

Integral Ecology

FW 499/PHL 499, 3 CREDITS
SUMMER 2006

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Course web site: <http://oasis.vancouver.wsu.edu>

Course description:

The course will introduce the concept of Integral Ecology (IE) as it applies to improving the management of natural resources, particularly fishery management. IE is an application of Ken Wilber's Integral Theory applied to ecological problems that allows insights into distinct perspectives which lead to a more holistic understanding of ecological-social systems. IE recognizes that the cultivation of mutual understanding, including one's own self-awareness and spirituality, is an essential component in addressing our environmental problems. The course will explore multiple issues associated with the development of integral theory, including the relationships between ecology, economics, management and policy development, environmental conflict, and personal perspectives. Through examples we will explore resource management practices of native cultures and modern fishery management in Hawaii and Oregon. Students will be involved in multiple field and group exercises and will conduct group projects on an integral analysis on the establishment of an MPA network in Oregon.

TENTATIVE LECTURE SCHEDULE

READINGS

<u>Day</u>	<u>Time</u>	<u>Lecture topic</u>	<u>Reading(s)</u>
Monday, June 27	8-9	Introduction to course: Roots of our Environmental Crisis	Hardin, 1968 White, 1967
	9-10	Integral theory: holons	
	10-11	Physical and systems quadrants: ecology, economics management & policy	
	11-12	Cultural quadrants: worldviews & conflict	
	1-2	Cultural quadrants: culture & mythology	
Tuesday, June 28	8-9	Cultural quadrants: resource management in native cultures	Callicott, 1984 (Chapter 6)
	9-10	Psychological quadrants: Carl	

		Jung and archetypes	
	10-11	Psychological quadrants: spirituality & inner work	
	11-12	AQAL: the integral approach	
	Lab	AQAL experiences & journaling	
Wednesday, June 29	8-9	Flatland: failures of the past, ideas for the future	
	9-10	The way forward: Integral Ecology & the ecological niches	Hargens, 2005; Zimmerman, 2005
	10-11	The eight methods of knowing	
	11-12	Conducting AQAL analyses	
	Lab	Public meetings exercise: video critique of PFMC, Fisherman's Forum; mock MPA hearing	Capitini et al. 2004
Thursday, June 30	8-9	Science of Marine Protected Areas	
	9-10	Community-based fishery management in West Hawai'i	Tissot, 2005
	10-11	History of west coast groundfish fisheries	
	11-12	Integral analysis of fishery management policy and MPAs	
	Lab	Field trip to Oregon MPAs	
Friday, July 1	8-9	<u>Example</u> : Canada's Great Bear Rainforest	Riddell, 2005
	9-10	<u>Example</u> : Integrating Interiority in community development	Hochacka, 2005
	10-11	Time for group work	
	11-12	IE: future challenges	
	Lab	Presentation of group projects	

Grading:

Write-ups of readings	25%
Personal Journal	20%
Participation in group discussions and activities.....	20%
Project Report & Presentation	35%

Course Reading List

- Callicott, J. B. 1994. Far Western Environmental Ethics. Chapter 6 in Earth's insights. Univ. of California Press, Berkeley.
- Capitini, C., B. N. Tissot, M. Carroll, W. Walsh and S. Peck. 2004. Aquarium fisheries management in west Hawaii: a dynamic conflict. Soc. Nat. Res. 17: 763-778.
- Hardin, G. 1968. The tragedy of the commons. Science, 162(1968):1243-1248
- Hargens, S. 2005. Integral Ecology: the what, who and how of environmental phenomena. World Futures 61: 5-49.
- Hochachka, G. 2005. Integrating Interiority in community development . World Futures 61: 110-127.
- Riddell, D. 2005. Evolving approaches to conservation: integral ecology and Canada's Great Bear Rainforest. World Futures 61: 63-78.
- Tissot, B. N. 2005. Integral marine ecology: community-based fishery management in Hawaii. World Futures 61: 79-95.
- White, 1967 Historical roots of our ecological crisis. Science 155: 1203-1207
- Zimmerman, M. 2005. Integral Ecology: A perspectival, developmental, and coordinating approach to environmental problems. World Futures 61: 50-62.

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- Beckwith, M. W. 1951. The Kumulipo, a Hawaiian Creation Chant. Chicago: Univ. Chicago Press,.
- Botsford, L. W., F. Micheli and A. Hastings. 2003. Principles for the design of marine reserves. Ecol. Apps. 13S(1): S25-S31.
- Callicott, J. B. 1994. Earth's insights. Univ. of California Press, Berkeley.
- Campbell, Joseph. 1949. The hero with a thousand faces. Princeton Univ. Press.
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- Daniels, S. and G. Walker. 2001. Working Through Environmental Conflict: The Collaborative Learning Approach. Westport CT: Praeger Publisher.
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- Hargens, S. B. F. 2002. Integral development in Bhutan: taking the "middle path" towards gross national happiness. J. Bhutan Stud. 6: 24-87.
- Johannes, R.E. 1978. Traditional marine conservation methods in Oceania and their demise. Annual Review of Ecology and Systematics. 9:349-364.

- Johannes, R. E. 1981. Words of the lagoon: fishing and marine lore in the Palau district of Micronesia. University of California Press, Berkeley.
- Jung, C. 1963. Memories, Dreams, Reflections., London: Collins and Routledge.
- Kirch, P. V. 1984. The evolution of the Polynesian chiefdoms. Cambridge Univ. Press, Cambridge, UK.
- Michaelidou, M., Decker, D., and J., Lassoie. 2002. The interdependence of ecosystem and community viability: a theoretical framework to guide research and application. Soc Nat Res 15:599-616.
- National Research Council. 1999. Sustaining Marine Fisheries. National Academy Press, Washington D.C.
- National Research Council. 2000. Marine Protected Areas: Tools for Sustaining Ocean Ecosystems. National Academy Press, Washington, D.C
- POC (Pew Oceans Commission). 2003. America's Living Oceans: Charting a Course for Sea Change. Pew Charitable Trust Report.
- Pukui, M. K., E. W. Haertig and C. A. Lee. 1972. Nana I Ke Kumu (Look to the Source). Queen Lili'uokalani Children's Center, Honolulu, HI.
- Tissot, B. N. 1999. Adaptive Management of Aquarium Fish Collecting in Hawaii. Live Reef Fish Information Bulletin 6: 16-19.
- Tissot, B. N. and L. E. Hallacher. 2003. The effects of aquarium collectors on coral reef fishes in Hawaii. Conservation Biology 17(6): 1759-1768
- Tissot, B.N. , Walsh, W. and L. E. Hallacher. 2004. Evaluating the effectiveness of a marine reserve network in Hawaii to increase the productivity of an aquarium fishery. Pacific Science 58(2): 175-188.
- Wilber, Ken. 1995. Sex, ecology, spirituality. Shambhala, Boston
- Wilber, Ken. 1996. A brief history of everything. Shambhala, Boston