January 4, 2018

Muriel Mc Clendon, Chair General Education Governance Committee Attn: Chelsea Hackett, Program Representative A265 Murphy Hall Mail Code: 157101

Dear Dr. McClendon:

Thank you for the opportunity to apply for GE credit in Foundations of Scientific inquiry.

As CHS 48: Nutrition and Food studies: Principles and Practice is a fully online course, I would like to share details about the course structure and student involvement, and how this fits into a Foundations of Scientific Inquiry framework.

Initially, this course was developed to answer a call for more online courses from the UCOP Integrated Learning Technology Initiative (ILTI). Nutrition is one of the top 10 course topics course topics identified by UCOP as needed to meet student demand. Additionally, it aligns with President Napolitano's creation of a Global Food Initiative, which has generated interest in providing nutrition and food studies courses. A requirement of the ILTI call is that the proposed course must be developed in collaboration with another UC campus; hence, we developed the course with Dr. Nigel Crawford at UCSD who teaches a nutrition course in their Biology department.

We worked with the Office of Instructional Development to make this class interactive and engaging; learning activities are paced for weekly completion. Weekly mandatory discussion sessions are conducted with Zoom web-based technology with the instructor and the TA; regular office hours are attended either in person, by phone, or on Zoom; and group forums allow students to share their thoughts and critiques with their peers. Students work virtually in groups, using Zoom, Google docs or Group me texts. They also break into small groups during the weekly discussion session, as needed.

To learn the material, students listen to online lectures, accompanied by slides or demonstrations. The textbook includes supplemental tutorials such as videos, reading questions, and animations to demonstrate specific concepts, such as digestion or lipoprotein transportation. Weekly low-stakes quizzes keep the students on track to complete the readings and lectures on a timely basis. You can see how the course is structured on CCLE in the CIMS application attachment, Appendix A.

Students also demonstrate their understanding through assignments such as a personal analysis of their three-day food records, creating and sharing infographics, reflecting on community programs, case studies, and analyzing and planning healthy diets. An example of an assignment is in Appendix B.

To further emphasize scientific methodology, we added a capstone project designed to give the students exposure to nutrition research. By working in groups to develop hypotheses about the eating habits of the class, research relevant literature, analyze the anonymous data provided by combining all

of the three-day food records, interpret findings, make inferences, and write a detailed abstract describing their work, students are motivated by their scientific curiosity about their peers' diets to learn about the research process. A link to the UCLA Library's Strategies for Research and Writing project helps them form their research questions and start a literature search. In addition, students develop a video describing their project which their peers use to critique their scientific methods and the video quality. Appendix C summarizes the project, which is assigned in steps to complete each week, starting in week 5.

Student response has been positive and enthusiastic. We believe that this course adds both to the Foundations of Scientific Inquiry and to important practical knowledge for students.

Again, we appreciate the opportunity to present this course to you and are available to answer any questions.

Sincerely, Mike Prelip, DPA Professor and Chair, Department of Community Health Sciences May Wang, Ph.D Professor, Department of Community Health Sciences Janet Leader, MPH, RD Lecturer, Department of Community Health Sciences January 4, 2018

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# General Education Course Information Sheet Please submit this sheet for each proposed course

Department & Course Number Course Title	Community Health Sciences 48 Nutrition and Food Studies: Principles and Practice			
Indicate if Seminar and/or Writing II course	<b>A</b>			
1 Check the recommended GE foundation	on area(s) and subgroups(s) for this course			
Foundations of the Arts and 1	Humanities			
<ul> <li>Literary and Cultural Analy</li> </ul>	sis			
Philosophic and Linguistic	Analysis			
Visual and Performance Arts Analysis and Practice				
Foundations of Society and C	Culture			
Historical Analysis				
Social Analysis				
Foundations of Scientific Inq	uiry			
Physical Science	•			
With Laboratory or Demons	stration Component must be 5 units (or more)			
Life Science		Х		
With Laboratory or Demons	stration Component must be 5 units (or more)			

2. Briefly describe the rationale for assignment to foundation area(s) and subgroup(s) chosen.

CHS 48 provides an overview of basic concepts of nutrition science, including energy, micro-and macro-nutrients, and the roles they play in maintaining health in the body. This fits the definition of a Life Science course. The course guides and encourages students to apply the concepts to their own lives, and to real world case and community studies. Students use concepts of scientific methodology to interpret nutrition research, use observational research methods to create and answer nutrition questions, and communicate the results of their research in a formal abstract format and video presentation.

3. "List faculty member(s) who will serve as instructor (give academic rank): Janet Leader, Lecturer; May Wang, Professor

Do you intend to use graduate student instructors (TAs) in this course? Yes X No

If yes, please indicate the number of TAs 1

4. Indicate when do you anticipate teaching this course over the next three years:

2017-18	Fall Enrollment	Х	Winter	Spring Enrollment
2018-19	Fall Enrollment	Х	Winter	Spring Enrollment
2019-20	Fall Enrollment	Х	Winter Enrollment	Spring Enrollment

5. GE Course Units

Is this an *existing* course that has been modified for inclusion in the new GE? Yes X No

	research studies Included an online notebook to organize observational research methods for group work. Changed a group assignment to focus on scientific research methods, including developing a question and hypothesis, gathering data, testing hypothesis through observation, and communicating results through a written formal abstract format and video
If yes, provide a brief explanation of what has changed.	 presentation

Present Number of Units: \_4\_\_\_\_

Proposed Number of Units:

4. Please present concise arguments for the GE principles applicable to this course.

General Knowledge	Developing food literacy should be a part of every student's education. This course teaches the basic principles of nutrition and helps students apply the concepts to their own lives, know how to choose foods best for their own health, and understand how food choices can influence the community in which they live. In addition, they learn to use scientific methodology to accurately process the myriad of information about nutrition that is presented in their everyday lives.
Integrative Learning	Cross-disciplinary or integrative learning is at the core of CHS 48 – a course in which students must demonstrate basic knowledge of fundamental biology and chemistry principles required for the study of nutrition, and be able to apply those principles to public health programs, policies and actions in the larger community.
Ethical Implications	This course includes discussions about the ethics of food sustainability including the role of eating animal foods; access to healthy food in all communities; government dietary guidelines and how they are developed, and adequate food intake (food security) for all people.
Cultural Diversity	One of the primary focus points of this course is the impact of culture on dietary patterns in the modern world. We begin with an assignment that asks the students to evaluate their own eating habits with respect to their cultural background and share that with their peers. Later assignments broaden the scope of inquiry to focus on cultural and environmental patterns that influence nutritional status in communities.
Critical Thinking	By creating research- informed hypotheses, then gathering and analyzing data about their peers' intake, students are asked to critically address their assumptions about what college students eat, and discuss factors that influence dietary behaviors using scientific literature to support their arguments.
Rhetorical Effectiveness	Students work together in a group to present the results of their research and support their interpretation of their findings using the format of a formal scientific abstract/presentation. In addition, they create a video presentation to share this information with a lay audience, using appropriate language to convey the same ideas.
Problem-solving	Case studies about people in different stages of the lifecycle encourage students to use the information from their lectures, readings and discussions to solve nutrition -related issues. In addition, applying these principles to communities helps them think of ways to resolve food-related barriers to a healthy lifestyle.
Library & Information Literacy	Students use a step-by-step worksheet developed by a UCLA librarian to generate nutrition questions that they want to explore, turn research questions into lines of inquiry, and use Food Studies or Public Health research guides to find the appropriate databases for their research. The worksheets help them manage their information, and they are required to turn in pieces of their research along the way so they can receive feedback from the instructors.
(A) STUDENT CONTA	ACT PER WEEK (if not applicable write N/A)
1. Lecture: includi	ng online forums 2.5 (hours)

- 2. Discussion Section:
- 3. Labs: Pearson Labs
- 4. Experiential (service learning, internships, other):
- 5. Field Trips:

1 (hours) (hours) (hours) (hours)

1

(hours)

(hours)

(A) T	OTAL Student Contact Per Week	4.5	(HOURS)
(B) O	UT-OF-CLASS HOURS PER WEEK (if not applicable wr	ite N/A)	
1.	General Review & Preparation:	1	(hours)
2.	Reading	3	(hours)
3.	Group Projects:	1	(hours)
4.	Preparation for Quizzes & Exams:	1	(hours)
5.	Information Literacy Exercises:	1	(hours)
6.	Written Assignments:	2.5	(hours)
7.	Research Activity:	1	(hours)
(B) TOTAL Out-of-class time per week		10.5	(HOURS)
GRAND TOTAL (A) + (B) must equal at least 15 hours/week		15	(HOURS)

# CHS 48 Nutrition and Food Studies: Principles and Practice

Instructor:	Janet Leader, MPH, RD	
Office:	CHS 21-245A	
Phone:	310-206-7942	
Email:	jleader@ph.ucla.edu	
To book office hours:	janetleader.youcanboo	k.me
Office Hours:	Mondays	10:00 a.m11:00 a.m.
	Tuesdays	10:00 a.m11:00 a.m.
	Wednesdays	3:00 p.m. – 4:00 p.m.
	Fridays	11:00 am-12:00 pm
Teaching Assistant:	Monica Pang	
Office:	CHS 26-078A	
Email:	monicapang@ucla.edu	
To book office hours:	s: monicapang.youcanbook.me	
Office hours:	Mondays	7:00 p.m8:00 p.m.
	Thursdays	1:00 p.m2:00 p.m.

Alternative appointments may be made if available.

Office hours may be conducted via Zoom, telephone, or in person. Please be sure to specify your preference when you make your appointment.

# Required Text (needed by the end of Week 1)

J.S. Blake, Nutrition & You, 4th edition. Publisher: Benjamin Cummings, 2017, bundled with Pearson's Modified Mastering Nutrition including MyDietAnalysis is available to purchase in 3 ways:

1. As a loose-leaf textbook with the Pearson access code + e-text, available in the Health Sciences Store in the Center for Health Sciences building on UCLA's South Campus or on their website.

- 2. As the e-textbook + Pearson access code, also available through the Health Sciences store.
- 3. You may also purchase the e-text and access code via the CHS 48 CCLE (Moodle) webpage.

\*Note: Do NOT buy the access code separately with a used textbook online as you will not have the correct access code for the assignments and will likely not get a refund. If you vary from these options, we will not be able to help you and you will lose money.

Pearson's <u>Modified Mastering Nutrition</u> contains self-paced tutorials, including animations and videos with questions, wrong-answer feedback, hints to help you solve problems, and a comprehensive self-study area. There will be Pearson activities assigned most weeks from which you will earn course participation credit.

#### **Course Description**

The goal of this course is to provide an overview of nutritional sciences and public health nutrition in a fully- online format. Students will learn basic science concepts of nutrition, and apply them to their own lives and real-world issues through recorded lectures, videos, diet analysis, activities, reports, online discussion of video and reading assignments, and reviews of community programs that apply nutrition and behavior theory to improve the public's health.

#### **Course Objectives & Competencies**

By the end of the course, you should have adequate understanding and ability to:

- Describe the components of a diet, its food sources, including proteins, fats, carbohydrates, vitamins and minerals, and the roles they play in maintaining health in the body;
- Use observational research methods to create and answer questions about nutrition in a small community
- Communicate results of research in an abstract and video presentation format
- Explain how the concept of energy balance and environmental influences apply to maintaining a healthy weight;
- Plan a healthful diet for people at different stages of the lifecycle;
- Assess the quality and quantity of their own diets;
- Explore aspects of social, cultural, behavioral and environmental causes of chronic disease;
- Identify a number of community health programs that support nutrition and nutrition education for different populations.

# **Course Format**

There are no classroom lectures for this course. All course content is delivered online, except for required weekly 1-hour live discussion sessions through UCLA's Common Collaboration and Learning

**CHS 48** 

Environment (CCLE). Course content includes the recorded video lectures, assigned readings and selfpaced online activities provided through Pearson's Modified Mastering Nutrition program (see description below). In addition, to promote collaborative learning in an online environment, you will be expected to work online in small groups, participate in online forums, and attend your weekly live discussion sections with either the professor or TA.

1ATuesday3-4 p.m., led by Janet Leader1BWednesday2-3 p.m., led by Monica Pang

Student guidelines for the amount of work required in a course are 3 hours per credit. Therefore, you should schedule **between 8-11 hours/week** to complete all of the required work (this may vary slightly from week to week). You have the flexibility to work through the course material at your own rate with the following exceptions:

- Individual or group assignments will have required deadlines posted to the course website for the given week.
- You will not be able to access subsequent week's quizzes until you have passed the Learning Checkpoint quiz for the current week with a score of 70% or better.
  - Students will have 2 attempts to pass each week's Learning Checkpoint quiz, after which they must contact the Instructor or TA to review course progress.
  - Your final grade for the quiz will be the average "mean" grade of all attempts.

# **Student Responsibilities**

Discussion Sections:

An online course requires that you use the resources and guidance provided to work independently or with your team to complete assignments on time, stay engaged by posting to the course forum, and read the weekly announcements. Specifically,

- Read the syllabus and understand course requirements;
- Stay up-to-date on all course-related work in a timely manner every week;
- Provide an equitable amount of effort to your team's projects;
- Post and answer questions about the course to the Get Help forum;
- Obey the expectations of UCLA's policy on Academic Integrity (available here)
- Inform the instructor of any expected absences by the end of Week 2. This includes medical, religious, athletics or other excused absences.
- Provide the instructor with a letter from your Center for Accessible Education advisor by the end of Week 2. Accommodations will not be made until the instructor has the letter at least one week before a quiz or assignment is due.

## **Grading Policies**

- Class quizzes on assigned readings/videos: 10 %
- Participation in online self-study quiz activities: 5%
- Participation in class discussion boards and live sessions: 10%
- Class assignments, team and individual: 30%
- Dietary Analysis individual reports: 20%
- Final team Organizational Research Analysis project (ORA): 20%

• Video presentation of final ORA paper: 5%

# **Late Policy**

- The grade for assigned work will be adjusted downward by 20% for each 12-hour period that it is late beginning immediately after the deadline passes (according to the CCLE clock system).
- Work that is more than two days late without prior arrangement will NOT be graded and will receive a zero.
- Extensions are only granted in urgent circumstances and must be arranged with your TA.

# **Students with Disabilities**

Students needing academic accommodations based on a disability should contact the Center for Accessible Education (CAE) at (310) 825-1501 or in person at Murphy Hall A255. As the professional delegated authority from the campus to determine reasonable disability accommodations, CAE will assess all requested accommodations and communicate appropriately with faculty. In the event that a student has approval for proctoring arrangements during exams, please inform your respective professors and/or Teaching Assistant(s) at least one week before date of exam(s). When possible, students should contact the CAE within the first two weeks of the term as reasonable notice is needed to coordinate accommodations. For more information visit www.cae.ucla.edu.

	Class Topic	<b>Assignments:</b> All assignment details, reading assignments and video lectures are listed on each week's Moodle page.
Week 0	How to succeed in this online course	Familiarize self with Welcome Page,
9/28	Food's role in life and society; course	Syllabus, take Class Format Quiz
	logistics	Personal Nutrition Infographic
Week 1	Tools for Health Living: Dietary Guidelines	Calculating energy content of meals
10/2	2015, Choose MyPlate, food labels, portion	(Pearson lab)
	sizes; Scientific Methodology	Food Label assignment; Weekly Learning Checkpoint Quiz How Scientists create nutrition hypotheses
Week 2	Digestion and absorption: anatomy and	Pearson Lab Practice
10/9	function	
	Common clinical syndromes; microbiome	Group Experts: Microbiome "Jigsaw"

	and health	Assignment Weekly Learning Checkpoint Quiz
Week 3 10/16	Carbohydrates: simple vs. complex CHO, CHO storage in the body, CHO digestion	Leah's Carbohydrate Day assignment; How to use My Diet Analysis Pearson Lab Practice
	Lipids: Digestion and absorption; lipoproteins and heart disease; RDA; healthy food sources	Pearson Lab Practice Weekly Learning Checkpoint Quiz
Week 4 10/23	Proteins: Digestion and absorption; RDA; healthy food sources	Developing a healthy vegan diet activity
	Vitamins: Roles of selected vitamins in the body; DGA 2015 nutrients of concern; food sources	Pearson Lab Practice Read about creating your 3-day food record Begin food record Thursday, submit following Monday, including anonymous data for Excel sheet Weekly Learning Checkpoint Quiz
Week 5 10/30	Minerals and Water: Roles of selected minerals in the body; DGA 2015 nutrients of concern; food sources	First Analysis + Eating Healthier questions about your 3-day food record Pearson Lab Practice Weekly Learning Checkpoint Quiz
	Observational Research Analysis	Begin Step 1-2 of Observational Research Analysis of Class 3-Day Food Records (ORA): Step 1 (question development) in discussion session Step 2 (hypothesis development) in group work outside of class

Week 6 11/6	Diabetes and Energy Balance: personal and built environmental influences on weight and chronic disease	<ul> <li>Step 3 of ORA submitted for review to</li> <li>instructors.</li> <li>Review of class ORA data.</li> <li>Begin Step 4: analysis of selected class data</li> <li>Pearson Lab Practice for Diabetes</li> <li>Built environment video</li> <li>Analysis of Weight of the Nation video</li> </ul>
	Food Insecurity in the US and programs that can help Veterans' Day	Weekly Learning Checkpoint Quiz
Week 7 11/13	Nutrition in Pregnancy and Lactation	Pregnancy case study Step 5: Submit ORA data and conclusion to instructors for review by Nov. 15. After instructor review, begin writing abstract. (optional: submit draft abstract to instructors for feedback by November 20)
	Toddlers/School-aged; Division of Responsibility in eating	Division of Responsibility questions submitted to forum for comments. Weekly Learning Checkpoint Quiz
Week 8 11/20	Food Safety	Food Safety case study in Pearson; forum food safety comments Submit Food Insecurity Infographic; forum

		comments
	Thanksgiving holiday	
Week 9 11/27	Nutrition for Older Adults	Osteoporosis case study Weekly Learning Checkpoint Quiz ORA final Abstract due
	Developing a personal and community philosophy of nutrition: Read "Can we Say What Diet is Best for Health?" by David Katz	Begin creating 5-minute video presentations of ORA results. Begin "Can we Say What Diet is Best for Health?" analysis activity
Week 10 12/4	Step 6: Communicate your ORA results to the group	Group video presentations due. Critique 3 other video presentations, using provided rubric. Submit "Can we Say What Diet is Best for Health?" activity
Finals week 12/11		Video presentation critiques due

**CHS 48** 

	UCLA	Course l	Inventory	Manager	nent S	ystem
31,5%	Main Men	u Inve	ntory F	leports	Help	Exit

# **Revise a Course**

Required fields are marked with a red letter **R**.

#### COM HLT 48 Nutrition and Food Studies: Principles and Practice Check all requested revisions that apply: Renumbering Title Format Requisites Units Grading Description Multiple Listing: Add New Change Number Delete Concurrent Listing: Add New Change Number Delete PROPOSED CURRENT 7-character code Department R 7-character code COM HLT COM HLT Requested R 7-character code 7-character code Course COM HLT COM HLT Number Course Number Course Number 48 48 prefix number suffix Check box if Multiple Listed Check box if Concurrent Concurrent Course Multiple Listed Course Course R Nutrition and Food Nutrition and Food Studies: Principles and Practice Catalog Title Studies: Principles and Practice Short Title **NUTR & FOOD STUDIES** NUTR & FOOD STUDIES (19 character limit) Units R Fixed: 4 Fixed: 4 Variable: Minimum Maximum Alternate: or Grading R Letter grade only Letter grade or Passed/Not Passed ▼ **Basis** Instructional **R** Primary Format Primary Format Format Lecture ▼ Lecture Hours per week 3 Secondary Format Secondary Format Discussion Discussion Hours per week 1 Next TIE Code R LECS - Lecture (Plus LECS - Lecture (Plus Supplementary Activity) [T] V **Supplementary** Activity) [T] GE R No O Yes No Requirement

Requisites

If yes, submit a proposal to the GE Governance Committee. Include enforcement level (enforcement, warning, none).

Page 15 of 16

Course R Description R Lecture, three hours; discussion, one hour. Overview of nutritional sciences and public health nutrition. Examination of basic science concepts of nutrition and application of them to student lives and real-world issues through lectures, diet analysis, activities, reports, discussion of video and reading assignments, and reviews of community programs that apply nutrition and behavior theory to improve health of public. Description of components of diets and food sources, including proteins, fats, carbohydrates, vitamins, and minerals and their roles in maintaining body health. Exploration of aspects of social, cultural, behavioral, and	<pre>theory to improve health of public. Students will use observational research methods to create and answer questions about a nutrition question in their cohort. 487 characters remaining</pre>
environmental causes of chronic disease. Letter grading.	Justify the need and state the objectives for this course revision. Identify effects on other
	courses in your department or on courses or curriculum in other departments. List departments and chairs consulted and summarize responses.
	We plan to submit a proposal to the GE governance committee for a Life Sciences GE approval. This revision will allow students to get GE credits for the course
	844 characters remaining
<u>Syllabus</u>	A syllabus and/or reading list is required for new courses. File <u>48.syllabus.F'17.pdf</u> has been uploaded. bytes received. Choose File No file chosen Upload syllabus file. Read the <u>upload instructions</u> for help.
Supplemental Information	Grading structure: Class quizzes on assigned readings/videos: 10% Participation in online self-study quiz
Effective R Fall 2016	Fall <b>v</b> 2018 <b>v</b>
Contact	Name GLORIA GREENGARD
Routing Help	E-mail gkrauss@ph.ucla.edu
Route Form Now Save Fo	rm for Later Exit without Saving Cancel Form
	<u>Menu Inventory Reports Help Exit</u> Registrar's Office MyUCLA SRWeb

Comments or questions? Contact the Registrar's Office at <u>cims@registrar.ucla.edu</u> or (310) 825-6704