General Education Course Information Sheet

Please submit this sheet for each proposed course

Department & Course Number

Course Title

Indicate if Seminar and/or Writing II course

1. Check the recommended GE foundation area(s) and subgroup(s) for this course

**Foundations of the Arts and Humanities**
- Literary and Cultural Analysis
- Philosophic and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

**Foundations of Society and Culture**
- Historical Analysis
- Social Analysis

**Foundations of Scientific Inquiry**
- Physical Science
  - *With Laboratory or Demonstration Component must be 5 units (or more)*
- Life Science
  - *With Laboratory or Demonstration Component must be 5 units (or more)*

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

Students are exposed to critical thinking methods on reasoning, analyzing arguments, hypothesis testing, likelihood and uncertainty, decision making, problem solving and creative thinking. Students should have experience on scientifically literature who will trained to learn how to make scientific evaluation and draw evidence based conclusion.

3. "List faculty member(s) who will serve as instructor (give academic rank):
Yan Wang – Graduate Instructor for Summer (Ph.D. Candidate)

Do you intend to use graduate student instructors (TAs) in this course?  Yes  X  No  
If yes, please indicate the number of TAs __________

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

<table>
<thead>
<tr>
<th></th>
<th>2015-16</th>
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<th>2016-17</th>
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<th>2017-18</th>
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<tr>
<td></td>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
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<tr>
<td>Summer</td>
<td>X 2017</td>
<td>Enrollment</td>
<td>25-30</td>
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</table>

5. GE Course Units

Is this an existing course that has been modified for inclusion in the new GE?  Yes  X  No
If yes, provide a brief explanation of what has changed.

Present Number of Units: __________  Proposed Number of 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.

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**(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 (HOURS)

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**(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) TOTAL Out-of-class time per week** 12 (HOURS)

**GRAND TOTAL (A) + (B) must equal at least 15 hours/week** 16 (HOURS)
Course # TBA

Critical Thinking about Food and Science Publications: Course Outline

Room: TBA Time: Summer Session C
Instructor: Yan Wang Office: CHS 63-050
Phone: 310-825-8089 Email: wangyan@ucla.edu
Office Hour: TBA

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


For Food Science Minor


Optional

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% x 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,

<table>
<thead>
<tr>
<th>Groups</th>
<th>Topic</th>
<th>Present time</th>
<th>Critiques</th>
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</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>Reasoning (Chapter 4)</td>
<td>Week3</td>
<td>Group 5</td>
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<tr>
<td>Group 2</td>
<td>Analysis arguments (Chapter 5)</td>
<td>Week3</td>
<td>Group 6</td>
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<tr>
<td>Group 3</td>
<td>Thinking as hypothesis testing (Chapter 6)</td>
<td>Week4</td>
<td>Group 1</td>
</tr>
<tr>
<td>Group 4</td>
<td>Likelihood and uncertainty (Chapter 7)</td>
<td>Week4</td>
<td>Group 2</td>
</tr>
<tr>
<td>Group 5</td>
<td>Problem solving skill (9)</td>
<td>Week5</td>
<td>Group 3</td>
</tr>
<tr>
<td>Group 6</td>
<td>Creative thinking (10)</td>
<td>Week5</td>
<td>Group 4</td>
</tr>
</tbody>
</table>
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,**

3. FOODnetBASE, [http://www.crcnetbase.com/page/food_science_ebooks](http://www.crcnetbase.com/page/food_science_ebooks)
**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](http://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,
2. Trust in Risk Regulation: Cause or Consequence of the Acceptability of GM Food?

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 http://ajcn.nutrition.org/content/69/6/1304s.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, http://www.sciencedirect.com/science/article/pii/S0031938416300944

Discussion topic
Week 6: Food Science Articles Review and Critiques

Reading Materials:
5. Food products in line with the next generation of sustainability thinking [http://stud.epsilon.slu.se/8846/7/olsson_m_160223.pdf](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 Studies 27
### Critical Thinking about Food and Science Publications

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<thead>
<tr>
<th><strong>Course Number</strong></th>
<th>Food Studies 27</th>
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<tbody>
<tr>
<td><strong>Title</strong></td>
<td>Critical Thinking about Food and Science Publications</td>
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<tr>
<td><strong>Short Title</strong></td>
<td>FOOD &amp; SCIENCE PUBS</td>
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<tr>
<td><strong>Units</strong></td>
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<tr>
<td><strong>Grading Basis</strong></td>
<td>Letter grade or Passed/Not Passed</td>
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<td><strong>Instructional Format</strong></td>
<td>Lecture - 4 hours per week</td>
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<tr>
<td><strong>TIE Code</strong></td>
<td>LECN - Lecture (No Supplementary Activity) [T]</td>
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<td><strong>GE Requirement</strong></td>
<td>Yes</td>
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<td><strong>Major or Minor Requirement</strong></td>
<td>No</td>
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<td><strong>Requisites</strong></td>
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### 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.

### Justification
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

<table>
<thead>
<tr>
<th><strong>Grading Structure</strong></th>
<th>Active participation and discussion (15%)</th>
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<td>Five weekly reading assignments (50%)</td>
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</table>
Group project presentation (15%)
Final Critiques about Food and Science publication (20%)

Effective Date  Summer 1  2017
Discontinue  Summer 1  2017

Instructor  Name  Title
Yan Wang  Instructor

Quarters Taught
Fall  Winter  Spring  Summer

Department  Food Studies

Contact  Name  E-mail
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