

Card of Course

Description of Course:	
Code of course	-----
Name of course	Safety and ecology in the transport of dangerous goods
Version of course	2014/2015
A. Place of the course in system of study	
Level of education	Intermediate
Degree of education	engineer
Kind of education	Full-time studies
Field of study	Transport
Profile of study	General academic profile
Specialization	Main field
Place of teaching of course	Faculty of Transport
Place of realization of course	Faculty of Transport
Coordinator of course	Ph.D. Sylwia Bęczkowska
B. General characteristic of the course	
Block of courses	Main field
Group of courses	specialization
Level of course	Intermediate
Status of course	Faculty with choice limited
Language of course	English
Nominal semester	
Academic year	2014/2015
Preliminary requirements	Environmental protection
Limit of number of students	30

C. Effects of education and manner of teaching

Purpose of course	The aim of the course is to familiarize students with issues of safety and ecology in the transport of dangerous goods.
Methods of evaluation	Lecture - exam.
Effects of education	Look – table 1
Form of didactic studies and number of hours per week	Lecture – 2 hour
Contents of education	<ul style="list-style-type: none"> - Regulations and the terminology connected with transport of dangerous goods - Classification of dangerous goods, vehicles to dangerous goods, general marking requirements - Causes of accidents involving dangerous goods, influence transport of dangerous goods on environmental - Monitoring dangerous goods
Methods of verification of effects of education	Look – table 1
Examination	Yes
Literature	<p>1. ADR (L' Accord européen relatif au transport international des marchandises Dangereuses par Route) 2013-2015.</p> <p>2. Bęczkowska S., Grabarek I.: Analysis of Factors Determining Ergonomic Conditions of Drivers Workplace and Safety in Transport of Dangerous Goods, Archives of Transport, vol. 24-3, pp. 297-306, Warszawa 2012.</p> <p>3. BS EN 12798:2007 Transport quality management system. Road rail and inland navigation transport. Quality management system requirements to supplement EN ISO 9001 for the transport of dangerous goods, with regard to safety</p> <p>4. EN ISO 9001:2008 Quality management systems – Requirements</p> <p>5. Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods.</p> <p>6. Industry guidelines for the Security of the transport of Dangerous goods by road - January 2013, (www.europa.eu)</p> <p>Zalecana literatura w języku polskim:</p> <p>1. Bęczkowska S.: Transportowy system zarządzania jakością – przewóz towarów niebezpiecznych, Spedycja Transport Logistyka (12) 2008,</p> <p>2. Buchcar R.: Towary niebezpieczne 2013-2015. Transport Drogowy. Wydawnictwo ADeR Błonie 2013</p> <p>3. Gronowicz J.: Ochrona środowiska w Transporcie Lądowym, Poznań 2004,</p> <p>4. Krystek R.(red.): Zintegrowany system bezpieczeństwa transportu, Tom I. WKŁ, Gdańsk 2009.</p> <p>5. Krystek R.(red.): Zintegrowany system bezpieczeństwa transportu, Tom II. WKŁ, Gdańsk 2009.</p>

	6. Norma PN-EN ISO 14001:2005 Systemy zarządzania środowiskowego -- Wymagania i wytyczne stosowania 7. Norma PN-EN 12798:2007 Transportowy system jakości – Transport drogowy, kolejowy i wodny śródlądowy -- Wymagania systemu jakości, uzupełniające EN ISO 9001 w zakresie bezpieczeństwa w transporcie materiałów niebezpiecznych
www of course	Does not have
D. Student's job	
Number of credits ECTS	3
Number of hours of student's job for achievement of education's effect (description):	18 hours of lecture, familiarization with the literature 30, Preparing to pass 40; exam: 2 h
Number of credits ECTS on the course with direct participation of academic teacher	1 ECTS – 10 Lecture hours, 5 Consultation hours, exam 2 h
Number of credits ECTS on practical activities on the course	0
E. Additional informations	
Notes	
Date of last modernization	14.10.2014

Table 1

General academic profile			
Course's effects		Field effects	Area effect
Knowledge			
Effect:	Student has a theoretical knowledge of process of transport dangerous goods by	Tr1A_W08	T1A_W03

	road		
Code of effect:	W01		
Verification:	Lecture - exam.		
Effect:	Student will know the general knowledge of safety and ecology in transport of dangerous goods	Tr1A_W10	T1A_W04 T1A_W07 T1A_W08
Code of effect:	W02		
Verification:	Lecture - exam.		
Skills			
Effect:	Student is able to use norms and other legal documents	Tr1A_U01	T1A_U01
Code of effect:	U01		
Verification:	Lecture - exam.		
Effect:	Student is able to prepare supplied documentary evidence for elaboration of problem of transport of dangerous goods	Tr1A_U04	T1A_U01 T1A_U03 T1A_U06
Code of effect:	U02		
Verification:	Lecture - exam.		
Social competences			
Effect:			
Code of effect:			
Verification:			