific method of problem solving, and evaluating strengths and weakness in research methods and goals.

   **Analytical/problem solving skills**- These skills will be used in meeting the oral and written requirements as discussed above.

   **Personal characteristics**- This course will help student demonstrate curiosity by formulating questions about the talks and during discussions. Research ethics will come up in discussions.
They will be expected to accept and rebut, in a professional manner, criticism from fellow students and faculty about their opinions in discussions.

**Human relation skills**- During questions and discussions, students will be expected to demonstrate professional attitudes toward the speaker and fellow students, as well as sensitivity to others views. They will also build self confidence.

**Business management skills**- Not met in this course except as related to the funding of research, as this may come up as a strength or weakness in a research presentation. Funding sources for research will also be learned.

**Real world Experience**- Students will meet speakers form outside of CTAHR and get exposed to cancer researchers and professionals which may influence their career choices.

**Leadership skills**- Students will need to take the initiative in formulating and asking clear, relevant questions and participating in discussions. They will project an image of competence and intelligence.

**Computer skills**- Students will see how professional researchers/speakers use powerpoint and other media presentation formats.

**Global perspective**- Students will experience multi-cultural communication patterns in interacting with the multi-cultural speakers and each other. They will also be exposed to ethnic and geographical differences in diet and disease relationships.

8. **How will students be evaluated?**

   10%  Attendance - A valid reason needed for absence (medical, important travel, emergency, etc).

   40%  Class participation- Ask relevant questions of 3 presenters & participate orally in at least 3 classroom discussions on your own initiative.

   50%  Written assignments- Critique the research strengths and limitations of two presentations.
     (see attached syllabus from experimental course taught in 2004 for more details)

   Grading: ≥ 90% A, 80% B. 70% C, 60% D

9. **What are the minimum qualifications for teaching this course? Is a qualified instructor available?**

Minimal qualifications for the instructors are that they be a member of the graduate faculty, or cooperating graduate faculty, in Nutrition or Nutritional Sciences, have a PhD, and that at least one of the two instructors have a degree in nutrition or closely related field.
Dr. Michael Dunn, chair of the Graduate Programs in Nutrition (PhD) and Nutritional Sciences (MS) will be the lead instructor. He will lead classroom discussions, evaluate student attendance, participation, written assignments, and assign the grades. A faculty member from the Cancer Research Center will serve as co-instructor (currently Dr. Suzanne Murphy). The co-instructor will recruit the CRCH speakers, discuss with them the purpose and expectations of the course and their presentations, and arrange speaking dates. The co-instructor will also assist Dr. Dunn in classroom discussions and evaluating written assignments when time allows (the co-instructor may not always be available to attend class).

10. **How will the course be financed, assuming no further cutbacks?** No additional funds beyond normal departmental operating funds are needed.

11. **Has the course been offered before? Is there a demand for it?** The course was offered on an experimental basis in Fall 2004 as FSHN 682- Topics in Nutritional Sciences, with the topic being “diet, cancer, and other chronic diseases” (see attached syllabus from Fall 2004 course). There were 10 graduate students formally enrolled in the class. Seven students were from Nutritional Sciences, 1 from Food Science, and 2 from JABSOM. Often, post-docs from the CRCH and faculty from HNFAS or CRCH would “sit-in” on the speaker’s presentation. All participants were welcome to add to the questions and discussions (controlled by the lead instructor), giving the students a greater depth of discussion, and made it more of a “real world” research conference like atmosphere. Course evaluations were very positive (see attached CAFE forms).

HNFAS has MS programs in Nutritional Sciences, Food Science, and Animal Sciences and a new PhD in Nutrition. Students in these programs deserve, on a regular basis, the valuable interaction and education faculty from the CRCH can provide in the area of food, diet and cancer research.

12. **Is the course cross-listed with any other department?** Not at this time although this could be discussed with Public Health Sciences at some point.

13. **How will the course be evaluated?** The instructors will use the universities Course and Faculty Evaluation (CAFE) instrument to assess themselves and the course. Feedback from seminar speakers will also be solicited. The results will be reviewed by the HNFAS Graduate Program Committees to evaluate the success of the course.