805-283 Environmental Studies

Steven A. Martin, PhD Environmental Management

Concepts, objectives, and development of environmental studies; system approach to environment; interaction between life and surroundings; patterns of environmental problem in both physical and biological aspects involved in society and economics; guidelines for designing environmental education processes, including theories and philosophy of environmental management that mitigate or solve environmental problems leading to the sustainable development

Key Areas of Study

- Concepts and objectives of environmental studies
- Development of environmental studies as a discipline of study
- System approach to environmental studies
- Interaction between life and surroundings
- Patterns of environmental problems in society
- Patterns of environmental problems in economics
- Guidelines for designing environmental education processes
- Theories and philosophy of environmental management
- Mitigation of environmental problems
- Toward sustainable development

Special Topics

- Bioarcheology in Southeast Asia – Case of Northeast Thailand
- Enviro studies in Southeast Asia – Case of the Tonle Sap
- Environmental Indicators and action planning
- Environmental sustainability index
- Mekong Dams – From China to Cambodia (6 countries)
- Sufficiency Economy
- Surf System Boundaries – A case for surfing reserves
- Guest speaker – Dr. Ray
- Nai Yang field trip (mangrove and coastal area)

Reading

Barrow, C. J. (2005). Environmental management and development. Oxon: Routledge.

Broadhurst, R. (2001). Managing environments for leisure and recreation. New York: Routledge.

Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st century business. Oxford: Capstone.

Emerson, J., Esty, D. C., Levy, M. A., Kim, C. H., Mara, V., Sherbinin, A. de, & Srebotnjak, T. (2010). 2010 Environmental performance index. New Haven: Yale Center for Environmental Law and Policy.

Esty, D. C., Levy, M., Srebotnjak, T., & Sherbinin, A. (2005). 2005 Environmental sustainability index: Benchmarking national environmental stewardship. New Haven: Yale Center for Environmental Law & Policy.

Kay, R., & Alder, J. (2005). Coastal planning and management. New York: Taylor & Francis.

Miller, G. T. (2006). Environmental science: Working with the Earth. Belmont, CA: Thompson Learning, Inc.

Miller, G. T., & Spoolman, S. (2014). Environmental Science 15th Edition. Boston: Cengage Learning.

TICA (Thailand International Development Cooperation Agency). (2013). Sufficiency economy: Background and rational. Retrieved from http://tica.thaigov.net/main/en/information/2237/28965-2.-SufficiencyEconomy.html (accessed August 10, 2013).

TNC (The Nature Conservancy). (2007). Conservation action planning: Developing strategies, taking action, and measuring success at any scale. Arlington, VA: Author. Retrieved from www.conserveonline.org/workspaces/cbdgateway/cap/practices (accessed January 25, 2013).

United Nations. (1987). Report of the world commission on environment and development: Our common future. Annex doc. A/42/427. NY: United Nations.

UNWTO (United Nations World Tourism Organization). (2004). Indicators of sustainable development for tourism destinations: A guidebook. Madrid: Author. Retrieved from http://www.eunwto.org/content/x53g07/fulltext?p=3c701026db9f448983493fe23067fb51&pi=0#section=890050&page=17&locus=48 (accessed June 19, 2013).

Journal Papers by Course Lecturer

Martin, S. A., & Assenov, I. (2013). Developing a surf resource sustainability index as a global model for surf beach conservation and tourism research. Asia Pacific Journal of Tourism Research, 19(7) 760–792. doi: 10.1080/10941665.2013.806942

Martin, S. A., & Assenov, I. (2014). Investigating the importance of surf resource sustainability indicators: Stakeholder perspectives for surf tourism planning and development. Tourism Planning and Development, 11(2) 127–148. doi: 10.1080/21568316.2013.864990

Martin, S. A., & Assenov, I. (2015). Measuring the conservation aptitude of surf beaches in Phuket, Thailand: An application of the surf resource sustainability index. International Journal of Tourism Research, 17(2) 105–117. doi: 10.1002/jtr.1961

Other Articles by Course Lecturer

Martin, S. A. (2010). Coastal currents in Phuket. Thailand Surfrider, (4) (pp. 44–46). Thalang, Phuket: Purple Diamond Ltd.

Martin, S. A. (2010). Coastal resource and surfing in Thailand. Thailand Surfrider, (1) (pp. 42–50). Thalang, Phuket: Purple Diamond Ltd.

Martin, S. A. (2011). Climate Change and the environment in Thailand: What's going on with the weather? Thailand Surfrider, (5) (pp. 28–30). Thalang, Phuket: Purple Diamond Ltd.

Martin, S. A. (2011). Rare earth vs. rare surf: Malaysian 'rare earth' refinery draws environmental concerns for surfers. Thailand Surfrider, (7) (pp. 28–29). Thalang, Phuket: Purple Diamond Ltd.

Martin, S. A. (2011). Surf science of the Andaman Sea, Part I: A surfer's guide to wind, water & waves. Thailand Surfrider, (7) (pp. 42–45). Thalang, Phuket: Purple Diamond Ltd.

Martin, S. A. (2011). Trash talking: Exploring marine debris on the Andaman Coast, Thailand. Thailand Surfrider, (6) (pp. 48–50). Thalang, Phuket: Purple Diamond Ltd.

Martin, S. A. (2014). Exploratory research on the Mekong Delta: The geography of Viet Nam. Faculty of International Studies E-Bulletin. Retrieved from http://www.magazine.fis.psu.ac.th/?p=142 (accessed July 18, 2014).

Martin, S. A. (2015). A brief introduction to the historical geography of Cambodia. Faculty of International Studies E-Bulletin. Retrieved from http://www.magazine.fis.psu.ac.th/?p=251 (accessed May 12, 2015).

Course Outline

	Content	**Teaching/ learning activities and materials**
1	Orientation/ Course description/ Expected learning behaviors guided by the education act and the university policies	Students are introduced to the course, syllabus, details, requirements and class policies. Class participation relative to student' perspectives and understanding of Environmental Studies
2	HUMANS AND SUSTAINABILITY: Environmental problems, their causes, and sustainability	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
3	ECOLOGY AND SUSTAINABILITY: Science, matter and energy	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
4	ECOLOGY AND SUSTAINABILITY: Ecosystems	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
5	ECOLOGY AND SUSTAINABILITY: 1) Evolution and biodiversity; 2) Climate and biodiversity	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
6	ECOLOGY AND SUSTAINABILITY: Community ecology, population ecology, and sustainability	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework

7	ECOLOGY AND SUSTAINABILITY: Applying population ecology and human population	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
8	SUSTAINING BIODIVERSITY: 1) Ecosystem approach; 2) Species approach	
9	Midterm Examination	
10	SUSTAINING RESOURCES AND ENVIRONMENTAL QUALITY: Food, soil and pest management	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
11	SUSTAINING RESOURCES AND ENVIRONMENTAL QUALITY: 1) Water and water pollution; 2) Air pollution	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
12	SUSTAINING RESOURCES AND ENVIRONMENTAL QUALITY: Geology and nonrenewable minerals	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
13	SUSTAINING RESOURCES AND ENVIRONMENTAL QUALITY: Energy	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
14	SUSTAINING RESOURCES AND ENVIRONMENTAL QUALITY: 1) Risk, human health and toxicology; 2) Solid and hazardous waste	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
15	SUSTAINING RESOURCES AND ENVIRONMENTAL QUALITY: Climate change	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
16	SUSTAINING HUMAN SOCIETIES: Environmental economics, politics and worldviews	-Active learning activities/ Lecture and PowerPoint/ Discussions and individual and group work/ Essay writing and review on select topics/ Reading and homework
17	Course review/ preparing for the final examination	Discussion

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