**New York City College of Technology**

**Interdisciplinary Committee**

**Course Review Form**

**DATE:** October 6, 2018

**REVIEWER:** Laureen Park

**COURSE TITLE & NUMBER:** Science in the Kitchen, PHYS1010ID

**PROPOSED BY:** Liana Karthikeyan and Robert Walljasper

**CREDIT HOURS:** 3 or 4?

**PREREQUISITES:** MAT1175

**COURSE IS: X** Existing New In development

**PROPOSED COURSE DESIGNATION**: X College Option X elective Capstone other:

**DEPARTMENT HOUSED IN:** Physics

**PROPOSED STRUCTURE (e.g., co-taught, guest lecture, LC, other):**  Co-taught

**CREDIT DISTRIBUTION** (if co-taught): 2 hours each professor

**CATALOG DESCRIPTION:** This interdisciplinary course is designed to introduce the physical concepts that are behind food cooking processes to non-science majors. The use of mathematics is limited to simple calculations. Laboratory work complements the course to gain hands-on experience and make use of the physical concepts in the kitchen for the students. Laboratory exercises are performed to explain the scientific method and to allow students to learn how to perform experiments and compose a lab report.

**DESCRIBE & EVALUATE HOW COURSE MEETS INTERDISCIPLINARY CRITERIA?**

I think that this course meets the interdisciplinary criteria well. It takes the very familiar fact of cooking and various ways of processing food, and approaches them with scientific knowledge and tools. It makes for a memorable learning experience and one that I think will be lasting. Food is a natural experiential component that makes the application and integration of the scientific component logical. Having instructors from each discipline will provide students with distinct perspectives that will be helpful for student work. I think that the assessment tools will be effective in promoting the intended learning outcomes. Lab reports provide regular opportunities to retain, understand, and acquire knowledge. The paper, presentation, and exams are opportunities for students to demonstrate skills of inquiry, problem-solving, information literacy, communication, analysis, and civic interactions.

**DESCRIBE & EVALUATE THE INTERDISCIPLINARY STRUCTURE?**

The interdisciplinary structure is clear in this course. An instructor from the biological sciences and one from the culinary arts will contribute to students learning skills and knowledge from both disciplines in ways that are synergistic. Each professor seems to take appropriate responsibility for instruction and assessment. Assignments and other assessment tools seem well designed to assess course and general learning outcomes.

**DOES COURSE MEET REQUIREMENTS FOR GENERAL EDUCATION?** I do think the course meets the requirements for general education, though that section in the application is not fully elaborated. It does provide depth and breadth of knowledge, communication and inquiry skills, information literacy, and the syllabus is clear about group work and academic integrity.

**STRENGTHS:** The topics seem highly suitable to both hospitality management and biology. The assessment tools include sufficient opportunities for writing and oral communication, as well as for nurturing inquiry, acquisition of knowledge, analysis, and critical thinking. The co-instructors seem to have a solid understanding of each others’ contributions to the overall course goals.

**WEAKNESSES:** The application lists MAT 1175 or higher as a pre-req, but the syllabus indicates that the pre-req is MAT 1190. Perhaps say either MAT 1175 or MAT 1190?

There is only one course learning objective that specifically speaks to Hospitality Management. Perhaps more could be included?

The course text is not required?

General education requirements not thoroughly elaborated.