



INTERNATIONAL OCEAN INSTITUTE



**TRAINING PROGRAMME ON
*OCEAN GOVERNANCE: POLICY, LAW AND MANAGEMENT***

SYLLABUS
(as of 17th July - subject to revision)

24th May – 21st July, 2017
Dalhousie University, Halifax, Canada

SUMMARY OF MODULES

MODULE 1:	<i>Orientation and Introduction to the Training Programme</i>
MODULE 2:	<i>Ocean Sciences</i>
MODULE 3:	<i>Law of the Sea and Principled Ocean Governance</i>
MODULE 4:	<i>Maritime Security</i>
MODULE 5:	<i>Communication and Negotiation</i>
MODULE 6:	<i>Fisheries and Aquaculture</i>
MODULE 7:	<i>Integrated Coastal and Ocean Management</i>
MODULE 8:	<i>Marine Transportation</i>
MODULE 9:	<i>Energy</i>
MODULE 10:	<i>Round Table Conclusion of Training Programme</i>

SYLLABUS

MODULE 1

Orientation and Introduction to the Training Programme

Wednesday, 24th May

10.00 – 10.30	Introductions & Administrative Matters	Ms Audra White (Module Leader)
10.45 – 12.00	Killam Library Tour	Mr Creighton Barrett
1.30 – 4.00	Understanding Canada	Dr Jason Grek-Martin

Thursday, 25th May

9.00 – 10.30	Intercultural Awareness	Ms Joanne Fraser
10.45 – 12.00	Managing at University	Dr David Mensink
1.30 – 4.00	Ethical Issues in Ocean Governance	Prof. Ian McAllister

Friday, 26th May

9.00 – 12.00	Introduction to: Course Organisation, Ocean Governance, Simulation/Integration Exercise	Mr Mike Butler Module Leaders IOI staff
1.30 – 2.30	The Sea in Human History	Mr David Griffiths
4.00 – 6.00	Opening Ceremony with Keynote Address: Catch A Wave	Dr Wendy Watson-Wright All

Saturday, 27th May

All day	Free. Optional morning trip to Farmers Market
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Sunday, 28th May

All day	Free
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MODULE 2
Ocean Sciences

Monday, 29th May

9.00 – 12.00	Introduction to Ocean Sciences, and Health of the Oceans	Dr Peter Wells (Module Leader)
1.30 – 4.00	Fundamentals of Climate Change	Mr Alexander MacDonald

Tuesday, 30th May

9.00 – 12.00	Vulnerability Assessment and Adaptation to Climate Change	Dr Danika van Proosdij
1.30 – 4.00	Ocean Acidification and its Implications	Dr Kumiko Azetsu-Scott

Wednesday, 31st May

9.00 – 12.00	Fundamentals of Oceanography	Dr Anna Metaxas
1.30 – 4.00	Marine Biodiversity: Census of Marine Life & Ocean Biogeographic Information System	Mr Bob Branton Ms Mary Kennedy

Thursday, 1st June

9.00 – 10.30	Participant Presentations	Participants
10.45 – 12.00	Whales and Fisheries	Dr Sean Brilliant
1.30 – 4.00	The Land-Sea Interface	Dr Graham Daborn

Friday, 2nd June

9.00 – 12.00	Remote Sensing of the Ocean	Mr Dirk Werle
1.30 – 4.00	Module Summary and Integration Exercise	Dr Peter Wells Mr David Griffiths Dr Sean Brilliant Mr Mike Butler

Saturday, 3rd June

All day	Free	
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Sunday, 4th June

All day Free

MODULE 3 Law of the Sea and Principled Ocean Governance

Monday, 5th June

9.00 – 12.00	Introduction to Law of the Sea – Part 1	Mr Hugh Williamson (Module Leader)
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1.30 – 4.00	Legal Aspects of Climate Change	Dr Meinhard Doelle
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Tuesday, 6th June

9.00 – 10.30	Introduction to Law of the Sea – Part 2	Mr Hugh Williamson
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10.30 – 11.00	Group Photograph	All
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11.00 – 12.00	Introduction to Law of the Sea – Part 2 (cont.)	Mr Hugh Williamson
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1.30 – 4.00	Ecosystem Approach	Ms Olga Koubrak
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Wednesday, 7th June

9.00 – 12.00	Precautionary Principle	Dr Tony George Puthucherril
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1.30 – 4.00	Legal Aspects of Maritime Boundary Delimitation	Prof. Phillip Saunders, QC
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Thursday, 8th June – World Oceans Day

9.00 – 10.30	Article 76 of UNCLOS	Mr Galo Carrera
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10.45 – 12.00	Technical Aspects of Maritime Boundary Delimitation	Mr Galo Carrera
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1.30 – 2.45	Participant Presentations	Participants
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3.00 – 4.00	Module Summary and Integration Exercise	Mr David Griffiths Mr Mike Butler
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7.00 onwards Elisabeth Mann Borgese Ocean Lecture:
Marine Protected Areas – For Whom?

Dr Sean Brilliant
Mr Paul Barnes
Ms Veronika Brzeski
Dr Ratana Chuenpagdee
Dr Susanna Fuller
Mr Ken Paul
Ms Maxine Westhead

Friday, 9th June

All day Field Trip: Bedford Institute of Oceanography

Ms Stephanie Clay
Mr Scott Coffen-Smout
Ms Jacinthe Cormier
Dr Mary-Lynn Dickson
Dr Cesar Fuentes-Yaco
Mr Jeff Graves
Mr Stephen Locke
Dr Hilary Moors-Murphy
Mr Brian Robinson
Dr Alain Vézina
Ms Audra White

Saturday, 10th June

All day Free

Sunday, 11th June

All day Free

MODULE 4
Maritime Security

Monday, 12th June

9.00 – 12.00 Introduction to Module, and Maritime Security

Cdr Bob Edwards (ret'd)
(Module Leader)
Mr Glen Herbert

1.30 – 2.45 Maritime Security (cont.)

Cdr Bob Edwards (ret'd)

3.00 – 4.00 Participant Presentations

Participants

Tuesday, 13th June

9.00 – 9.45	Concepts of Emergency Management and Application to Coastal Communities	Mr David Griffiths
9.45 – 10.30	Technology and Emergency Management	Dr Mélanie Fournier
10.45 – 12.00	Disaster Risk Reduction Internationally; & Case Study	Mr David Griffiths
1.30 – 4.00	Field Trip to Nova Scotia Emergency Management Office (EMO)	Ms Joan Mahoney Mr Brian Barr

Wednesday, 14th June

All day	Integrated Maritime Security Policy Exercise	Cdr Bob Edwards (ret'd) Mr Glen Herbert
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Thursday, 15th June

All day	Integrated Maritime Security Policy Exercise (cont.)	Cdr Bob Edwards (ret'd) Mr Glen Herbert
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Friday, 16th June

9.00 – 10.30	Integrated Maritime Security Policy Presentations	Participants Cdr Bob Edwards (ret'd) Mr Glen Herbert Ms Leah Beveridge
10.45 – 12.00	Module Summary and Integration Exercise	Cdr Bob Edwards (ret'd) Mr David Griffiths Mr Mike Butler
1.00 onwards	Field Trip to Bay of Fundy: Sustainable Blue Fish Farm, Evangeline Beach	Mr David Roberts Dr Graham Daborn Ms Audra White

Saturday, 17th June

All day	Field Trip to Bay of Fundy: Annapolis Royal Marsh Nature Trail, Annapolis Tidal Power Station, Fort Anne, Annapolis Royal Market, Habitation	Mr Leslie Smith Ms Audra White
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Sunday, 18th June

All day	Field Trip to Bay of Fundy: Fundy Adventures, Port of Digby, Stone Bear Tracks and Trails	Ms Wanda VanTassel Mr Edwin Chisholm Mr Frank Meuse Ms Shalan Joudry Ms Audra White
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Monday, 19th June

All day	Field Trip to Bay of Fundy: Acadian Seaplants, Grand Pré	Mr Will Neily Ms Audra White
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MODULE 5

Communication and Negotiation

Tuesday, 20th June

9.00 – 12.00	Recuperation/Study Period	Participants
1.30 – 4.00	Introduction to Module, and Media	Mr Ian Porter (Module Leader)

Wednesday, 21st June

All day	Interview and Presentation Skills	Mr Ian Porter Mr Tim Tracey
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Thursday, 22nd June

9.00 – 12.00	Marine Managers and the News	Mr Ian Porter
1.30 – 4.00	Communication	Mr Peter MacLellan

Friday, 23rd June

9.00 – 12.00	Negotiation Theory and Practice	Mr Hugh Williamson Prof. Diana Ginn
1.30 – 2.45	Module Summary and Integration Exercise	Mr Ian Porter Mr David Griffiths Mr Mike Butler
3.00 – 4.30	International Centre for Ocean Development (ICOD): History and Future?	Mr Chris Milley Mr Garry Comber

Saturday, 24th June

All day Free

Sunday, 25th June

All day Free

MODULE 6
Fisheries and Aquaculture

Monday, 26th June

9.00 – 10.30	Introduction to Fisheries Science	Dr Ross Claytor
10.45 – 12.30	Ecosystem- based Fisheries Management	Dr Nancy Shackell
1.30 – 4.00	Participant Presentations	Participants

Tuesday, 27th June

9.00 – 10.30	Co-management	Dr Claudio Aporta
10.45 – 12.00	SDG 14 and UN Goals	Dr Susanna Fuller
1.30 – 4.00	Community-based Fisheries	Mr Chris Milley

Wednesday, 28th June

9.00 – 10.30	Policy Development	Ms Kerri Graham
10.45 – 12.00	Development of Nova Scotia's Aquaculture Policy and Legislation	Mr Brennan Goreham
1.30 – 4.00	Ocean Tracking Network and Telemetry Systems	Dr Fred Whoriskey

Thursday, 29th June

9.00 – 12.00	Seafood Value Chain	Dr Megan Bailey
1.30 – 4.00	Field Trip: Northwest Atlantic Fisheries Organisation	Mr Fred Kingston Mr Ricardo Federizon

Friday, 30th June

9.00 – 12.00	Aquaculture	Mr David Roberts
1.30 – 4.00	Indigenous Fisheries	Mr Ken Paul
4.00 – 4.30	Module Summary and Integration Exercise	Mr Mike Butler (Module Leader) Mr David Griffiths

Saturday, 1st July (Canada Day)

All day Free

Sunday, 2nd July

All day Free

Monday, 3rd July

All day Free – holiday in lieu of Canada Day

MODULE 7
Integrated Coastal and Ocean Management

Tuesday, 4th July

9.00 – 12.00	Introduction to Integrated Coastal and Ocean Management (ICOM)	Dr Lucia Fanning
1.30 – 4.00	Marine Spatial Planning and MPAs	Mr Paul Macnab Mr Scott Coffen-Smout

Wednesday, 5th July

9.00 – 12.00	GIS Web Mapping and Simulation (<i>GIS Lab – Rowe 4001</i>)	Dr Mélanie Fournier Mr James Boxall Mr David Griffiths
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1.30 – 4.00	Coastal Information Management	Dr Bertrum MacDonald Dr Suzuette Soomai Mr James Ross Ms Sarah Chamberlain Ms Rachael Cadman Ms Diana Castillo Ms Kalene Eck
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Thursday, 6th July

9.00 – 12.00	Project Cycle	Prof. Ian McAllister
1.30 – 2.45	Participant Presentations	Participants
3.00 – 4.00	Ocean Education, Literacy and Awareness	Ms Anna Naylor
4.00 – 4.30	Tour of CERC Lab (Steele Ocean Sciences Building)	Mr Mike Butler

Friday, 7th July

9.00 – 12.00	Ecological Economics	Dr Peter Tyedmers
1.05 – 1.25	Optional Briefing: Dalhousie's Marine Affairs Program	Ms Becky Field
1.30 – 4.00	Module Summary and Integration Exercise	Mr Paul Boudreau (Module Leader) Mr David Griffiths Mr Mike Butler

Saturday, 8th July

All day Free

Sunday, 9th July

All day Free

MODULE 8
Marine Transportation

Monday, 10th July

9.00 – 12.00	Shipping Fundamentals	Capt. Jim Calvesbert
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1.30 – 2.45	Human Elements of International Shipping	Capt. Angus McDonald
3.00 – 4.00	Evolution of Containerisation	Mr Jim Frost

Tuesday, 11th July

9.00 – 12.00	Safety of Ships	Capt. Alan Knight
2.00 – 3.30	Field trip: Ecology Action Centre	Dr Susanna Fuller

Wednesday, 12th July

9.00 – 12.00	Port Governance and Reform	Dr Mary Brooks
1.30 – 2.45	Maritime Search and Rescue	Mr John Dalziel
3.00 – 4.00	Module Summary and Integration Exercise	Mr Patrick Bohan (Module Leader) Mr John Dalziel Mr David Griffiths Mr Mike Butler

Thursday, 13th July

9.00 – 10.30	Field Trip: Eastern Canada Response Corporation	Mr Darin Connors
10.30 – 12.00	Field Trip: Survival Systems Training Ltd	Mr Dan Latremouille
1.00 – 4.00	Field Trip: Port of Halifax	Mr Patrick Bohan Ms Audra White

MODULE 9
Energy

Friday, 14th July

9.00 – 12.00	Introduction to Module	Dr Alain Joseph (Module Leader)
1.30 – 2.45	Introduction to Geology	Mr David Brown
3.00 – 4.00	Introduction to Geophysics	Mr Kris Kendell

Saturday, 15th July

All day Integration Exercise: Preparation of Presentations Participants

Sunday, 16th July

All day Integration Exercise: Preparation of Presentations Participants

Monday, 17th July

9.00 – 10.30 Exploration and Risk Mr Paul Barnes

10.45 – 12.00 Regulation and the Canadian Environmental Assessment Agency (CEAA) Ms Elizabeth MacDonald

1.30 – 4.00 Tidal Power Ms Melissa Oldreive

Tuesday, 18th July

9.00 – 10.30 Wind Power Mr Aaron Long

10.45 – 12.00 Solar Power Dr Peter Allen

1.30 – 2.30 Module Summary and Integration Exercise Dr Alain Joseph
Mr David Griffiths
Mr Mike Butler

2.45 – 4.00 UNCLOS Evolution and Implementation History, and the Current Processes and Challenges of Ocean Governance Dr Awni Behnam

<p style="text-align: center;">MODULE 10 Round Table Conclusion of Training Programme</p>

Wednesday, 19th July

All day Round Table Ms Leah Beveridge
Dr Tony Charles
Dr Dan Lane
Dr Suzuette Soomai
Mr David Griffiths
Participants

Thursday, 20th July

9.00 – 12.00 Round Table

Ms Leah Beveridge
Dr Tony Charles
Dr Dan Lane
Dr Suzuette Soomai
Mr David Griffiths
Participants

1.30 – 3.00 Round Table

Ms Leah Beveridge
Dr Tony Charles
Dr Dan Lane
Dr Suzuette Soomai
Mr David Griffiths
Participants

4.30 – 6.30 Closing Ceremony and Reception

All

Friday, 21st July

9.00 – 12.00 Feedback, What Next? and Closing Remarks

IOI Staff
Module Leaders
Participants