Engineering Ethics and Technological Practice: Philosophical Perspectives on Engineering

SYLLABUS

Course Information

Course: Engineering Ethics and Technological Practice: Philosophical Perspectives on Engineering

Number/section: PHIL 334 – 102

Semester: Spring 2025

Time: Tuesday, 6 p.m. to 8:50 p.m.

Location: Faculty Memorial Hall 407

Instructor: Peter Heap

Email: peter.heap@njit.edu

Office hours: I am available before or after class. If you want to set an appointment, please email me.

Prerequisites: HUM 102 with a grade of C or higher, and one History and Humanities GER 200 level course with a grade of C or higher.

Learning Objectives

At the end of this course, students will be able to:

- Identify ethical issues
- Describe different ethical decision-making approaches
- Analyze engineering ethics cases
- Apply different ethical decision-making approaches to engineering ethics cases
- Recognize the ethical responsibilities of engineers
- Evaluate the broader societal and environmental impacts of engineering
- Develop and defend positions about issues in engineering ethics
- Understand some of the major philosophical theories of engineering

Description

Ethics is an integral part of the practice of engineering. Many, if not all, engineering tasks have an ethical component and incorporate a philosophical outlook. To engineer without an ethical and philosophical understanding is to engineer badly.

This purpose of this class is to help students become better engineers by giving them an understanding of how ethics and philosophy are an inseparable component of engineering. To do this, we will look at ethical and philosophical theories and see how they make the problems of engineering clearer.

The course emphasizes case studies of particular examples in engineering. Rather than dictating viewpoints to students, it aims to equip them with the tools and abilities to think through engineering problems from an ethical and philosophical perspective.

Books

This course has a small number of required readings. These will be supplied via links, the NJIT library or directly. There are also a larger number of recommended readings. You are strongly encouraged to study these as they will improve your understanding of the material but they are not required. If you wish to follow the recommended readings then you should buy the following books:

- Mike W. Martin and Roland Schinzinger, *Ethics in Engineering*, fourth edition, McGraw-Hill, 2005. ISBN 978-0-07-283115-3.
- Langdon Winner, *The Whale and The Reactor*, University of Chicago Press, 1989. ISBN 978-0-226-90211-0. Or second edition, University of Chicago Press, 2020. ISBN 978-0-226-69254-8.

The syllabus also provides further reading for those who wish to pursue in more depth the subjects we are covering. These are available from the NJIT library.

Grading

Good work for all assignments will make clear and carefully reasoned arguments drawing on the theories and principles we have studied in class. Grading will be as follows:

- Class participation: 9%
- Homeworks: 20%
- Forms of life case study: 15%
- Ethics case study: 20% + 1%
- Final exam: 35%

Class participation

Discussion is an important part of improving our understanding, clarifying our ideas and discovering different points of view. It also helps develop the valuable skill of being able to explain and defend a point of view. Debate will be encouraged in this course. Class participation is divided into two parts. First, participation in general discussions is worth 7% of the final grade or 0.5% per week. Second, participation in discussion of the four groups of required readings is worth 2% or 0.5% per week. Total: 9% of grade.

Homework

There are four short homeworks worth 5% of the grade each. Total: 20% of grade.

Forms of life essay

To better understand the impact of technology, for this assignment you will go without a specific technology for a day. You will then report on your experience and analyze it using the perspective of forms of life. Total: 15% of grade.

Ethics case study

The study will have two parts. Identification of a case and sources (1% of grade), and description and analysis using theories discussed in class (20% of grade). Total: 21% of grade.

Final exam

The final exam will be made up of four short essay questions worth 3% per question, seven multiple-choice questions worth 1% each and two longer essay questions worth 8% per question. You will have a choice of questions. The exam will cover the entire semester. Total: 35% of grade.

Grades

The maximum grade for the class is 100%. Letter grades will be assigned as follows:

90 to 100:	A	70 to 74:	C
85 to 89:	B+	60 to 69:	D
80 to 84:	B	59 and less:	F
75 to 79:	C+		

Deadlines

Work is due on the dates shown in the class schedule. Numerical grades for late submissions will be multiplied by 0.95 for up to 48 hours late, 0.9 for up to a week late and 0.8 for up to two weeks late. No work will be accepted later than two weeks after the due date or after the start of final exams.

Plagiarism and Academic Integrity

Plagiarism or copying of any kind will not be tolerated. All work must be your own. Specifically, it must be your own thoughts and your own ideas expressed in your own words. Any use of others' efforts must be credited via a citation. This includes computer and artificial intelligence tools such as ChatGPT and Grammarly. If you use these tools you must credit their contribution via a citation and put direct quotations from these tools inside quotation marks. NJIT's policy is as follows:

Academic integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:

http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students' office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will be subject to disciplinary action. This may include a failing grade of F and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu

Use of Artificial Intelligence Tools

This course aims to help students develop the skills of reasoning, critical thinking and expression of ideas. To promote those goals, students are not permitted to use artificial intelligence and related computer tools for this class. This prohibition includes applications and websites that check grammar, change words to synonyms or which supply text in any other form. As stated in the section on academic integrity, all work must be your own ideas expressed in your own words.

Class Schedule

January 21: Introduction

Plan of the course, introduction to ethical thinking

January 28: Individual responsibility

Responsibility

Case study: Citicorp tower

Whistleblowing: When is it permissible, when is it required, complicity

Case studies: C-5A, DC-10, BART

Doing versus omitting, "If I don't do it someone else will," "I was only following orders"

Homework due February 4

Choose one of the following cases:

Kermit Vandivier and the Air Force A-7D brake problem

Air Force A-7D Brake Problem: Hearing Before the Subcommittee on Economy in Government of the Joint Economic Committee of the U.S. Congress, 91st Congress, Aug. 13, 1969, 1-9, 12, top paragraph on 239. https://www.jec.senate.gov/reports/91st%20Congress/Air%20Force%20A-7D%20Brake%20Problem%20(474).pdf

David Lorge Parnas and the Strategic Defense Initiative

David Lorge Parnas, "Software Aspects of Strategic Defense Systems," Communications of the ACM, vol. 28, no. 12, December 1985, Introduction, "Why software is unreliable," "Why the SDI system will be untrustworthy," "Is SDIO an efficient way to fund worthwhile research?" 1326-1330, 1334-1335. https://dl.acm.org/doi/pdf/10.1145/214956.214961

Background on SDI here:

"Strategic Defense Initiative," *Wikipedia*. https://en.wikipedia.org/wiki/Strategic_Defense_Initiative

February 4: Professionals and organizations

Professionalism: Definition, codes of ethics, role in public debate

Case study: Toyota unintended acceleration

Professional ideals versus business demands

Case study: Challenger disaster

Corporate culture

Case studies: Volkswagen, Tylenol

The purpose of a corporation: Milton Friedman and J. Edward Freeman

Marx: Capitalism and communism, the purpose of work

- Van Divier/Parnas homework due

Homework due February 11

Choose either John Mackey or T.J. Rodgers:

Milton Friedman, John Mackey, T.J. Rodgers, "Rethinking the social responsibility of business," *Reason*, October 2005. https://reason.com/2005/10/01/rethinking-the-social-responsi-2/

February 11: Ethical theories

Ethical theories: Deontological ethics, utilitarianism, virtue ethics, also care ethics and other theories

Case studies: Northern States Power, San Diego water purification

- Mackey/Rodgers homework due

February 18: Engineers and the world/Two models

Case study: Nokia in Russia

Ethical relativism: Are ethical values the same everywhere and for everyone?

International business

Case study: Bhopal

Offshoring

Two models of engineering

Engineering as experimentation

Case studies: Comet jet aircraft, Samsung Galaxy Note 7

Engineering as pragmatic participation

Case study: Aluminum can

Pragmatism

Case study: California electricity grid

Required reading

Anna Shedletsky, "Aggressive Design Caused Samsung Galaxy Note 7 battery explosions," Instrumental, Inc., Dec. 1, 2016. https://instrumental.com/resources/failure-analysis/aggressive-design-caused-samsung-galaxy-note-7-battery-explosions/

Peter Fairley, "Building a Weather-Smart Grid," *Scientific American*, July 2018, 60-65. https://www.researchgate.net/publication/325891548_Building_a_Weather-Smart_Grid

Homework due February 25:

Teton Dam case study

Philip M. Boffey, "Teton Dam Verdict: A Foul-up by the Engineers," *Science*, Vol. 195, No. 4275, Jan. 21, 1977, 270-272 (Available from NJIT library website)

These pictures show what happened:

Wikipedia, "Teton Dam," https://en.wikipedia.org/wiki/Teton_Dam#Collapse_and_flood

February 25: Forms of life, political technology

Forms of life

Case study: Cellphones and social media

Political technology

Case study: NC machine tools

- Teton Dam homework due

Homework due March 4:

Forms of life: The telephone

Ithiel de Sola Pool, *Forecasting the Telephone: A Retrospective Technology Assessment*, Ablex, 1983, 41-45 (Will be distributed).

March 4: Perceptions and relations

Perceptions: How technology changes perceptions

Case study: Flight 965

Automation complacency, automation bias

Case study: Three Mile Island

Identification and relations to technology: Identification, Peter-Paul Verbeek, Don Ihde, Hegel

- Forms of life homework due

Required reading

Federal Aviation Administration, American Airlines Flight 965 near Cali: Accident Overview. https://www.faa.gov/lessons_learned/transport_airplane/accidents/N651AA

Boston Dynamics, *Atlas, the Next Generation*, 2016. https://youtu.be/rVlhMGQgDkY

March 11: Ethical reasoning, the Ford Pinto

Ethical reasoning: A five-step process

Case study: The Ford Pinto

Required reading

Mark Dowie, "Pinto Madness," *Mother Jones*, September/October 1977. http://www.motherjones.com/politics/1977/09/pinto-madness

March 18: Spring break – no class

March 25: Utilitarianism and cost-benefit analysis

Utilitarianism and cost-benefit analysis: Working for a tobacco company, criticisms and responses

Case study: Table saw safety

Case study: The benzene case

April 1: Engineering and the environment

Engineering and the environment: Attitudes to nature, the Invisible Hand, the Tragedy of the Commons, externalities

Case study: Love Canal

Theories, sustainable development

Case study: Cultivated meat

Heidegger

- Forms of life essay due

April 8: Autonomous systems and artificial intelligence

Case study: Tesla

Autonomous systems and artificial intelligence: Definitions, the Turing test, practical issues, responsibility, ethics for robots including Asimov's three laws, the trolley problem

Technological revolutions

Case study: Budweiser's self-driving truck

- Ethics case study: Identify a case

Required reading

Neil Boudette, "Tesla Says Autopilot Makes Its Cars Safer. Crash Victims Say It Kills," *New York Times*, July 5, 2021. https://www.nytimes.com/2021/07/05/business/tesla-autopilot-lawsuits-safety.html

Otto and Budweiser: *First Shipment by Self-Driving Truck*. https://www.youtube.com/watch?v=BH2pQ_Uq77I

April 15: Artificial intelligence – the big picture

Artificial intelligence: Jobs: four-day week and universal basic income, democracy

Cyborgs: Haraway

April 22: Ethics in the workplace

Ethics in the workplace: Power, resolving conflict, confidentiality, conflicts of interest, affirmative action, truthfulness

- Ethics case study: Analysis due

April 29: Personal values

Weapons work: Just war theory

Personal values and personal fulfillment: Ayn Rand and self-interest, Stanley Cavell and self-realization, Peter Singer and why be ethical, Susan Wolf on meaningful work

May 6: Thursday schedule – no class

May 13: Final exam

6 p.m. – 8:30 p.m.

Readings

January 21: Introduction

None

January 28: Individual responsibility

Recommended

Mike W. Martin and Roland Schinzinger, "Saving Citicorp Tower," section 1.2.1 in *Ethics in Engineering*, 12-14.

Mike W. Martin and Roland Schinzinger, "Whistleblowing," in *Ethics in Engineering*, 172-184.

Further reading

Joe Morgernstern, "The Fifty-Nine-Story Crisis," *Journal of Professional Issues in Engineering Education and Practice*, January 1997, 23-29. (Available through NJIT library website)

Peter Carlson, "A. Ernest Fitzgerald," *People*, Dec. 9, 1985. https://people.com/archive/a-ernest-fitzgerald-vol-24-no-24/

Michael Davis, "Some Paradoxes of Whistleblowing," *Business & Professional Ethics Journal*, Spring 1996, Vol. 15, No. 1. (Available from NJIT library website.)

Peter Singer, "Famine, Affluence and Morality," *Philosophy and Public Affairs*, Spring 1972, vol. 1, no. 3, 229-243. (Available from NJIT library website.) https://www.jstor.org/stable/2265052

February 4: Professionals and organizations

Recommended

Cherri Pancake, "Programmers need ethics when designing the technologies that influence people's lives," *The Conversation*, Aug. 8, 2018. https://theconversation.com/programmers-need-ethics-when-designing-the-technologies-that-influence-peoples-lives-100802

Malcolm Gladwell, "The Engineer's Lament," *The New Yorker*, April 27, 2015. (Available from NJIT library website.) https://www.newyorker.com/magazine/2015/05/04/the-engineers-lament or https://www.proquest.com/magazines/engineers-lament/docview/1680967727/se-2?accountid=35725

Mike W. Martin and Roland Schinzinger, "Challenger," in *Ethics in Engineering*, 106-114.

Russell Hotten, "Volkswagen: The Scandal Explained," *BBC News*, Dec. 10, 2015. https://www.bbc.com/news/business-34324772

Jerry Knight, "Tylenol's Maker Shows How to Respond to Crisis," *The Washington Post*, Oct. 11, 1982. https://www.washingtonpost.com/archive/business/1982/10/11/tylenols-maker-shows-how-to-respond-to-crisis/bc8df898-3fcf-443f-bc2f-e6fbd639a5a3/

Further reading

Edwin Layton, *The Revolt of the Engineers*, Johns Hopkins University Press, 1986.

Presidential Commission on the Space Shuttle Challenger Accident: Report to the President, June 6, 1986. https://sma.nasa.gov/SignificantIncidents/assets/rogers_commission_report.pdf

Karl Marx, *The German Ideology*, Part I: Feuerbach. Opposition of the Materialist and Idealist Outlook. A. Idealism and Materialism. "First Premises of Materialist Method." https://www.marxists.org/archive/marx/works/1845/german-ideology/ch01a.htm

Karl Marx, Economic and Political Manuscripts of 1844. "Estranged Labour." https://www.marxists.org/archive/marx/works/1844/manuscripts/labour.htm

Codes of ethics

American Institute of Chemical Engineers https://www.aiche.org/about/governance/policies/code-ethics

American Society of Civil Engineers https://www.asce.org/-/media/asce-images-and-files/career-and-growth/ethics/documents/asce-code-ethics.pdf

American Society of Mechanical Engineers https://www.asme.org/getmedia/3e165b2b-f7e7-4106-a772-5f0586d2268e/p-15-7-ethics.pdf

ASME criteria for interpretation https://www.asme.org/wwwasmeorg/media/resourcefiles/aboutasme/get%20involved/advocacy/policy-publications/criteria-for-interpretation-of-the-canonsjune2012.pdf

Association for Computing Machinery https://ethics.acm.org/

IEEE https://www.ieee.org/content/dam/ieee-org/ieee/web/org/about/corporate/ieee-code-of-ethics.pdf

National Society of Professional Engineers https://www.nspe.org/resources/ethics/code-ethics

February 11: Ethical theories

Recommended

Olive Heffernan, "Bottoms Up," *Scientific American*, July 2014, 69-75. (Available from NJIT library website via JSTOR.)

Further reading

Peter Borrelli et al. *People, Power and Pollution: Environmental and Public Interest Aspects of Electric Power Plant Siting*, California Institute of Technology, Sept. 14, 2007, 36-39. https://doi.org/10.7907/Z9TD9V7P.

February 18: Engineers and the world/Two models

Required

Anna Shedletsky, "Aggressive Design Caused Samsung Galaxy Note 7 battery explosions," Instrumental, Inc., Dec. 1, 2016. https://instrumental.com/resources/failure-analysis/aggressive-design-caused-samsung-galaxy-note-7-battery-explosions/

Peter Fairley, "Building a Weather-Smart Grid," *Scientific American*, July 2018, 60-65. https://www.researchgate.net/publication/325891548_Building_a_Weather-Smart_Grid

Recommended

Adam Satariano, Paul Mozur and Aaron Krolik, "When Nokia Pulled Out of Russia, a Vast Surveillance System Remained," *New York Times*, March 28, 2022. https://www.nytimes.com/2022/03/28/technology/nokia-russia-surveillance-system-sorm.html

Mike W. Martin and Roland Schinzinger, "Multinational Corporations," in *Ethics in Engineering*, Sections 9.1.2, 9.1.3, 9.1.4 and 9.1.5, 245-252.

Further reading

Gary Stix, "Bhopal: A tragedy in waiting," *IEEE Spectrum*, vol. 26, no. 6, June 1989. https://ieeexplore.ieee.org/document/29340

Henry Petroski, *To Engineer is Human*, Vintage Books, 1992.

Norbert J. Delatte Jr., *Beyond Failure: Forensic Case Studies for Civil Engineers*, ASCE Press, 2008, 82-86. (Available from NJIT library website.)

February 25: Forms of life, political technology

Recommended

Langdon Winner, "Technologies as Forms of Life," "Do Artifacts Have Politics?" in *The Whale and the Reactor*, 3-39.

Langdon Winner, "Do Artefacts have Politics?" *Daedalus*, vol. 109, no. 1, Winter 1980, 121-136. (Available from NJIT library website.) https://www.jstor.org/stable/pdf/20024652

Further reading

David Noble, "Social Choice in Machine Design," in *Case Studies on the Labor Process*, ed. Andrew Zimbalist, Monthly Review Press, 1979, p. 18-50.

March 4: Perceptions and relations

Required

Federal Aviation Administration, American Airlines Flight 965 near Cali: Accident Overview. https://www.faa.gov/lessons_learned/transport_airplane/accidents/N651AA

Boston Dynamics, *Atlas, the Next Generation*, 2016. https://youtu.be/rVlhMGQgDkY

Recommended

John Edward Huth, "Losing Our Way in the World," *New York Times*, July 21, 2013. https://www.nytimes.com/2013/07/21/opinion/sunday/losing-our-way-in-the-world.html

Nolen Gertz, *Death by Robot*, ABC, July 12, 2016. https://www.abc.net.au/religion/death-by-robot-the-ethics-of-turning-assistive-technologies-into/10096776

Further reading

John Edward Huth, *The Lost Art of Finding Our Way*, Belknap Press, 2013.

Nicholas Carr, *The Glass Cage*, W.W. Norton & Co., 2014, 67-72.

President's Commission on the Accident at Three Mile Island, *Report of the President's Commission on the accident at Three Mile Island. The need for change: the legacy of TMI*, 1979. https://www.osti.gov/servlets/purl/6986994

March 11: Ethical reasoning, the Ford Pinto

Required

Mark Dowie, "Pinto Madness," *Mother Jones*, September/October 1977. http://www.motherjones.com/politics/1977/09/pinto-madness

Recommended

Mike W. Martin and Roland Schinzinger, "Resolving Ethical Dilemmas" in *Ethics in Engineering*, 32-39

National Institute for Engineering Ethics, *Study Guide for Gilbane Gold*. https://www.niee.org/wp-content/uploads/2021/07/Gilbane-Gold-Study-Guide.pdf

March 25: Utilitarianism and cost-benefit analysis

Recommended

Steven Kelman, "Cost-Benefit Analysis: An Ethical Critique," *The American*, Feb. 7, 1981. https://www.aei.org/articles/cost-benefit-analysis-an-ethical-critique/

James V. DeLong, Robert M. Solow, Gerard Butters, John E. Calfee, Pauline Ippolito and Robert A. Nisbet, "Defending Cost-Benefit Analysis: Replies to Steven Kelman," *The American*, April 11, 1981. https://www.aei.org/articles/defending-cost-benefit-analysis-replies-to-steven-kelman/

Roger Rosenblatt, "How do Tobacco Company Executives Life with Themselves?" *The New York Times Magazine*, March 20, 1994. https://www.nytimes.com/1994/03/20/magazine/how-do-tobacco-executives-live-with-themselves.html

Centers for Disease Control and Prevention, *Smoking and Tobacco Use*, May 4, 2023. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/cigarette-smoking-in-the-us.html

Ben Blatt, "How Much Would You Pay to Make Sure You Never Sawed Off a Finger?" *The New York Times*, March 30, 2024. https://www.nytimes.com/2024/03/30/upshot/table-saws-safety-cost.html

Further reading

Industrial Union Department, AFL-CIO v. American Petroleum Institute, 448 U.S. 607 (1980). https://supreme.justia.com/cases/federal/us/448/607/

April 1: Engineering and the environment

Recommended

Langdon Winner, "The State of Nature Revisited" in *The Whale and the Reactor*, 121-137.

Mike W. Martin and Roland Schinzinger, "Environmental Ethics," in *Ethics in Engineering*, 219-239.

Erika Engelhaupt, "Happy Birthday, Love Canal," *Environmental Science and Technology*, vol. 42, issue 22, Nov. 15, 2008. https://doi.org/10.1021/es802376z

Joe Fassler, "The Revolution that Died on Its Way to Dinner," *New York Times*, Feb. 9, 2024. https://www.nytimes.com/2024/02/09/opinion/eat-just-upside-foods-cultivated-meat.html

April 8: Autonomous systems and artificial intelligence

Required

Neil Boudette, "Tesla Says Autopilot Makes Its Cars Safer. Crash Victims Say It Kills," *New York Times*, July 5, 2021. https://www.nytimes.com/2021/07/05/business/tesla-autopilot-lawsuits-safety.html

Otto and Budweiser: *First Shipment by Self-Driving Truck*. https://www.youtube.com/watch?v=BH2pQ_Uq77I

Recommended

Eric A. Taub, "Can Tesla's Autopilot be Trusted? Not Always," *New York Times*, Sept. 23, 2016. http://nyti.ms/2d6WthQ

Neil E. Boudette, "Big Carmakers Merge, Cautiously, Into the Self-Driving Lane," *New York Times*, Sept. 1, 2016. http://nyti.ms/2c4RwWz

Paul Scharre, "Autonomous Weapons and Operational Risk," *Center for a New American Security*. https://www.cnas.org/publications/reports/autonomous-weapons-and-operational-risk

Christopher Salge, "Asimov's Laws Won't Stop Robots Harming Humans So We've Developed a Better Solution," *The Conversation*, July 10, 2017. https://theconversation.com/asimovs-laws-wont-stop-robots-harming-humans-so-weve-developed-a-better-solution-80569

Langdon Winner, "Mythinformation," in *The Whale and the Reactor*, 98-117 (If you are short of time: 106-115).

Further reading

Isaac Asimov, *I, Robot* (originally Doubleday, 1950, mass market edition, Bantam 2004).

April 15: Artificial intelligence – the big picture

Further reading

David H. Autor, "Why Are There Still So Many Jobs? The History and Future of Workplace Automation." *Journal of Economic Perspectives*, Vol. 29, no. 3, Summer 2015, 3-30. https://www.aeaweb.org/articles?id=10.1257/jep.29.3.3

Mark Muro, Jacob Whiton and Robert Maxim, *What Jobs are Affected by AI? Better-Paid, Better-Educated Workers Face the Most Exposure*, Brookings Institution, Nov. 20, 2019. https://www.brookings.edu/research/what-jobs-are-affected-by-ai-better-paid-better-educated-workers-face-the-most-exposure/

David Autor, "AI Could Actually help Rebuild the Middle Class," *Noema*, Feb. 12, 2024. https://www.noemamag.com/how-ai-could-help-rebuild-the-middle-class/

Scott Santens, "It's Time for Technology to Serve all Humankind with Unconditional Basic Income," *Medium*, April 13, 2018. https://medium.com/basic-income/its-time-for-technology-to-serve-all-humankind-with-unconditional-basic-income-e46329764d28

Yuval Noah Harari, "Why Technology Favors Tyranny," *The Atlantic*, October 2018. https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,sso&db=pwh&AN=131647760&site=ehost-live&scope=site&custid=njitinf

April 22: Ethics in the workplace

Recommended

Mike W. Martin and Roland Schinzinger, "Workplace Responsibilities and Rights" and "Honesty," in *Ethics in Engineering*, sections 6.1 to 6.3, 146-172, chapter 7, 189-216.

Further reading

Roger Fisher, William Ury and Bruce Patton, *Getting to Yes*, 3rd ed., Penguin Books, 2011.

Charles Handy, "On Power and Influence," in *Understanding Organizations*, 4th ed., Penguin Books, 1999, 123-149.

Steven M. Cahn, "Two Concepts of Affirmative Action," *Academe*, Jan.-Feb. 1997, Vol. 83, No. 1, 14-19. https://www.jstor.org/stable/40251557 (Available from NJIT library website.)

April 29: Personal values

Further reading

Mike W. Martin and Roland Schinzinger, "Weapons Development," in *Ethics in Engineering*, 266-269.

Peter Singer, "Why Act Morally?" in *Practical Ethics*, 3rd ed., 2011, 276-295.

Susan Wolf, "Meaning in Life and Why it Matters," Tanner Lectures on Human Values, Nov. 7-8, 2007. https://tannerlectures.utah.edu/_resources/documents/a-to-z/w/Wolf_07.pdf