June 19, 2012

Re: Chesapeake Project Report, NFSC100: Elements of Nutrition

NFSC100: Elements of Nutrition is now a general education course in the category of distributive studies, natural sciences. This is a team-taught course through the Department of Nutrition and Food Science and is offered in the winter, spring, summer and fall semesters with an annual enrollment of approximately 1000. Ms. Katz, the previous course coordinator and major instructor, updated “the Ever Changing Food Supply” lecture two years ago and included selected topics of sustainability. The previous lecture (50 min) covered genetic modification, food irradiation, bovine growth hormone, organic farming, and local, sustainable and community supported agriculture. Since taking over the course in Fall 2011, I consider the need of expanding this important area with an attempt to make our younger generation aware of the significance of protecting our environment. In Fall 2012, I plan to substantially expand this area by offering two 50-min lectures. To meet the changes, the lecture is now entitled “Sustainability: Agriculture, Food and Nutrition”. In addition to the existing teaching materials, the followings will be included:

1. The impact of farming and food processing on the environment.
2. Greenhouse gas produced by ruminant animals.
3. Fossil fuel vs. extreme oil: impact on our food system.
4. Renewable energy vs. food systems (corn/sugarcane → ethanol?)
5. Alternative energy vs. lands for foods (algae).

Moreover, several other lectures throughout the semester that will now include discussions of sustainability. Examples include:

1. **Carbohydrate.** Discuss the pros and cons of converting carbohydrate from corns for human or animal consumption to ethanol production. Available technologies will also be discussed.
2. **Protein.** Discuss the burden of producing meat and milk for human consumption on the environment. In this regard, cow is the least environmental friendly.
3. **Food choices.** Discuss the upward trend of obesity rate and how poor food choices are related to the obesity issue and greenhouse gas emission.

Furthermore, NFSC100 will now include one discussion section on Sustainability. It is expected that students will have a better understanding and interests in the pursuit of a greener life. Moreover, the syllabus also emphasizes the sustainability and indicates what the university is expected and committed for being one of the best green universities.