Integrated Coastal Zone Management  
MARA 5009.03/LAWS 2041.03/ENVI 5204.03  
Dalhousie University, Winter Term 2015

Tuesdays, 11:30a.m. – 2:30p.m.  
Room 8007, Milligan Room, 8th Floor, LSC

Instructor
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Introduction
Coastal zones are critical areas of transition between land, sea and air, involving complex overlays between natural processes, resources uses and government jurisdiction. The number and variety of uses and user groups competing for this land, sea and air space is ever-increasing, resulting in resource use conflicts that are often difficult to effectively resolve. At the same time, coastal areas and communities are increasingly subjected to impacts arising from climate change while the resources in these coastal environments are decreasing and deteriorating – not surprising, given that half of the world’s population is now estimated to be living within 200 kilometres of the coast, most in coastal megacities. To address this dilemma, there has been an urgent call for coastal states to plan, manage and regulate multiple uses in the coastal zone in an integrated manner, if the sustainable use of coastal resources is to be achieved. By 2001, approximately 95 coastal nations or semi-sovereign states had initiated some 345 integrated coastal management efforts, suggesting the selection of Integrated Coastal Zone Management (ICZM) as a key implementation strategy to address the challenges confronting coastal nations. However, despite the abundance of academic and policymaking activities surrounding ICZM, the understanding and practice of ICZM might best still be described as rudimentary and plagued by fragmentation along geographic, sectoral and disciplinary lines, to name a few. Nonetheless, ICZM remains the most promising approach for coastal states to address the urgencies and benefits to be gained by managing the growing demands being placed upon this critically important yet limited area of the earth’s surface.

Course Description
This course focuses on understanding the process associated with the implementation of Integrated Coastal Zone Management and lessons learned from a comparative assessment of selected efforts to date. Using case studies and examples from developed and developing countries, students will gain insights into the requirements necessary to plan and implement integrated coastal zone management programs at the local, sub-national, national and regional levels.

Students registering for this course are expected to familiarize themselves with key global and regional treaties and policies relating to the integrated management of
oceans and coasts, and be able to critically analyze existing international, regional, national and/or sub-national coastal and ocean policies, laws, programs and plans.

The course is offered by the Marine Affairs Program and is cross-listed with the Law School and SRES. The approach is accordingly comparative and interdisciplinary. Course material will include a required text, assigned weekly readings and optional supplemental readings.

**Course Requirements**

- Students will be expected to attend all seminars and participate actively throughout the course. Non-attendance of a class will result in a substantial knowledge gap for the student concerned and will negatively affect the student’s final grade as marks are assigned for class participation.
- Regular reading of weekly reading assignments, in advance of scheduled seminars. At the graduate level, reading materials support actual class discussion or provide background and context for students to enable them to better participate in class discussion and to improve their critical analysis of the subject matter selected for their major paper.
- Complete all class requirements by the stated deadlines, bearing in mind that late submission of written assignments will be marked down (See MARA Course Outline Supplemental Requirements).
- Students are expected to be familiar with the academic and administrative rules of the University, paying particular attention to policies regarding plagiarism and other forms of academic misconduct.

**Course Objectives and Learning Outcomes:**

This course will contribute to the objectives of MAP by:

1. Emphasizing practical management skills and tools for use in the practice of integrated coastal zone management;
2. Expanding and deepening students’ exposure of the theoretical to practical aspects of integrated coastal zone management;
3. Focusing on problem/case-based learning;

By the end of the course, students should be able to:

- Recognize the interdependence between coastal systems and human demands of the systems.
- Recognize the multidisciplinary nature of socio-ecological systems and the need for an interdisciplinary approach to address increasing coastal pressures.
- Have knowledge of the tools and methodologies needed to develop sound policy options for effective coastal management that draws on knowledge from multiple disciplines.
- Contribute to the development and implementation of an integrated approach to managing coastal activities at multiple jurisdictional scales.

**Course Evaluation**

Course evaluation will be based upon an individual major paper, a small group assignment on applying the stages of the ICM approach to a researchable chosen coastal
area, a mid-term exam, a short reflection piece on a simulated exercise and in-class participation. Law Students will be graded according to the Law School grading system while all graduate students will be graded in accordance to the Faculty of Graduate Studies grading system. **Students are required to submit all assignments both electronically and in hard copy to the course Instructor.**

**Grading**

1. **Due Jan 27** – Simulation Exercise Reflection – Part 1 (5%)  
2. **Due Feb 24** - Preliminary outline and draft bibliography of major paper topic (10%)  
3. **Due Mar 3** – In-class mid-term exam (20%) (Law students 10%)  
4. **Due Mar 17** – ICM Stages Case Study (20%) (Small group assignment)  
5. **Due April 14** - Completed major paper (40%)(Law students 50%)  
6. **Term Long** - In-class participation (5%)  

**Required Text and Weekly Assigned Readings**

While this book will be used as the major reference, other readings will be assigned for each class. Students are also expected to undertake their own literature research, especially for the preparation of the major paper assignments.

**Research Materials**

There is a considerable body of literature on coastal management in the form of books, journals, newsletters and proceedings from US, Canada and International Coastal and Ocean Management conferences. A number of web-sites also provide useful information on ICM.

A sample of recommended background/supplemental reading material include:

GESAMP, *A Sea of Troubles* (Nairobi: UNEP, 2001) and other GESAMP reports.  
World Commission on Environment and Development, *Our Common Future*. (Oxford:
Oxford University Press, 1987)
UN Conference on Sustainable Development (2012). Rio+20 portal (http://rio20.net/en/)

Some Useful Websites
Department of Fisheries and Oceans at http://www.dfo-mpo.gc.ca/oceans/oceans-eng.htm
Intergovernmental Oceanographic Commission at http://ioc.unesco.org/oceanportal/
National Oceanic and Atmospheric Administration (NOAA) at http://oceanservice.noaa.gov/tools/czm/
Global Forum on Oceans, Coasts and Islands at http://www.globaloceanforum.com

Some Frequently Cited Journals
Coastal Management
Ocean & Coastal Management
International Journal of Marine and Coastal Law
Marine Policy
Marine Pollution Bulletin
Ocean Yearbook
Journal of Coastal Conservation
Course Outline Weekly Guide*

Week 1 – Jan 6  -  Course overview
   Introduction and Context of ICM
   Understanding the Coastal Environment

Week 2 – Jan 13  -  Coastal Uses, Coastal Pressures and Critical Management Issues
   Identification of Case Study Groups

Week 3 – Jan 20  -  ICM as a Bargaining Process - Simulation Exercise Part 1
   Setting the Scene for ICM – Integration and Arrangements

Week 4 – Jan 27  -  A Systems Approach to ICM – Part I
   Reflection paper on simulation exercise Part 1 due (5%)

Week 5 – Feb 3  -  A Systems Approach to ICM – Part II
   Group 1 Case Study facilitation

Week 6 – Feb 10  -  A Systems Approach to ICM – Part III
   Group 2 Case Study facilitation

Week 7 – Feb 17  -  Reading Week – no classes

Week 8 – Feb 24  -  International, Regional and National Governance Approaches
   Coastal Climate Change Adaptation and the Role of Law
   Group 3 Case Study facilitation
   Major Paper Outline and Bibliography due (10%)

Week 9 – Mar 3  -  In-class exam

Week 10 – Mar 10  -  A practical guide for ICM planning, ICM Planning Tools
   Group 4 Case Study facilitation

Week 11 – Mar 17  -  Stakeholder Participation, Conflict Management
   ICM as a Bargaining Process - Simulation Exercise Part 2
   ICM Stages Case Study due (20%)

Week 12 – Mar 24  -  Tools for Assessing Management Options

Week 13 – Mar 31  -  Evaluating Effectiveness of ICM, ICM Best Practices

Week 14 – April 7  -  Identifying and Addressing Ongoing Challenges

*Course outline may be subject to changes.
Week 1 and 2 - Assigned Readings


Background Reading

a) Baseline 2000. Available at http://www.uhi.umb.edu/b2k/index.htm

Week 3 - Assigned Readings


Background Reading

b) GESAMP (2001). A Sea of Troubles (UNEP) Report No. 70. Available at http://www.gesamp.org/publications/publicationdisplaypages/rs70

Week 4 - Assigned Readings


Background Reading

a) Kay, R. & Alder, J. (2005). Coastal Planning and Management. London and New York: SPON Press. (Chapter 5, all of Sections 5.1, 5.2 and 5.5)

Week 5 - Assigned Readings


Background Reading

### Week 6 - Assigned Readings


### Background Reading

a) Kay, R. & Alder, J. (2005). *Coastal Planning and Management*. London and New York: SPON Press. (Chapter 4, Section 4.1; Chapter 5, Sections 5.3 and 5.4)

### Week 8 - Assigned Readings


### Background Reading


### Week 10 - Assigned Readings


### Background Reading


### Week 11 - Assigned Readings

1. Revisit East Typicus Simulation Hand-out

### Background Reading


### Week 12 - Assigned Readings


### Background Reading

**Week 13 - Assigned Readings**


**Background Reading**