

# **Ethics in Engineering and Research**

## **Lecture #10 Case Study for Workplace**

# Management interference with professional duties...

Student: “While on a co-op job I was involved with the production of a product that did not function properly. This product was not capable of performing some of the advertised functions. The product was released to the public because it was considered by the company [management] to be more cost effective to release the faulty product than it was to hold up production.”

Responsibilities of the engineer?

# Moral autonomy...

Student: “I was trying to get people to buy our software product (a CAD/CAM system). I was told to tell them that our company was stable and we would be there to help them for years in the future. But our company was actually in the process of going out of business. They just wanted to get as much money as they could before we closed our doors. I could not just lie to the customers, so I got a new job.”

Admirable?

Other responsibilities?

# Perception of conflict of interest

Student: "I worked for a government research center and a company brought us out to their place to show us their software. After the morning session we went to lunch and they paid. We are not supposed to allow this, since it was against agency's "code of ethics". However, we did it anyway because we knew we were already going to buy their product."

Is the perception of conflict of interest a problem?

What if the supplier's competitor ran into you on the way out as the bill was being paid?

# Unprofessional environment...

Student: “While working in a power company in a construction management department, I was given a small project to get rid of several pieces of obsolete equipment. Although the company executives had enforced a recycling policy, most of my colleagues wanted to trash all the equipment. I found a way to recycle some of the equipment and gave the rest to a business liquidator, but I was distressed at the indifferent attitude most of my working colleagues displayed.”

What to do? Talk about it over coffee/lunch with colleagues? Find out why the equipment would pollute (get hard facts)? Give them reading material?

## Informal Approach



- ✓ Talk about the case over coffee/lunch with colleagues

## Formal Approach



- ☐ Raise awareness: Organize meetings to educate colleagues
- ☐ Collaborate with management: Establish recycling policy
- ☐ Ally with like-minded colleagues who are interested in environmental sustainability

## Wasting time...

- Student: Someone I worked with used to play games on his computer all day as an intern. He also read books at his desk during the workday and would only work if our boss came in
- What is wrong with this?

## Foul Language...

- Student: The only unprofessional behavior, in my opinion, that I saw was excessive cursing?
- What to do about this?



Student: An intern pursued a manager within the company. Not her direct manager but an elder influential person. Ended engaged and then married...”

Is it a good idea to date persons in the workplace?

# He Calls all the Women “Sweetie” (from Lockheed-Martin Corp.)

- When a male supervisor talks to any female employee, he always addresses her as "Sweetie." You have overheard him use this term several times.
- As the supervisor's manager, should you do anything?

## Impact on the work environment

- ❖ Unprofessional and disrespectful
- ❖ Create a hostile work environment for female employees

## Suggested Actions

- ☐ Educate him through a private meeting
- ☐ Follow up on the matter to ensure that the behaviour has stopped.
- ☐ Take further disciplinary action if the behaviour continues
- ☐ Must ensure a safe and respectful workplace for all employees

# Women's issues...

Harris, Pritchard, Rabins' book...

- On a business trip three engineers Jane, Joe, and Jim (the engineer at the site being visited) and others go out after work for a social-type dinner. The site engineer Jim sits between Jane and Joe and other business types sit across the table. During dinner Jim mostly talks to Jane - mostly shop. Dinner is over and Jim gets up and says to Joe: "Sorry that we did not have more time to talk but Jane is a lot better looking"



Jane?

What should Jane do? Joe?

**Everyone in the workplace feels respected and valued!**

# Women's issues...

Student: When I worked at company XYZ a supervisor and I were discussing some of my colleagues. We had just begun to discuss the only two female engineers who worked at XYZ and I asked why one of them had not been promoted. She had been doing good work for the company for years, and still was working on CAD, a job usually reserved for technicians and/or new engineers. His reply was (paraphrasing):

“Its just as well, women are much better at tedious tasks than men.”

**What should the engineer do?**

## Women's issues...

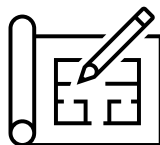
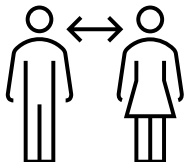
- Student: “My supervisor didn't like women and wouldn't assign me work. I had to go find it on my own ” **What should the student do?**
- Student: “I worked for a company where my boss did not ask questions to the most qualified person simply because she was woman and his background was such that he thought women were inferior.” **What to do?**

## Issues

- Inappropriate and unprofessional
- Gender bias and stereotypes towards women
- Create a hostile work environment for female employees

## Action

- ❑ Bring up the matter to the supervisor's manager or HR
- ❑ Policies and procedures to handle such issues (HR's responsibility)
- ❑ Promote a culture of diversity and inclusiveness in the workplace



# Preferential treatment...

Student: I have not witnessed sexual harassment, but I do feel I have witnessed discrimination. I was hired to do research for the summer because I was “diverse,” a woman in ECE. My qualifications were not considered for the application. Although this would seem advantageous, I sensed that I was inferior to my co-workers, since very few would talk to me or would just ignore me, even though I went above and beyond their expectations.

**What should the woman do?**

**Discrimination can have a significant impact on an individual's mental health, job satisfaction, and career growth.**

**Seek support; Networking with other professionals in the field**

# Witnessing sexual harassment...

Student: “The only real ethical problem that I have encountered in industry involved a co-worker who was sexually harassing secretaries and other female co-workers. I didn’t say anything because the women in question didn’t seem to mind it (some even liked it). Maybe I should have.”

## Should they tell someone? Who?

- ☐ It's essential to report any incidents of sexual harassment in the workplace, even if the victims seem to tolerate or even enjoy it.
- ☐ Create a hostile work environment, illegal
- ☐ Report to HR; Speak to a supervisor; Contact an external agency



## Subjected to sexual harassment...

Student: "I have experienced sexual harassment by a peer intern student. It did not affect my job, but it was uncomfortable. My dilemma was whom (if at all) should I tell about it."

Who should she tell? Anyone?

## Preferential hiring...

- Student: I have seen a lot of preference to good-looking women over men at several jobs. One job in particular, in the IT field, good-looking girl was hired just to (and blatantly) have a “change” and some eye-candy. She was not qualified
- What to do about this?

# Bringing in the First Woman (Michael Pritchard, Western Michigan University)

- Jim Grimaldi, projects manager in the Sunnyvale division of Universal Corporation, has just learned that in two weeks the headquarters in Los Angeles will be sending him a project engineer, Joan Dreer. Her job will be to supervise small groups of engineers involved in automotive brake design. The Los Angeles headquarters is anxious to move women into all company levels, and it has targeted Grimaldi's engineering division at Sunnyvale as a good place for Joan Dreer. Joan Dreer will be the first woman engineer at Sunnyvale. ...

- On learning that their new supervisor will be a woman, several of the engineers inform Jim Grimaldi that they don't like the idea of a woman supervising their work.
- What, if anything, should Jim Grimaldi do to prepare for Joan Dreer's arrival?
- Joan Dreer has been with the Sunnyvale division for several months now. As project engineer she has been supervising the work of several engineering groups involved in automotive brake design. As a projects manager, Jim Grimaldi is Joan Dreer's supervisor. ...

- The contracts Joan Dreer's groups have been working on have tight deadlines and allow only extremely narrow margins for error. So, the engineering groups have had to work at maximum speed and under a great deal of pressure. Jim Grimaldi has become increasingly concerned about the work of the groups under Joan Dreer's supervision. He comments: A couple of months ago I was sent a new engineer from our plant in Los Angeles, Joan Dreer, and told to put her to work right away as a project engineer. The company was making a push to move women into all company levels but had apparently run into a lot of problems with their engineers down in Los Angeles. ...

- They had decided that our place would have the fewest problems adjusting to women and they were pretty insistent that we find a way to work things out. When I first took Joan around our plant so she could get to know the men and the kind of work we do, several of the engineers took me aside and let me know in no uncertain terms that they didn't want a woman to supervise their work. To make matters worse, Joan came on as a pushy and somewhat aggressive feminist. When one of the young engineers asked her if she was a "Miss" or a "Mrs.", she retorted that her private life was her own affair and that he should get used to calling her "Ms."

- Jim has not found any of the groups under Joan's supervision outrightly refusing to work. But they do seem to have been dragging their feet in small ways so that sometimes they miss their deadlines. The other groups have also been showing some reluctance to cooperate with the groups under Joan Dreer's supervision. So, Jim has become increasingly concerned about the impact Joan Dreer's presence seems to be having on his ability to meet deadlines, and he is concerned about how this might affect his own career. He is also worried about the safety factor involved in the brake design. He concludes:

- I agree that it's important to move women into supervisory positions in the company, but I don't know whether we can really afford to do it just yet. Women aren't really suited for this kind of work. I don't want to fire any of m engineers. That would be unfair since they have worked hard in the past under a lot of pressure. What should I do?
- What do you think Jim Grimaldi should do? Explain. What are the ethical issues involved, and how should they be approached?



What, if anything, should Jim Grimaldi do to prepare for Joan Dreer's arrival?

- ☐ Convey the headquarters' decision to the engineer (why Joan Dreer was chosen and her qualifications; emphasize that gender is irrelevant to ability)
- ☐ Listen to the concerns of the engineers and address any misconceptions or biases they may have
- ☐ Set clear job responsibility and authority for Joan Dreer
- ☐ Provide support to Joan Dreer to ensure she is able to do her job effectively

- What do you think Jim Grimaldi should do? Explain. What are the ethical issues involved, and how should they be approached?

### Ethical issues and Jim's responsibilities

- ❑ To ensure that the work under his supervision is being performed to the best of the employees' abilities, and that safety standards are met
- ❑ To follow the company's policy of promoting diversity and inclusion
- ❑ To ensure that no discrimination or harassment in the workplace

### Jim's appropriate action

- ✓ Discuss with Joan to understand her management style, and with the engineers to understand the issues they are facing
- ✓ Explain the company's policy on diversity and inclusion
- ✓ Provide additional training or support to engineers to help them adjust to working with a woman supervisor
- ✓ Take immediate action against discrimination or harassment
- ✓ Communicate clearly with all employees (importance of treating all with respect and professionalism)

**Did you observe any behavior towards**

- women engineers/colleagues  
you think is not professional?**
- What do you think the attitude  
towards women engineers/colleague  
should be.**

# Group Discussion

Discuss about women's rights movement and sexual harassment in China

Hints:

- New PRC Civil Code (effective from Jan 2021)
- The PRC Law on Protection of Rights and Interests of Women (came into force on 1<sup>st</sup> Oct 1992, amended on 26<sup>th</sup> Oct 2018)
- 12<sup>th</sup> Five-Year Plan (Reducing gender inequality in education and healthcare)
- Anti-domestic Violence Law of PRC (effective 1<sup>st</sup> March 2016)
- Proclaimed by President Xi on donation \$10 million to the United Nations for Gender Equality

- Measures regarding sexual harassment including prevention, complaint, investigation and treatment
- Challenges