module title: MULTIMEDIA IN MANAGEMENT				
field of study: Management and Production Engineering – EFE	type of study: stationary	course code: VII.8		
course: Business and Technology (BT)	degree: I Level	year: IV semester: VII		
type of classes: lecture, laboratory	hours per week: 2Lec^E, 2Lab	No of ECTS credits: 5 ECTS		

MODULE DESCRIPTION

TARGETS

T1. Understanding the basic issues relating to the operation, application and use of the techniques and multimedia technology in management.

T2. Obtaining knowledge of multimedia services and their suitability for different organizations.

T3. Understanding the basic principles of managing website multimedia content.

T4. Understanding the basic principles of creating Business Intelligence.

ENTRY REQUIREMENTS

- **R1.** Basic information about the terms: media, IT technology, telecommunication networks, website, databases, data warehouses.
- **R2.** Basic information on issues such as electro-magnetic wave, wave parameters, analogy signal, digital signal.

LEARNING OUTCOMES

- **LO1.** Student can names and describes contemporary art and multimedia technologies, know how to apply them in management processes and knowledgeable about the direction of their development.
- **LO2.** Student is able to determine the functionality of the techniques and multimedia technology in the modern management in the context of their use at various levels of the enterprise.
- **LO3.** Student is able to perform basic calculations related to physical quantities such as: the frequency and wave period, signal amplification, and make transformations in the field of mathematical analogy signal to a digital signal and vice versa. It can determine the quality of the converted signal based on the sampling frequency. He knows to select the sampling frequency to achieve the quality of the signal used in the production of audio media.
- **LO4.** Student is able to run a website using a CMS (Content Management System), and manage multimedia content and administering its users.
- **LO5.** The student can also run and used for the analysis of business processes Business Intelligence Systems.

LECTURE	hours
L1-2 - Introduction to the course. Presentation of the basic concepts and terms related to multimedia of management.	
L3-4 - The perception of a manager in terms of techniques and multimedia technologies.	
L5-6 - The importance of multimedia techniques and technologies for modern management.	
L7-8 - The role of the digitization of signals in the multimedia: techniques and technologies.	2
L9-10 - Presentation characteristics, construction and selected aspects of the design of modern databases.	
L11-12 - Characteristics of multimedia data management processes.	2
L13-14 - Techniques and technologies to create websites.	
L15-18 - Content Management Systems - CMS class.	
L19-20 - Characteristics of Business Intelligence Systems.	
L21-22 - Conducting business analysis using Business Intelligence systems.	2
L23-24 - The rules multimedia presentations for business and education.	
L25-28 - Basic techniques for multimedia communications (WEB 2.0, WEB 3.), cloud computing).	
L29-30 – Management Agent Systems.	4

LABORATORY	hours
Lab 1-2 – Introduction to laboratory. Preparation and setup workshop - text editor and graphic, Apache HTTP Server, MySQL database server.	
Lab 3-4 - Support for FTP, create a database by using PHP MyAdmin software, setting access rights to the directory, PHP settings on the server.	
Lab 5-6 - Installation and configuration of Content Management Systems on the local server - for example, Joomla! The safety of the system.	2
Lab 7-8 - Introduction to basic elements of Joomla! - modules, components, accessories. Installing language packs.	
Lab 9-10 - Basic elements of content - sections, categories, articles. Create a hierarchy of content. Add and edit articles. Working with editors and TinyMCE WYSIWYG content.	
Lab 11-12 - Manage users. Managing the home page. Archiving system. Creating a navigation structure. Designing and creating multi-level "menu".	2
Lab 13-14 - Inserting links and attachments to articles. Placing multimedia files. Creating a media library - document database system Joomla!	2
Lab 15-16 - Working with modules in the system Joomla! - the distribution of the page template configuration modules.	
Lab 17-18 - Working with components in the Joomla! system - configuration and maintenance of embedded components.	

Lab 19-20 - Basics of editing templates.	2
Lab 21-22 - Installing additional modules and components in the system Joomla!	
Lab 23-24 – Management of contacts and information channels. Fundamentals of positioning and visitor statistics.	
Lab 25-26 - Processing and compression of image files in the system MW Snap.	
Lab 27-28 - Modelling data in a spreadsheet.	
Lab 29-30 - Creating Business Intelligence Systems for the needs of the marketing department.	

TEACHING TOOLS

1 - Textbooks and scripts	
2 - Visual Equipment	
3 - Computer Laboratory: Multimedia in business	
4 - CMS Software and Business Intelligence applications	

STUDENT LOADING

activity	hours
contact hours with teachers	$30Lec + 30Lab \rightarrow 60h$
reading	5 h
preparation to lab exercises	5 h
writing reports	15 h
preparation to exam	10 h
total	95 h

SOURCE LITERATURE

- **1.** Shreves R., Joomla! Biblia, Wydawnictwo Helion, Gliwice 2010.
- 2. Januszewski A., Systemy Business Intelligence, PWN, Warszawa 2008.
- 3. Kiełtyka L., Komunikacja w zarządzaniu. Wydawnictwo Placet, Warszawa 2002.
- **4.** Frankowski P., Szumański M., Joomla! Podręcznik administratora systemu, Wydawnictwo Helion, Gliwice 2008.
- 5. Rahmel D., Joomla! Profesjonalne tworzenie stron WWW, Wydawnictwo Helion, Gliwice 2009.
- Przelaskowski A., Kompresja danych. Podstawy. Metody bezstratne. Kodery obrazów, BTC, 2005.

TEACHERS

- 1. Dr hab. inż. Robert Kuceba Prof. PCz. <u>robertk@zim.pcz.pl</u>
- 2. Dr inż. Rafal Niedbał <u>rafal.n@zim.pcz.pl</u>