General Education Annual Course Assessment Form

Course Number/Title: **NuFS115, Issues in Food Toxicology**  
GE Area R

Results reported for AY: **2014-2015**  
# of sections **2**  
# of instructors: **1**

Course Coordinator: **Giselle Pignotti**  
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Department Chair: **Lucy McProud**  
College: **CASA**

**Instructions:** Each year, the department will prepare a brief (two page maximum) report that documents the assessment of the course during the year. This report will be **electronically submitted**, by the department chair, to the Office of Undergraduate Studies, with an electronic copy to the home college by September 1 of the following academic year.

**Part 1**

To be completed by the course coordinator:

(1) What SLO(s) were assessed for the course during the AY?

**SLO1:** Students will be able to demonstrate an understanding of the methods and limits of scientific investigation.

(2) What were the results of the assessment of this course? What were the lessons learned from the assessment?

**SLO1** was assessed through embedded questions in exams (multiple-choice questions) from midterms and final exam and literature assignments to critically evaluate scientific articles. Knowledge behind each question is delivered through lectures, videos in class, group presentations and discussion in class, and writing critiques of scientific articles.

Approximately 62 students were assessed. Overall, assessment data shows that students are meeting SLO#1. Correct answers from exam questions regarding methods and limits of scientific investigation ranged from 72 to 100%. In addition, most students (70%) received a grade B or better in the literature assignments.

- **Example Exam Question:**

1. Knowledge of the dose-response relationship permits one to determine:
   a. The degree of metabolism of a toxicant
   b. The relationship of exposure dose to absorbed dose
   c. Whether exposure has caused an effect, threshold for the effect, and the rate of buildup of the effect with increasing dose levels.

   Students successful meeting the objective: 93%
2. Whether a chemical is harmful or beneficial depends largely on
   a. Whether it is natural or synthetic
   b. Whether it is found in animals or in plants
   c. The dose
   d. The molecular weight
Students successful meeting the objective: 100%

3. In the risk assessment process, the exposure assessment step performs which of the following function?
   a. Characterize the relation between doses and adverse effects in exposed populations
   b. Estimates the levels, types and duration of human exposure to agents
   c. Characterize the innate toxic effects of agents
   d. Make risk assessment and risk management comprehensible to the public
Students successful meeting the objective: 72%

- Assignment:

Literature Assignments: Read, summarize and critically evaluate scientific articles.
Grade Distribution - (A) 44%, (B) 26%, (C) 14%, and (D) 16%

As suggested by the Program Planning Committee report, one assignment and three exam questions that are applicable to SLO 1 were selected in order to standardize data assessment collection

(3) What modifications to the course, or its assessment activities or schedule, are planned for the upcoming year? (If no modifications are planned, the course coordinator should indicate this.)

The course was modified for the Fall of 2015 according to BOGS recommendations:

- Activities were better aligned with the GE learning outcomes
- Adjustments were made related to pseudoscience activities that will be used for future assessments
- More emphasis has been place in scientific research methods.

Part 2

To be completed by the department chair (with input from course coordinator as appropriate):

(4) Are all sections of the course still aligned with the area Goals, Student Learning Objectives (SLOs), Content, Support, and Assessment? If they are not, what actions are planned?

All sections of the course are aligned with GE learning objectives. The course has been offered twice a semester and taught by one instructor, facilitating consistency between sections. The instructor (Irene Chou) and the GE coordinator (Giselle Pignotti) attend regular meeting to discuss ideas and ongoing concerns.
If this course is in a GE Area with a stated enrollment limit (Areas A1, A2, A3, C2, D1, R, S, V, & Z), please indicate how oral presentations will be evaluated with larger sections (Area A1), or how practice and revisions in writing will be addressed with larger sections, particularly how students are receiving thorough feedback on the writing which accounts for the minimum word count in this GE category (Areas A2, A3, C2, D1, R, S, V, & Z) and, for the writing intensive courses (A2, A3, and Z), documentation that the students are meeting the GE SLOs for writing.

Students complete several written assignments including three literature assignments to critically evaluate scientific articles, one written report about a food toxicology issue, five presentation summaries, and two video summaries/critiques. The instructor provides a rubric to serve as a guideline and establish standards. An introduction to library resources is provided by the library liaison. Accounting all written assignment, students are required to write more than 3000 words for the course.