

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Supply chain design</b>		Code <b>1011102311011117660</b>
Field of study <b>Logistics - Full-time studies - Second-cycle</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>1 / 1</b>
Elective path/specialty <b>Chain of Delivery Logistics</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>elective</b>
Cycle of study: <b>Second-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: <b>30</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>30</b>		No. of credits <b>5</b>
Status of the course in the study program (Basic, major, other) <b>other</b>		(university-wide, from another field) <b>university-wide</b>
Education areas and fields of science and art <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>5 100%</b> <b>5 100%</b>
<b>Responsible for subject / lecturer:</b>  dr hab. Inż. Marek Fertsch, prof.nadzw. email: marek.fertsch@put.poznan.pl tel. 061 665 3416 Wydział Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Student has knowledge on Supply Chain Management
2	<b>Skills</b>	Student has skills within Supply Chain Management
3	<b>Social competencies</b>	Student has social competences within Supply Chain Management area
<b>Assumptions and objectives of the course:</b> Providing student with knowledge, skills, competences within Supply Chain Design area		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Student is able to identify interdependencies and relations within area of Supply chain design and their connection to Logistics - [K2A_W02]		
2. Student knows basic relations between technical and economic sphere typical for Supply chain design - [K2A_W04]		
3. Student knows basic terms and definitions typical for Supply chain design - [K2A_W09]		
4. Student is familiar with process mapping idea and generally process approach - [K2A_W10]		
5. Student is familiar with IT systems applicable in Supply chain design area - [K2A_W12]		
6. Student is able to identify and explain methods, tools and means applicable in Supply chain design area - [K2A_W13]		
<b>Skills:</b>		

1. Student is able to communicate with proper means in professional environment and other environments connected with Supply chain design area - [K2A_U02]
2. Student is able to develop and present in Polish or in foreign language analysis of a given problem within Supply chain design area - [K2A_U04]
3. Student is able to benefit from self-learning - [K2A_U05]
4. Student is able to define and solve problem integrating interdisciplinary knowledge from the disciplines within logistics - [K2A_U10]
5. Student is able to assess potential of new solutions (technics and technologies) within logistics and connected areas - [K2A_U12]
6. Student is able to identify areas for improvement within Logistics system - [K2A_U16]
<b>Social competencies:</b>
1. Student is aware of responsibility for own work and ready to obey team work principles, including sharing responsibility for group tasks - [K2A_K03]
2. Student is able to identify interdependencies and cause-effect relations in striving for goals and prioritize tasks - [K2A_K04]

<b>Assessment methods of study outcomes</b>		
Forming assessment a) project: discussion on solution, students developed in their project, b) answering questions discussed during lecture and referring to issues presented		
Final assessment project a) public presentation of project outcomes and discussion on solutions developed b) quality of project developed lecture: presentation of analysis of a problem defined by the coordinator, answering questions concerning subject content		
<b>Course description</b>		
Supply chain as Logistics system. Reference models of supply chain design. Logistics system design. Selection of supply chain strategy. Strategic analysis. Models: Krajlica, Coxa, Saundersa. Model by Olsen and Ellram, assessment of supply chain performance. Configuration of supply chain. Theoretical aspects of supply chain configuration. Balancing supply chains. Dimensions of supply chains. Simulation methods in supply chains. Physical systems design, identification of available alternatives, collecting and using data, selection of methods, selection of technics for alternatives assessment, selection of criteria of assessment, analysis of results.		
Teaching methods: conventional specialist lecture, team project, work with literature		
<b>Basic bibliography:</b>		
1. Fertsch M., Projektowanie łańcuchów dostaw., Wydawnictwo Politechniki Poznańskiej, Poznań, 2012		
2. Kisperska-Moroń D. (red.), Pomiar funkcjonowania łańcucha dostaw, Prace Naukowe Akademii Ekonomicznej Imienia Karola Adamieckiego w Katowicach, Katowice, 2006		
3. Ciesielski M., Długosz J. (red.), Strategie łańcuchów dostaw, PWE, Warszawa 2010		
4. Gołębska E., Szymczak M., Informatyzacja w logistyce przedsiębiorstw, Wydawnictwo Naukowe PWN, Warszawa, 1997		
<b>Additional bibliography:</b>		
1. Schary P.B., Skjøtt-Larsen, T., Zarządzanie globalnym łańcuchem podaży, Wydawnictwo Naukowe PWN, Warszawa 2002		
2. Witkowski J., Zarządzanie łańcuchem dostaw, PWE Warszawa 2010		
<b>Result of average student's workload</b>		
Activity	Time (working hours)	
1. lectures	30	
2. project	30	
3. preparation for the project	15	
4. work with literature	35	
5. consultations	15	
<b>Student's workload</b>		
Source of workload	hours	ECTS
Total workload	125	5
Contact hours	75	3
Practical activities	60	2