**New York City College of Technology**

**Interdisciplinary Committee**

**Application for Interdisciplinary Course Designation**

**Evaluation Framework for PHIL2202, Symbolic Logic**

In the course, one lead professor in philosophy will guide students in exploring fundamental concepts in Logic. There will be frequent homework assignments, four tests, a paper, a final project, and a final exam. The assignments and class discussion are low-stakes assessments that allow students to gain familiarity with the methods and discourses of logic. Mathematics faculty will show students how to employ logic in mathematical proofs. They will also demonstrate the different terminologies used. CST and CET faculty will demonstrate how computer coding employs logical principles in processing data towards a desired output.

Tests will assess student proficiency in the fundamentals of logic, including symbolizing languages into symbolic form, applying rules of derivation and quantificational rules. The paper will encourage student development of skills including analysis, synthesis, critical thinking, as well as reading and writing skills in developing a thesis regarding logic and the scientific method. The paper asks students to explore a well-known concept in the philosophy of science first articulated by Karl Popper – i.e. the principle of falsifiability. This principle relies on the logical methods employed to determine validity and invalidity.

The group project requires students to develop lessons in review of the entire curriculum of the course. Groups present on their assigned topics towards a thorough review for the final exam. Students may use all the disciplines that they were exposed to in the course to develop their topics. All guest lecturers are invited to the presentations for assessment.

A final exam assesses proficiency in all the course concepts that students are taught in the semester. There will be sections on translation, operations, derivations, quantification translations and derivations, and perhaps others.