Research And Information Systems Class Journal Entries.

Lectures

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Lecture No. 1. (08/24/05)
**Introduction of the course by Drs. Mullins and Brewster**
This is the introduction of the course student and instructors. Each student introduced him/herself and almost all Departments in the life sciences are represented in this course. It is a diverse class. Drs. Mullins and Brewster gave a general overview of what the course is all about, as well as its history. This was a good class and we came to know each other and the people who will be taking us through the training.

Lecture No. 2. (08/31/05)
**Information Technology and Science by Dr. Brewster**
Information technology was defined as. The actual meaning of IT was provided and application the field of science, especially the emerging disciplines such as bioinformatics. The land grant mission was also provided and the acts since 1962. Being an international student, I now know what Land grant Institute Institutes stand to do and achieve and for that reason this was an excellent class for me.

Lecture No. 3. (09/07/05)
**The Scientific Method by Dr. Mullins**
The scientific method is a process by which scientists of different categories try to construct an accurate representation of the world. To achieve this, four steps are followed and each of these steps were discussed with relevant information to clarify each. I was a little bit confused at the beginning by the whole lecture was summarized everything became clear. This was an important lecture to me as I have to follow this method in my present and future research.

Lecture No. 4. (09/14/05)
**Good Laboratory Practices by**
I worked in a laboratory and the Lab Technologist in a University research lab. The lab dealt with a variety of biological material and chemicals. Having been taught good laboratory practices, I realized that they were not being applied in that lab. As a result sometimes we threw away valuable materials or left old useless stuff for a long time in the lab. After this lecture I realized that, a lot needs to be done in that lab, in
terms of GLP and my plan is then after graduation, I will encourage my bosses back home that there is need for GLP. This will improve quality of research and productivity. This was a good introduction for people like myself who might be charged with a whole research to run.

**Lecture No. 5. (09/21/05)**
**Scientific Writing I by Dr. Mullins**
Scientific writing is one of the core components of graduate studies. This could be a term paper, the thesis itself or publication of part of the thesis or dissertation. I have done research before and published some in a refereed journal, of course with the assistance of an experienced author. Although I have this limited experience, I think had I done those writings after this lecture, the output would have been better. I have also read extensively during the preparation of my proposal and I am now realizing that some of those publications were not as good.

**Lecture No. 6. (09/28/05)**
**Scientific Writing II by Dr. Mullins**
We discussed the Gopen and Swan article entitled “The science of scientific writing”. We were grouped to read and share with the rest of the class sections of the article. I had a tough time understanding what’s going on in this article. Even though Gopen and Swan are trying to tell us what a good writing is, to me they should try to put up their thoughts in less jargon than this. Otherwise they might as well be dismissed as bad writers. Dr. Mullins asked me to say something about the section I was assigned, and I must admit, I had very little to say and it embarrassed me somehow.

**Lecture No. 7. 10/05/05**
**Biological Compliance by Dr. Tolin**
This was about practices and procedures of handling materials considered to be hazardous to people or the environment. This include organisms such a microorganisms or insect or their genetic materials. I deal with physiology of maize in my research and it seems not that strick to follow any compliance in handling maize. However, I should biologically comply should I consider importing some maze germplasm from outside the United States of America. It was a good lecture for people in pathology and entomology studies and may be for me in the future.

**Lecture No. 8. (10/12/05)**
**Designing Research Projects by Dr. Brewster**
I had a tough time sometime back here in Virginia Tech when my major Professor asked me to come up with a research project idea. I wish I had attended this lecture before then. I feel I would have come up easily with a researchable project, without being turned back several times. This lecture was good for new students who are still thinking about the kind of project they would like to do. It was also well presented and everything about designing a project became clear.

**Lecture No. 9. (10/19/05)**
**Data Analysis, Visualization and Bioinformatics by Dr. Brewster**
It is by coincidence that this lecture came at the time when I spent sleepless nights wondering what to do with the volumes of research data I have from the greenhouse and the laboratory analyses. After the lecture I just went ahead and summarized my data sets into descriptive statistics and I drew some graphs and could tell even before analysis of variation that some of data was not going to give me the results I am expecting. So this lecture was a lecture of the month for me. It was good.

**Mid Term Exam (10/26/05)**
This was a rather hard exam but the kind of teaching and out of class assistance we get from the Instructors is excellent. As a results I did well in this exam.
Lecture No. 11 (11/02/05)
Teaching and the Art of Lecturing by Dr. Fell
Dr. Fell was trying to teach without using teaching aids. He talked and never used the aids. This really demonstrated that aids in teaching does a good job. For the most part of this lecture I was asleep and was lucky that Dr. Fell never asked me any question. I will never teach anyone without using teaching aids.

Lecture No. 12. (11/09/05)
Grant Writing by Dr. Tolin
She explained to us what it takes to write a good grant proposal. The kind of things the reviewers look for when they assess the proposals. I have always thought Professors are the one who should always right the proposals and now it seems I was wrong. It was a good lecture for me especially that in our University back home, research can only be done when you have a grant form somewhere, especially from the US and the EU. This exposed me to some of the things they look for in grant proposals.

Lecture No. 13. (11/16/05)
Distance Education by Dr. Brewster
This was about offering online courses, which is becoming common in Universities throughout the world this days. This is an important aspect of University education, moreso that a lot of people who are working can have access to education. It will allow people to get educated without the need to enroll full time. In my field of study, I am wondering how I can possibly offer an online course, since there are labs and some of the concepts need face to face kind of teaching. I don’t think I will have an opportunity to teach any online course, unless I become selfish. It is a good thing though.

Thanks Giving Break (11/23/05)
It was a good thing for to have the break. I was tired and needed it. I did not go anywhere and just hanged around Blacksburg/Christiansburg area.

Lecture No. 14. (11/30/05)
Ethics in Science by Drs. Pfeiffer and Jubb.
The lecture was about ethical issues in doing scientific research and publishing the results. What touched my heart was about the drawing used by some student to market their department, and it turned out to be copy right law violation. This implies that in the this error of internet with a lot of easy to download pictures, a lot of people may fall into this kind of trap. The evening class by Dr. Jubb was more about academic honesty. It appears some people could do anything to get what they want out of a research experiment. These were good lectures and I wish this could be atleast 25% of this course. Alternatively, some hours for the lab could be used for this kind of teaching. This was an excellent lecture for me.

Lecture No. 15 (12/07/05)
Intellectual Properties