

\* = *Principles of Effective Writing*

**Class #1**    **Tu 1/15**    **Introduction, Course Overview, *Gilbane Gold***

**Class #2**    **Th 1/17**    **Moral Theory: Concepts and Cases**

*Engineering Ethics*, Chapter 1: "Engineering Ethics: Making a Difference," 1-20, 320-22  
Case 27-28: "Gilbane Gold I, II"  
Grahm, "Palchinsky's Travels," 23-31  
Fleming, "Engineers of Death," 19

**Class #3**    **Tu 1/22**    **Engineering as a Profession**

Dunwoody, et al., *Fundamental Competencies for Engineers*, 9-13  
*Time Investigation: The V-2*, 36-37, 39-40, 42,44  
Greenwood, "Attributes of a Profession," 67-77

**Lecture Sponsored by the University of Illinois Center for Advanced Study  
Knight Auditorium, Spurlock Museum, 600 South Gregory Street  
January 23, 2008, 4:00 p.m.**

Langdon Winner, "Information Technology and the Dream of Democratic Renewal"

**Class #4**    **Th 1/24**    **The Moral Responsibility of Engineers**

*Engineering Ethics*, Chapter 2: "Responsibility in Engineering," 21-47  
Hechler, "Lockheed Employee's You Tube Video Sounds Ethics Alarm," 1-4  
Alpern, "Moral Responsibility for Engineers," 187-95

**Class #5**    **Tu 1/29**    **The History of Engineering and Professional Codes of Ethics  
Personal Mission Statement Due**

Davis, "A History of Engineering in the United States," 18-30  
IEEE and NSPE Codes of Ethics  
\* Williams, "The Grammar of Clarity," 7-32, 204-21  
Tolkien, *Lord of the Rings*, "The Bridge of Khazad-Dum," 3, 335-46

**Class #6**    **Th 1/31**    **Work, Responsibility, and Human Personhood  
Draft of Response Paper #1 Due**

Covey, "Principles of Personal Vision," 66-80  
Tolkien, *Lord of the Rings*, "The Breaking of the Fellowship," 411-23

**Class #7    Tu 2/5    Tools and Methods of Case Study Analysis**

*Engineering Ethics*, Chapter 3: "Framing the Problem," 48–76  
\* "Cohesion, Coherence, and Concision"

**Distinguished Lecture Series Sponsored by the Information Trust Institute  
NCSA (National Center for Supercomputing Applications) Auditorium  
1205 W. Clark, Room 1122, February 6, 2008, 4:00 p.m.**

Deborah G. Johnson

**Class #8    Th 2/7    Invited Guest Lecturer  
Draft of Response Paper #2**

Deborah G. Johnson

**Class #9    Tu 2/12    The Discipline of Philosophy:  
Epistemology, Metaphysics, and Ethics  
Ethical Theories: Teleological and Deontological Perspectives**

*Engineering Ethics*, Chapter 4: "Organizing Principles," 77–100

**Class #10    Th 2/14    The Scientific Method and the Tests of Truth  
The Principles of *Contradiction* and *Causality*  
Final Version of Response Paper #1**

Sandage, "Cosmology," 321–34

The Principle of *Contradiction*: Aristotle, *Metaphysics*, Book IV, 1–8 [1003a–1012b]

The Principle of *Causality*: Aristotle, *Posterior Analytics*, I 1–2 [71a–72b];  
and the *Metaphysics*, Book V, 1–2 [1012b–1013b]

**Class #11    Tu 2/19    Normative Ethical Naturalism  
Aristotle, Darwin, and Nietzsche**

Aristotle, *Nicomachean Ethics*, Book I [1094–1103]

White, "The Pursuit of Happiness," xi–xii, 3–11

[For further study of other perspectives on *Ethical Naturalism*, see Darwin, *The Descent of Man*; Nietzsche, *On the Genealogy of Morality*; and Spinoza, *Ethics*.]

**Class #12    Th 2/21    The Structure of Aristotelian Ethics  
Final Version of Response Paper #2 Due**

Aristotle, *Nicomachean Ethics*, Book II [1103–1109]

White, "The Pursuit of Happiness," 12–21

**Class #13    Tu 2/26    Normative Ethical Idealism**  
**Plato, Kant, and Hegel**  
**Research Topic Due**

Kant, *Grounding for the Metaphysics of Morals*, "Transition from the Ordinary Rational Knowledge of Morality to the Philosophical" [393–405]  
Paton, "The Good Will," 34–37, 44–45, "Duty," 46–55  
Turabian, *A Manual for Writers*, Part I, 12–23

[For further study of other perspectives on *Ethical Idealism*, see Plato, *The Republic*; Hegel, *The Phenomenology of Spirit*; Schwartz, *The World of Thought in Ancient China*; Raju, *The Philosophical Traditions of India*; and Hackett, *Oriental Philosophy*.

**Class #14    Th 2/28    The Structure of Kantian Ethics**

Kant, *Grounding for the Metaphysics of Morals*, "Transition from Popular Moral Philosophy to a Metaphysics of Morals" [406–45]; "Transition from a Metaphysics of Morals to a Critique of Pure Practical Reason" [446–47]  
Paton, "The Maxim of Morality," 58–62, "The Law," 69–73

**Class #15    Tu 3/4    Normative Ethical Theism**  
**Augustine, Aquinas, and Luther**

Aquinas, *Summa Theologiae*, Question #2 [5–17], #5 [61–81], #6 [83–93]  
*Genesis* 1:1–31  
[Turabian, *A Manual for Writers*, Part I, 24–47]

[For other perspectives on *Ethical Theism*, see the *Talmud* and the *Koran*.]

**Class #16    Th 3/6    The Structure of Biblical Theism**  
**Research Paper Bibliography Due**

Selected Texts of the Biblical Narrative  
[Turabian, *A Manual for Writers*, Part II, 133–280, *Chicago Manual of Style* citation format; focus attention on chapters 16–17, dealing with "Notes" and "Bibliographies"]

**Class #17    Tu 3/11    The Engineer and Society**  
***Chicago Manual of Style* Citation Format**

Bellah, et al., *Habits of the Heart*, "Preface," vii–viii  
Alexis de Tocqueville, *Democracy in America*, 27–35, 39  
Martin and Schinzinger, "Engineering as Social Experimentation," 88–106

**Class #18    Th 3/13    Fiduciary Relationships and Conflict of Interest  
Draft of Response Paper #3 Due**

*Engineering Ethics*, Chapter 6: "Honesty, Integrity, and Reliability," 125-49  
Bayles, "Obligations between Clients and Professionals"

**Spring Vacation, March 15-23**

**Class #19    Tu 3/25    Computer Ethics  
Research Paper *Plan* and *Outline* Due**

*Engineering Ethics*, Chapter 5, "Computers, ... Morality, and Social Policy," 101-24  
Gotterbarn, Miller, and Rogerson, "Software Engineering Code of Ethics," 102-7  
\* Williams, "Sustaining the Longer Sentence," 79-105, 205-17  
[Turabian, *A Manual for Writers*, Part I, 48-70]

**Class #20    Th 3/27    The Frontiers of Cyberspace  
Final Version of Response Paper #3 Due**

Spinello, *CyberEthics: Morality and Law in Cyberspace*, 1-10, 29-52  
[Turabian, *A Manual for Writers*, Part I, 71-81]

**Class #21    Tu 4/1    The Engineer's Responsibility for Safety**

*Engineering Ethics*, Chapter 7: "Safety, Risk, and Liability in Engineering," 150-80  
Petroski, "Accidents Waiting to Happen," 85-97  
Martin and Schinzinger, "Dimensions of Engineering," 16-20

**Class #22    Th 4/3    Complete Draft of Research Paper Due  
Employee-Employer Relations  
Whistle-Blowing**

*Engineering Ethics*, Chapter 8: "Engineers as Employees," 181-213  
De George, "Ethical Responsibilities of Engineers in Large Organizations," 175-86  
James, "Whistle-Blowing: Its Moral Justification," 263-78

**Class #23    Tu 4/8    The Challenger Case  
*Columbia* and the *Challenger* Case Revisited**

Bell and Esch, "The Fatal Flaw in Flight 51-L," 36-51  
Boisjoly, "... Moral Responsibility and the Working Engineer," 6-14  
*The CAIB Report: Columbia Accident Investigation Board*, "History as Cause:  
*Columbia* and *Challenger*," 195-204 [for the full text of the report, see [www.caib.us](http://www.caib.us)]

**Class #24    Th 4/10    Energy for the Future: the Grand Vision  
Engineers and the Environment  
Peer Review of Research Papers**

*Engineering Ethics*, Chapter 9: "Engineers and the Environment," 214-30  
\* "Emphasis, Elegance, and Economy"

**Class #25    Tu 4/15    Choosing a Vocation  
Obligations of the Profession**

Meese, "The Sealed Beam Case: Engineering in the Public and Private Interest," 1-20  
Martin and Schinzingler, "Saving Citicorp Tower," 12-14  
Morgenstern, "The Fifty-Nine Story Crisis," 45-53

**Class #26    Th 4/17    Final Version of Research Paper Due  
Research Project Presentations**

**Class #27    Tu 4/22    Research Project Presentations**

**Class #28    Th 4/24    Research Project Presentations  
Personal Mission Statement Due  
Final Version with Critical Reflection**

**Class #29    Tu 4/29    Research Project Presentations**

**Class #30    Final class session of research project presentations and course  
evaluations to be held during the scheduled final examination time  
for the University of Illinois, Urbana-Champaign, Spring Semester, 2008**

**Section E3, Monday, May 5, 9:00-10:20 a.m.  
Section E4, Thursday, May 8, 2:00-3:20 p.m.**