

CODE	GSC5101
TITLE	Global Ocean Governance Framework and Managing our Relations with the Oceans
UM LEVEL	05 - Postgraduate Modular Diploma or Degree Course
MQF LEVEL	7
ECTS CREDITS	5
DEPARTMENT	Geosciences
DESCRIPTION	<p>This study-unit has been modelled academically by drawing on a contemporary understanding of biological patterns, processes and resources within Ocean Governance.</p> <p>The first half of this unit sets out the objectives of ocean governance and the linkages to socio-economic issues, integrated and ecosystem ocean management, and resource exploitation. The focus is on the understanding of effective governance frameworks to put maritime policy into practice, including the mandate and efforts of the UN agencies and organisations. The course programme details the efforts of the agencies and organisations such as the International Maritime Organisation to reduce emissions from ships, to control garbage from ships (through MARPOL Annex V), and through Annex IV on sewage which now includes the concept of Special Areas which is especially relevant to the Black and Mediterranean Seas. It also presents regional efforts like those of the EU to achieve Good Environmental Status for its Seas by 2020 through the Marine Strategy Framework Directive (MSFD). Ad hoc sessions on emerging thematics relevant to ocean governance practitioners and led by world-renowned exponents, are entrenched within the Programme of Studies, including Marine Spatial Planning, ABNJ's (Areas Beyond National Jurisdiction) the SDG's (Sustainability Development Goals), Climate Issues and the Blue Economy. The course showcases the regional perspectives on sustainable development, eradication of poverty, enhancement of partnerships and promotion of the concept of the Common Heritage of Mankind.</p> <p>The same study-unit covers traditional policy, legal and institutional tools of the Blue Economy and Blue Growth, focusing on the science-management interface and bringing to light new perspectives, practices, methodologies and the use of technology for the effective and sound operationalisation of ocean governance. This study-unit covers methods of national marine coastal zone policies development; the use of marine data for informed decisions, products and services; maritime spatial planning principles; integrated coastal zone management; the role of coastal communities; vulnerability assessment; environmental risk evaluation and mitigation of marine-related natural hazards; marine pollution and related efforts.</p> <p>The second half of this unit deals with the main biological features of the marine environment, including patterns and processes within marine ecosystems, the biological resources they support, and the main physical and chemical factors influencing marine life and ecosystems. The second part deals with the biological component of marine ecosystems and the natural and anthropogenic factors that influence biodiversity, and methods for assessing biodiversity. The Mediterranean Sea will be taken as an example of a</p>

marine biodiversity hotspot. The third part covers assessment of the state of the marine environment through methods and procedures for monitoring and evaluating impact and risk. The main EU directives dealing with marine environmental quality, namely the Bathing Water Directive, the Water Framework Directive and the Marine Strategy Framework Directive will be briefly reviewed. Finally, the study-unit will consider two case studies concerning environmental assessment and monitoring of coastal development.

Study-unit Aims:

1. To familiarize students with the early history and the evolution of rules and laws that culminated in the adoption of UNCLOS/the constitution of the oceans;
2. To assist students in understanding the phases of that interaction in its legal, economic social and political implications traversing "mare clausum", "mare liberum" to the principle of Common Heritage and the changing governance paradigm of the ocean post-UNCLOS;
3. To develop an understanding of the role of international institutions in all dimensions of the governance architecture from legislation to implementation, compliance, enforcement to jurisdiction and control and finally;
4. To identify the current governance deficit in light of the new and emerging challenges;
5. To assist students in understanding the impact of the current governance architecture and its deficits on the health and sustainability of the ocean;
6. To assist students in comprehending the complexity and vulnerability to human impacts of the marine natural environment and its assets;
7. To identify the principles and tools to implement sustainability in ocean governance.

Learning Outcomes:

1. Knowledge & Understanding

By the end of the study-unit the student will be able to:

1. Describe the Law of the Sea and Principles of Ocean Governance; UNCLOS; the concept of the Common Heritage of Mankind;
2. Describe the major international and regional marine instruments and structures;
3. Identify priority issues in the current governance scenario;
4. Identify trends and future challenges in the global and regional scenarios;
5. Define and explain the main concepts underlying marine biodiversity;
6. Identify the natural and anthropogenic factors affecting marine biodiversity;
7. Define and explain methods and procedures for evaluating the status of the marine environment through impact and risk assessments;
8. Define and explain scientific monitoring of the marine environment;
9. Define and explain the main EU Directives concerning marine environmental protection;

10. Critically describe over-arching ocean governance issues including the maritime areas of jurisdiction and control in preparation for further development of the themes within this unit;
11. Demonstrate a working knowledge of the of the role of international institutions in ocean governance.

2. Skills

By the end of the study-unit the student will be able to:

1. Outline the historical and political processes giving rise to the current governance scenarios including their legal, economic, social and political dimensions;
2. Identify and describe lacunae in the design and effectiveness of the current global ocean governance architecture;
3. Apply knowledge of methods and procedures for evaluating the status of the marine environment through impact and risk assessments;
4. Apply knowledge of methods and procedures to monitor the marine environment;
5. Apply knowledge of the main EU Directives concerning marine environmental protection to practical situations;
6. Put in practice the operationalisation of ocean governance principles and protocols;
7. Critically discuss ongoing political efforts towards achieving ocean governance.

Main Text/s and any supplementary readings:

Main texts and online resources

- Attard, D.J. (1987). 'The Exclusive Economic Zone in International Law', Clarendon Press, Oxford: 416pp.
- Behnam, A. (2014). Tracing the Blue Economy. Lumen Publishing: 100pp.
- Birnie, P. and Boyle, A. (2002) 'International Law and the Environment', 3rd Edition, Oxford University Press, Oxford: 851pp.
- Freestone David, Barnes Richard and Ong David (eds). (2006) The Law of the Sea: Progress and Prospects. Oxford Publishing: 466pp.
- O'Connell, D.P. (1982). The International Law of the Sea. Volume I. Clarendon Press, Oxford.
- O'Connell, D.P. (1984). The International Law of the Sea. Volume II. Clarendon Press, Oxford.
- Treves, T. (2008). United Nations Convention on the Law of the Sea. United Nations Audiovisual Library of International Law (http://untreaty.un.org/cod/avl/pdf/ha/uncls/uncls_e.pdf)

Supplementary Reading

- Denny M. (2008). How the ocean works: an introduction to oceanography. Princeton University Press: 344pp.
- King M. (2007). Fisheries Biology, Assessment and Management. Wiley-Blackwell; 2nd Edition edition: 400pp.

	<ul style="list-style-type: none"> – Levinton J. (2009). Marine biology: function, biodiversity, ecology. [4th ed.] Oxford University Press: 476pp. – Nybakken J. W. & Bertness M. D. (2004). Marine biology: an ecological approach. [6th ed.] Benjamin Cummings: 579pp. 												
ADDITIONAL NOTES	<p>Pre-Requisite qualifications: At least a first degree in the marine sciences, management, engineering or maritime law.</p>												
STUDY-UNIT TYPE	Lecture, Fieldwork, Independent Study & Seminar												
METHOD OF ASSESSMENT	<table border="1"> <thead> <tr> <th>Assessment Component/s</th> <th>Assessment Due</th> <th>Sept. Asst Session</th> <th>Weighting</th> </tr> </thead> <tbody> <tr> <td>Presentation (15 Minutes)</td> <td>SEM1</td> <td>No</td> <td>15%</td> </tr> <tr> <td>Assignment</td> <td>SEM1</td> <td>Yes</td> <td>85%</td> </tr> </tbody> </table>	Assessment Component/s	Assessment Due	Sept. Asst Session	Weighting	Presentation (15 Minutes)	SEM1	No	15%	Assignment	SEM1	Yes	85%
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LECTURER/S	Felicity Attard Alan Deidun Charles Galdies Adam Gauci Lisa Pace												

Thursday, 7th November	
9.00 - 10.30	Introduction: The road to UNCLOS and beyond
	<i>Awni Behnam</i>
	The Constitutional Framework of the UN Convention on the Law of the Sea (UNCLOS); Imperatives of Ocean Governance; Historical development towards UNCLOS; Mare liberum, mare clausum discourse; Historical development towards UNCLOS; Mare liberum, mare clausum discourse; Maltese initiative in 1967, the common heritage of mankind and the Structuring of an Alternative World Economic Order; Third United Nations Conference on the Law of the Sea; UNCLOS today and related development.
10.30 - 11.00	Coffee break
11.00 - 13.00	The Constitutional Framework of the UN Convention on the Law of the Sea (UNCLOS) - Ocean Sustainability <i>Awni Behnam</i>
13.00 - 14.15	Lunch break
14.15 - 15.00	The Constitutional Framework of the UN Convention on the Law of the Sea (UNCLOS) - Ocean Sustainability <i>Awni Behnam / Continued</i>
15.00 - 16.00	Impact of Climate Change on Our Ocean and Contribution of Citizen Science <i>Alan Deidun</i>
16.00	Adjournment

Friday, 8th November	
9.00 - 10.30	Presentations by Participants
10.30 - 11.00	Coffee break
11.00 - 13.00	Maritime Zones: Definition, Delimitation and Basic Regime with respect to Navigation, Environmental Protection and Resource Management <i>Elda Belja</i> Internal waters; Normal and straight baselines; Territorial seas; Archipelagic waters; International straits; Contiguous zone; EEZ; Continental shelf; High seas; Enclosed and semi-enclosed seas; International seabed area.
13.00 - 14.15	Lunch break
14.15 - 16.00	Sustainable Development – the State of the Ocean, the Earth Summit, MDGs, WSSD, RIO + 20, Ocean Compact, SDGs <i>Awni Behnam, Cosmin Chivu</i>
16.00	Adjournment

Monday, 11th November	
9.00 - 10.30	Blue Growth and Blue Economy
	<i>Awni Behnam</i>
10.30 - 11.00	Coffee break
11.00 - 12.00	Presentations by Participants - final
12.00 - 13.00	The new "gold": the rise of blue biotechnology and the 'omics' revolution <i>Alan Deidun</i>
13.00 - 14.15	Lunch break
14.15 - 15.30	European Marine Observation and Data Network, EMODnet - an overview of the marine in situ data flow in Europe <i>Beatrice Scotto</i>
15.30 - 16.30	Malta's National Efforts in Marine Monitoring <i>Adam Gauci</i>
16.30	Adjournment

Tuesday, 12th November	
9.00 - 09.30	Introduction to Maritime Trade, Ports and Harbours, Supply Chain <i>Awni Behnam</i>
09.30 - 10.30	General introduction + Chapter 1 "International Maritime Trade" <i>Luisa Rodriguez 2023</i>
10.30 - 11.00	Coffee break
11.00 - 12.00	Chapter 2 "World shipping fleet, services, and freight rates" <i>Hassiba Benamara 2023</i>
12.00 - 13.00	Chapter 3 "Decarbonizing shipping" <i>Hassiba Benamara 2023</i>
13.00 - 14.00	Lunch break
14.00 - 15.00	Chapter 4: Port performance and maritime trade and transport facilitation Chapter 5: Legal issues and regulatory developments <i>Tomasz Kulaga (port performance); Celine Bacrot (trade and transport facilitation); Regina Asariotis (Legal issues and regulatory developments)</i>
15.00 - 16.00	Chapter 5: Legal issues and regulatory developments
16.00	Adjournment

Wednesday, 13th November	
9.00 - 10.30	Maritime Migration: Contemporary Challenges for International Shipping <i>Felicity Attard</i>
10.30 - 11.00	Coffee break
11.00 - 13.00	Area based management: Introduction to the Large Marine Ecosystems (LMEs) concept. Challenges to manage high seas MPAs <i>Werner Ekau</i>
13.00 - 14.00	Lunch break
14.00-15.00	Overview of the Aquaculture industry in Malta <i>Alan Deidun</i>
15.00-16.00	Artisanal Fisheries - Challenges and Oportunities <i>Alicia Said</i>
15.30	Adjournment

Thursday, 14th November	
8.30 - 10.30	Results of the LME exercise: Presentation and discussion of transboundary issues of the example LMEs and challenges identified to manage the systems Challenges to managing high-sea MPAs <i>Werner Ekau</i>
10.30 - 11.00	Coffee break
11.00	Leave Campus Hub for Freeport
11.30 - 13.00	<u>Freeport visit</u>
13.15 - 14.30	Lunch break
14.30 - 15.30	European Marine Observation and Data Network, EMODnet - an overview of the marine in situ data flow in Europe <i>Beatrice Scotto</i>
15.30 - 16.30	Maritime cybersecurity <i>Commander CJ O'Neill</i>
16.30	Adjournment