



INTERNATIONAL OCEAN INSTITUTE



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

SYLLABUS

(as of 6th July - subject to change)

**23rd May – 20th July, 2018
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>Integrated Coastal and Ocean Management</i> |
| MODULE 5: | <i>Communication and Negotiation</i> |
| MODULE 6: | <i>Maritime Security</i> |
| MODULE 7: | <i>Fisheries and Aquaculture</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, 23rd May

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|---------------|--|---------------------------------|
| 10.00 – 10.30 | Introductions & Administrative Matters | Ms Mallory Ross (Module Leader) |
| 10.45 – 12.00 | Killam Library Tour | Ms Sarah Stevenson |
| 1.30 – 4.00 | Understanding Canada | Dr Jason Grek-Martin |

Thursday, 24th May

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|---------------|------------------------------------|----------------------|
| 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, 25th May

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|--------------|------------------------------------|---|
| 9.00 – 12.00 | Introduction to Training Programme | Mr Mike Butler Mr Hugh Williamson Module Leaders IOI staff |
| 1.30 – 2.30 | The Sea in Human History | Mr David Griffiths |
| 4.00 – 6.00 | Opening Ceremony | All |

Saturday, 26th May

All day Free. Optional morning trip to Farmers Market and Pete's.

Sunday, 27th May

All day Free

MODULE 2
Ocean Sciences

Monday, 28th May

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|--------------|--|--------------------------------|
| 9.00 – 12.00 | Introduction to Ocean Sciences, and Health of the Oceans | Dr Peter Wells (Module Leader) |
| 1.30 – 4.00 | Fundamentals of Oceanography | Dr Myriam Lacharité |

Tuesday, 29th May

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|--------------|---|------------------------|
| 9.00 – 12.00 | Fundamentals of Climate Change | Mr Alexander MacDonald |
| 1.30 – 4.00 | Vulnerability Assessment and Adaptation to Climate Change | Dr Daniel Lane |

Wednesday, 30th May

| | | |
|--------------|---|-----------------------------------|
| 9.00 – 12.00 | Marine Biodiversity: Census of Marine Life & Ocean Biogeographic Information System | Mr Bob Branton Ms Mary Kennedy |
| 1.30 – 4.00 | The Land-Sea Interface | Dr Graham Daborn |

Thursday, 31st May

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|---------------|--|------------------------|
| 9.00 – 10.30 | Participant Presentations | Participants |
| 10.45 – 12.00 | Plastics and the Ocean | Dr Tony Walker |
| 1.30 – 4.00 | Ocean Acidification and its Implications | Dr Kumiko Azetsu-Scott |

Friday, 1st June

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|--------------|-------------------------------------|--|
| 9.00 – 9.30 | Alumna Presentation | Ms Vatosoa Rakatondrazafy |
| 9.30 – 12.00 | Simulation and Integration Exercise | Mr David Griffiths |
| 1.30 – 3.30 | Traditional Ecological Knowledge | Mr Roger Hunka Ms Katherine Sorbey |
| 3.30 – 4.00 | Module Wrap-up | Dr Peter Wells Mr Hugh Williamson Mr David Griffiths |

Saturday, 2nd June

All day Free

Sunday, 3rd June

All day Free

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| <p style="text-align: center;">MODULE 3 Law of the Sea and Principled Ocean Governance</p> |
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Monday, 4th June

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|--------------|---|----------------------|
| 9.00 – 12.00 | Introduction to Law of the Sea – Part 1 | Mr Hugh Williamson |
| 1.30 – 4.00 | Precautionary Principle | Dr David VanderZwaag |

Tuesday, 5th June

| | | |
|--------------|---|------------------------|
| 9.00 – 12.00 | Introduction to Law of the Sea – Part 2 | Mr Hugh Williamson |
| 1.30 – 2.45 | UN Agencies | Dr Wendy Watson-Wright |
| 3.00 – 4.00 | Participant Presentations | Participants |

Wednesday, 6th June

| | | |
|--------------|---|--|
| 9.00 – 12.00 | Law of the Sea and the Arctic | Dr Tony George Puthucherril (Module Leader) |
| 1.30 – 4.00 | Technical Aspects of Maritime Boundary Delimitation | Mr Galo Carrera |

Thursday, 7th June

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|---------|---|--|
| All day | Field Trip: Bedford Institute of Oceanography | Mr Scott Coffen-Smout Mr Steve Cole Dr Mary-Lynn Dickson Dr Diego Ibarra Mr Stephen Locke Dr Hilary Moors-Murphy Mr Brian Robinson Mr Tom Rowsell Ms Tana Worcester Ms Mallory Ross |
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Friday, 8th June– World Oceans Day

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|---------------|---|---|
| 9.15 – 9.45 | Participant Presentation | Participant |
| 10.00 – 11.30 | The Role of Coastal Communities in Marine Protection | Dr Susanna Fuller |
| 11.30 – 12.00 | Participant Presentation | Participant |
| 1.30 – 2.45 | Ocean Governance (<i>Video & Skype</i>) | Dr Awni Behnam (via video link) |
| 3.00 – 4.00 | Discussion and Module Summary | Mr Hugh Williamson Dr Tony George Puthucherril Mr David Griffiths |
| 7.00 onwards | Elisabeth Mann Borgese Ocean Lecture: Panel discussion on <i>Peace and Equity in Ocean Governance – Possibility or Pipe Dream?</i> | Vice-Adm. (ret'd) Glenn Davidson Dr Susanna Fuller Mr Hugh Williamson Dr Wendy Watson-Wright (moderator) |

Saturday, 9th June

All day Free

Sunday, 10th June

All day Free

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| <p style="text-align: center;">MODULE 4 Integrated Coastal and Ocean Management</p> |
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Monday, 11th June

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|---------------|---|-------------------------------------|
| 9.00 – 10.45 | Introduction to Module Themes, Whales | Dr Sean Brilliant(Module Leader) |
| 11.00 – 12.00 | Participant Presentation | Participant |
| 1.30 – 2.45 | Ocean Capacity Building in South America and the Caribbean | Dr Eduardo Marone |
| 3.00 – 4.00 | Participant Presentations | Participants |

Tuesday, 12th June

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|--------------|--|---|
| 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, 13th June

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|--------------|--------------------------------|--|
| 9.00 – 12.00 | Planning in the Coastal Zone | Dr Patricia Manuel |
| 1.30 – 4.00 | Coastal Information Management | Dr Bertrum MacDonald Mr Simon Ryder-Burbidge Ms Rachael Cadman Mr James Ross Ms Diana Castillo |

Thursday, 14th June

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|--------------|--|---|
| 9.00 – 12.00 | GIS Web Mapping and Simulation (venue: Killam Library 2902) | Mr James Boxall Ms Caitlin Cunningham Mr Jeff McKenna Mr Andy Sherin Mr David Griffiths |
| 1.30 – 4.00 | Project Cycle | Prof. Ian McAllister |

Friday, 15th June

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|---------------|--|--|
| 9.00 – 10.30 | Ocean Education, Literacy and Awareness | Ms Anna Naylor |
| 10.45 – 12.00 | Sea Level Rise and Coastal Communities | Prof. Blake Hudson |
| 1.00 onwards | Field Trip to Bay of Fundy: Sustainable Blue Fish Farm, Evangeline Beach | Mr David Roberts Mr Luc Boudreau Ms Mallory Ross |

Saturday, 16th June

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|---------|---|--|
| All day | Field Trip to Bay of Fundy: Annapolis Royal Marsh Nature Trail, Annapolis Tidal Power Station, Fort Anne, Annapolis Royal Market, Parker's Cove, Habitation | Dr Jon Percy Mr Leslie Smith Ms Mallory Ross |
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Sunday, 17th June

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| All day | Field Trip to Bay of Fundy: Fundy Adventures, Port of Digby, Clean Annapolis River Project briefing | Ms Wanda VanTassel Mr Edwin Chisholm Ms Katie McLean Ms Mallory Ross |
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Monday, 18th June

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|---------|---|----------------------------------|
| All day | Field Trip to Bay of Fundy: Acadian Seaplants, Kejimkujik National Park, Lunenburg Fisheries Museum | Mr Will Neily Ms Mallory Ross |
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Tuesday, 19th June

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|--------------|----------------------|-------------------|
| 9.00 – 12.00 | Ecological Economics | Dr Peter Tyedmers |
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MODULE 5
Communication and Negotiation

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| 1.30 – 4.00 | Introduction to Module, and Media | Mr Ian Porter (Module Leader) |
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Wednesday, 20th June

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| All day | Interview and Presentation Skills | Mr Ian Porter Mr Tim Tracey |
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Thursday, 21st June

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|--------------|------------------------------|--------------------|
| 9.00 – 12.00 | Marine Managers and the News | Mr Ian Porter |
| 1.00 | Class photograph | All |
| 1.30 – 4.00 | Communication | Mr Peter MacLellan |

Friday, 22nd June

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|--------------|---------------------------------|--|
| 9.00 – 12.00 | Negotiation Theory and Practice | Mr Hugh Williamson Prof. Diana Ginn |
| 1.30 – 2.45 | Negotiation Exercise | Mr Hugh Williamson Prof. Diana Ginn |

3.00 – 4.00 Module Summary and Integration Exercise

Mr Ian Porter
Mr Hugh Williamson
Mr David Griffiths

Saturday, 23rd June

All day Free

Sunday, 24th June

All day Free

MODULE 6
Maritime Security

Monday, 25th June

9.00 – 12.00 Emergency Management in the Coastal Zone

Ms Murielle Provost

1.30 – 4.00 Field Trip to Nova Scotia Emergency Management Office (EMO)

Ms Erica Fleck
Ms Rhonda Matthews
Mr Marc Cayouette
Ms Murielle Provost
Mr David Griffiths

Tuesday, 26th June

9.00 – 12.00 Introduction to Maritime Security

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

1.30 – 2.45 Disaster Risk Reduction: International Case Studies

Mr David Griffiths

3.00 – 4.00 Participant Presentations

Participants

Wednesday, 27th June

9.00 – 12.00 Integrated Maritime Security Policy Exercise

Cdr Bob Edwards (ret'd)
Mr Glen Herbert

1.00 – 1.25 Optional Briefing: Dalhousie's Marine Affairs Program (FASS 1115)

Ms Becky Field

1.30 – 4.00 Integrated Maritime Security Policy Exercise

Cdr Bob Edwards (ret'd)
Mr Glen Herbert

Thursday, 28th June

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

Friday, 29th June

9.00 – 12.00 Integrated Maritime Security Policy Presentations Participants
Cdr Bob Edwards (ret'd)
Mr Glen Herbert

1.30 – 2.45 Module Summary and Integration Exercise Cdr Bob Edwards (ret'd)
Mr Hugh Williamson
Mr David Griffiths

3.00 – 4.00 Participant Presentations Participants

Saturday, 30th June

All day Free

Sunday, 1st July - Canada Day

All day Free

Monday, 2nd July

All day Free – holiday in lieu of Canada Day

MODULE 7
Fisheries and Aquaculture

Tuesday, 3rd July

9.00 – 12.00 Fisheries from a Holistic Perspective Dr Tony Charles (Module
Leader)

1.30 – 2.45 Introduction to Fisheries Science Dr Ross Claytor

3.00 – 4.00 Ecosystem- based Fisheries Management Dr Nancy Shackell

Wednesday, 4th July

9.00 – 10.30 Policy Development Ms Kerri Graham

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| 10.45 – 12.00 | Participant Presentations | Participants |
| 1.30 – 4.00 | Field Trip: Northwest Atlantic Fisheries Organisation | Mr Fred Kingston Ms Jana Acker Ms Dayna Bell MacCallum |

Thursday, 5th July

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|--------------|---|--------------------|
| 9.00 – 12.00 | Seafood Value Chain | Dr Megan Bailey |
| 1.30 – 2.45 | Community-based Fisheries | Mr Chris Milley |
| 3.00 – 4.00 | Development of Nova Scotia's Aquaculture Policy and Legislation | Mr Brennan Goreham |

Friday, 6th July

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|--------------|---|---|
| 9.00 – 12.00 | Aquaculture | Mr David Roberts |
| 1.30 – 2.00 | Module Wrap-up and Integration Exercise | Dr Tony Charles Mr David Griffiths Mr Hugh Williamson |
| 2.00 – 4.30 | Legal Aspects of Maritime Boundary Delimitation | Prof. Phillip Saunders, QC |

Saturday, 7th July

All day Free

Sunday, 8th July

All day Free

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| <p>MODULE 8 Marine Transportation</p> |
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Monday, 9th July

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

Tuesday, 10th July

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|--------------|----------------------------|-------------------|
| 9.00 – 12.00 | Safety of Ships | Capt. Alan Knight |
| 1.30 – 4.00 | Port Governance and Reform | Dr Mary Brooks |

Wednesday, 11th July

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|--------------|---|-----------------|
| 9.00 – 12.00 | International Maritime Organisation (IMO) | Mr Bud Streeter |
| 1.30 – 2.45 | Maritime Search and Rescue | Mr John Dalziel |
| 3.00 – 4.00 | Participant Presentations | Participants |

Thursday, 12th July

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|---------------|---|--|
| 9.00 – 10.30 | Field Trip: Eastern Canada Response Corporation | Mr Darin Connors Mr Addison Vickerd Ms Mallory Ross |
| 10.30 – 12.00 | Field Trip: Survival Systems Training Ltd | Mr Peter Konings Mr Dan Latremouille Ms Mallory Ross |
| 1.00 – 4.00 | Field Trip: Port of Halifax | Mr Patrick Bohan (Module Leader) Ms Mallory Ross |

MODULE 9
Energy

Friday, 13th July

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

Saturday, 14th July

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|---------|--|--------------|
| All day | Integration Exercise: Preparation of Presentations | Participants |
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Sunday, 15th July

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|---------|--|--------------|
| All day | Integration Exercise: Preparation of Presentations | Participants |
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Monday, 16th July

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|---------------|--|------------------------|
| 9.00 – 10.30 | Exploration and Risk | Ms Jennifer Matthews |
| 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, 17th July

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|---------------|---|---|
| 9.00 – 10.30 | Wind Power | Mr Aaron Long |
| 10.45 – 12.00 | Solar Power | Dr Wayne Groszko |
| 1.30 – 2.30 | Module Summary and Integration Exercise | Dr Alain Joseph Mr David Griffiths Mr Hugh Williamson |
| 2.45 – 4.00 | Study Period | Participants |

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| <p>MODULE 10 Round Table Conclusion of Training Programme</p> |
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Wednesday, 18th July

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|---------|-------------|--|
| All day | Round Table | Dr Sean Brilliant Dr Dan Lane Mr Wendell Sanford Dr Suzuette Soomai Mr David Griffiths Participants |
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Thursday, 19th July

9.00 – 12.00 Round Table

Dr Sean Brilliant
Dr Dan Lane
Mr Wendell Sanford
Dr Suzuette Soomai
Mr David Griffiths
Participants

4.30 – 6.30 Closing Ceremony and Reception

All

Friday, 20th July

9.00 – 12.00 Feedback, What Next? and Closing Remarks

Mr Hugh Williamson
IOI Staff
Module Leaders
Participants