Course Syllabus

- Name of Curriculum Bachelor of Science Program in Environment
 Faculty/Institute/College Mahidol University International College, Faculty of Science, Faculty of Environment and Resource Studies, Mahidol University
- 2. Course Code ICEN 462 Course Title Coastal Zone Management
- 3. Number of Credits 4 (Lecture/Lab) (4-0)
- 4. Prerequisite None
- **5. Type of Course** Elective
- 6. Trimester / Academic Year

Second / 2005

7. Course Description

General knowledge on coastal areas and coastal resources, distribution, status and importance of coastal resources to environment. Mangrove forests, coral reefs, seagrass beds, fisheries and coastal aquaculture are found at the coast. Concept of management, planning, goals, objectives with special reference to the important coastal habitats. Policy, legislation and organizations pertaining to coastal resource conservation and management. Study cases.

8. Course Objectives

This course aims to give necessary knowledge on coastal zone management especially on the important coastal resources and fisheries, the principles for coastal conservation and management.

9. Course Outline

Week	Topic	Totaloustan			
	Lecture/Seminar	Hour	Lab	Hour	Instructor
1	Introduction and overview of the	4			Dr. Suvaluck
	course				Satumanatpan
	Definition: Coastal area, coastal				
	resources,				
	Management, Planning				
	Principles and concepts for				
	management				
	Goals / objectives for				
	management				
2	History of CZM in Thailand	4			Dr. Suvaluck
	Example of The Coastal Resource				Satumanatpan
	Management Project (CRMP)				
3	Issues addressed by coastal	4			Dr. Suvaluck
	management: resource use				Satumanatpan
	conflict, population growth and				
	poverty, illegal activities,				
	pollution, biodiversity				
	conservation, policy and				
	institutional gaps and conflicts				

Week	Topic	T			
	Lecture/Seminar	Hour	Lab	Hour	Instructor
4	Overview of coastal management concepts and principles, important tools for coastal management	4			Dr. Suvaluck Satumanatpan
5	Orientation to the coastal management process: issue identification and baseline assessment, CRM plan preparation and adoption, action plan and project implementation, Monitoring and evaluation	4			Dr. Suvaluck Satumanatpan
6	Management on mangrove/study cases	4			Prof. Dr. Sanit Aksornkoae
7	Management on Coral reef /study cases	4			Dr. Thammasak Yeemin
8	Management on Seagrass/ study cases	4			Dr. Suvaluck Satumanatpan
9	Management on coastal fisheries and coastal aquaculture /study cases	4			Assoc. Prof. Dr. Kungwan Chantharachot
10	Policy, legislation and institutional arrangement for costal management	4			Dr. Suvaluck Satumanatpan
11	Report discussion	4			Dr. Suvaluck Satumanatpan
	Total	44			

10. Teaching Method

- 1. Lecture
- 2. Discussion
- 3. Self-Study

11. Teaching Media

- 1. Texts and Teaching Materials
- 2. Transparencies
- 3. Power Point Presentation

12. Course Achievement

Assessment made from the set-forward criteria. Student who gets 80% up, will have Grade A.

13. Course Evaluation

- 1. Oral Presentation 10%
- 2. Report 60%
- 3. Examination 30%

14. References

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- 2. Asian Fisherfolk Conference. 2002. Prince of Songkla University, Hat Yai, Thailand.
- 3. Baker, I. and Kaeoniam P. 1985. Manual of Coastal Development Planning and Management for Thailand. Prepared at TISTR. 179 pp.
- 4. Barrett M.G. (editor). 1992. Coasatl Planning and Management. Proceedings of the Conference Coastal Management 92: integrating coastal zone planning and management in the next century, organized by the Institution of Civil Engineers and held in Blackpool on 11-13 May 1992. 327 pp.
- 5. Bennett, R.G. 2000. Coastal Planning on the Atlantic Fringe, North Norway: the Power Game. Ocean & Coastal Management. 43: 879-904.
- 6. Clark, J.R. 1985. Coastal Resources Management: Development Case Studies. Coastal Publication No.3 749pp.
- 7. Chotthong, B. 1997. Using Biophysical Characteristics For Coasatl Resources Zoning, For coastal Resources Zoning, Phangnga Bay Case Study. Master Thesis. Faculty of Environment and Resource Studies. Mahidol University.
- 8. Chou, L.M. (editor). 1995. Proceedings of the Workshop on Soft-Bottom Benthic Communities as Indicators of Pollutant-Induced Changes in the Marine Environment. RCU/EAS Technical Report Series No. 7. UNEP. Bangkok, Thailand. 83 pp.
- 9. Chufamanee, P. and Jarayabhand, S. 1998. Management of Coastal Zones and Non-Living Resources Development in Thailand. Emerging Policy Initiatives and Activities in Coastal Zone management and Non-Living Resources Assessment in Asia and the Pacific. Development and Management of Non-living Resources in the Coastal Zones of the Asia-Pacific Region Series. Volume 3. United Nations. pp. 72-80.
- 10. Clark, J.R., Banta, J.S. and Zinn, J.A. 1980. Coastal Environmental Management, Guidelines for Conservation of Resources and Protection Against Strom Hazards. Washington, D.C. 161pp.
- 11. Department of Land development. 1999. Guideline for Coastal Zone Management in Thauiland. 274 pp. (in Thai).
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- 13. East Asian Seas regional Report on the Issues and activities associated with coral reefs and related ecosystems. 1996. RCU/EAS Technical Reports Series No. 11. UNEP, Bangkok, Thailand.
- 14. Fortes, M.D. 1995. Seagrass of East Asia: Environmental and Management Perspective. RCU/EAS Technical Reports Series No. 6. UNEP. Bangkok, Thailand. 79 pp.
- 15. Hay, J.E. and Chou Loke Ming. 1993. Contributions to training in Coastal Zone Management in the Asia-pacific Region and Report of the first

- NETTLAP Resources Development Workshop for Education and Training at Tertiary Level in Coastal Zone Management. UNEP/ROAP Network for Environmental Training at Tertiary Level in Asia and the Pacific, Publication No. 7, UNEP. 245 pp.
- 16. Lemay, M.H. Chansang, H. 1989. Coral Reef Protection Strategy for Phuket and Surrounding Islands. Thailand Coastal Resources Management project, Office of National Environment Board. 64 pp.
- 17. Ludwig, H.F. 1975. Environmental Guideline for Coastal Zone Management in Thailand Zone of Pattaya. Environmental Impact Evaluation Division, Office of the National Environment Board with the Cooperation of Usaid (Thailand). 107 pp.
- 18. Ludwig, H.F. 1976. Environmental Guidelines for Coastal Zone Management in Thailand Inner Gulf Zone. Environmental Impact Evaluation Division, Office of the National Environment Board. 187 pp.
- 19. Ludwig, H.F. 1976. Coastal Zone Management in Thailand, Environmental Reconnaissance, A Case Study at Phuket. Environmental Impact Evaluation Division, Office of the National Environment Board with the Cooperation of Usaid (Thailand). 130 pp. (GB 458.15 L8C)
- 20. Office of Environmental Policy and Planning. 1991. A National Coral Reef Strategy for Thailand. Volume 1: Statement of Need. 33 pp.
- 21. Office of Environmental Policy and Planning. 1998. Report on Mapping, Management and Action Plan for Seagrass Resources of Thailand. 162 pp. (in Thai).
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- 23. Office of Environmental Policy and Planning. 2000. National Action Plan on Climate Change of Thailand. Volume I: Main Report. Ministry of Science, Technology and Environment. Prepared by Thailand Environment Institute. (QC 981.8.C 5 s623n)
- 24. Kittiwanitch, J. 2000. Monitoring Shrimp Farm Expansion and Assessing its compliance to Land use Plan along prasae and Pangrat River, Rayong Province. Master Thesis. Faculty of Environment and Resource Studies. Mahidol University. 93 pp. (TH J96m 2000 c.2)
- 25. Kenchington, R and Looi, C.K. (editors). 1994. Staff training Materials for the Management of Marine Protected Areas. RCU/EAS Technical Report Series No. 4. UNEP. Bangkok, Thailand. 543 pp.
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- 27. Meprasert, S. 1999. Integrated Coastal Management For the Eastern Coast of The Inner Gulf of Thailand. Master Thesis. Faculty of Environmental Science Inter-Department of Environmental Science. Chulalongkorn University. 154pp. (in Thai)

- 28. Penning-Rowsell, C. et al. 1992. The Economics of Coastal management. A manual of Benefit Assessment Techniques. Belhaven Press. 380 pp. (GB 541 P4e 1992)
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- 38. Training Manual on Assessment of the Quality and Type of Land-Based Pollutant Discharges into the Marine and Coastal Environment. 1993. RCU/EAS Technical Reports Series No.1. UNEP, Bangkok, Thailand.
- 39. Talbot, F. and Wilkinson, C. 2001. Coral Reefs, Mangroves and Seagrasses: A Sourcebook for Managers. Australian Institute of Marine Science. Australia. 193 pp.
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- 42. UNITED NATIONS. 1995. Guidelines on Environmentally Sound Development of Coastal Tourism. New York. 124 pp.
- 43. UNITED NATIONS. 1995. Planning Guidelines on Coastal Environmental Management. New York. 116 pp. (QH 541.5.c65 1995)
- 44. UNEP. 1997. Integrated Management of Watersheds in Relation to Management and Conservation of Neashore Coastal and Marine Areas in the East Asian Seas Region: Phase1 Assessment of Effects of River Discharges of Sediments, Nutrients and Pollutants on Coastal Wetlands, Seagrass Beds and Coral Reefs. A Regional Overview. RCU/EAS Technical Reports Series No. 13. 143 pp.

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15. Instructor

Asst.Prof. Dr. Suvaluck Satumanatpan

16. Course Coordinator

Asst.Prof. Dr. Suvaluck Satumanatpan