Attendees: Sarah, Norm, Alypios, Brad, Jim, Steven, Karen, Jonathan, Hunter

**Business:**

* June 5th meeting book coming. Steve will send an e-mail when it’s here for pick up in CTL.
* Smaller group meeting for lunch today to discuss developing a course (something for all freshman, through LAES, were suggestions). The idea/goal to launch in Fall 2010.

**Book Discussion by facilitator(Biomimicry):**

* Introduction… reference Alypios’ ppt (posted on site)
  + Great idea… DaVinci quote
  + Not common in language (google, Word) implies not wide spread
  + Part of biotechnology
  + Brainz.org/15-coolest-cases-biomimicry/ = examples of biomimcry
  + Lars in Biology is an on campus biomimicry expert
* Author background
  + Literature degree
  + Favorable reviews of institute and her
  + She is the champion of Biomimicry.. but not well known or wide spread
* Book summary
  + Started with agriculture… not sure that seemed like a good start. Problem is we can’t go back in time.. have to start with where we’re at
  + Energy & water… best possibilities
  + Manufacturing.. good idea but how to happen immediately
  + Health and Medicine… possibilities
  + Computing… maybe a little unrealistic
  + Business… not close to implementing.. but can’t view a disaster as making sense economically. Board member of Center for Sustainability in Engineering not as optimistic in person as in the book.
  + Call to Action…wasn’t ‘urgent’ enough
* Sustainability: What is the question? And Practical actions And NAE (National Academy of Engineering) view and Epilogue (see Alypios’ ppt)
* Not a lot of research $’s into biomimicry (long term (~20 yrs) risky but high payout), most focused on short term (~5yrs) high payout, both industry and government

**Book Discussion among group (Biomimicry):**

* Author is proposing ‘holistic’ view not tinkering, agreed the topic hasn’t grown.
* Wind turbines .. only 1% built with biomimicry principles
* Original model for computer was modeled after a human (input, output, memory processing). Gave example of Artificial Intelligence (AI) and aerodynamics related to/modeled after nature.
* Leverage the sustainability component within ABET (Engineering accreditation) to increase sustainability in engineering curriculum
* Optimistic when looking at the changes that happen in a lifetime (50-60 years)
* Book represents one end of large spectrum of thinking… how we think and cope with our relationship with nature. It is not only engineering but ALL disciplines. There have been changes in our lifetime… study of medicine (no food nutrition 30 years ago and now there is), change in behavior of smoking another example. A lot of examples (see back of text) of dealing with/designing with nature. About evolving value system.
* Study of what type of student would be interested and how they would learn via the following tests: NEP (concern for environment), MSI (motivation), SL (leadership style)
* 1st quarter consistently bringing in sustainability into course before getting on main topic… this was a 2nd most enjoyable thing about coming to class
* One goal of a course is simply literacy (sustainability) and based on bullet above.. goal oriented (re: the tests). Learn about yourself in relation to the topic.
* Express nature more beautifully with concern for the organism.. not just be motivated by greed. Teach people how to ‘read nature’.. referred to example on page 45 farmer/rancher knew he had a healthy field when the birds had returned.
* Value in humble arts (basic) as well as the super scientist, big CEO etc…
* How do we heal ourselves.. wrong!! How do we stay healthy is a better question.
* Change in values.. from 1st chapter… imposing will vs will of the land. Respect for primitive practices but recognizing value of technology.
* Broad conceptual moral, social guidelines applied to science and what we can learn from nature.
* Quantum mechanics and conflict with spirituality… Einstein never accepted the quantum mechanics view.
* Learning from nature is evolution and natural selection which involves chance.. what lessons can we incorporate? She’s emphasizing community, connection among disciplines.
* General agreement that nature as model is correct a path to solutions.
* This book is 15 years old but the ideas not really changed/updated as seen in newer books we’ve read.
* Today’s students aware and interested in sustainability but need additional education/literacy in the subject.
* Still a disconnect (or conflicting view) if sustainability and GDP growth can go hand in hand.