Lecture 35 — Solving Ethics Case Studies

Jeff Zarnett jzarnett@uwaterloo.ca

Department of Electrical and Computer Engineering University of Waterloo

August 24, 2016

Acknowledgments: Douglas Harder [1], Julie Vale [2]

ECE 290 Fall 2016 1/42

Case Studies

The standard means by which a student is tested with respect to his or her knowledge of ethics and professional practice.

A scenario is provided and the student must identify instances of professional misconduct and must recommend ethical courses of action.

ECE 290 Fall 2016 2/4

The solution to a case study must always be in essay form.

A correct answer that is in point form will result in a failing grade on the Professional Practice Examination.

All forms of human communication consist of:

- An introduction including relevant background
- A body
- A conclusion, including a summary and recommendations

ECE 290 Fall 2016 3/4

How To Solve a Case Study

Steps in solving a case study:

- Who are the main players involved?
- What are their relationships?
- Identify relevant actions
- What are the relevant statutes, codes, regulations?
- Determine professional misconduct and ethical responses

ECE 290 Fall 2016 4/42

The acronym here is **PRISM**:

Steps in solving a case study:

- The Players involved
- Their **R**elationships
- Identify their actions
- What **S**tatutes apply?
- Determine professional Misconduct and ethical responses

ECE 290 Fall 2016 5/

It Could Be Worse...

PRISM may be a forced acronym, but it's better than: READ-EGAD!-SUMMARIZE

- Read
- Ethical issues
- Generation of alternatives
- Analysis
- Decision
- Summary

ECE 290 Fall 2016 6/4:

A case study from a previous Professional Practice Examination:

McGee is a professional engineer who is employed on a full-time basis by EngrCIS, Inc., a large engineering firm. However, for a number of reasons, McGee is unhappy and for some time has been thinking about looking for a new job. Although McGee's current employment at EngrCIS provides good pay and interesting work, McGee is finding it difficult to work with DiNozzo1, a professional engineer who is McGee's supervisor at EngrCIS.

ECE 290 Fall 2016 7/42

A case study from a previous Professional Practice Examination:

In the year since McGee joined the company, DiNozzo has frequently made derogatory jokes and remarks about McGee's race and religion – sometimes even in meetings with other engineers and clients. On many occasions, McGee has informed DiNozzo that such remarks are offensive, hurtful, and inappropriate and has asked DiNozzo to stop. DiNozzo refuses to do so and says that McGee should "toughen up and learn to take a joke" if McGee expects to have a successful career at EngrCIS.

ECE 290 Fall 2016 8 / 4

A case study from a previous Professional Practice Examination:

In the year since McGee joined the company, DiNozzo has frequently made derogatory jokes and remarks about McGee's race and religion – sometimes even in meetings with other engineers and clients. On many occasions, McGee has informed DiNozzo that such remarks are offensive, hurtful, and inappropriate and has asked DiNozzo to stop. DiNozzo refuses to do so and says that McGee should "toughen up and learn to take a joke" if McGee expects to have a successful career at EngrCIS.

ECE 290 Fall 2016 9 / 4

Recently, McGee met with a professional engineer colleague, Sciuto1, who is a vice president at NYCE, Ltd., another engineering company. Upon hearing that McGee was interested in considering other opportunities, Sciuto offered McGee a part-time job to work in the evenings and on weekends on a trial basis as an engineer for NYCE. McGee would work under Sciuto's supervision with the intent that in a few months, if McGee preferred working at NYCE, McGee would resign from EngrCIS and become a full-time employee of NYCE.

ECE 290 Fall 2016 10 / 4

Start with P

Remember the P from PRISM: Who are the Players?

ECE 290 Fall 2016

Start with P

Remember the P from PRISM: Who are the Players?

- McGee, P.Eng.
- DiNozzo, P.Eng.
- EngrCIS
- Sciuto, P.Eng.
- NYCE

ECE 290 Fall 2016 12 / 42

Now R

Next is R: What are the relationships between the parties?

ECE 290 Fall 2016 13 / 42

Next is R: What are the relationships between the parties?

- McGee and DiNozzo are employed by EngrCIS
- DiNozzo is McGee's supervisor
- McGee is colleagues with Sciuto
- The colleague is a VP at NYCE
- McGee has the option of contracting with NTCE

ECE 290 Fall 2016 14/42

Next I

Next I: What are the actions?

ECE 290 Fall 2016

Next I: What are the actions?

- DiNozzo has been harassing McGee
- The VP has made a contract offer to McGee

ECE 290 Fall 2016 16 /42

Then S

What are the relevant statues, codes, regulations?

ECE 290 Fall 2016 17/42

In this case, the relevant statutes, codes, regulations, etc., include:

- The Professional Engineers Act, including
 - The requirement that a Certificate of Authorization is required for any engineering services offered to the public
 - The Code of Ethics
 - The definition of professional misconduct
- The Ontario Human Rights Code
- The Ontario Occupational Health and Safety Act

ECE 290 Fall 2016 18 / 42

To the practitioner's employer, he or she:

Has a duty to act at all times with fairness and loyalty (77.1);

Shall act in professional engineering matters:

As a faithful agent or trustee, and

Shall regard as confidential information obtained by the practitioner as to the business affairs, technical methods or processes of an employer (77.3); and

Shall avoid or disclose a conflict of interest that might influence the practitioner's actions or judgment (77.3)

ECE 290 Fall 2016 19 /

To other members of the profession, he or she has a duty to act at all times with fairness, loyalty (77.1), courtesy and good faith (77.7);

Shall not:

- Accept an engagement to review the work of another for the same employer except with the knowledge of the other practitioner or except where the connection of the other practitioner with the work has been terminated, nor
- Maliciously injure the reputation of another practitioner (77.7); and

Shall:

- Give proper credit for engineering work,
- Provide opportunity for professional development and advancement of the practitioner's associates and subordinates, and

■ Extend the effectiveness of the profession through the interchange of engineering information and experience (77.7).

ECE 290 Fall 2016 20 / 4

Recall the Certificate of authorization rules:

12. (2) No person shall offer to the public or engage in the business of providing to the public services that are within the practice of professional engineering except under and in accordance with a certificate of authorization.

ECE 290 Fall 2016 21/4

The Human Rights Code prohibits discrimination on the the following grounds:

Race Ancestry Place of origin
Colour Ethnic origin Citizenship
Creed Sex Sexual orientation

Gender identity
Gender expression
Age
Marital status
Family status
Disability
Record of Offences
Reprisal
Association

The receipt of public assistance

Oxford English Dictionary: Discrimination, n.

The action of discriminating; the perceiving, noting, or making a distinction or difference between things; a distinction (made with the mind, or in action).

ECE 290 Fall 2016 22 /

Occupational Health and Safety Act:

Policies, violence and harassment

32.0.1(1)(b) An employer shall prepare a policy with respect to harassment.

Program, harassment

32.0.6 (1) An employer shall develop and maintain a program to implement the policy with respect to workplace harassment required under clause 32.0.1(1)(b).

Contents

- (2) Without limiting the generality of subsection (1), the program shall,
- (a) include measures and procedures for workers to report incidents of workplace harassment to the employer or supervisor;
- (b) set out how the employer will investigate and deal with incidents and complaints of workplace harassment; and

(c) include any prescribed elements.

ECE 290 Fall 2016 23/42

Finally M

 $\mbox{\bf M}$ is for Misconduct; what do you find in the case study?

ECE 290 Fall 2016 24 / 42

One instance of professional misconduct is DiNozzo's harassment of McGee.

- Such harassment constitutes a violation of the Ontario Human Rights
 Code as well as professional misconduct
- For whatever reason, it seems that McGee has not approached H.R. at EngrCIS
- Given he appears to enjoy working at EngrCIS, it would be reasonable to give them the opportunity to correct this violation
- If H.R. does not respond, McGee should file a complaint with PEO
- Depending on the severity, a last step might be to file a human rights complaint

ECE 290 Fall 2016 25 / -

McGee is being offered a contract by NYCE.

- The scenario suggests that he would be providing engineering services to NYCE
- Providing such services requires a Certificate of Authorization
- Providing such services without a C. of A. would be a breach of Section 12(2) the Act
- A breach of the Act is professional misconduct under 72(2)(g)
- McGee should acquire a C. of A. if he intends to enter into such a contract

ECE 290 Fall 2016 26 / 42

M also for Moonlighting?

The scenario suggests that he would be providing engineering services to NYCE.

- The Code of Ethics requires McGee to Provide, in writing, a statement to NYCE that he is employed by EngrCIS (even if this is obvious)
- Ensure that there is no conflict in the work performed
- Inform EngrCIS that he is entering into a contract with NYCE
- Failure to do so would be professional misconduct under 72(2)(i) as an undisclosed conflict of interest

ECE 290 Fall 2016 27/42

Writing It Out

If you are simply required to respond to a case study, the response would be an essay-based which would cover the points we have just discussed.

Every essay must have an introduction, a body, and a conclusion.

The introduction would briefly cover the situation and explain the approach that the body of the essay will take.

In each case, we will look at the obligations under the Code of Ethics and issues with respect to any statutes that may have been breached.

We conclude by summarizing the actions that should be taken.

ECE 290 Fall 2016 28 / 42

In the professional practice examination, there were three questions asked:

- (a) Comment on DiNozzo's conduct with respect to Ontario Regulation 941.
- (b) In relation to the regulation of the practice of professional engineering what should McGee consider doing about DiNozzo's conduct?
- (c) Specify and explain the requirements, if any, that McGee must satisfy in order to properly undertake such part-time employment with NYCE.

ECE 290 Fall 2016 29 /

Notes on Case Study 1

In these questions, it specifically restricts the response with respect to DiNozzo's actions to the regulations.

In this case, it would be therefore only a question of professional misconduct by harassment.

(The OHSA and Ontario Human Rights Code are not usually tested in the PPE).

ECE 290 Fall 2016 30/42

Another Case Study from a previous PPE:

Gibbs, the owner of a house in the City of Waterloo, was notified by the city that the condition of the foundation walls of his house violated the standards set out in the city's property standards by-law. The city, being concerned that the foundation walls had deteriorated to the point of being structurally unsafe, ordered Gibbs to obtain a written report by a professional engineer as to the condition of the walls. Fornell prepared a report stating that he had inspected the foundation and that the foundation walls appeared to be "structurally sound and capable of safely sustaining the house for many more years."

ECE 290 Fall 2016 31/-

Gibbs submitted Fornell's report to the city. In response, the city sent a letter to Gibbs with a copy to Fornell pointing out the city's observations regarding the deterioration of the walls, including evidence of significant water permeation, together with photographs taken by the city's inspector. In the letter, the city requested the condition of the foundation be reassessed and a response be made to the city within two weeks. Gibbs was unaware that Fornell would be waiting for authorization for him to spend more time on the project and accordingly did not contact Fornell and request him to respond. Fornell did not follow up with either Gibbs or the city.

ECE 290 Fall 2016 32 / 42

Following a second request to Gibbs, copied to Fornell, Fornell responded by letter to the city, advising that he had never examined the interior of the walls, only the exterior and admitted the photographs provided by the city indicated that the foundation was structurally unsound.

ECE 290 Fall 2016 33 / 4

Case Study 2 Questions

In the professional practice examination, there were two questions asked:

- (a) Comment on the services provided by Fornell, in relation to Regulation 941. In your answer, also discuss Fornell's conduct regarding his dealings with the City.
- (b) Fornell does not have a certificate of authorization. Does Fornell need one under the facts described above? Explain why or why not. What are the possible consequences to a professional engineer of acting without a certificate of authorization when one is required?

ECE 290 Fall 2016 34/42

A third case study from a previous Professional Practice Examination:

Duckie, P.Eng., a senior professional engineer, established a small firm, Mallard Engineering, to provide professional engineering services to the public. The firm became busy very quickly and within a few months, he hired Palmer1, a bright recent university graduate with an engineering degree, to assist with the work. Duckie strongly believed in mentoring and hoped that in several years, after obtaining the necessary experience requirements and becoming a professional engineer, Palmer would assume increasing managerial responsibility and possibly an ownership interest in the firm.

ECE 290 Fall 2016 35/42

After about a year after Palmer joined the firm, Mallard Engineering was asked by one of its clients to provide a formal report that included an engineering option. Palmer performed the work on that matter and prepared a draft of the report. Before having a chance to review Palmer's work, Duckie received an urgent request from another client that required Duckie to leave on a lengthy business trip. On the way out of the office, Duckie stopped at Palmer's desk and said, "Sorry, but I'll be out of the country and tied up completely for the next three weeks, so I won't be able to review that report. I know that it's due tomorrow, so go ahead and sign it under your own name and send it to the client so that we can meet the deadline." Duckie was confident that that would be all right, since Palmer has always produced outstanding work in the past. Palmer proceed to complete the report, signed it "J. Palmer, Eng., Mallard Engineering" and sent it to the client.

ECE 290 Fall 2016 36 / 42

In the professional practice examination, there were three questions asked:

- (a) Discuss the conduct of both Duckie and Palmer. What, if anything, should they be concerned about?
- (b) Could Duckie or Palmer be subject to a hearing by the Discipline Committee of PEO? Discuss.
- (c) Is there anything about Duckie's conduct relative to the Code of Ethics that is commendable?

ECE 290 Fall 2016 37/-

One final example from a previous PPE:

IBF Engineering, a large engineering firm, was hired to prepare the design for a chemical production plant for AIC, Inc. In addition to preparing the plant design, IBF Engineering's duties included providing inspection services during the construction stage of the project. The project was completed successfully. I

ECE 290 Fall 2016 38/42

You are a professional engineer and have been employed on a full-time basis for IBF Engineering for several years. You work in the Process Division and are involved on several process design projects. You were an important member of the design team that prepared the design for AIC Inc.'s plant. In addition to working for IBF Engineering, you supplement your income by occasionally undertaking work on weekends and during evenings for Marine Engineering, Ltd., another engineering company. A colleague of yours, who is a professional engineer at Marine Engineering, Ltd., assigns you such work and assumes responsibility for it.

ECE 290 Fall 2016 39/42

A few years after the plant was completed, AIC, Inc., decides to restructure its operations and sell the plant. ASN Corp. has agreed to buy the plant, but before it does so, ASN Corp. wants to satisfy itself (and its bank) that the plant was built to proper standards and is in good physical condition. ASN Corp. hires Marine Engineering, Ltd. to inspect the physcial plant and to review relevant documents (including the original plans, "as-built" drawings, and operations and maintenance logs). Marine Engineering, Ltd. is very busy on several projects and asks you to assist with the plant inspection and document review.

ECE 290 Fall 2016 40/42

In the professional practice examination, there were three questions asked:

- (a) Discuss the appropriateness of your employment arrangements.
- (b) Assuming that your employment arrangements have not changed since the plant was designed and constructed, discuss how you respond to Marine Engineering, Ltd.'s request for assistance.
- (c) Would you need a Certificate of Authorization to provide services to Marine Engineering, Ltd.? Explain.

ECE 290 Fall 2016 41/42

References & Disclaimer

- [1] D. W. Harder, "ECE 290 Lecture Materials," 2013. Online; accessed 31-May-2016.
- [2] J. Vale, "ECE 290 Course Notes," 2011.

Disclaimer: the material presented in these lectures slides is intended for use in the course ECE 290 at the University of Waterloo and should not be relied upon as legal advice. Any reliance on these course slides by any party for any other purpose are the responsibility of such parties. The author(s) accept(s) no responsibility for damages, if any, suffered by any party as a result of decisions made or actions based on these course slides for any other purpose than that for which it was intended.

ECE 290 Fall 2016 42 / 42