# Ethics and Engineering

**ECE/Philosophy 316**

**Fall Semester**

**2018**

**Course Guidelines**

“Ethics and Engineering” is a broad-ranging course in *moral theory and practice*, open to all disciplines and all majors. The principles studied throughout the semester are applicable to all career paths, and all who are interested are welcome to be members of the class. The course will be structured in three interrelated parts — (1) an *introduction* to the central themes of the course, (2) a focused study of *normative ethics*, and (3) an exploration of *ethical issues in the practice of a profession*, applied in the vocational context of the discipline of engineering (including safety and liability, professional responsibility to clients and employers, legal obligations, codes of ethics, and career choice). As a course in *philosophy*, one of the primary objectives of our journey together will be to explore the fundamental structure of human personhood, the grounding of moral action, and the development of moral character as a precondition of integral work in a profession — and the essential foundation necessary for our life together in society.

The course fulfills credit as an upper-division class in *advanced composition*, for which the University of Illinois requires twenty to thirty pages of *revised writing* as a minimum standard. In order to fulfill this requirement, each member of the class will *write and revise* a personal *mission statement* reflecting on your life work and career path (three pages), two *response papers* — an initial article analysis (three pages) and a substantive paper on normative ethical theories (five pages) — plus a final *research paper* of your own choosing(nine pages or more in length). All members of the course will also give a five-minute presentation on their research project at the end of the semester, followed by questions from the class. The research paper and class presentation function together as the final examination for the course.

# Instructor

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**Course Home Page**

The course home page can be accessed at the following URL [Uniform Resource Locator]: [http://publish.illinois.edu/ecephil316/](https://webmail.illinois.edu/owa/redir.aspx?C=-ZkV4KLDA0qHmzrtcyAQ9smHhZqak9EITJ5vlx3FwwTJEUR0MYpeTFpE66Qvvm88gmcN33M5GIc.&URL=http%3a%2f%2fpublish.illinois.edu%2fecephil316%2f).

**Classes**

Section E1: Tuesdays and Thursdays, 11:00 – 12:20, Room 329 Gregory Hall

Section E2: Tuesdays and Thursdays, 2:00 – 3:20, Room 329 Gregory Hall

**Prerequisites**

Junior standing and Rhetoric 105. The term “junior standing” means that the course will be taught at the level of an upper-division class in Philosophy and Advanced Composition, and that every enrolled member of the course is willing and able to work at the level necessary to fulfill these University requirements.

**Credit**

3 hours. ECE/Philosophy 316, “Ethics and Engineering,” satisfies University General Education requirements for Advanced Composition and Humanities and the Arts (Historical and Philosophical Perspectives).

**Course Objectives**

* To read and think critically
* To develop moral reasoning skills
* To improve writing skills in an engineering context
* To understand multiple perspectives and to respect others of diverse persuasions
* To study the fundamental structure of human personhood — what does it mean to be a human being — the grounding of moral action, and the development of moral character as the precondition of integral work in a profession and the essential foundation necessary for our life together in society

**Required Texts**

* Charles E. Harris, Jr., et al., *Engineering Ethics:* *Concepts and Cases,* 6th ed. (Boston: Cengage, 2019) — [http://services.cengagebrain.com/course/site.html?id=2712867](https://webmail.illinois.edu/owa/redir.aspx?C=OtrUtP06QUGmDjgMpariw3vBF7YvF1dRUHIoi8h2EwTn3htj5wrWCA..&URL=http%3a%2f%2fservices.cengagebrain.com%2fcourse%2fsite.html%3fid%3d2712867)
* A three-volume integrated set of course readings — *Volume 1: Introduction, Volume 2:* *Normative Ethical Theories, and Volume 3: Windows into Applied Ethics* — available in the textbook department at the Illini Union Bookstore
* *The Chicago Manual of Style*, 17th ed. (Chicago: University of Chicago Press, 2017) — available online through the University Library home page at [www.library.illinois.edu](http://www.library.illinois.edu). See the direct link through the course home page under “Important Tools” at <http://publish.illinois.edu/ecephil316/>
* William Strunk, Jr., *The Elements of Style* (New York: Harcourt, Brace and Company, 1920) — available online through “Project Gutenberg.” See the link on the course home page under “Important Tools” at <http://publish.illinois.edu/ecephil316/>

**Important Reference Works**

A good dictionary will assist you greatly in your use of the English Language. *Webster’s Dictionary* in an unabridged form is an excellent reference work that provides clear definitions and an etymological history of each word. As a member of the University community, the *Oxford English Dictionary* can be viewed online through the University of Illinois Library home page (www.library.illinois.edu). From this site, you can also consult the *Oxford American Thesaurus of Current English*.

**Source Citation**

All sources must be cited in “Notes and Bibliography” citation format, as outlined in the *Chicago Manual of Style,* 17th edition (University of Chicago Press, 2017). See “Part Three: Source Citations and Indexes,” Chapter 14, “Notes and Bibliography,” 14.1–14.305 [743–890].

**Thesis and Supporting Arguments**

All papers for the course are to be written as position papers, not simply thematic summaries of the readings or topics at hand. Take a position, state your thesis, and then provide a coherent set of well-articulated and substantive reasons in support of your thesis. A clear thesis and strong arguments are what makes good writing.

**Attendance and Assigned Readings**

The assigned readings are an essential component of the course. All required readings are listed on the course schedule. Bring to class the printed texts of the readings for each day. Seek to understand the central thesis and supporting arguments of the readings to the best of your ability, within the time allotted to you (see “Time Investment,” page 7). Then come to class ready to share your reflections on these texts and to engage in substantive dialogue with your neighbor. Attendance will be taken each day, and there will be a place on the attendance sign-in sheet for you to indicate — using an honors system — the amount of readings you were able to complete.

**Reflection Papers**

Focused reflection papers over the assigned readings will also be an important part of the course. These papers will help you crystallize your understanding of the readings and our discussions together in class — they will also help you learn the art of clear and concise writing, which is developed through consistent and regular practice. The reflection papers are only one page or more in length. They are “reflections” (and hence have a “journal entry” dimension), but the goal of each paper is to develop the skill of substantive philosophical reflection. View your reflection papers as a progressive series of cumulative home-work assignments, designed to engage the substance of the required readings in an upper-division course in philosophy.

To allow time for reflection, your papers will be due at the end of the week, submitted electronically through the compass course site on Friday by 11:00 p.m. — except for the first week of the semester (when your work will be submitted on Sunday). No reflection papers will be assigned for weeks three, four, nine, and ten (i.e., classes [#5 and #6], [#7 and #8], [#17 and #18], and [#19 and #20], when major writing projects will be due). There will be a total of eight reflection papers during the semester. Your reflection papers will be read and evaluated using a check/check-minus scale. Type each reflection paper in twelve-point, Times New Roman font, double-spaced, with one-inch margins. Place your name and submission date on the first line of your paper, and then begin your work on the next line. All papers must be visually at least one full page of text in length. You are free to write papers of greater length, if you choose.

You are responsible for all of the assigned readings, but use your reflection papers to focus on a portion of the readings — and our discussions in class — that you found to be significant. Briefly summarize the substance of *the author’s position* and then reflect upon the reading, developing *your own position* with well-reasoned argumentation in dialogue with the author. There is no mid-term or final examination for the course. The reflection papers, together with your completion of the assigned readings for each class session, will count toward a significant portion of your final course grade.

*Sequential Due Dates for Reflection Papers:*

Reflection Paper #1: September 2 (reflecting on the readings for class #2)

Reflection Paper #2: September 7 (reflecting on the readings for class #3 and #4)

Reflection Paper #3: September 28 (reflecting on the readings for class #9 and #10)

Reflection Paper #4: October 5 (reflecting on the readings for class #11 and #12)

Reflection Paper #5: October 12 (reflecting on the readings for class #13 and #14)

Reflection Paper #6: October 19 (reflecting on the readings for class #15 and #16)

Reflection Paper #7: November 9 (reflecting on the readings for class #21 and #22)

Reflection Paper #8: November 16 (reflecting on the readings for class #23 and #24)

**Personal Mission Statement**

Your first major writing project of the course will be to draft a three-page mission statement, due the beginning of the third week of the semester. The final version of your mission statement will be due at the end of the semester. Guidelines for the mission statement will be distributed in class and posted on the course site under “Course Documents” — [http://publish.illinois.edu/ecephil316/](https://webmail.illinois.edu/owa/redir.aspx?C=-ZkV4KLDA0qHmzrtcyAQ9smHhZqak9EITJ5vlx3FwwTJEUR0MYpeTFpE66Qvvm88gmcN33M5GIc.&URL=http%3a%2f%2fpublish.illinois.edu%2fecephil316%2f).

*Due Dates for the Mission Statement:*

Draft Due: September 9

Final Version Due: December 2

**Response Papers**

The mission statement will be followed by two response papers. As a course in advanced composition, each paper will be submitted through the compass course site first as a complete draft and then in a final version. The drafts of your papers will be evaluated with substantive comments and suggestions for revision (using Microsoft “Track Changes” format), but only the final version will be graded. A grading rubric will accompany each assignment.

*Due Dates for Response Papers:*

Response Paper #1: *Article Analysis* (3 pages)

Complete Draft: September 16

Final Version: September 30

Response Paper #2: *Normative Ethical Theories* (5 pages)

Complete Draft: October 28

In-Class Peer Review: November 1

Final Version: November 11

**Research Paper**

As one of the major writing projects of the course, you will complete a substantive research paper of nine pages or more in length. In your final project, you will carefully explore the ethical implications of a topic of your choice. The research paper will follow the same procedural steps of a complete draft, evaluation, and revision.

At the end of the semester, you will also give a five-minute presentation of your research project, followed by your response to questions from the class. The research paper and in-class presentation function together as the final examination for the course.

*Due Dates for Research Paper:*

Research Topic September 23

Bibliography, Thesis, Outline October 14

Complete Draft of Research Paper November 4

In-Class Peer Review November 13

Final Version November 25

Project Presentations November 27, 29; December 4, 6, 11

**Course Grading**

Attendance and Class Participation 10%

Assigned Readings 10%

Reflection Papers 15%

Writing Skills Assessment 5%

Mission Statement 5%

Response Papers 25%

Research Paper 25%

Research Project Presentation 5%

**Plus and Minus Scale**

93 – 100 % A

90 – 92.9 % A-

87 – 89.9 % B+

83 – 86.9 % B

80 – 82.9 % B–

77 – 79.9 % C+

73 – 76.9 % C

70 – 72.9 % C-

67 – 69.9 % D+

63 – 66.9 % D

60 – 62.9 % D-

0 – 59.9 % F

**Attendance and Class Participation**

Daily attendance is required and will be recorded each day. In the event of an absence, attendance credit will be granted by writing an additional reflection paper on the assigned readings for the day you were absent. A total of three (3) “absence papers” for the semester will be allowed.

Your attendance and participation in class will be a significant factor in determining your final grade. The synergy of the course hinges upon your active engagement with your colleagues in exploring the fundamental ideas that we will be studying throughout the semester.

**Classroom Guidelines**

* Class will start promptly at the beginning of the University scheduled time for each class period. Make every effort to be at your desk — ready to work — five minutes before class begins. Late attendance will be noted.
* Bring with you to class each day the printed texts of the assigned readings (or the e-book for *Engineering Ethics*) as specified on the course schedule. Careful textual reading and informed discussion together in class will be essential to the internal dynamics of the course. The importance of this requirement cannot be overemphasized.
* Turn off all electronic communication devices before the beginning of class.
* Please refrain from eating, sending text messages, or reading non-related course materials during class.
* As class begins, have ready at hand — in your heart and mind — the substance of your reflections on the assigned readings for the day.

**Review of Paper Submission Guidelines**

All papers must be submitted electronically through the compass course site — submitted electronically by 11:00 p.m. on the specified due date.

All major writing assignments (i.e., response papers and research papers) must use correct *Chicago Manual of Style* citation format, following the “Notes and Bibliography” guidelines.

All papers — including drafts — must be the complete number of pages. An incomplete paper will be given a ten percent [10 %] reduction.

All papers must be submitted on time. Late papers, regardless of circumstances (such as printer or computer malfunction), will also receive an automatic ten percent [10 %] reduction in the assigned grade. An additional five percent [5%] reduction in grade will continue for each day the paper is late, for a total of seven days. If the paper is not submitted within seven days, it will no longer be accepted. Note that the late penalty for papers applies to the draft as well as the final version. All of the major writing projects have been scheduled to allow sufficient time for revision between the complete draft and the final version due dates. You will receive detailed comments on the draft of each paper — a grade will be assigned only for the final version.

**Academic Integrity**

Violations of the standards of academic integrity will result in appropriate disciplinary action.

**Time Investment**

Steward your time well. University guidelines suggest that all members allocate two hours of work per week for every hour in class. Hence, for a three-hour course, the expected work load required to complete all assignments is approximately six hours of work per week.