# Research Writing Prof. Aradhna Malik Department of Management Indian Institute of Technology, Kharagpur

#### Lecture – 23 Academic Integrity

Welcome back, to the MOOC course on research writing, my name is Aradhna Malik and I am helping you with this course and we will now take up a very important topic that is very, very close to my heart, we finished the discussion on you know how to write the manuscript, you have written the manuscript now there are a few things that you need to be careful of.

What we are going to talk about today in this lecture is, academic integrity. Academic integrity refers to unethical, we are going to in this lecture we are going to talk about unethical practices in written communication and implications for intellectual property, or implications for protecting the intellectual property of people who have created that property.

(Refer Slide Time: 01:02)



Some codes we will start the discussion with codes and policies for research ethics. Now, when we are writing any document, we must remember few things we must be ethical in the way we present are information, we must be ethical in the way we do our research. So, some standard codes and policies for research ethics, as prescribed by the or this is

by Resnick 2010, and from a website put up by the national institutes of health, government of United States one is honesty, we must be honest in the way we conduct our research, we must never fudge data we must never write up data, I know of instances where people have been known to you know they will create a questionnaire and one find a they will just lock up their office and fill out the information, and then they will say through my research I found out x y or z and if somebody asks them for information, they will say here is a stack of questionnaires.

Now, when you go through those questionnaires you will realise, that all of them are written in the same handwriting and you know that, they have been honest they have just filled them out, one over a couple of days or had 2 or 3 of their associates fill them out, and different handwritings and unfortunately these unethical practices do take place.

Objectivity, we must be objective now when we talk about qualitative research, again qualitative research assumes that are biases and opinions will creep into, what we do. So, objectivity, but then again when you are writing from the perspective of a researcher, objectivity comes in and then when you writing from the perspective of the participant in that research, then your opinions in biases come in.

So, even in that polyvocal atmosphere or polyvocal (Refer Time: 02:57) objectivity, is still an important integral element of that polyvocal melio, especially when you are writing from the perspective or in the voice of a researcher, integrity carefulness you must be very careful with the data you collect, especially you know again most of what I have said till now, focus is on writing about people, writing in the social sciences, writing in the humanities, I am sure writing is very different in the pure sciences and the engineering discipline, but all of this does apply to those situations also you must be very, very careful about how you handle data?

How you process it? How you analyze it. I remember when I was just getting started on my research work, on this you know on my academic pursued, I was an academic associate with the Indian Institute of Management in Ahmadabad and my boss was Doctor Dilip Mavlankar, who I was associated or working with Doctor Dilip Mavlankar who is at that time an associate Professor, and he is now the director of the Indian Institute of Public Health in Gandhinagar, and I remember he asked me to compile a set

of data and he said why do not you type up this table and bring it, and then make a may be I think draw line graph or something may be a graph or a pie chart.

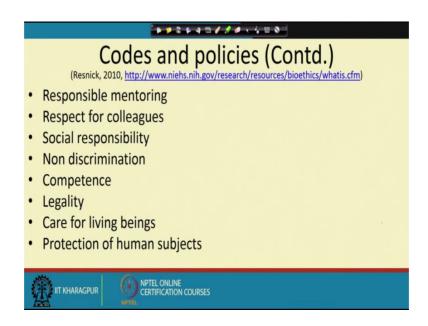
And I took that pie chart to him and he took one look at it, and he said this does not seem right. So, he was. So, well versed with how that data would look just by looking at the raw data, he knew what patterns would emerge if Doctor Mavlankar is listening to this, I am sure these smiling and he is he is he is you know he is tickled by this example, but that is what happens when you. So, experienced with data you know I am I think I forgot to put in, a few data points or somebody who had been dictating the data to me, somehow you know there was some confusion and.

So, maybe I missed out on a few data points, and he said no this pattern does not look right there is something wrong, please go back cross check and that was the day I learnt my lesson. He was very sweet about it, but I felt bad that I had to one of course, I had to re do the work and I felt bad, that I had been entrusted with such important work and I had not been able to deliver, what I had promised I would deliver. So, big lesson learnt always cross checked 2 3 4 times after that. So, you know.

So, so you must be very careful, because if he had not spotted that tiny error, the information that had come out, the knowledge that he had created as a result of that analysis, may be would have been flawed and would have led to faulty you know building of knowledge. So, it is very, very important that we handle the data very, very carefully. Openness, you have to draw there is a very fine line, between protecting confidentiality of the sources and being open about how you have conducted your research, being open about how you have you know or what you have done in your research work.

It is important to be very clear to be as open as possible, at the same time you must protect your intellectual property, you might need to protect your trait secrets as they call them. So, it is very, very you know you have to balance the 2, and we must respect the intellectual property, created by the other people.

(Refer Slide Time: 06:53)



So, this is an absolutely essential aspect of research ethics, we must maintain confidentiality the sources and we must publish responsibly. We must also mentor people responsibly, when we are undertaking research, we must respect our colleagues, we must be socially responsibly when we are taking data, we must be socially responsible as to how it treat the data? How it deal with that data? How it present that data? We do not want to create a panic, but still want to inform the people, how do we do it? We must not discriminate on any basis what.

So, ever when we are dealing with data unless of course, we are talking about again, you know it is not discrimination it is objectivity in dealing with data, that talks about discrimination. So, when we are dealing with that kind of a situation, then we might actually want to or need to talk about discrimination, as a subject as a field of study, but we must not discriminate between, you know caste religion etc, you know when we are selecting people, select group of people unless of course, the study mandates, that we compare and contrast 2 groups in which case equal weight age will be given to the groups concerned ok, competence we must be competent to handle data.

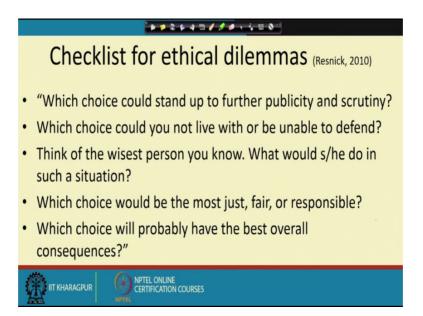
So, unless you are trained in statistics, please heir statistician to do your work, unless you have taken you know unless you know what different statistics mean, please take the help of an expert. If you can not understand, what you are analysing? Or what you have analysed? If you do not know which test to use please seek the help of an expert, if you

are not well versed with qualitative research by all means do it, but get some training first. So, that is very important.

legality again, there are legal issues while presenting data, you must be very careful to be law of the land you must care for living beings. So, you know there are society is that protects the interest of the subjects, under study the various organisations that that ensure, or that you know for my own PhD work, I had to present my data to a committee of 11 people that were drawn from various works of life, there were some Professors some administrators some people in the community.

So, the university where I did my PhD had this committee of I think 11 or 13 people, and I had to send my proposal and tell them that you know this is what I am going to do, and these could be the harmful negative effect. So, what I am planning to do, these could be the positive these could be the advantages. And so, you know I had to describe everything and ensure and then they gave me suggestions, as to where I could modify, what I was planning to do? while still maintaining the regard of research. So, we must be very, very careful protection of human subjects very, very essential.

(Refer Slide Time: 09:51)

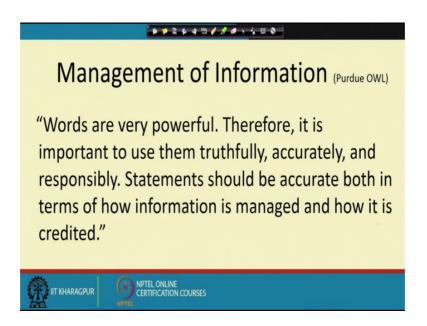


And then, some checklist for ethical dilemmas, whenever we have an ethical dilemma while presenting a work, we must you know we there is a checklist here, which choice could stand up to further publicity and scrutiny, what should we choose that could stand up to further publicity and scrutiny? What how? On the basis of what could be present

are data? Now, which choice could you not live with or be unable to defend, think of the wisest person you know what would he or she do in such a situation? Many times we are tone between the needs of our research, they need to present our research in a certain way and, what we are or you know the constraints of a moral or legal obligations. Which choice would be the most just fair or responsive?

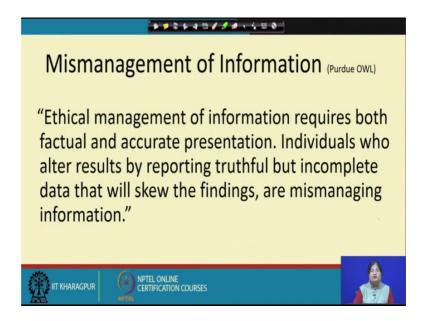
Which choice will probably have the best overall consequences? How do you select the method that is least harmful to all concerned and that is still yields the best possible results? Now, these kinds of dilemmas come up when you dealing with human subjects, when you are dealing with animals that are used for testing, pharmaceutical pharmaceutical that are used for testing life saving drugs, where do you draw the line.

(Refer Slide Time: 11:06)



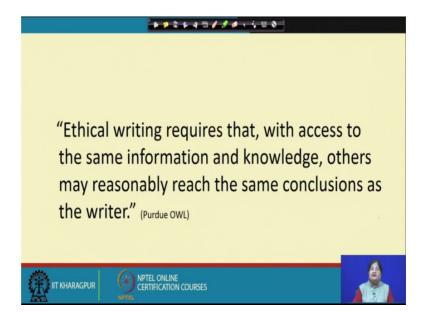
Now, management of information, when we talking about integrity, now we were at till this point we were talking about research integrity. Now, we are talking about honesty in presenting our work words are very, very powerful therefore, it is important to use them truthfully, accurately and responsibly, statements should be accurate both in terms of how information is managed? And how it is credited?

(Refer Slide Time: 11:30)



Ethical management of information requires both factual and accurate presentation, individuals who alter results by reporting truthful, but incomplete data that will skew the findings are mismanaging information. Ethical writing requires that, with access to the same information and knowledge others may reasonably reach the same conclusions as the writer.

(Refer Slide Time: 11:45)



(Refer Slide Time: 11:58)

#### Academic Misconduct

- "Plagiarism (Latin:plagiarus= plundered; from plagium= kidnapping).
   Plagiarism is the kidnapping of another's words." (Sutherland-Smith, 2009)
- "Plagiarism means to take and use another person's ideas and or manner of
  expressing them and to pass them off as one's own by failing to give
  appropriate acknowledgement. This includes material from any source,
  staff, students or the Internet published and un-published works."
  (Sutherland-Smith, 2009)
- Plagiarism is the act of "...tak[ing] (borrow[ing], st[ealing],
  misappropriat[ing], pass[ing] off) an 'object' (language/ [style of
  expression], work, computer images, choreography, graphics) from a source
  (books, journals, Web, [published or unpublished document]) by an agent
  (student, person, academic) without adequate acknowledgement with or
  without intention to deceive." (Sutherland-Smith, 2009)

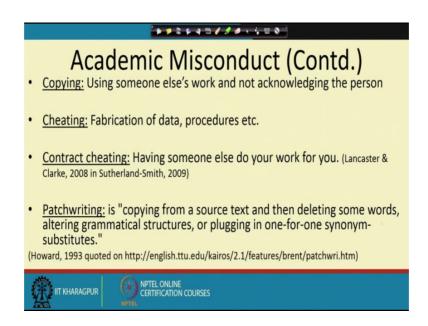


Now, what is academic misconduct plagiarism, refers to you know the is comes from 2 words sorry, it comes from the word plagiary rus, which means plundered, from plagium which mean kidnapping a Professor Wendy Sutherland smith has been working on plagiarism, and she says that plagiarism is the kidnapping of another persons words. Now, plagiarism means to take another persons ideas and or manner of expressing them, and to pass them off as ones own by failing to give appropriate acknowledgement, this includes material from any source staff students or the internet, published and unpublished works.

Plagiarism is the act of taking, borrowing, stealing taking refers to borrowing stealing, misappropriating passing of an object, object includes language or style of expression, work computer images, choreography or graphics from a source which includes books, journals, web published or unpublished document by an agent, the agent could be a student person or academic without adequate acknowledgment, with or without the intention to deceive.

I hear this many times from my students, and you know I asked them why did you copy and they said mam we did not intend to copy it just happened. So, that is you know with or without the intention to deceive, if you take somebody else's words if you take somebody else's creation, then it is called plagiarism.

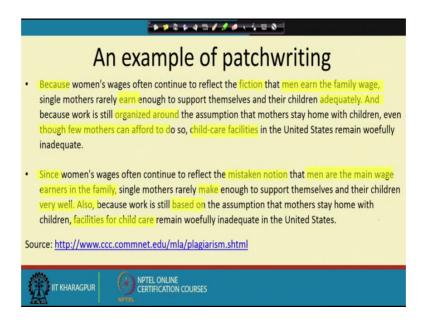
(Refer Slide Time: 13:30)



Various forms of plagiarism, copying means using someone else's work and not acknowledging the person, cheating refers to fabrication of data procedures etc. So, like I told you, you take a set of questionnaires fill them out yourself scribble somewhere, you know change your handwriting, fill them out and then write a paper based on that and then you say that, you know this is the outcome of my study that is outright cheating should not be done. contract cheating having someone else do your work for you, you have someone else again hiring and editor to do the job, and acknowledging that editor does not count as cheating.

However, having someone having ghost writers writer dissertation, is absolutely contract cheating not acceptable. Patch writing is copying from an source text and then deleting some words, altering grammatical structures or plugging in one for one, synonym substitutes let us see what this is.

(Refer Slide Time: 14:29)



An example of patch writing, please read this and just pay attention to the highlighted text, I will you know I will let you read and ingest this slide, I will let you make sense of the slide, before I start explaining it. Now, when we talk about patch writing just look at the 2 paragraphs, this is from this website ccc dot comment dot edu, these 2 you look at the first paragraph, because becomes since women's wages often continue to reflect the stage the same, fiction becomes mistaken notion, men earn the family wage becomes men are the main wage earners in the family, single mothers rarely remains the same, earn becomes make, enough to support themselves and their children remains the same, adequately becomes very well, and becomes also, because work is still based work is still remains the same.

Organised around becomes based on, the assumption that mothers stay home with their children remains the same, facilities becomes child care facilities, and here facilities for child care becomes child here child care facilities becomes facilities for child care and is interspersed at a different location, remain woefully in adequate is here in the United States comes here.

So, rearrangement and substitution of some words and phrases, by others and you know this part, even though few mothers can afford to do. So, is completely removed. So now, this is a perfect example of patch writing, we do this and we say that we have done our own work, a lot of our students do it we also have tendency to do it, bad experience writers can catch this, your credibility will take a hit please do not do it.

(Refer Slide Time: 16:43)

### Other forms of plagiarism

(Purdue OWL

- "Claiming originality regarding material copied directly from outside sources. In other words, deliberately failing to cite sources.
- Improperly documenting quoted, paraphrased or summarized source material.
- Extending the length of a bibliography to meet project requirements by including sources not used in your research or making them up all together"

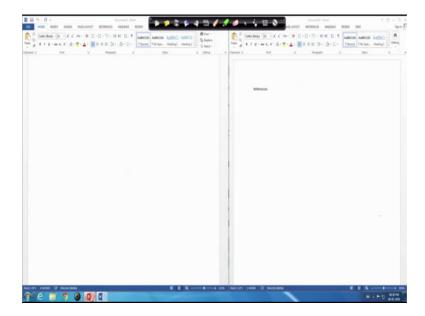


Other forms of plagiarism, claiming originality regarding material copied directly from outside sources, in other words deliberately failing to cite sources is plagiarism, improperly documenting quoted paraphrased or summarised source material, extending the length of a bibliography to meet project requirements by including sources not used in your research or making them up all together, bad idea very bad idea, what happens is, many times I have seen this and I tell my students to be very careful, when you cite resources you know, many times we forget what we are citing.

So, we use a source in our text and we forget to mention it at the end, and we keep looking for it and we do not find it occasionally, what we will do is, we will cite sources in the middle of the text, and after we you know we take 6 8 months to finish the document, then we compile list of references and then we just take a totally different list, we say these are the articles I have they must have appeared. So, we cut corners on that whole process bad idea.

What you should do is, you know open 2 windows, let me show you how here. So, you open 2 windows and have them side by side you have a document on one and copy your references and put them on the second document ok.

(Refer Slide Time: 18:16)



So, you have your document here, and your reference is here the bibliography. The detailed bibliography here, and you have the main document here, you go on highlighting whatever you do here you keep on highlighting c and highlight here also, if it finds a match here then you highlight it here, if this finds a match here, then you highlight it here.

So, you cross check these 2 sets of references and whatever is left behind, must be looked at make sure your in text and end of text references match up, before you submit the paper for review or to any you know official channel. Another things that happen is, many times again this is this happens with unethical people or people who are in a rush, they run out of references.

So, they just make up journal names they make up volume and issue numbers, thinking that nobody will know they will say yes I found this journal you know somewhere. So, they may not realise that such a journal exists, or they may just make up the name of a journal, make up the names of articles, I have seen some unethical people do that it is very bad, it just leads the reader to a dead end and leaves them frustrated, if they want to go to that journal and they want to find out where to get that information from, they do not know what to do, and that is again that is just lying and not right.

(Refer Slide Time: 19:47)

## Common forms of contract cheating

(Purdue OWL)

- "Purchasing an essay or paper from a "dealer" on the Internet, friends, hostels or anywhere else and calling it your own.
- Borrowing another author's paper from a previous assignment and calling it your own.
- Having someone else do your work, for free or for hire.
   Agreeing to do someone else's work is equally wrong"



Some common forms of contract cheating, purchasing an essay or a paper from a dealer on the internet friends hostels, or anywhere else and calling it your own, borrowing another authors paper from a previous assignment and calling it your own, having someone else do your work for free or for hire agreeing to do someone else's work is equally wrong.

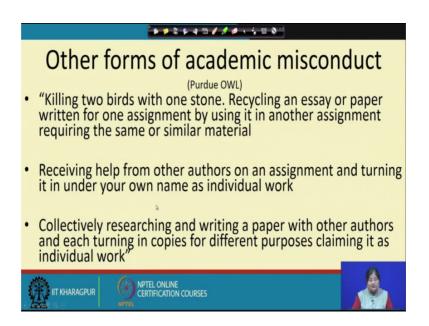
If you have hired an editor, you may hire I have known friends for who English was a second or 3rd or 4th language, they hired an editor and acknowledged the services of the editor, in the acknowledgement section as a footnote, that is perfectly all right because you are not comfortable with the language, but as far as the critical thought that goes into it, is concerned you must do your own work.

Now, I will share another example with you, some years back I came across a set of papers written by the same team of people. So, it is a team of 5 or 6 people, and they would go around, they would take the same paper the same content, change the title of the article a little, bit tweak it a little bit and keep shuffling the names of the authors. So, in one paper one team member would become the first author, the second paper with the same content published in the same journal, would have the name of another person as the author.

And they would just keep changing it, or they would submitted to different lesser known places, where it would not really you know it would give them something to put on their

resume, but it would not really be traceable and they would go around shuffling the order of the people and that was. So, wrong you have a mega project, you split it up into tiny projects and all of you do a little bit of it, that is absolutely acceptable, but using the same content in 5 or 6 different for a is bad ok.

(Refer Slide Time: 21:50)



So, please do not do it other forms of academic misconduct, killing 2 birds with one stone recycling an essay or paper written for one assignment, by using it in another assignment requiring the same or similar material not right, receiving help from other authors on an assignment and turning it in, under your own name as individual work this is what I was talking about, collectively researching and writing a paper with other authors, and each turning in copies for different purposes claiming it as individual, work bad idea please do not do it.

(Refer Slide Time: 22:18)

#### Causes of Academic Misconduct

- Lack of proficiency in a language
- Perception that big words and complicated flowery language will leave a good impression about the author
- Lack of expertise
- Lack of awareness
- Laziness
- Fear of failure



Some causes of academic misconduct, why do we resort to academic misconduct? lack of proficiency in a language, we are not proficient we are not comfortably using a particular language. So, we in order to appear to be very knowledgeable, we resort to academic misconduct, acknowledge the fact that you are not comfortable, either get a hold on the language or find somebody who can help you and acknowledge the persons work, even if you paid that person to edit your paper, what difference does it make, I have a friend who has sent me papers several times for review.

And then, very gracefully acknowledged my name, even though I tell him not to I said this was just informal, he says no you read my paper you helped me with my grammar and writing skills. So, I will put your name and very you know in fine print my name is mentioned at the bottom of his paper saying that, you know we thank Doctor Aradhna Malik for her inputs, on the structure of the paper and that is you know that is the way it should be done, that is the way it is done in senior journals.

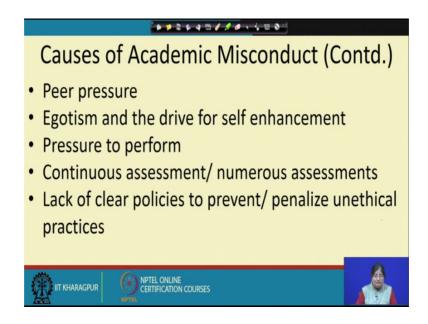
Perception that big words and complicated flowery language, will leave a good impression about the author bad idea. Research writing has to be very direct, very to the point you know you have limited space and too much, if you have really done your work well you will have too much to say. So, big words do not really help, they only numb the senses of the reader and occasionally if you do not use the big words properly, then you will get into trouble your credibility will suffer, please do not do it. lack of expertise in

the in the area, lack of expertise in the discipline, again this has been suggested to me by you know I have I have heard this happening where people say, you can just take an old paper and see what they have done, take the same data regurgitated use some different statistical techniques, and just tweak a few things here or there, and send it to a less or known journal, who will come to know, I am sorry that is just not acceptable. So, we resort to you know you are not an expert.

So, you just depend on other experts, who have published their work, you will be caught you do something like this you will definitely be caught and you will be punished for it severely. So, please do not do it, lack of awareness many times people do not know that, it is wrong which is why this is? This particular lecture in this class is very helpful, you are listening to it if you been doing it please stop doing it. laziness it, writing is hard work, writing requires thinking, writing requires sitting down in 1 place thinking, and you know scratching your brain and then it is frustrating, it is mind boggling, but once a manuscript is done you feel great about it. So, it is difficult work, we are too lazy we do not want to sit down we do not have that kind of commitment, and that leads to academic misconduct.

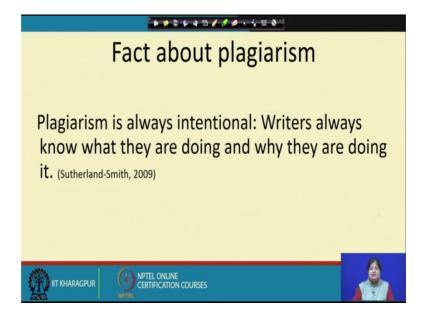
Fear of failure, we are scared of rejection, I keep telling my student paper is rejected once, excellent if your paper is accepted in the first (Refer Time: 22:18) you do not know what you should be doing, your paper must be rejected 3 or 4 times for you to really grow as a researcher. So, that is absolutely all right, but we are. So, scared of failure we do not want to revise, and that is what create creates problems. Um peer pressure, you know you see your friends publishing here and there, and you say you are you have so many publications, you know you have so much material under your bed and that really creates a lot of pressure on you.

(Refer Slide Time: 25:55)



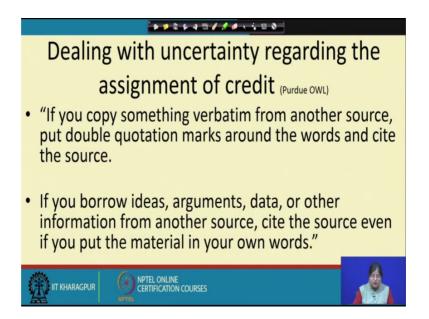
Egotism and the drive for self enhancement, you just want to go on publishing whether it is good quality or not in that that need to, just move ahead and do so much more than everybody is doing, really can lead to people doing the wrong thing. Pressure to perform again it is a requirement for recruitment, it is a requirement for promotions etc, continuous assessment or numerous assessments lack of clear policies to prevent or penalize unethical practices. So, these are some of the reasons, why we resort to academic misconduct.

(Refer Slide Time: 26:31)



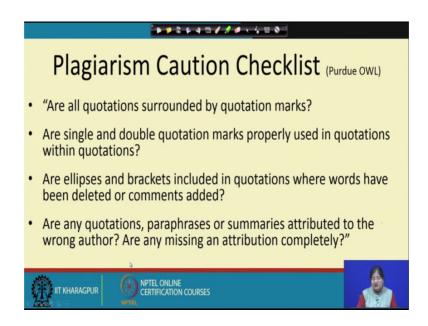
Now, fact about plagiarism, plagiarism is always intentional writers always know, what they are doing? And why they are doing it? And this is something you know that Professor Wendy Sutherland Smith has mentioned again and again in her papers.

(Refer Slide Time: 26:50)



So dealing with uncertainty regarding the assignment of credit, again we have dealt with some of it earlier, if you copy something verbatim from another source put double quotation marks, around the words and cite the source. If you borrow ideas arguments data or other information from another source, cite the source even if you put the material in your own words.

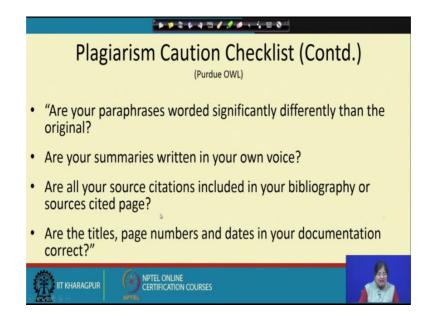
(Refer Slide Time: 27:10)



Some checklist, a checklist we will deal with more ways of. How to reference this? in another lecture. Um then you are reviewing your paper, to see if you have you know if you have really taken care, you must go through or this is a checklist that will help you, ensure that you haven't really copied.

So, ask yourself are all quotations surrounded by quotation marks, are single and double quotation marks properly used, in quotations within quotations are ellipses and brackets included in quotations, where words have been deleted we will talk about this in a later class, are any quotations paraphrases or summaries attributed to the wrong author, are any missing an attribution completely are your paraphrased word, are your paraphrases worded significantly, different than the original have you patched it in something, are your summaries written in your own voice are your are all your source citations, included in your bibliography or sources cited page, are the titles page numbers and dates in your documentation correct now.

(Refer Slide Time: 28:03)



(Refer Slide Time: 28:21)



So, you must ask yourself all these questions, now consequences of academic misconduct. If you resort to these unethical practices, what can happen to you? I am going to really scare you at this point, your credibility goes for a toss, your credibility takes a hit people do not want to believe you, your reputation takes a hit, your there are professional implications, you are caught doing something unethical, you can really suffer you know you may be demoted, you may be removed from your job you may lose your job you may lose a project etc.

There could be legal implications, if you have you know stolen somebody else's intellectual property, somebody else is done the work, you do not give them credit. You know what is intellectual property? Intellectual property is the creation of somebody else's work, somebody does the work and you say no I have done this work. So, you do not give credit it is like you know stealing a pen or a pencil, it is it belongs to someone else somebody has created that knowledge, and you say it is my knowledge. So, you claim it as your own and they can be legal implications, you know they could be copy right issues there could be patent issues.

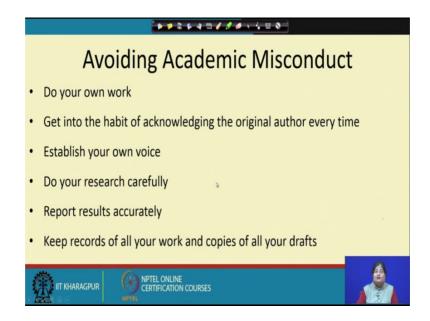
And so, that can really have long ranging complications, cost to funding agencies, you lie you fabricate, you cheat on your data on the ways you analyse people, who are funding your research will not know you know what has been what is the result of that cheating? And what is a really authentic information? They try to use the information you have generated, and it leads to it leads no were. Imagine a space program or a medical device manufacturing company, things go wrong the medicine you know does not behave the way, it is suppose to behave if you are not doing your work properly, and it can a very serious implications, or maybe you know structural problem.

So, you say that the building will based on your research you say this been made of this particular, material or this composition of materials will take the load of so many breaks and all that is calculated, and the building is built and people are living in the building and the building falls down, and then as things are traced back you realise that, the actual research was fabricated, it was the information that was used was based on fabricated data, you develop people develop a medicine based on research. Come up with the chemical, you do not declare the negative effects or the harmful effects of that medicine, people consume and they start falling sick and eventually it comes back to haunt you.

So, you know people who have funded that research also, I mean you know that that research really falls flat on it is face, and the companies that have funded it suffer cost to academia of course, new knowledge cannot be created or if it is created that whole body of knowledge, collapses future knowledge creation, professional careers of future scholars, people who have built who have started doing their PhDs, they use that information and they go on together PhD, they use your work as the basis for their work, and then when truth is discovered, everything falls and their careers also suffer. So, this

can have long range implications, now how do you hand of course, the cost to society of course, if your work is used in this society, then the society can also suffer.

(Refer Slide Time: 31:51)



How do you avoid academic misconduct? Do your own work, please do your own work, the only way you will improve is through practice, please do your own work do not cheat do not look into other peoples papers, do not take material from others just do your own work and eventually it will pay of, get into the habit of acknowledging the original author every time, we will talk more about it in the next lecture, but you must do this.

Establish your own voice, establish your own perspective, establish your own genre, establish your own way of writing do your research very, very carefully, report your results accurately and keep records of all your work and copies of all your drafts. Now, there is a the Hollywood movie called Flash of Genius, if you have a chance please watch it you know we I normally have my research students watch that movie it, really highlights the importance of keeping records of, how you have done the work. So, not a very popular movie.

But really brings to light how, you know by keeping records of your work, you can actually prove that something that you created was your own creation, even if unscrew plus un ethical elements want to steal your work, they will not survive in the legal system, because you will be able to prove through these drafts through these records, that you have done that work and not someone else. So, it is very, very essential.

(Refer Slide Time: 33:30)

#### References for slides on academic integrity

- Purdue Online Writing Lab
- Eckstein, M. A. (2003). Combating academic fraud: Toward a culture of integrity. International Institute for Educational Planning, UNESCO.
- Sutherland-Smith, W. (2009). Plagiarism: ethical issues in the learning and teaching relationship. Unpublished powerpoint presentation received through personal communication.



Now, and again I like to practice what I preach. So, the references for the slides on academic integrity are, purdue online writing lab, I am acknowledging the work they have done and acknowledging the information they have given us, and of course, there is a paper by Eckstein then, Professor Wendy Sutherland Smiths paper called plagiarism ethical issues in the learning and teaching relationship. So, you know this was received through personal communication, I wrote to her about plagiarism and she sent very kindly sent me this the set of slides.

So, you know we must acknowledge it, you must have seen that you know in all my slides most of my slides at least, I have something here some names some year something is mentioned here. So, this you know this is the these are the references, I wish I had time to show you the similarity detections of where, but I think I am running out of time for this presentation, but do you know the various similarity detection softwares, that catch the textual similarity between different documents, and you know it is not a plagiarism detection software, it just captures the textual.

Similarity between different documents you will find many of them, you know available for free on the internet please go through them and see, how they detect this textual similarity? Let us have a discussion about this on the forum, if you feel. So, inclined, but that is all we have time for in this lecture, we will continue with some more discussion on research writing in the next class.

Thank you very much for listening.