

富山高等専門学校		開講年度	平成31年度 (2019年度)		授業科目	海運論Ⅱ
科目基礎情報						
科目番号	0220		科目区分	専門 / 必修		
授業形態	授業		単位の種別と単位数	履修単位: 1		
開設学科	商船学科		対象学年	5		
開設期	前期		週時間数	2		
教科書/教材	「新訂 外航海運概論」Takayuki Mori, SEIZANDO-SHOTEN／「SHIPPING NOW」Japan Maritime Center					
担当教員	西井 典子					
到達目標						
1. Understand the type of ship cargo. 2. Understand the safety measures and handling methods to be taken when transporting dangerous goods. 3. Understand the basic knowledge and rules necessary to unload and manage cargo.						
ルーブリック						
		Ideal Level of Achievement (Very Good)	Standard Level of Achievement (Good)	Unacceptable Level of Achievement (Fail)		
Evaluation 1		Can understand the type of ship cargo almost perfectly.	Can correctly understand the type of ship cargo.	Can't understand the type of ship cargo.		
Evaluation 2		Can understand almost perfectly the safety measures and handling methods to be taken when transporting dangerous goods.	Can understand the safety measures and handling methods to be taken when transporting dangerous goods.	Can't understand the safety measures and handling methods to be taken when transporting dangerous goods.		
Evaluation 3		Can understand almost perfectly the safety measures and handling methods to be taken when transporting dangerous goods.	Can understand the safety measures and handling methods to be taken when transporting dangerous goods.	Can't understand the safety measures and handling methods to be taken when transporting dangerous goods.		
学科の到達目標項目との関係						
教育方法等						
概要	Provide basic knowledge of cargo transport handling, especially safety and equipment for transporting dangerous goods, as required by ship's officer.					
授業の進め方・方法	Lectures by teachers alone.					
注意点	Students must be sure to obtain this unit of lecture to meet the requirements of the State. If you don't get the credits for this lecture, you cannot graduate. If the evaluation is less than 60 points, who wishes to make a request will be able to accept the approval test by asking for the procedure. If the results of the approval test permit the acquisition of units, the evaluation is 60 points.					
授業計画						
		週	授業内容	週ごとの到達目標		
前期	1stQ	1週	Guidance Shipping policy	Understand type and transition of shipping policy.		
		2週	International regulations on shipping	Understand international regulations and PSC.		
		3週	Global Environment and Safe Navigation (1)	Understand history and details of the ISM Code. (1)		
		4週	Global Environment and Safe Navigation (2)	Understand history and details of the ISM Code. (2)		
		5週	Marine insurance (1)	Understand type of ship insurance, PI insurance, and other insurance. (1)		
		6週	Marine insurance (2)	Understand type of ship insurance, PI insurance, and other insurance. (2)		
		7週	Midterm exam	Test on lecture content from 1st to 6th week.		
		8週	Handling and loading of cargo transport (1)	Understand handling of general cargo, maintenance of stacking, disinfection of ships, etc. (1)		
	2ndQ	9週	Handling and loading of cargo transport (2)	Understand handling of general cargo, maintenance of stacking, disinfection of ships, etc. (2)		
		10週	Transporting dangerous goods (1)	Understand the IMDG CODE and how to transport and manage dangerous goods according to domestic rules. (1)		
		11週	Transporting dangerous goods (2)	Understand the IMDG CODE and how to transport and manage dangerous goods according to domestic rules. (2)		
		12週	Oil transport and Safety (1)	Understand characteristics of ordinary cargo oil, structure of tankers, cargo handling equipment, etc. (1)		
		13週	Oil transport and Safety (2)	Understand characteristics of ordinary cargo oil, structure of tankers, cargo handling equipment, etc. (2)		
		14週	Prospects for shipping industry and seafarers' labor	Consider the issues and development of oceangoing shipping.		
		15週	Final exam	Test on lecture content from 8th to 14th week.		
		16週	Evaluation and confirmation	Return of the test sheet. Commentary.		

モデルコアカリキュラムの学習内容と到達目標							
分類		分野	学習内容	学習内容の到達目標	到達レベル	授業週	
専門的能力	分野別の専門工学	商船系分野 (航海)	載貨	復原性と船の安全性の関係について説明できる。	2		
				船の重心、浮心、傾心等の専門用語の意味を説明できる。	2		
				復原力について、包括的に説明できる。	2		
				船舶の載貨能力、貨物の種類について説明できる。	4		
				燃焼の三要素について説明できる。	4		
				引火点、発火点、爆発限界などの用語について説明できる。	4		
				危険物を輸送する際に取られる様々な安全対策について説明できる。	4		
貨物を管理する上での様々な危険項目について説明できる。				4			
評価割合							
	Examination	Presentation	Mutual Evaluations between students	Behavior	Portfolio	Other	合計
総合評価割合	70	0	0	0	0	30	100
Basic Ability	35	0	0	0	0	15	50
Technical Ability	35	0	0	0	0	15	50
Interdisciplinary Ability	0	0	0	0	0	0	0