

# Science, Technology, & Human Values

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Last Updated: Mon, 01/05/2026

**Course prefix:** PHIL

**Course number:** 3127

**Section:** NZ

**CRN (you may add up to five):**

35272

**Instructor First Name:** Justin

**Instructor Last Name:** Biddle

**Semester:** Spring

**Academic year:** 2026

## **Course description:**

Science and technology are human activities that are intricately intertwined with values. This course examines these interconnections. It begins with an overview of scientific institutions, scientific reasoning, and the role of science in society. The next section examines prominent moral philosophical frameworks, which provide tools for thinking critically about the place of human values in scientific and technological practice. In the third section, we discuss case studies at the intersection of science, technology, environment, and society that particularly affect the Pacific region. The course concludes with group projects on problems at the intersection of science, technology, environment, and human values.

## **Course learning outcomes:**

- **Ethical Awareness:** This course should help to cultivate your ethical awareness – that is, your ability to identify ethical issues in specific contexts in which they are relevant, especially in science and technology.
- **Ethical Knowledge:** This course should help you to develop and deepen your knowledge of important ethical theories, frameworks, and concepts – including welfare, liberty, autonomy, equality, privacy, fairness, and others – and how these relate to science and technology.
- **Ethical Reasoning:** This course should help you to identify, construct, and evaluate ethical arguments that are based on the theories, frameworks, and concepts mentioned above.
- **Communication:** This course should improve your ability to communicate, both orally and in writing, in a way that is clear, precise, and supported with reasons. You

should improve your ability to do this even if the issues in question are controversial and subject to disagreement.

**Required course materials:**

None

**Grading policy:**

**Course Requirements:**

- Perusall Reading Assignments (20%)
- Quizzes (40%)
- Final Project (40%)

**Grade Scale:**

[90, 100] A

[80, 90) B

[70, 80) C

[60, 70) D

[0, 60) F

**Attendance policy:**

This class includes a strict attendance policy. For every unexcused absence, your overall course grade will be reduced by 3 percentage points. An unexcused absence is any absence for which I do not receive appropriate documentation or is not cleared by me in writing. Absences arising from personal travel are not excused. You will be considered absent for any class period in which you miss 30 minutes or more.

**Academic honesty/integrity statement:**

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

**Core IMPACTS statement(s) (if applicable):**

PHIL 3127 is a USG Core IMPACTS course that is part of the Arts, Humanities & Ethics area. Core IMPACTS refers to the core curriculum, which provides students with essential

knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.

This course will direct students toward a broad Orienting Question:

- How do I interpret the human experience through creative, linguistic, and philosophical works?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will effectively analyze and interpret the meaning, cultural significance, and ethical implications of literary/philosophical texts or of works in the visual/performing arts.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Ethical Reasoning
- Information Literacy
- Intercultural Competence