**PRE 231 – History and Philosophy of Technology (3 credits, W course)**

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<tr>
<th>Autumn 2013</th>
<th>Alec J. Engebretson, Ph.D.</th>
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<tbody>
<tr>
<td>Wednesday evenings 6:00-10:30</td>
<td><a href="mailto:alec.engebretson@doane.edu">alec.engebretson@doane.edu</a></td>
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<tr>
<td>August 21, 2013 – October 9, 2013</td>
<td>402-826-8216 (o) 402-826-9541(c)</td>
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**Catalog description**

This course focuses on aspects of the history of technology: the moral and social dilemmas that past technologies gave rise to (even when those dilemmas were not clearly acknowledged); the potentials of selected current technologies; and the moral and social dilemmas that those technologies raise. Students study the ways major thinkers have tried to deal with the dilemmas technologies have posed, and are asked to think through their own responsibilities concerning the technologies discussed.

This course is a required cognate for the Information Systems Management major. This course satisfies the Philosophy-Religion requirement in Heritage Studies of the Doane Plan.

**Additional course description**

Technology is ubiquitous in modern society. Try to imagine the world if all technology suddenly disappeared. What would be gone and what would remain? In other words, what is technology? After providing a foundation in philosophic belief systems, this course will address that question and then branch out in three different directions, all related by the study of the history and philosophy of technology.

The first branch of this course will examine some of the key areas of study and principles which have emerged in the short history of the philosophy of technology. While studies of philosophy go back over 2,000 years and the use of technology by humans has been seen in pre-historic humans, the philosophy of technology as an academic discipline is less than 70 years old. **The primary means of study for this branch will be class seminars over readings from an introductory text. The seminars are structured so all students will participate and contribute.**

The second branch will focus on one particular technology – information technology – and one particular aspect of philosophy – ethics – in exploring ethical issues that have arisen as information technology has evolved. **The primary means of study for this branch will be trials of case studies in which all students will participate and during which an ethical verdict, rather than a legal verdict, will be sought.**

The third branch will apply material in this course to current happenings in our world. **As the primary means of study for this branch, students will seek out current events related to our use of technology, examine those current events through the philosophic lens provided by the seminars, and present their analysis to the class using the same framework as in the trials.**

Building on all branches, a **final project presentation** has students research a particular technology, past or present, and analyze that technology through their philosophic lens by developing a hypothetical case study which will go on trial the final night of class.
Course objectives

In successfully completing this course, each student will demonstrate

(1) an understanding of key areas of study and principles related to the philosophy of technology
(2) an increased ability to critically evaluate and form arguments on case studies, related to the ethical use of information technology
(3) an increased ability to examine and provide an analysis of current events, related to the ethical use of technology
(4) an increased ability to effectively communicate (reading, writing, speaking, listening) as evaluated against the intellectual standards of clarity, accuracy and precision (among others).

Texts

You will need weekly access to the following two books starting the first night of class:

(ISBN 1-4051-1163-1) - PT

(ISBN 978-0-521-70914-9) - CE
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<tr>
<th>Session</th>
<th>Topic</th>
<th>Homework</th>
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| 1       | Course introduction - history of the philosophy of technology  
A philosophic framework  
A philosophic inventory  
Philosophic belief systems | PT, Introduction  
CE, Chapters 3 and 4  
*Seminar:* PT, Chapter 2 – journal entry |
| 2       | *Seminar:* What is technology? (PT Chpt. 2)  
Philosophic belief systems revisited  
An ethical decision-making process | CE, Chapters 1 and 6  
*Seminar:* PT, Chapter 3 – journal entry |
| 3       | Current topics: assignment and example  
*Seminar:* Technocracy (PT Chpt. 3)  
**IT on trial:** assignment and example  
Timeline of technological advances  
*Project:* assignment and identification of topics | Current topic – journal entry  
*Seminar:* PT, Chapter 6 – journal entry  
**IT on trial,** Case taken from  
CE Chapters 12 and 13 – journal entry |
| 4       | Current topics: sharing and discussions  
*Seminar:* Technological Determinism (PT Chpt. 6)  
**IT on trial:** Theft and piracy (Case from CE, Chpt. 12 & 13) | Journal entries review – email to Alec  
Current topic – journal entry  
*Seminar:* PT, Chapter 7 – journal entry  
**IT on trial,** Case taken from  
CE Chapters 14 and 15 – journal entry |
| 5       | Current topics: sharing and discussions  
*Seminar:* Autonomous Technology (PT Chpt. 7)  
**IT on trial:** Privacy (Case from CE, Chpt. 14 & 15) | Current topic – journal entry  
*Seminar:* PT, Chapter 9 – journal entry  
**IT on trial,** Case taken from  
CE Chapters 16 and 17 – journal entry |
| 6       | Current topics: sharing and discussions  
*Seminar:* Women and Technology (PT Chpt. 9)  
**IT on trial:** Power concerns (Case from CE, Chpt. 16 & 17) | Current topic – journal entry  
*Seminar:* PT, Chapter 11 – journal entry  
**IT on trial,** Case taken from  
CE Chapter 19 – journal entry |
| 7       | Current topics: sharing and discussions  
*Seminar:* Anti-technology (PT Chpt. 11)  
**IT on trial:** Parasitic computing (Case from CE, Chpt. 19) | **Journals due**  
Prepare project presentations and activities |
| 8       | *Project* presentations  
Course summary | |
Grading

30 points – Seminars
   5 points for each of six seminars
     3 points for preparation of journal entry (focus on *What the Author Means*)
       1 point – timeliness – completed in time for the seminar
       1 point – completeness – all elements present and in order
       1 point – reflective thought - demonstrate reflective thought
     2 points for participation in seminar
       1 point – participant – present and attentive
       1 point – contributor – constructive, reflective input

40 points – Current topics
   10 points for each of four current topics
     7 points for preparation of journal entry (letter to editor w/ action)
       1 point – timeliness – completed in time for the class
       1 point – completeness – all elements present and in order
       4 points – demonstrates effective communication as measured by
       (clarity, accuracy, precision and others)
       1 point – spelling and grammar - no mistakes
     3 points for participation in class
       1 point – participant – present and attentive
       2 points – contributor – constructive, reflective input

40 points – IT on trial
   10 points for each of four trials
     7 points for preparation of journal entry (persuasive legal briefing)
       1 point – timeliness – completed in time for the trial
       1 point – completeness – all elements present and in order
       4 points – demonstrates effective communication as measured by
       (clarity, accuracy, precision and others)
       1 point – spelling and grammar - no mistakes
     3 points for participation in trial
       1 point – participant – present and attentive
       2 points – contributor – constructive, reflective input

10 points – Project presentation

120 points – Total course points
   120-117 A+, 116-113 A, 112-109 A-
   108-105 B+, 104-101 B, 100-97 B-
   96-93 C+, 92-89 C, 88-85 C-
   84-81 D+, 80-77 D, 76-72 D-
   72 or lower F
Attendance and participation

In order to maximize the benefit from this course, full attendance to and participation in all classes is necessary and expected. The course grading includes components that require attendance and participation. Exceptional cases will be considered on an individual basis.

Students with disabilities substantially limiting a major life activity are eligible for reasonable accommodations in college programs, including this course. Accommodations provide equal opportunity to obtain the same level of achievement while maintaining the standards of excellence of the college. If you have a disability that may interfere with your participation or performance in this course, please meet with me to discuss disability-related accommodations and other special learning needs.

Academic dishonesty policy

In accordance with Doane's academic dishonesty policy which articulates the college's stance on honesty in the classroom, any act of dishonesty in pursuing the work of this course will be penalized.

First confirmed act of dishonesty

- Report to Academic Affairs as required by college policy.
- Receipt of a zero (0) for the activity.

Second and subsequent confirmed acts of dishonesty will be forwarded to and handled by the Vice President for Academic Affairs in accordance with policy guidelines.

Remember, collaboration among classmates is necessary and expected as an integral part of the education process. Copying will not be tolerated! All sources of work not your own should be given proper credit.