New Special lecture start 2017 September

Brazil-Japan Collaborative Program on Naval Architecture and Offshore Engineering

A new education program on Naval Architecture and Offshore Engineering was launched in April 2016, together with 5 Brazilian and 4 Japanese universities using a *remote lecture system*, with the support of Re-Inventing Japan Project "Support for the formation of Collaborative Programs with Universities in Latin America". This program is designed for all UFSC undergraduate and graduate students, former students, teachers, technical and administrative support staff interested in expanding their knowledge in Naval Architecture and Offshore Engineering. Two courses will be offered this semester (2017.02), beggining in September.

Course 01 : Economics of Marine Natural Resource

Where : Room E201
When : 08:00-09:30 (Mondays and Wednesdays)
Start : September 25
Duration : 13 weeks
How : The lecture is given in English.
Cost : Free

Course 02 : High Speed Vessel Design

Where : Room E201
When : 08:00-09:30 (Fridays)
Start : September 29
Duration : 15 weeks
How : The lecture is given in English.
Cost : Free

Interested in attending this courses please fill out the form available at https://goo.gl/forms/6RUKBwIrWUnMu0m53, until September 25. By sending this form correctly filled you are automatically matriculated for the classes, which have to be attended in person (Room E201). In case of any doubt, please contact professor Thiago Pontin Tancredi (thiago.tancredi@ufsc.br) or professor Lucas Weihmann (lucas.weihmann@ufsc.br).

Planned schedule

Course 01: Economics of Marine Natural Resource

Course name:	Economics of Marine Natural Resource
Corse organiser:	Edmilson Moutinho dos Santos - edsantos@iee.usp.br
September to December, 2017	

course purpose (what do you expect from students when they finish this course?):

The ocean will give a lot of benefit to humanbeeings. But if the development is too much, we will have negative reaction from the ocean: environment sollution, global warming, etc. There must be a line we must not exceed: the limit of sustainable usage. But we do not know where the line is. Therefore, learning by doing (adaptive management) is the method to be taken: PDCA cycle based on monitoring, discussion with stakeholders, and decision making. This course contains a full range of the most current economic information available on the uses of living and mineral resources of the coastal waters. Updated discussions on Commercial Fisheries and Aquaculture/Mariculture are raised. And main attention is given to Offshore mineral production, with emphazis on Oil & Gas. The course covers macroeconomic and regulatory dimensions, such as rules set by the United Nations Convention on the Law of the Sea, as well as microeconomic dimensions related to industry definitions and features; economics of exploiting oil and gas; marketing and pricing oil and gas; concept, management and distribution of mineral rents, and fisheries management.

	date	day	lecturer name	sub-title of lecture	lecture contents
1	25-Sep	Mon	Edmilson M. dos Santos	Introduction to Marine Natural Resources	Introduction to living marine resources and offshore minerals
2	27-Sep	Wed	Maria Gasalla	Marine living resources in a global scale	Global trends in fisheries and aquaculture
3	2-Oct	Mon	Edmilson M. dos Santos	The offshore mineral, oil and NG industry	Global context of offshore mineral, oil and NG activities
4	4-Oct	Wed	Hirdan K. M. Costa	The law and regulation of the seas	Rationale of the Law of the Seas and international regulations that affect the exploitation of natural marine resources
5	9-Oct	Mon	Edmilson M. dos Santos	Future of O&G offshore indust.: Brazil x	Developing trends in Offshore Oil and Gas activities in Brazil and some major Asian countries
6	11-Oct	Wed	Maria Gasalla	Marine living resources in a global scale	Global trends in fisheries and aquaculture
7	16-Oct	Mon	Edmilson M. dos Santos	Growing role of more sustainable NG indust.	Growing trends of more sustainable NG industry - From Asia to Global Business
8	18-Oct	Wed	Hirdan K. M. Costa	Offshore international trading regulation	Legal, regulatory and contractual aspects of offshore international trading
9	23-Oct	Mon	Gabriel A. Costa Lima	Economics of O&G offshore activities 1	Time value of money, inflation, equivalence, exchange rate, interest rate, costo of capital
10	25-Oct	Wed	Maria Gasalla	Fisheries Management	Challenges and opportunities in fisheries management
11	30-Oct	Mon	Gabriel A. Costa Lima	Economics of O&G offshore activities 2	Concept of deterministic cash flow applied to O&G projects
13	1-Nov	Wed	Maria Gasalla	Fishing rights, food security, and ABNJ	Fishing rights, food security from oceans, and areas beyond national jurisdiction
14	6-Nov	Mon	Gabriel A. Costa Lima	Economics of O&G offshore activities 3	Concept of stochastics processes applied to cash flow modeling of O&G projects and economic risk analysis
15	8-Nov	Wed	Maria Gasalla	Economics of F&A	Cost-benefit analysis of fisheries and aquaculture (F&A)
	13-Nov	Mon	Gabriel A. Costa Lima	Economics of O&G offshore activities 4	Examples, exercises, discussions
	15-Nov	Wed	HOLLYDAY IN BRAZIL		
16	20-Nov	Mon	HOLLYDAY IN BRAZIL		
17	22-Nov	Wed	Maria Gasalla	Climate change impacts	Climate impacts on F&A
18	27-Nov	Mon	Edmilson M. dos Santos	Conventional and non conventional O&G resources	Definition and global perspectives of conventional and non conventional O&G resources
19	29-Nov	Wed	Hirdan K. M. Costa	The law and regulation of mineral, oil and gas (1)	Introdution of Oil and Gas Law &Regulation. Impacts on offshore mineral, oil and gas activities
20	4-Dec	Mon	Ken Takagi	The offshore Power Industry	Presenting technologies for offshore power production: From wind power to more diversified technology options
21	6-Dec	Wed	Hirdan K. M. Costa	Advanced topics in Offshore Law and Regulation	Contracting systems and principles in Oil and Gas. Case studies of major offshore oil and gas producers
22	11-Dec	Mon	Yoshihiro Konno	Hydrates E&P in Japan	Overview and future perspectives of methane hydrate commercial exploration in Japan and in Global scale
23	13-Dec	Wed	Masahiko Ozaki	CO2 Management and CCS	CO2 management and more energy sustainability. The concept, technology options and the expected role of CCS
24	18-Dec	Mon	Edmilson M. dos Santos	International Relations in O&NG	Intern. relations in the O&G business. Bridging a long-term energy and technology partnership between Brazil and Asia
	20-Dec	Wed	Edmilson M. dos Santos	Final remarks and students grading	

Japanese holidays: 10 Oct, 3 Nov, 23 Nov, 23 Dec, 26-31 Dec

Brazilian holidays: 12 Oct, 2, 15 and 20 Nov, 24-25 Dec

Course 02 : High Speed Vessel Design

Course name:	High Speed Vessel Design
Corse organiser:	Takanori Hino
September to December, 2017	
half	

course purpose (what do you expect from students when they finish this course?):

The course provides basics of the high speed vessel design which include hydrodynamic performances such as resistance, propulsion and related topics. Also the design aspects of various high speed vessels are discussed.

	date	day	lecturer name	sub-title of lecture	lecture contents
1	29-Sep	Fri	Takanori Hino	Introduction/Course Overview	Introduction of the cource
2	6-Oct	Fri	Takanori Hino	Ship Resistance Theory	Basics of ship resistance:wave making resistance and viscous resistance
3	13-Oct	Fri	Takanori Hino	Ship Propulsion Theory	Basics of ship propulsion:propeller hull interaction and ropulsive efficiency
4	20-Oct	Fri	Hajime Yamaguchi	Wing Theory	Basics of wing theory
5	27-Oct	Fri	Hajime Yamaguchi	Cavitation	Physics and practical aapects of cavitation phenomena
6	3-Nov	Fri	Holiday in Japan		
7	10-Nov	Fri	Hajime Yamaguchi	Propulsors for High Speed Vessels	Basics of propulsion systems for high speed vessels
8	17-Nov	Fri	Hajime Yamaguchi	Cavitation	
9	24-Nov	Fri	Richard Schachter	Working Principles of High Speed Vessels	General introduction of high speed vessels.
10	1-Dec	Fri	Richard Schachter	Dynamic Equilibrium	Concept of dynamic equilibrium of vessels
11	8-Dec	Fri	Richard Schachter	Planing Boats Design	Design issues of planing boats
12	15-Dec	Fri	Richard Schachter	Hydrofoil	Design issues of hdrofoils
13	22-Dec	Fri	Claudio Muller Sampaio	Multi-hull	Design issues of multi-hull vessels
14	29-Dec	Fri	Holiday in Japan and Brazil		
15	5-Jan	Fri	Claudio Muller Sampaio	Air-cushon Vehicle	Design issues of air-cushon vehicle vessels
16	12-Jan	Fri	Claudio Muller Sampaio	Ocean waves	Physics of ocean waves
17	19-Jan	Fri	Claudio Muller Sampaio	Seakeeping	Basics of seakeeping perfromance of ships

Japanese holidays: 3-5 May, 17 July, 11-18 (11-15) Aug, 18 Sept, 9 Oct, 3 Nov, 23 Nov, 25-31 Dec, 1-3 Jan, 10 Jan, 11 Feb, 19 Mar

Brazilian holidays: 14 April (Easter), 21 April, 1 May, 15 June, 7 Sept , 12 Oct, 2 Nov, 15 Nov, 25-31 Dec, 1 Jan, 25-28 Feb