

## **Course Report**

**Course Title: Learn, How to learn and think**

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## INTRODUCTION

The most important thing in the world is to learn new things. As we all know at this level the simple definition of learning is to acquire new knowledge or skills from new experiences, study or being taught. We all human beings have this ability to learn new things and it modifies and reinforce our skills, existing knowledge, our behavior and preferences to different experiences. Learning can be aided by motivation or it can be goal oriented which may occur as part of our schooling, training or personal development. The basic and one of the key purpose of this course *“Learn, How to learn and think”* was to encourage learner to learn new knowledge in some hierarchical manner which tests learner’s previous knowledge and deep thinking skills and approaches.

To be honest, when I choose this course to study in this semester, my expected course content list was very much different and after attending first lecture jointly delivered by Professor Jinshan Wu and Professor Kip Ault. It totally destroy my expectations and design of the course. After first class, I was confused to continue this course or to drop it but the very much thing about this course which motivated me to take this course was I never learnt a course which jointly offers micro and macro level topics at same time, this course introduced us about “big picture” ideas as well as “bird’s eye view” which was a very impressive and extremely helpful way of thinking especially while you are going to start your research as a PhD candidate.

## COURSE DESIGN AND ITS OUTCOMES

The whole course was divided into two modules. In first module which was instructed by Professor Kip Ault, we learnt about the concept mapping tool “Cmap Tools” and how we can construct concept maps by using this tool to develop meaningful learning and concept map making. Undoubtedly Professor Kip is one of the best teacher I have ever learnt from. The beauty of his fundamentally simple but unique teaching style is that he always focus on learner’s thinking and feelings and he make teaching and learning process very easy by including basic but very strong real life examples and phenomenon. I still remember the ideas of parking lot in concept mapping and bird’s eye view concept he taught us in very natural way. His words and ideas helped me a lot in deep thinking process and it changed my perceptions of viewing at a problem. By completing difference class activities and projects, it developed and sharpened my meaningful thinking and learning new knowledge capabilities.

The journey with Professor Jinshan Wu, who instructed the second module of this course is the unforgettable and is like a pearl of my life. I feel very lucky to study from such a diversified and deep thinker. The main content of this module was to enable a learner in sciences to construct concept maps by doing project in their own field of study. The main crux of this module was to identify and then try to answer the WHAT, WHY and HOW parts of any science problem or question. As I came from an education system which is completely based on taking classes and typical exam oriented structure which leads to the rote learning. The main purpose of this course was to guide a learner towards and develop meaningful learning so it really challenged my abilities and approaches towards the problem solving. Thanks to presentations from Professor Jinshan Wu especially the presentation on quantum mechanics which shake my mind and improves my logical and meaningful learning capabilities. In his presentation Professor Wu told

us about Schrödinger's cat experiment, and by demonstrating single photon phenomenon he beautifully explained how we can see at any natural or scientific phenomenon or problems at macro and micro levels. Throughout the course he emphasized on the WHWM questions which we must try to seek and solve in any phenomenon universally. In this way we definitely become able to go to the basic roots of the problems and we can then clearly see the answer. The second module was the most difficult for me because it challenged my previous knowledge and skills as undoubtedly to learn new skills and develop new concepts is a slow and very challenging process and at the end of this course I am somehow successful to learn and absorb and implement the new knowledge gained from this course.

## **CONCLUSION**

The beauty of this course was all activities were student based. The role of teacher was not just as a teacher but as an advisor and critics too. Professors' compliments, suggestions and criticism throughout this course at every stage was the key factor for us as learners to improve our learning about specific topics and in different natural phenomenon. At the time of presentations or project assignments, another advantage professors gave to us students was we were free to choose any topic or focus question related to our field of study so that one can utilize his/her skills and in depth knowledge about the topic to prepare. Other than this Cmap tools proved to be very helpful in organizing, structure and representing our knowledge. The ideas professors' emphasis during whole course like parking lot, bird eye view, 'What, How and Why' questions proved to be very powerful that by implying these one can formulate a problem precisely and

with clarity. Another benefit from this course is that one can communicate effectively by using subject language of the related discipline.

For me, the basic purpose of this course is to train a learner to understand the meaningful learning and how to construct new meanings by correlating the existing knowledge with new knowledge. To master the Cmap tool so that we can construct, organize and represent the knowledge and learning in new and effective way. I feel by taking this course it enables me to get in touch with myself, with my understanding of the things and most importantly it gave me strength to evaluate my learning and understanding about the problems whether they are curriculum based or phenomenon in nature I am much confident that I can now think more deeply and critically and then try to structure the solution in more presentable way.

## **ACKNOWLEDGMENT**

I feel lucky to choose such a wonderful and creative course. It helped me to evaluate my understanding and knowledge more clearly which I never thought about. This all progress would be impossible without the teaching and guidance of all professors especially Professor Jinshan Wu and Professor Kip Ault whose teaching methods and concepts were so powerful and simple enough for any learner to absorb the lecture and motivate the learner to improve and do better and better. Professor Jinshan Wu and Professor Kip Ault, I really want to thank you both for your guidance, friendship and even for your discipline. Thank you for creating the environment of enthusiasm for learning, appreciation for growing and room for making mistakes along the way. I will always be grateful to you and your precious words will be a guiding light for me throughout my life and I would sincerely appreciate your continued advice along the way.

Last but not least I just want to take a moment and thank all of my friends and classmates especially Wang Ran and Shad Ali, Hehui Li, Jonathan Wu and BaiLu for sharing sweet memories of being together, learning together and enhancing our knowledge through one another will always shine in my mind.

Thank you all!

Regards:

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