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

De	partment & Course	Number					
Со	urse Title						
'na	licate if Seminar and	d/or Writing II co	ourse				
	Check the recom	mended GE fou	ndation area(s) a	and subgroups(s)	for this cou	rse	
	Foundati	ons of the Arts	and Humaniti	es			
	• Literar	y and Cultural A	Analysis				
	• Philoso	ophic and Lingu	istic Analysis				
	• Visual	and Performance	ce Arts Analysis	s and Practice		<u> </u>	
	Foundati	ons of Society a	and Culture				
	• Histori	cal Analysis					
	• Social	Analysis					
	Foundati	ons of Scientifi	c Inquiry				
	• Physic	al Science	an an atmatian Ca	un ou out un ot h o 5			
	• Life S	cience	emonstration Con	nponeni musi be s	o units (or mo	x	[
	With	Laboratory or D	emonstration Con	mponent must be 5	units (or mo	re)	
		1		1 (-)) 11		
•	Briefly describe t	ne rationale for	assignment to f	oundation area(s) and subgro	oup(s) chosen	1.
	Students are exp	bosed to critical	thinking method	ds on reasoning,	analyzing ar	guments, hy	pothesis
	testing, likelihoo	od and uncertair	nly, decision ma	king, problem so	olving and cr	eative thinki	ing.
	thinking. Studen	nt should have e	xperience on sci	ientifically literat	ture who wil	l trained to l	earn how to
	make scientific	evaluation and o	lraw evidence b	ased conclusion.			
•	"List faculty men Yan Wang – Gra	nber(s) who will aduate Instructo	l serve as instruc or for Summer (I	ctor (give acaden Ph.D. Candidate)	nic rank):		
	Do you intend to	o use graduate s	tudent instructo	rs (TAs) in this c	course?	Yes X	No
			If yes, please i	ndicate the numb	per of TAs		
					-		
•	Indicate when do	you anticipate	teaching this cou	urse over the nex	t three years	5:	
	2015-16	Fall	\	Winter	{	Spring	
		Enrollment	I		1	Inrollment	
	2016-17	Fall	\	Winter		Spring	
		Enrollment	1		1 	Summer	X 2017
					I	Enrollment	25-30
	2017-18	Fall		 Winter		Spring	
		Enrollment	I	Enrollment	I	Enrollment	
	GE Course Units						
]	Is this an <u>existing</u>	course that has	been modified f	for inclusion in th	ne new GE?	Yes	No X
]	ir yes, provide a b	riet explanation	of what has cha	anged.			5
]	Present Number of	f Units:		Propose	ed Number o	f Units:	5

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

General Knowledge	General understanding about the scientific publications. The students will have basic evidence-based evaluation on the fundamental concept or framework about the idea.
Integrative Learning	Understanding the rationale behind the language in the published articles. Use self judgement to retrieve the knowledge, draw valid conclusion.
Ethical Implications	Learn a model that assist for decision making process and eventually improve the problem solving skills. Understand the human psychology and culture issue.
Cultural Diversity	Understand the cultural diversity is widely considered Evidence-based research. Learn how to analyzing information in the publications. Understand culture diversity is important.
Critical Thinking	Critical thinking is the key and essential in this course. Reasoning augments and valid conclusion needs to be clearly addressed in any claim.
Rhetorical Effectiveness	Understand the arguments in media and advertisements, evaluate the conclusion use evidence-based methods and hypothesis testing analysis.
Problem-solving	Problem solving and decision making are part of the thinking. Learn how to define the problem well and using the skills to seek the solutions.
Library & Information Literacy	Article database and library information is part of the critical thinking on how to identify the valid information.

(A) STUDENT CONTACT PER WEEK (if not applicable write N/A) 1. Lecture: 4 (hours) 2. Discussion Section: (hours) 3. Labs: (hours) 4. Experiential (service learning, internships, other): (hours) 5. Field Trips: (hours) (A) TOTAL Student Contact Per Week 4

(B) OUT-OF-CLASS HOURS PER WEEK (if not applicable write N/A)				
1.	General Review & Preparation:	1	(hours)	
2.	Reading	3	(hours)	
3.	Group Projects:	2	(hours)	
4.	Preparation for Quizzes & Exams:	2	(hours)	
5.	Information Literacy Exercises:	1	(hours)	
6.	Written Assignments:	2	(hours)	
7.	Research Activity:	1	(hours)	
(B) T	OTAL Out-of-class time per week	12	(HOURS)	
GRA	ND TOTAL (A) + (B) must equal at least 15 hours/week	16	(HOURS)	

Course # TBA Critical Thinking about Food and Science Publications: Course Outline

Room:TBAInstructor:Yan WangPhone:310-825-8089Office Hour:TBA

Time:Summer Session COffice:CHS 63-050Email:wangyan@ucla.edu

Objectives: The goals of this summer course are to enhance the skills and knowledge necessary to critically evaluate scientific articles in food science and nutrition studies and develop a basic understanding of the research process and critical thinking.

Course Description: Critical thinking becomes an integral part of learning and understanding the food science and eventually become a food scientist. This course will help the student develop the process of further thinking about the stories behind the conclusions from the nutrition studies and food scientific literature. The skills of critical thinking must be practiced with a wide variety of problems in many different contexts in order to be learned and retained. The exercises, discussions, reports, and readings in this course are designed to provide the practices to become a critical thinker in food science and literature.

Prerequisites: This is a lower division, Scientific Inquiry GE Course.

Textbooks:

Required

- > Chaffee, John. *Thinking critically.* Cengage Learning, 2014.
- Halpern, D. F., & Riggio, H. R. (2013). Thinking Critically About Critical Thinking: A Workbook to Accompany Halpern's Thought & Knowledge. Routledge.

For Food Science Minor

- Shewfelt, R. L. (2012). Becoming a food scientist: to graduate school and beyond. Springer Science & Business Media.
- Bower, J. A. (2013). Statistical methods for food science: introductory procedures for the food practitioner. John Wiley & Sons.

Optional

- Rossi, Frank, and Victor Mirtchev. Statistics for Food Scientists: Making Sense of the Numbers. Academic Press, 2015.
- > Ruggiero, Vincent Ryan. *Becoming a critical thinker*. Nelson Education, 2014.
- Stratton, Jon. *Critical thinking for college students.* Rowman & Littlefield, 1999.

Grading

- Active participation and discussion (15%)
- Five weekly reading assignments (10% each)
- Group project presentation (15%)
- Final Critiques about Food and Science publication (20%)

Letter grades will be assigned as follows: 98-100=A+, 92-97=A, 90-91=A-, 88-89=B+, 82-87=B, 80-81=B-, 78-79=C+, 72-77=C, 70-71=C-, below 70=F. Late assignments will be penalized at a rate of 5% per day.

Details about grading

Participation (15%): including timely attendance to the class, 2 pop quizzes will be given at the beginning of the sessions without announcement in advance. Only the higher score will be counted for the quiz credit. Actively participate in the discussion about the critiques of food literature and conclusions in the publications. There will be weekly after a class discussion about the concepts or topics post on the website. You are required to choose 2 discussion topics and write on the discussion board.

Weekly Assignments ($10\% \times 5$): There will be 5 weekly assigned homework, due by the end of the class day. Late assignments will be penalized at a rate of 5% per day. The assignment is based on summaries and comments from the published articles, chapter materials. The assignment is minimum 2 pages and no more than 5 pages.

Group Presentation (15%): About 3-4 students are assigned into groups (roughly total 6 groups) to present a format of applications in class on the 6th week. Students are welcome to choose the topic on below from the **Workbook** as list below,

Groups	Торіс	Present time	Critiques
Group 1	Reasoning (Chapter 4)	Week3	Group 5
Group 2	Analysis arguments (Chapter 5)	Week3	Group 6
Group 3	Thinking as hypothesis testing (Chapter 6)	Week4	Group 1
Group 4	Likelihood and uncertainty (Chapter 7)	Week4	Group 2
Group 5	Problem solving skill (9)	Week5	Group 3
Group 6	Creative thinking (10)	Week5	Group 4

Students are required to present the literature, study design, sampling, funding, conflicts of interest, study size, recruitment, statistical analysis and critiques on the potential flaw on a generalization of the study. Another group serves as the critiques to evaluate the presentation on the critiques. There will be 10% credits from the group presentation and 5% of critiques on the evaluation of others.

The presentation will be 20 minutes and 10 minutes for questions. A draft slides of the presentation will be sent to the instructor at least 72 hours before the day of the presentation. Please do not exceed the 20 minutes time limit. The grade will be based on the quality of the work and the presentation. The group as a team will be assigned the same grade.

The critiques will submit an evaluation form after the presentation. The materials will be shared at least 48 hours before the presentation. Please fill out the evaluation form and critiques by the end of the presentation. Please be prepared to ask questions and give comments for both critique group and general audiences.

Final critiques on literature (20%): Students are required to work independently on the critiques of a peer-review publication in food and science literature. One page proposal and a full copy of the article to be criticized is due by the end of 3rd week. Approved or Revision suggestions will be given by 4th week. Final Paper is due on Friday, September 22, 2017, at 11:59pm. Minimum 6 pages and maximum 8 pages, including title, abstract, background, methods, results, conclusion, discussion and critiques and references. Details of guidelines about how to write a good critique will be given in details during lecture. APA style of citations is required.

Some resources you may find useful,

- 1. FSTA Food Science and Technology Abstracts, <u>http://www.library.ethz.ch/en/Resources/Databases/FSTA-Food-Science-and-Technology-Abstracts</u>
- Research Databases for Food Science & Nutrition, University of Waterloo, <u>http://journal-indexes.uwaterloo.ca/results.cfm?resourceType=index&subjectID=175&subjectHeading</u> =Food%20Science%20%26%20Nutrition
- 3. FOODnetBASE, <u>http://www.crcnetbase.com/page/food_science_ebooks</u>
- 4. Finding Journal Articles: Food Science Research Guide from NCSU, https://www.lib.ncsu.edu/guides/foodscience/journal
- 5. Nutrition top database from Connell University, http://guides.library.cornell.edu/c.php?g=31078&p=198972

Course Policy

This is an upper division summer course, so please demonstrate that you have made the best effort. It is a strict policy that I will not take late homework assignments or papers, except under rare and well-justified circumstances such as an unforeseen personal event that is convincingly documented no later than 24 hours after the due date. There may be occasions where I will need to reach you outside of the regularly scheduled class hours. Usually, I will use email as the first means of contact. Please make sure that you check your email regularly. Generally, I will try to respond to email inquiries within 24 hours of receipt but please do not expect an immediate reply.

Statement on academic integrity: You are expected to abide by UCLA's Code of Conduct. Cheating and plagiarism are not tolerated and can result in failure of the course and/or other disciplinary actions including expulsion from UCLA.

To view the Code of Conduct, go to www.deanofstudents.ucla.edu/studentconductcode

Students with Special Needs

If you need an accommodation because of a disability, please contact me as soon as possible to set up an appointment. We can discuss your needs and potential accommodations. I rely on the Office for Students with Disabilities for assistance in verifying and accommodating your special needs. If you have not previously contacted the Office for Students with Disabilities, I encourage you to do so at your earliest convenience.

Tentative Schedule of Topics (order of topics subject to change)

Weekly Topic, goal, assignment, and discussion

Week 1: Thinking and Critical Thinking

Reading Materials:

Chapter 1-2 of Chaffee Chapter 1 of workbook

Goal of the week

Understand the elements in idea generation, in research design, in scientific publications How to clearly define the problems, identify the question to be answered How to generate and develop the research hypothesis How to be critical about each claim in the media and published articles

Assignment of the week

Write a 3-page summary of how to define the research question, due week 2 class. Choose your group to present

Discussion topic on board

Topic analysis of the Media – find an example from the media, and write about the wrong of it.

Week 2: Solving Problem, Belief and Knowledge

Reading Materials:

Chapter 3-5 of *Chaffee* Chapter 2-3 of *workbook*

Goal of the week

What is critical review/evaluation of literature? Why is sampling an issue? Understand basic statistical terms, study designs, Understand independent thinking regardless of belief and knowledge Diverse perspective about reasons and evidence

Assignment of the week

Write a summary about possible flaws in the process of data collection and research design Using the problem solving skills to fix the complex problem

Discussion topic

Please comment on how to use a scientific approach to solve a person's perception differs. Comment a source of news and discuss how reliable are the informational and source.

Week 3: Thinking and talking vs concept and language

Reading Materials: Chapter 6-8 of *Chaffee* Chapter 4-7 of *workbook*

Goal of the week

Understand about concepts developing, relationships, and causal relationship

Assignment of the week

Write a summary about correlation, association, and causation based on the reading materials and class notes.

Reading the materials besides textbook are, Causation in the Presence of Weak Associations https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3024843/

Discussion topic

Please comment on either article,

- 1. Salt, salted food intake, and risk of gastric cancer: Epidemiologic evidence, http://onlinelibrary.wiley.com/doi/10.1111/j.1349-7006.2005.00006.x/full
- 2. Trust in Risk Regulation: Cause or Consequence of the Acceptability of GM Food? http://onlinelibrary.wiley.com/doi/10.1111/j.0272-4332.2005.00579.x/full

Week 4: Reason critically and Decision Making

Reading Materials:

Chapter 9-12 of *Chaffee* Chapter 8-10 of *workbook*

Goal of the week

Understand literature arguments, and reasoning critically, generalization carefully. Decision making skills

Assignment of the week

Comment on the reading of paper - Vegetarian, vegan diets, and multiple health outcomes: a systematic review with meta-analysis of observational studies http://www.tandfonline.com/doi/full/10.1080/10408398.2016.1138447

Discussion topic

Think of a major decision that you will be facing in the near future, use the worksheet procedure to help you reach a decision.

Week 5: Scientific Method and Epidemiology Studies

Reading Materials:

- 1. The role of epidemiology in developing nutritional recommendations: past, present, and future <u>http://ajcn.nutrition.org/content/69/6/1304s.full</u>
- 2. Epidemiology of What to Eat in the 21st Century, http://epirev.oxfordjournals.org/content/22/1/87.full.pdf
- 3. Prevalence and cumulative incidence of food hypersensitivity in the first 10 years of life, http://onlinelibrary.wiley.com/doi/10.1111/pai.12564/full

Goal of the week

Understand how epidemiology studies uncover the relationship between food and disease, food and health, food and nutrition, eventually food and science.

Assignment of the week

Comment on the reading of paper – Brain response to images of food varying in energy density is associated with body composition in 7- to 10-year-old children: Results of an exploratory study, <u>http://www.sciencedirect.com/science/article/pii/S0031938416300944</u>

Discussion topic

Please comment on the article, The Conflicted Nature of Food Security Policy: Balancing Rice, Sugar and Palm Oil in Indonesia,

http://www.tandfonline.com/doi/abs/10.1080/00664677.2016.1190919

Week 6: Food Science Articles Review and Critiques

Reading Materials:

- Can Organic Farming Reduce Vulnerabilities and Enhance the Resilience of the European Food System? A Critical Assessment Using System Dynamics Structural Thinking Tools <u>http://www.mdpi.com/2071-1050/8/10/971/htm</u>
- 2. Measurement of food safety culture using survey and maturity profiling tools, http://www.sciencedirect.com/science/article/pii/S0956713516300317
- 3. Too much common sense, not enough critical thinking! http://link.springer.com/article/10.1007/s10624-016-9434-5
- 4. Critical Thinking in Social Policy: The Challenges of Past, Present, and Future, http://onlinelibrary.wiley.com/doi/10.1111/spol.12253/full
- 5. Food products in line with the next generation of sustainability thinking http://stud.epsilon.slu.se/8846/7/olsson_m_160223.pdf

Goal of the week

Thinking!!! Critically, Sustainably, and Systematically.

Assignment of the week

Final Paper is due on Friday, September 22, 2017, at 11:59pm.

Discussion topic

(Bonus Discussion) Please write on a discussion board about your suggestions, critical thinking about the topics that make great contributions to food and science.

FOOD ST 27 W17



New Course Proposal

Food Studies 27 Critical Thinking about Food and Science Publications

Course Number Food Studies 27

<u>Title</u> Critical Thinking about Food and Science Publications

Short Title FOOD & SCIENCE PUBS

Units Fixed: 5

Grading Basis Letter grade or Passed/Not Passed

Instructional Format Lecture - 4 hours per week

TIE Code LECN - Lecture (No Supplementary Activity) [T]

<u>GE Requirement</u> Yes

Major or Minor Requirement No

Requisites N/A

- Course Description Critical thinking becomes an integral part of learning and understanding the food science and eventually become a food scientist. This course will help the student develop the process of further thinking about the stories behind the conclusions from the nutrition studies and food scientific literature. The skills of critical thinking must be practiced with a wide variety of problems in many different contexts in order to be learned and retained. The exercises, discussions, reports, and readings in this course are designed to provide the practices to become a critical thinker in food science and literature.
 - <u>Justification</u> Demand for courses related to food and that will satisfy requirements for the Food Studies Minor has increased. As a new department, Food Studies hopes to build course offerings to help meet this demand.

Syllabus File Food Science Literature Syllabus 1 18 2017.doc was previously uploaded. You may view the file by clicking on the file name.

Supplemental Information

<u>Grading Structure</u> Active participation and discussion (15%) Five weekly reading assignments (50%)

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FOOD ST 27 W17

	Group project presentation (15%) Final Critiques about Food and Science publication (20%)			
Effective Date	Summer 1 2017			
Discontinue Date	Summer 1 2017			
Instructor	Name	Title		
	Yan Wang	Instructor		
Quarters Taught	Fall Winter Spring	Summer		
<u>Department</u>	Food Studies			
<u>Contact</u>	Name	E-mail		
Routing Help	BROOKE WILKINSON	bwilkinson@college.ucla.edu		
ROUTING STATUS				
Role: Dean College/School or Designee - Audish, Lisa Michelle (LAUDISH@COLLEGE.UCLA.EDU) - 47245				
Status: Pending Action				

Role: FEC School Coordinator - Yokota, Mitsue (MYOKOTA@COLLEGE.UCLA.EDU) - 71104

Status: Returned for Additional Info on 1/19/2017 2:40:18 PM

Changes: No Changes Made

Comments: Routing to Lisa Audish for Dean/Vice Provost Turner's approval.

Role: Department Chair or Designee - Wilkinson, Brooke Elizabeth (BWILKINSON@COLLEGE.UCLA.EDU) - 54945

Status: Approved on 1/19/2017 11:01:20 AM

Changes: No Changes Made

Comments: On behalf Joseph Nagy, Food Studies Chair, this course is approved.

Role: Initiator/Submitter - Wilkinson, Brooke Elizabeth (BWILKINSON@COLLEGE.UCLA.EDU) - 54945

Status: Submitted on 1/18/2017 3:39:41 PM

Comments: Initiated a New Course Proposal



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FOOD ST 27 W17

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Comments or questions? Contact the Registrar's Office at <u>cims@registrar.ucla.edu</u> or (310) 206-7045

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