



MANİSA CELAL BAYAR ÜNİVERSİTESİ
MANİSA TEKNİK BİLİMLER MESLEK YÜKSEKOKULU
BİLGİSAYAR TEKNOLOJİSİ BÖLÜMÜ
BİLGİSAYAR PROGRAMCILIĞI PROGRAMI
2021 ÖĞRETİM PLANI

1. Sınıf 1. Yarıyıl						
Türkçe/İngilizce Ders Kodu	Türkçe Ders Adı	İngilizce Ders Adı	T	U	S	K AKTS
BİL 1101	Matematik 1	Mathematic 1	3	0	3	3 3
BİL 1103	Programlama Temelleri	Basics of Programming	2	2	4	3 5
BİL 1105	Web Tasarımının Temelleri	Basics Of Web Design	2	1	3	3 4
BİL 1107	Bilişim Teknolojileri	Information Technology	1	2	3	2 3
BİL 1109	Grafik ve Animasyon	Graphics and Animations	2	2	4	3 4
BİL 1111	Bilgisayar Donanımı	Computer Hardware	2	1	3	3 4
BİL 1113	Üniversite Yaşamına Giriş	Transition Into University Life	1	0	1	1 1
BİL 1115	İş Sağlığı ve Güvenliği	Occupational Health and Safety	2	0	2	2 3
BİL 1001	Seçmeli Dersler 1	Elective Courses 1	2	0	2	2 3
BİL 1201	Robotik Uygulamalar ve Kodlama	Robotic Practices and Coding	2	0	2	2 3
BİL 1203	Mobil Uygulama Geliştirme	Mobile Application Development	2	0	2	2 3
BİL 1205	Temel Elektronik	Basic Electronics	2	0	2	2 3
BİL 1207	Algoritma ve Akış Şemaları	Algorithm and Flowcharts	2	0	2	2 3
BİL 1209	Masaüstü Yayıncılık	Desktop Publishing	2	0	2	2 3
BİL 1211	İçerik ve Öğrenme Yönetim Sistemleri	Content and Learning Management Systems	2	0	2	2 3
BİL 1213	Endüstri 5.0 ve Yapay Zeka	Society 5.0 and Artificial Intelligence	2	0	2	2 3
BİL 1215	Grafik Tasarımı	Graphic Design	2	0	2	2 3
BİL 1217	İletişim Teknikleri	Communication Techniques	2	0	2	2 3
BİL 1219	Girişimcilik	Entrepreneurship	2	0	2	2 3
Toplam			17	8	25	22 30

1. Sınıf 2. Yarıyıl						
Türkçe/İngilizce Ders Kodu	Türkçe Ders Adı	İngilizce Ders Adı	T	U	S	K AKTS
BİL 1102	Matematik 2	Mathematic 2	2	0	2	2 3
BİL 1104	Veri Yapıları	Data Structures	3	0	3	3 4
BİL 1106	Veri Tabanı 1	Database 1	2	1	3	3 4
BİL 1108	Görsel Programlama 1	Visual Programming 1	2	2	4	3 5
BİL 1110	İnternet Programcılığı 1	Internet Programming 1	2	1	3	3 4
BİL 1112	Nesne Tabanlı Programlama 1	Object Oriented Programming 1	2	2	4	3 5
BİL 1002	Seçmeli Dersler 2	Elective Courses 2	2	0	2	2 2
BİL 1202	Mesleki Etik	Professional Ethics	2	0	2	2 2
BİL 1204	Bilişim Etiği	IT Ethics	2	0	2	2 2
BİL 1206	Medya Okuryazarlığı	Media Literacy	2	0	2	2 2
BİL 1208	Güncel Teknolojik Gelişmeler	Current Technological Developments	2	0	2	2 2
BİL 1210	Zeka Oyunları	Intelligence Games	2	0	2	2 2
BİL 1212	Mesleki Matematik	Professional Mathematics	2	0	2	2 2
BİL 1214	Bilişim Teknolojilerinde Sektörel Uygulamalar	Sectoral Applications in Information Technologies	2	0	2	2 2
BİL 1216	Doğrusal Cebir ve Uygulamaları	Linear Algebra and Its Applications	2	0	2	2 2

Doç. Dr. Barış ÇUKURBAŞI
Bölüm Başkanı

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BİL 1004	Teknik Olmayan Seçmeli Dersler	Non-Technical Elective Courses	2	0	2	2	3
BİL 1218	Mesleki Yabancı Dil	Professional Foreign Language	2	0	2	2	3
BİL 1240	Kalite Güvencesi ve Standartları	Quality Assurance and Standards	2	0	2	2	3
BİL 1222	Teknoloji Yönetimi	Technology Management	2	0	2	2	3
BİL 1224	İnovasyon Yönetimi	Innovation Management	2	0	2	2	3
BİL 1226	İletişim ve Etik	Communication and Ethics	2	0	2	2	3
BİL 1228	Sanat ve Estetik	Art and Aesthetics	2	0	2	2	3
BİL 1230	Sürdürülebilir Kalkınma ve Bilişim Teknolojileri	Sustainable Development and Information Technologies	2	0	2	2	3
BİL 1238	Araştırma Yöntem ve Teknikleri	Research Methods and Techniques	2	0	2	2	3
BİL 1232	Çevre Koruma	Environmental Protection	2	0	2	2	3
BİL 1234	İlk Yardım	First Aid	2	0	2	2	3
BİL 1236	İşletme Yönetimi	Business Administration	2	0	2	2	3
Toplam			17	6	23	21	30

2. Sınıf 3. Yarıyıl							
Türkçe/İngilizce Ders Kodu	Türkçe Ders Adı	İngilizce Ders Adı	T	U	S	K	AKTS
BİL 2101	Veri Tabanı 2	Database 2	2	1	3	3	4
BİL 2103	Nesne Tabanlı Programlama 2	Object Oriented Programming 2	2	2	4	4	5
BİL 2105	Bilgisayar Ağları ve İletişim	Computer Networks and Communication	2	1	3	3	4
BİL 2107	İnternet Programcılığı 2	Internet Programming 2	2	1	3	3	4
BİL 2109	İşletim Sistemleri	Operating Systems	2	2	4	4	4
BİL 2111	Görsel Programlama 2	Visual Programming 2	2	2	4	4	5
BİL 2113	Sosyal Sorumluluk	Social Responsibility	1	0	1	1	1
BİL 2001	Teknik Seçmeli Dersler	Technical Elective Courses	2	1	3	3	3
BİL 2201	Yazılım Mimarileri	Software Architectures	2	1	3	3	3
BİL 2203	Yazılım Kurulumu ve Yönetimi	Software Installation and Management	2	1	3	3	3
BİL 2205	E-Ticaret ve Uygulamaları	E-Commerce and Applications	2	1	3	3	3
BİL 2207	İstemci Taraflı Programlama	Client-Side Programming	2	1	3	3	3
BİL 2209	Web Editörü	Web Editor	2	1	3	3	3
BİL 2211	Bilişim Teknolojilerinde Matematik Uygulamaları	Mathematics Applications in Information Technologies	2	1	3	3	3
BİL 2213	Sistem Analizi ve Tasarımı	System Analysis and Design	2	1	3	3	3

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MANİSA CELAL BAYAR ÜNİVERSİTESİ
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BİL 2215	3 Boyutlu Modelleme	3D Modeling	2	1	3	3	3
BİL 2217	Video Tasarımı	Video Design	2	1	3	3	3
BİL 2219	İhtiyaç ve Sistem Analizi	Requirement and System Analysis	2	1	3	3	3
BİL 2221	Siber Güvenlik ve Bilişim Hukuku	Cyber Security and IT Law	2	1	3	3	3
BİL 2223	Açık Kaynak Kodlu Yazılımlar	Open Source Software Development	2	1	3	3	3
BİL 2225	Mobil Programlama	Mobile Programming	2	1	3	3	3
BİL 2227	Mikrodenetleyiciler	Microcontrollers	2	1	3	3	3
BİL 2229	Sanallaştırma ve Bulut Bilişim	Virtualization and Cloud Computing	2	1	3	3	3
BİL 2231	Etkileşimli İçerik Tasarımı	Interactive Content Design	2	1	3	3	3
BİL 2233	Bilgisayar Bilimleri için Ayrık Matematik	Discrete Mathematics for Computer Science	2	1	3	3	3
Toplam			15	10	25	25	30

2. Sınıf 4. Yarıyıl							
Türkçe/ İngilizce Ders Kodu	Türkçe Ders Adı	İngilizce Ders Adı	T	U	S	K	AKTS
MYO 2002	İşletmede Mesleki Eğitim	Vocational Training in Workplace	5	0	5	4	18
AİT 2102	Atatürk İlkeleri ve İnkılap Tarihi	Atatürk's Principles and History of Revolution	4	0	4	4	4
TDL 2102	Türk Dili	Turkish Language	4	0	4	4	4
YDI 2102	Yabancı Dil	Foreing Language	4	0	4	4	4
Toplam			17	0	17	16	30
Genel Toplam			66	24	90	84	120

T: Teori **U:** Uygulama **S:** Ders Saati **K:** Ulusal Kredi **AKTS:** Avrupa Kredi Transfer Sistemi

Ayrıntılı Ders İçerikleri Linki: <http://katalog.cbu.edu.tr/Site/CourceStructure.aspx?ProgramID=1699&lang=1>

Doç. Dr. Barış ÇUKURBAŞI
Bölüm Başkanı

Sayfa | 3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Graphics and Animations		
Course Code	BİL 1109	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	3
Hours Per Week	3	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The nature of light and color. Aesthetic and semantic use of colors. Color models and techniques in computer and print media. Image formats, properties, usage locations. General introduction to Photoshop program. Introducing the interface of the Photoshop program and its menus. File Operations. Photoshop program working on control, selection operations and applications. Layer usage and applications in Photoshop program. The use of pen tool and other tools in Photoshop program. Image management in Photoshop, masking operations, filter usage. General logic of vector graphics and object management with Adobe Illustrator, file operations. Vector image file formats. Introducing Adobe Illustrator's interface and menus. Selection, object management techniques and applications with Adobe Illustrator. Basic drawing techniques and applications with Adobe Illustrator. File conversions between Adobe Photoshop, Adobe Illustrator and other kinds of software, combined graphics production techniques, graphic design application in connection with a certain theme. Web site drawing

The Aim of Course

In this course, the student's visual design being able to present creative ideas, this idea to be able to transfer to a computer, Basic Visual Design, computer graphics and animation aims to develop the skills to be able to use the built-in Tools.

Learning Outcomes

1. To be able to reveal of ability the student's visual design creative ideas in this course.
2. To be able to transfer the idea of a computer with certain technical skills into the environment.
3. To be able to use the built-in Tools Visual Basic design, computer graphics and animation .
4. To be able to prepare images for your web pages

Evaluation Criteria

Vize (%40) Dönem Sonu Projesi (%60)

Recommended or Required Reading

Lecture Notes, textbooks and Internet broadcasts

Course Content

Week	Topic	Content
Week 1	Theoretical	It's the nature of light and color. The use of colors, aesthetic and semantic.
	Practice	an application of computerized color selection model.
	Laboratory	
	Theoretical	Computer models and techniques to obtain the color and print environments.



Week 2	Practice	an application of computerized color selection model.
	Laboratory	
Week 3	Theoretical	Image formats, properties, uses. A general introduction to the Photoshop program.
	Practice	Photoshop application.
	Laboratory	
Week 4	Theoretical	Photoshop is the program interface and menu introduction. File Operations.
	Practice	Photoshop application.
	Laboratory	
Week 5	Theoretical	Working in Photoshop, control over the selection processes and their applications.
	Practice	Photoshop application.
	Laboratory	
Week 6	Theoretical	In Photoshop, use layers and applications.
	Practice	Photoshop application.
	Laboratory	
Week 7	Theoretical	The use of the Pen tool in Photoshop and other tools.
	Practice	Photoshop application.
	Laboratory	
Week 8	Theoretical	The image menu in Photoshop, masking operations, use a filter.
	Practice	Photoshop application.
	Laboratory	
Week 9	Theoretical	Midterm Exam
	Practice	
	Laboratory	
Week 10	Theoretical	Adobe Illustrator vector graphic object with the logic and overall management, file
	Practice	Photoshop application.
	Laboratory	
Week 11	Theoretical	Adobe Illustrator interface and the introduction of the menu of the software.
	Practice	Photoshop application.
	Laboratory	
Week 12	Theoretical	With Adobe Illustrator selection, object management techniques and applications.
	Practice	Photoshop application.
	Laboratory	
Week 13	Theoretical	Basic drawing with Adobe Illustrator techniques and applications.
	Practice	Photoshop application.
	Laboratory	
Week 14	Theoretical	Adobe Photoshop, Adobe Illustrator, and other software between file conversions,
	Practice	Photoshop application.
	Laboratory	
Week 15	Theoretical	drawing web site
	Practice	drawing web site
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	3	3	2	5	4	1	2	2	5	4	4
OC2	4	1	1	2	2	3	3	3	5	2	1	4
OC3	5	2	5	2	5	2	5	4	4	4	5	5
OC4	5	2	2	2	3	5	5	5	5	4	1	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Computer Hardware		
Course Code	BİL 1111	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The objective of this course is to teach the following topics : Basic hardware devices and their duties, Hardware units and assembly this units, Hardware failure.

The Aim of Course

In this course, it is aimed to provide the necessary information to create a new computer using standard computer hardware units.

Learning Outcomes

1. To be able to learn the hardware elements and know the characteristics of them.
2. To be able to inspect hardware components.
3. To be able to do the installation of hardware components
4. To be able to do the bios configuration
5. To be able to resolve error messages

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

-- Course presentation files (Source: www.aliosmangokcan.com)-- Computer Hardware, Ebubekir Yaşar - Murathan Publisher

Course Content

Week	Topic	Content
Week 1	Theoretical	PRECAUTIONS AGAINST STATIC (STAGNANT) ELECTRICITY
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 2	Theoretical	PROPERTIES OF HARDWARE MATERIALS
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 3	Theoretical	PROPERTIES OF HARDWARE MATERIALS POWER REQUIREMENTS OF
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
	Theoretical	POWER REQUIREMENTS OF COMPUTER CASE



Week 4	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 5	Theoretical	THE MOTHERBOARD, PROCESSOR, AND MEMORY UNITS
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 6	Theoretical	THE MOTHERBOARD, PROCESSOR, AND MEMORY UNITS
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 7	Theoretical	DISK DRIVES
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 8	Theoretical	DISK DRIVES
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 9	Theoretical	MIDTERM EXAM
	Practice	
	Laboratory	
Week 10	Theoretical	HARDWARE CARDS
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 11	Theoretical	PERIPHERAL DEVICES
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 12	Theoretical	BIOS
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 13	Theoretical	ERROR MESSAGES
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 14	Theoretical	ERROR MESSAGES
	Practice	PRACTICES ON THE SUBJECT
	Laboratory	
Week 15	Theoretical	REVIEW OF THE COURSE TOPICS
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	2	5	3	4	1	2	3	5	2	1	4
OC2	1	2	5	1	4	3	2	1	5	4	1	2
OC3	5	2	1	4	5	3	2	5	4	1	2	3
OC4	5	2	5	5	5	4	4	1	1	2	3	3
OC5	2	5	2	5	2	5	1	5	5	5	5	1



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Transition Into University Life		
Course Code	BİL 1113	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	1
Hours Per Week	1	ECTS	1
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Of the University while providing all the technical facility and the acquisition of the facilities properly, social media and enables continuous activities to take place.

The Aim of Course

This course where the student's university environment, is intended to benefit from high-level efficiency.

Learning Outcomes

1. Gain from acquisitions university environment.
2. Take advantage of social backgrounds in a university setting.
3. Experience in environmental conditions and propose different activities.
4. The University can be found in the new formations.

Evaluation Criteria

Midterms (%40) Final (%60)

Recommended or Required Reading

Lecturer in the school library and social hall and all club activities.

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction to the University.
	Practice	Introduction to the University.
	Laboratory	
Week 2	Theoretical	Introduction to the University.
	Practice	Introduction to the University.
	Laboratory	
Week 3	Theoretical	Introduction to all the events and clubs.
	Practice	Introduction to all the events and clubs.
	Laboratory	
Week 4	Theoretical	Evaluation of the existing clubs.
	Practice	Evaluation of the existing clubs.
	Laboratory	



Week 5	Theoretical	I'm Existing proposals on the recommendations and the new club.
	Practice	I'm Existing proposals on the recommendations and the new club.
	Laboratory	
Week 6	Theoretical	Organizations.
	Practice	Organizations.
	Laboratory	
Week 7	Theoretical	Organizations.
	Practice	Organizations.
	Laboratory	
Week 8	Theoretical	Within the university sporting events.
	Practice	Within the university sporting events.
	Laboratory	
Week 9	Theoretical	Within the university sporting events.
	Practice	Within the university sporting events.
	Laboratory	
Week 10	Theoretical	Concerts
	Practice	Concerts
	Laboratory	
Week 11	Theoretical	Theatre
	Practice	Theatre
	Laboratory	
Week 12	Theoretical	Seminar
	Practice	Seminar
	Laboratory	
Week 13	Theoretical	Interview
	Practice	Interview
	Laboratory	
Week 14	Theoretical	Overall Rating
	Practice	Overall Rating
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	4	5	4	5	4	5	4	5	4	5	5
OC2	2	1	2	1	3	4	1	3	5	2	1	1
OC3	2	3	2	5	2	1	5	3	1	4	1	2
OC4	3	2	5	2	1	2	3	1	4	2	3	2



Manisa Celal Bayar University
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Computer Programming
The Course Description Form

Course Name	Desktop Publishing		
Course Code	BİL 1209	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Information technologies, computing concepts, algorithms and flow charts, computer systems, basic concepts of software and hardware, bases of operating systems, up-to-date operating systems, desktop publishing; file management, utilities; word processing programs, database management systems, web design, use of internet in education, effects of computer and internet on children / youth.

The Aim of Course

To ensure that teacher candidates are literate in information technology and acquire knowledge of computational thinking.

Learning Outcomes

1. To be able to explain the basic concepts of Information Technologies and computational thinking.
2. To be able to explain the concepts and approaches to problem solving.
3. To be able to explain the main components of computer systems.
4. To be able to use Microsoft Office programs effectively.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

<https://support.office.com/tr-tr>Şahin, S. (Ed.) (2017). Eğitimde Bilişim Teknolojileri I-II, Pegem Akademi
YayıncılıkUzunboylu, H. (Ed.) (2017). Bilişim Teknolojileri, Seçkin Yayıncılık

Course Content

Week	Topic	Content
Week 1	Theoretical	Basic concepts of Information Technologies (data, information, science, technology,
	Practice	Expression through presentation
	Laboratory	
Week 2	Theoretical	The history of computers • Types of computers. Computational thinking and activities
	Practice	Expression through presentation
	Laboratory	
Week 3	Theoretical	Problem solving approaches in information technologies • Algorithm and flow chart
	Practice	Expression through presentation
	Laboratory	



Week 4	Theoretical	Working logic of the computer • Hardware-software concepts
	Practice	Expression through presentation
	Laboratory	
Week 5	Theoretical	Operating systems and their features, current operating systems and their features •
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 6	Theoretical	Input and output units, storage units • Microsoft Office Word word processing program
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 7	Theoretical	Microsoft Office Word word processing program
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 8	Theoretical	Midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Microsoft Office Excel spreadsheets
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 10	Theoretical	Prepare a Microsoft Office PowerPoint presentation
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 11	Theoretical	Microsoft Office Publisher publishing program, Microsoft Office Access Desktop
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 12	Theoretical	Applications of using the Internet as an educational tool, Computer and internet security
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 13	Theoretical	Computer viruses and protection methods, IT ethics • The effects of computer and
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 14	Theoretical	Applications of using the internet as an educational tool, Computer and internet security
	Practice	Expression through presentation
	Laboratory	
Week 15	Theoretical	Computer viruses and protection methods, IT ethics • The effects of computer and
	Practice	Expression through presentation
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	3	4	5	3	3	2	3	5	1	0	5
OC2	4	4	3	2	5	1	2	3	5	2	1	2
OC3	3	5	2	1	2	3	5	5	4	4	2	2
OC4	1	2	5	1	3	4	3	2	5	2	1	2
OC5	5	1	3	4	2	1	2	3	5	2	1	0



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Computer Programming
The Course Description Form

Course Name	Content and Learning Management Systems		
Course Code	BİL 1211	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content
content management systemssite managementcontent managementcomponent managementplug-in managementtools management
The Aim of Course
With this course, students, and the content management system installation, site management and system administration will be able to process.

Learning Outcomes
1. To be able to install content management system. 2. To be able to make all settings of the content management system. 3. To be able to manage the content management system.

Evaluation Criteria
txtDegerlendirmeKriteri

Recommended or Required Reading
help books and other sources

Course Content		
Week	Topic	Content
Week 1	Theoretical	Content management systems overview
	Practice	
	Laboratory	
Week 2	Theoretical	Content management systems comparison
	Practice	
	Laboratory	
Week 3	Theoretical	Installation of a content management system
	Practice	
	Laboratory	
Week 4	Theoretical	Structure of a content management system
	Practice	
	Laboratory	



Week 5	Theoretical	Content management system, data entry, image and insert operations for the media
	Practice	
	Laboratory	
Week 6	Theoretical	Content management system, data entry, image and insert operations for the media
	Practice	
	Laboratory	
Week 7	Theoretical	Personalization of content management system
	Practice	
	Laboratory	
Week 8	Theoretical	Personalization of content management system
	Practice	
	Laboratory	
Week 9	Theoretical	MIDTERM EXAM
	Practice	
	Laboratory	
Week 10	Theoretical	Content management system modules, components
	Practice	
	Laboratory	
Week 11	Theoretical	Content management system modules, components
	Practice	
	Laboratory	
Week 12	Theoretical	Content management system modules, components
	Practice	
	Laboratory	
Week 13	Theoretical	Content management system modules, components
	Practice	
	Laboratory	
Week 14	Theoretical	Content management system, search engine optimization (seo)
	Practice	
	Laboratory	
Week 15	Theoretical	Content management system, search engine optimization (seo)
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	2	3	5	4	2	3	4	4	2	3	5
OC2	2	3	2	3	2	3	2	3	2	3	2	3
OC3	3	4	4	2	3	4	5	2	3	5	4	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Society 5.0 and Artificial Intelligence		
Course Code	BİL 1213	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Information Technologies, 21st Century Skills, Industry 5.0, Lifelong Learning, Women, Gender Equality, Introduction to Artificial Intelligence and basic concepts, Supervised and Unsupervised Learning; Supportive Learning; Decision Trees; Bayesian Learning; Huffman coding; Shortest path problems; Artificial intelligence methods: Artificial Neural Networks, Expert Systems, Fuzzy Logic.

The Aim of Course

The aim of this course is to enable students to use information technologies effectively in the context of their professional and personal development by meeting the requirements of Industry 5.0; The aim is to enable students to increase their analytical and theoretical thinking power and to solve problems effectively by enabling them to gain awareness of the concepts emerging with today's current digitalization and to effectively learn and apply methods, application languages and search paradigms in the field of artificial intelligence.

Learning Outcomes

1. Can identify goals and priorities in the use of information technologies in the context of Industry 5.0
2. Can use different approaches (strategies) on the basis of Industry 5.0 in integrating technology with his professional and daily life.
3. Be aware of artificial intelligence methods and their applications in daily life.
4. Can use the appropriate search paradigm for the solution of the given problem and produce a solution to the problem.
5. Apply learning paradigms in daily life and produce solutions to problems.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Course Content

Week	Topic	Content
Week 1	Theoretical	*Description of the Course, Method of Teaching, Information about Required Materials.
	Practice	
	Laboratory	
	Theoretical	*From Industrial Developments to Industry 5.0 *Industry 5.0



Week 2	Practice	
	Laboratory	
Week 3	Theoretical	21st Century Requirements and Skills *Information Technologies and Lifelong Learning
	Practice	
	Laboratory	
Week 4	Theoretical	*Information Technologies in the Context of Industry 5.0 *Current Approaches and
	Practice	
	Laboratory	
Week 5	Theoretical	*Open and Distance Learning *Open Access and Massive Open Online Courses, Courses
	Practice	
	Laboratory	
Week 6	Theoretical	*Introduction to Artificial Intelligence: History and Applications of Artificial Intelligence
	Practice	
	Laboratory	
Week 7	Theoretical	*Information Representation in Artificial Intelligence
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm Exam
	Practice	
	Laboratory	
Week 9	Theoretical	*Problem Solving: Constraint Satisfaction Problems (CSP), Backtracking Search for CSP
	Practice	
	Laboratory	
Week 10	Theoretical	*Search Strategies: Depth First Search, Depth First Search, Heuristic
	Practice	
	Laboratory	
Week 11	Theoretical	*Hill Climbing, Best First Search, A* Method
	Practice	
	Laboratory	
Week 12	Theoretical	*Game Trees and Recursive Search, Alpha-Beta Reduction, Minimax Search
	Practice	
	Laboratory	
Week 13	Theoretical	*Artificial Intelligence Languages and Knowledge Base Creation, Introduction to
	Practice	
	Laboratory	
Week 14	Theoretical	*Natural Language Processing: Morphology, Semantics and Pragmatics, Robots
	Practice	
	Laboratory	
Week 15	Theoretical	*Learning Paradigms: Learning from Observations, Inductive Learning, Decision Trees
	Practice	
	Laboratory	
Week 16	Theoretical	Final Exam
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	0	3	2	0	0	0	0	3	2	5	0
OC2	3	3	0	3	2	5	5	3	2	4	5	5
OC3	1	0	2	0	3	2	3	2	0	5	3	0
OC4	5	2	5	0	0	3	2	5	5	0	0	3
OC5	4	5	2	3	4	4	2	4	2	5	1	5



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Visual Programming 1		
Course Code	BİL 1108	Activity Type	Compulsory
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	3
Hours Per Week	3	ECTS	5
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

To install and adjust a visual programming language, forms and their properties, standart objects, input and message windows, dialog windows, advanced objects, operators, functions, decision structures and loops, arrays, graphics applications, reports

The Aim of Course

To install and use a visual programming language. To identify the visual programming interface. To distinguish between the object-oriented programming and the structural programming. To use basic components and design visually. To use properties of objects and events. To use variables, control statements, and loops. To understand and to use terms and definitions about class and object concepts after using objective language

Learning Outcomes

1. To be able to use the visual programming editor.
2. To be able to work with forms.
3. To be able to do basic software applications.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

-- Visual Programming Visual Basic - Ebru Yeniman Yıldırım, NOBEL Publishing House -- Course presentation files

Course Content

Week	Topic	Content
Week 1	Theoretical	Installing and adjusting the Visual Basic programming language editör
	Practice	Installing and adjusting the Visual Basic programming language editör
	Laboratory	
Week 2	Theoretical	Forms and their properties
	Practice	Forms and their properties
	Laboratory	
Week 3	Theoretical	Standart objects
	Practice	Standart objects
	Laboratory	
	Theoretical	Input and message Windows



Week 4	Practice	Input and message Windows
	Laboratory	
Week 5	Theoretical	Dialog Windows
	Practice	Dialog Windows
	Laboratory	
Week 6	Theoretical	Advanced objects
	Practice	Advanced objects
	Laboratory	
Week 7	Theoretical	Operators
	Practice	Operators
	Laboratory	
Week 8	Theoretical	Functions
	Practice	Functions
	Laboratory	
Week 9	Theoretical	Decision structuresMIDTERM EXAM
	Practice	Decision structures
	Laboratory	
Week 10	Theoretical	Loops
	Practice	Loops
	Laboratory	
Week 11	Theoretical	Decision structures and loops
	Practice	Decision structures and loops
	Laboratory	
Week 12	Theoretical	Arrays
	Practice	Arrays
	Laboratory	
Week 13	Theoretical	Graphics applications
	Practice	Graphics applications
	Laboratory	
Week 14	Theoretical	Reports
	Practice	Reports
	Laboratory	
Week 15	Theoretical	Reports
	Practice	Reports
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	5	3	5	5	0	5	0	0	0	0	0
OC2	5	5	3	5	5	5	5	0	0	0	0	0
OC3	5	5	3	5	5	5	5	0	0	0	0	0
OC4	5	5	3	5	5	5	5	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Robotic Practices and Coding		
Course Code	BİL 1201	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Problem solving = Coding, Algorithm and algorithm for children, What is programming? What is block programming?, Block programming tools code.org, Blockly, Tynker, scratch, Robotics and robotic systems, Robotic materials, Makeblock mBot robot, LEGO mindstorms EV3, Arduino, Raspberry pi.

The Aim of Course

To prepare students for the future in digital content and skill-assisted transformation.

Learning Outcomes

1. To be able to gain computational thinking skills.
2. To be able to gain logical algorithmic thinking skills.
3. To be able to gain coding skills.
4. To be able to gain problem solving skills.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Scratch ile Yeni Başlayanlar İçin Kodlama, Altın Kitaplar, 2017 mBot ile Robotik Kodlama, Recep Çakır, Cinius, 2018 Blockly, Ben Rearick, Cherry Lake Publishing, 2017

Course Content

Week	Topic	Content
Week 1	Theoretical	Coding
	Practice	
	Laboratory	
Week 2	Theoretical	Algorithms and algorithm for children
	Practice	
	Laboratory	
Week 3	Theoretical	What is programming? What is block programming?
	Practice	
	Laboratory	
Week 4	Theoretical	Block coding tools – code.org
	Practice	



	Laboratory	
Week 5	Theoretical	Block coding tools – Blockly
	Practice	
	Laboratory	
Week 6	Theoretical	Block coding tools – Tynker
	Practice	
	Laboratory	
Week 7	Theoretical	Block coding tools - Scratch
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 9	Theoretical	Robotics and robotic systems
	Practice	
	Laboratory	
Week 10	Theoretical	Robotic materials
	Practice	
	Laboratory	
Week 11	Theoretical	Makeblock mBot robot
	Practice	
	Laboratory	
Week 12	Theoretical	LEGO Mindstorms EV3
	Practice	
	Laboratory	
Week 13	Theoretical	LEGO Mindstorms EV3
	Practice	
	Laboratory	
Week 14	Theoretical	Arduino
	Practice	
	Laboratory	
Week 15	Theoretical	Raspberry pi
	Practice	
	Laboratory	
Week 16	Theoretical	Evaluation
	Practice	
	Laboratory	

Program and Learning Outcomes Relations

OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	4	1	2	3	3	5	5	0	1	4	5
OC2	2	5	3	2	4	4	5	2	2	5	4	4
OC3	1	3	3	2	5	4	1	2	3	5	2	4
OC4	2	3	5	1	5	1	4	2	3	4	5	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Media Literacy		
Course Code	BİL 1206	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Media literacy and its history, basic approaches, communication, mass communication, media and society, mass media, Secondary School Media Literacy Curriculum.

The Aim of Course

To enable them to be media literate.

Learning Outcomes

1. Explains the concept of media literacy.
2. Analyze the historical development process of media literacy.
3. Explains the basic approaches to media literacy.
4. Relates communication and mass communication.
5. Evaluates the relationship between media and society.

Evaluation Criteria

Vize (%20) Ödev (%20) Final (%60)

Recommended or Required Reading

Medya Okuryazarlığı ve Öğretmen Eğitimi: Öğretmen Adayları İçin Bir Öğretim Programı Tasarısı – Cahit Erdem
Eleştirel Medya Okuryazarlığı – Abdurrahman Şahin Medya Okuryazarlığı ve Eğitimi – İbrahim E. Bilici Medya
Okuryazarlığı – Melda Cinman Şimşek ve Nurçay Türkoğlu

Course Content

Week	Topic	Content
Week 1	Theoretical	Information about the presentation of the course, the way it is taught, the necessary
	Practice	
	Laboratory	
Week 2	Theoretical	Why Media Literacy? Scope of Media Literacy
	Practice	
	Laboratory	
Week 3	Theoretical	Basic Approaches to Media Literacy
	Practice	
	Laboratory	
	Theoretical	Ads Analysis in Media Literacy



Week 4	Practice	
	Laboratory	
Week 5	Theoretical	Analysis of News in Media Literacy
	Practice	
	Laboratory	
Week 6	Theoretical	Propaganda Techniques Analysis of Propaganda Techniques
	Practice	
	Laboratory	
Week 7	Theoretical	Emotions and Emotional Attraction Analysis of Emotional Expressions in the Media
	Practice	
	Laboratory	
Week 8	Theoretical	*Midterm exam
	Practice	
	Laboratory	
Week 9	Theoretical	The Effect of Information and Communication Technologies on Media Literacy
	Practice	
	Laboratory	
Week 10	Theoretical	Prejudices and Stereotypes Analysis of Prejudices and Stereotypes
	Practice	
	Laboratory	
Week 11	Theoretical	Media Literacy Course Basic Principles of Media Education
	Practice	
	Laboratory	
Week 12	Theoretical	Examination of Examples of Integration of Media Literacy Education with Other Courses
	Practice	
	Laboratory	
Week 13	Theoretical	Barriers to Media Literacy
	Practice	
	Laboratory	
Week 14	Theoretical	Multimedia in Media Literacy *Use of Multimedia Elements in Media Literacy
	Practice	
	Laboratory	
Week 15	Theoretical	Other Types of Literacy and Its Relationship with Media Literacy
	Practice	
	Laboratory	
Week 16	Theoretical	Final Exam
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	0	5	0	4	0	0	4	0	0	4	1	0
OC2	3	0	2	1	2	3	2	4	5	0	0	2
OC3	0	3	2	0	3	0	0	2	3	2	4	0
OC4	2	0	3	5	5	3	4	4	2	0	0	4
OC5	2	2	0	0	0	2	0	0	0	1	3	4



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Current Technological Developments		
Course Code	BİL 1208	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content
Web 2.0 Tools, Web 3.0 Tools, Internet Technologies
The Aim of Course
With this course, it is aimed to provide students with the knowledge and skills of current web technologies (Web 2.0 and Web 3.0) that can be used for professional and personal development.

Learning Outcomes
1. Gains knowledge about Web 2.0 and Web 3.0 technologies. 2. Decides which web technology to use according to their needs. 3. Knows how to adapt which web technology according to their needs. 4. Integrates related web technologies for professional and personal development.

Evaluation Criteria
Vize (%40) Final (%60)

Recommended or Required Reading
101 Araçla Web 2.0 – Onur İşbulan, Zehra Demir Kaymak ve Mübin Kırıyıcı

Course Content		
Week	Topic	Content
Week 1	Theoretical	Presentation of the course, the way it is taught, information about the necessary materials.
	Practice	
	Laboratory	
Week 2	Theoretical	Internet Technologies Technology Integration
	Practice	
	Laboratory	
Week 3	Theoretical	Electronic Portfolio, Personal Blog and Website Preparation Tools
	Practice	
	Laboratory	
Week 4	Theoretical	Online Coding and Programming Tools
	Practice	



	Laboratory	
Week 5	Theoretical	Online Interactive Presentation Tools
	Practice	
	Laboratory	
Week 6	Theoretical	Online Collaboration Tools
	Practice	
	Laboratory	
Week 7	Theoretical	Online E-Book Tools
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm Exam (Electronic Portfolio Evaluation)
	Practice	
	Laboratory	
Week 9	Theoretical	Online Organization, URL Shortening and QR Code Tools
	Practice	
	Laboratory	
Week 10	Theoretical	Online Survey and Feedback Tools
	Practice	
	Laboratory	
Week 11	Theoretical	Online Video Editor and Design Tools
	Practice	
	Laboratory	
Week 12	Theoretical	Online Drawing, Diagram and Word Cloud Tools
	Practice	
	Laboratory	
Week 13	Theoretical	Online Audio Recording and Editor Tools
	Practice	
	Laboratory	
Week 14	Theoretical	Online Visual and Creative Design Tools
	Practice	
	Laboratory	
Week 15	Theoretical	Media and KVKK in Web Applications
	Practice	
	Laboratory	
Week 16	Theoretical	Final Exam (Electronic Portfolio Evaluation)
	Practice	
	Laboratory	

Program and Learning Outcomes Relations

OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	3	4	1	5	4	1	4	3	2	4	5
OC2	3	4	2	3	4	3	5	1	4	3	3	2
OC3	5	3	2	4	3	3	2	3	4	2	4	3
OC4	3	3	4	3	5	4	5	3	4	2	5	2



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Computer Programming
The Course Description Form

Course Name	Visual Programming 2		
Course Code	BİL 2111	Activity Type	Compulsory
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	4
Hours Per Week	3	ECTS	5
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Connection of database, listing and processing of data, simple and statistical queries, obtaining graphics from database, reporting, creating and adding components, preparing help files, preparing of the installation database package, preparing of the installation package

The Aim of Course

To install and use a visual programming language, To make and develop new components, to prepare components dynamically, to use components advanced, to develop database applications with the visual programming language, to connect different database servers, to prepare distributions packages of applications

Learning Outcomes

1. To be able to working together with local area database.
2. To be able to working together with wide area database.
3. To be able to developing advanced applications.
4. To be able to preparing the installation package.

Evaluation Criteria

Vize (%40) Dönem Sonu Projesi (%60)

Recommended or Required Reading

-- Visual Programming Visual Basic - Ebru Yeniman Yıldırım, NOBEL Publishing House -- Course presentation files

Course Content

Week	Topic	Content
Week 1	Theoretical	Connecting to a local area database and listing data
	Practice	Connecting to a local area database and listing data
	Laboratory	
Week 2	Theoretical	Processing data of a local area database
	Practice	Processing data of a local area database
	Laboratory	
Week 3	Theoretical	Reaching to a specific data of a local area database
	Practice	Reaching to a specific data of a local area database
	Laboratory	
	Theoretical	Connecting to a wide area database and listing data



Week 4	Practice	Connecting to a wide area database and listing data
	Laboratory	
Week 5	Theoretical	Processing data of a wide area database
	Practice	Processing data of a wide area database
	Laboratory	
Week 6	Theoretical	Making simple queries
	Practice	Making simple queries
	Laboratory	
Week 7	Theoretical	Obtaining graphics from the database
	Practice	Obtaining graphics from the database
	Laboratory	
Week 8	Theoretical	Obtaining graphics from the database
	Practice	Obtaining graphics from the database
	Laboratory	
Week 9	Theoretical	Reporting from the databaseMid-term exam
	Practice	Reporting from the database
	Laboratory	
Week 10	Theoretical	Reporting from the database
	Practice	Reporting from the database
	Laboratory	
Week 11	Theoretical	Creating and adding components
	Practice	Creating and adding components
	Laboratory	
Week 12	Theoretical	Preparing help files
	Practice	Preparing help files
	Laboratory	
Week 13	Theoretical	Preparing the installation database package
	Practice	Preparing the installation database package
	Laboratory	
Week 14	Theoretical	Preparing of the installation package
	Practice	Preparing of the installation package
	Laboratory	
Week 15	Theoretical	Preparing of the installation package
	Practice	Preparing of the installation package
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	5	5	5	5	5	3	0	0	0	0	0
OC2	5	5	5	5	5	5	3	0	0	0	0	0
OC3	5	5	5	5	5	5	3	0	0	0	0	0
OC4	5	5	5	5	5	5	3	0	0	0	0	0



Manisa Celal Bayar University
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Computer Programming
The Course Description Form

Course Name	Social Responsibility		
Course Code	BİL 2113	Activity Type	Compulsory
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	1
Hours Per Week	1	ECTS	1
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

In this course, students will learn about social responsibility concept, purpose and importance; The development of social responsibility in society; Civil society organizations and their places in social responsibility, social responsibility projects in the world and in Turkey.

The Aim of Course

It is expected from students to 1. identify environmental problems like social, natural, cultural and so on. 2. to develop interdisciplinary cooperation for the solution of the problem, 3. Continuity without compromising the process objective, 4. to share their results with the public.

Learning Outcomes

1. To be able to identify problems that concern social life
2. To be able to solve to existing problems and to be able to produce projects
3. To be able to do interdisciplinary studies

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Course Content

Week	Topic	Content
Week 1	Theoretical	Social Responsibility Concept, aim and importance
	Practice	
	Laboratory	
Week 2	Theoretical	History of Social Responsibility
	Practice	
	Laboratory	
Week 3	Theoretical	Development of Social Responsibility
	Practice	
	Laboratory	
Week 4	Theoretical	Relationship between community and social responsibility
	Practice	



	Laboratory	
Week 5	Theoretical	Relationship between individual and social responsibility
	Practice	
	Laboratory	
Week 6	Theoretical	Concept of social responsibility on the basis of occupations
	Practice	
	Laboratory	
Week 7	Theoretical	Definition, mission and purpose of civil society organizations
	Practice	
	Laboratory	
Week 8	Theoretical	Civil society organizations' place in social responsibility projects
	Practice	
	Laboratory	
Week 9	Theoretical	midterm
	Practice	
	Laboratory	
Week 10	Theoretical	Social responsibility projects in the world and Turkey
	Practice	
	Laboratory	
Week 11	Theoretical	Phantasmal phases of social responsibility projects
	Practice	
	Laboratory	
Week 12	Theoretical	Identification of student projects
	Practice	
	Laboratory	
Week 13	Theoretical	
	Practice	Project presentations
	Laboratory	
Week 14	Theoretical	
	Practice	Project presentations
	Laboratory	
Week 15	Theoretical	
	Practice	Project presentations
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	1	2	0	0	0	1	4	0	0	4	2
OC2	2	1	0	0	0	0	3	3	0	0	4	3
OC3	2	1	1	0	0	0	2	3	0	0	4	4



Manisa Celal Bayar University
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Computer Programming
The Course Description Form

Course Name	Video Design		
Course Code	BİL 2217	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Introduction. Digital image fundamentals. Digital Image Transformations. The frequency domain image enhancement. Image restoration. Discrete Fourier Transform. Image compression. Image Filtering. Linear and nonlinear image quantization

The Aim of Course

The aim of the course, the image identification, remediation, restoration, compression, digital image processing such as segmentation is to provide students with the basic issues.

Learning Outcomes

1. to be able to get the ability of transform a digital image with different techniques
2. to be able to get the ability of filtering a digital image
3. to be able to get the ability of compressing a digital image with different techniques
4. to be able to design and implement algorithms for digital image processing

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Gonzalez, G. C., Woods, R. E., "Digital Image Processing", Prentice Hall, 2002.

Course Content

Week	Topic	Content
Week 1	Theoretical	Digital image definition
	Practice	
	Laboratory	
Week 2	Theoretical	Image enhancement techniques
	Practice	
	Laboratory	
Week 3	Theoretical	Digital transform techniques, Fourier Transform
	Practice	
	Laboratory	
Week 4	Theoretical	Digital transform techniques, Fourier Transform
	Practice	Homework



	Laboratory	
Week 5	Theoretical	Digital transform techniques, Cosine Transform
	Practice	
	Laboratory	
Week 6	Theoretical	Image Filtering Techniques, Low pass filtering
	Practice	
	Laboratory	
Week 7	Theoretical	Image Filtering Techniques, High pass filtering
	Practice	Quiz
	Laboratory	
Week 8	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 9	Theoretical	Image Filtering Techniques, High pass filtering
	Practice	
	Laboratory	
Week 10	Theoretical	Digital compression techniques
	Practice	
	Laboratory	
Week 11	Theoretical	Run-Length coding
	Practice	
	Laboratory	
Week 12	Theoretical	Huffman coding
	Practice	
	Laboratory	
Week 13	Theoretical	Vector quantization
	Practice	Homework
	Laboratory	
Week 14	Theoretical	Vector quantization
	Practice	Quiz
	Laboratory	
Week 15	Theoretical	Review
	Practice	
	Laboratory	
Week 16	Theoretical	
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	2	3	4	4	5	2	2	3	4	4	5
OC2	4	4	2	4	5	1	1	5	4	3	2	2
OC3	2	3	1	2	3	4	1	3	3	3	2	1
OC4	3	4	3	4	1	1	2	4	1	3	3	2
OC5	4	3	4	3	3	3	3	5	5	4	4	3
OC6	2	5	2	5	3	5	5	1	2	4	4	4



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Requirement and System Analysis		
Course Code	BİL 2219	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

With this course the student, using his technical knowledge in the sector be able to create a viable project in detail.

The Aim of Course

With this course the student, using his technical knowledge in the sector be able to create a viable project in detail.

Learning Outcomes

1. To be able to determine the scope of the final project
2. To be able to do more research on the subject project
3. To be able to preparation for the writing of the project code
4. To be able to writing project
5. To be able to installation package, and report preparation of the project, will gain competencies

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Course Content

Week	Topic	Content
Week 1	Theoretical	Select the subject area of the project for
	Practice	Select the subject area of the project for
	Laboratory	Select the subject area of the project for
Week 2	Theoretical	Submit Information Obtained
	Practice	Submit Information Obtained
	Laboratory	Submit Information Obtained
Week 3	Theoretical	Identify the issues and analysis of the project Working Environment
	Practice	Identify the issues and analysis of the project Working Environment
	Laboratory	Identify the issues and analysis of the project Working Environment
Week 4	Theoretical	Detecting the data to be saved in the project, and Types
	Practice	Detecting the data to be saved in the project, and Types



	Laboratory	Detecting the data to be saved in the project, and Types
Week 5	Theoretical	Submit Information Obtained
	Practice	Submit Information Obtained
	Laboratory	Submit Information Obtained
Week 6	Theoretical	Identify the project's Algorithm and Flow Chart
	Practice	Identify the project's Algorithm and Flow Chart
	Laboratory	Identify the project's Algorithm and Flow Chart
Week 7	Theoretical	Establishing a Platform for the project's working
	Practice	Establishing a Platform for the project's working
	Laboratory	Establishing a Platform for the project's working
Week 8	Theoretical	Preparation of the Terms
	Practice	Preparation of the Terms
	Laboratory	Preparation of the Terms
Week 9	Theoretical	Main Subjects Code writing and testing of the project
	Practice	Main Subjects Code writing and testing of the project
	Laboratory	Main Subjects Code writing and testing of the project
Week 10	Theoretical	Presentation of the project
	Practice	Presentation of the project
	Laboratory	Presentation of the project
Week 11	Theoretical	Detailed Proposals for the project to import, code writing and testing
	Practice	Detailed Proposals for the project to import, code writing and testing
	Laboratory	Detailed Proposals for the project to import, code writing and testing
Week 12	Theoretical	Presentation of the project
	Practice	Presentation of the project
	Laboratory	Presentation of the project
Week 13	Theoretical	Prepare the Project Installation Package
	Practice	Prepare the Project Installation Package
	Laboratory	Prepare the Project Installation Package
Week 14	Theoretical	Prepare booklet covering all stages of the project report
	Practice	Prepare booklet covering all stages of the project report
	Laboratory	Prepare booklet covering all stages of the project report
Week 15	Theoretical	Prepare booklet covering all stages of the project report
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	1	3	3	2	4	3	1	5	4	3	3	3
OC2	1	5	2	3	4	2	2	2	5	1	4	1
OC3	2	3	2	4	5	1	3	2	5	1	2	3
OC4	2	3	1	5	3	4	5	5	1	2	2	1
OC5	3	3	3	2	5	1	4	4	3	2	3	4



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Interactive Content Design		
Course Code	BİL 2231	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Assoc. Prof. Dr. Barış ÇUKURBAŞI
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

General information on Interactive Content Design; definition of interaction, its relationship with content design and principles, usage areas, examination of applied studies, pairing of animation and video, sound, musical instruments, design of an educational tool

The Aim of Course

This course informs students about Interactive graphic design and animation techniques.

Learning Outcomes

1. Knows the interaction tools, defines the multimedia tools used in design.
2. Decides which web technology to use according to their needs.
3. Knows the basic software to implement interactive design.
4. Knows the production method and design process of the application (flow chart, picture story, page design, editing).
5. Learns interactive content design applications.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Oğuzhan Özcan, İnteraktif Media tasarımında Temel Adımlar, İş Bankası Kültür yayınları, İstanbul, 2003 Roger Noake, Animation, Mocdonald ve Co Ltd. Yayınları, Londra, 1988 Anima Mundi, Animation Now, Taschen GmbH, Köln, 2004 M.Naci Dedeal, Temel Özellikleriyle Çizgi Canlandırma, İstanbul, 1999. International Symposium of Interactive Media Design I-II-III-IV-V-VI yayınları, Yeditepe Üniversitesi

Course Content

Week	Topic	Content
Week 1	Theoretical	Introducing the course, the way it is taught, information about the necessary
	Practice	
	Laboratory	
Week 2	Theoretical	Definition of interaction, interactive content design, multimedia tools
	Practice	
	Laboratory	
Week 3	Theoretical	Multimedia elements: animation, image, sound, text, digital video. Introduction of the
	Practice	



	Laboratory	
Week 4	Theoretical	Timeline, keyframes, animated text, graphic animations
	Practice	
	Laboratory	
Week 5	Theoretical	Button, symbol creation, uploading picture and sound files; editing the library
	Practice	
	Laboratory	
Week 6	Theoretical	Editing tags, creating simple commands (forward, backward, go to ..., back to top etc.)
	Practice	
	Laboratory	
Week 7	Theoretical	Editing tags, creating simple commands (forward, backward, go to ..., back to top etc.)
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 9	Theoretical	Scenes, transitions between scenes, transition commands
	Practice	
	Laboratory	
Week 10	Theoretical	Scenes, transitions between scenes, transition commands
	Practice	
	Laboratory	
Week 11	Theoretical	Creating the flow chart of a simple promotional film; storyboard, page
	Practice	
	Laboratory	
Week 12	Theoretical	Creating the flow chart of a simple promotional film; storyboard, page design, visuals
	Practice	
	Laboratory	
Week 13	Theoretical	Creating the flow chart of a simple promotional film; storyboard, page design, visuals
	Practice	
	Laboratory	
Week 14	Theoretical	Designing the login page and linked pages, making the commands
	Practice	
	Laboratory	
Week 15	Theoretical	Designing the login page and linked pages, making the commands
	Practice	
	Laboratory	
Week 16	Theoretical	Final Exam
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	1	3	2	1	2	5	3	2	5	3	1	1
OC2	1	3	3	1	2	4	3	2	4	3	1	3
OC3	1	2	3	1	4	3	1	3	2	2	2	4
OC4	1	3	2	3	2	3	2	2	3	1	2	3
OC5	2	2	1	4	1	2	4	5	4	4	2	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Occupational Health and Safety		
Course Code	BİL 1115	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Asst. Prof. Dr. Çağlar KARACA
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The concept of job security and the basic principles, measures related to electricity use, machinery and related measures, first aid, personal protectors, safety at work legislation

The Aim of Course

With this course the students, aimed to gain the competencies required to ensure safety

Learning Outcomes

1. To be able to take first aid measures
2. To be able to provide working safety
3. To be able to take precautions in accordance with work safety legislation
4. To be able to have knowledge about occupational accidents and occupational diseases

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

The textbook, textbooks and other resources to help

Course Content

Week	Topic	Content
Week 1	Theoretical	First Aid training
	Practice	
	Laboratory	
Week 2	Theoretical	First Aid training
	Practice	
	Laboratory	
Week 3	Theoretical	First Aid training
	Practice	
	Laboratory	
Week 4	Theoretical	First Aid training
	Practice	
	Laboratory	



Week 5	Theoretical	Provide personal safety
	Practice	
	Laboratory	
Week 6	Theoretical	Provide personal safety
	Practice	
	Laboratory	
Week 7	Theoretical	Provide personal safety
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm-exam
	Practice	
	Laboratory	
Week 9	Theoretical	Ensuring the safety of employees
	Practice	
	Laboratory	
Week 10	Theoretical	The business environment is to provide security
	Practice	
	Laboratory	
Week 11	Theoretical	The business environment is to provide security
	Practice	
	Laboratory	
Week 12	Theoretical	Safety at Work legislation
	Practice	
	Laboratory	
Week 13	Theoretical	Safety at Work legislation
	Practice	
	Laboratory	
Week 14	Theoretical	Safety at Work legislation
	Practice	
	Laboratory	
Week 15	Theoretical	Overview
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	2	0	0	0	0	1	2	4	0	0	1
OC2	0	3	0	0	0	0	1	1	3	0	1	0
OC3	4	2	0	0	0	0	1	2	2	1	2	2
OC4	1	2	0	0	0	0	0	1	1	0	2	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Operating Systems		
Course Code	BİL 2109	Activity Type	Compulsory
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	4
Hours Per Week	3	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Asst. Prof. Dr. Çağlar KARACA
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Introduction to operating systems, operating system structures, process management, deadlocks, CPU scheduling, memory management, file system, storage system and input/output,

The Aim of Course

The learners will be taught principles of operating systems. In particular, the course will cover details of concurrent process management, CPU scheduling, deadlock, memory management, file system, storage subsystem, and input/output management. The course integrates theory and practice with a mixture of lecture and lab hours.

Learning Outcomes

1. To be able to learn the principles operating systems.
2. To be able to evaluate the relationship between the systems and application programming.
3. To be able to develop multi-process applications.
4. To be able to understand the techniques of developing efficient and correct system programs.
5. To be able to evaluate the efficiency aspect of using system resources.

Evaluation Criteria

Vize (%20) Ödev (%5) Quiz (%15) Proje (%10) Final (%50)

Recommended or Required Reading

Textbooks: Silberschatz, P.B., G. Gagne, G., 2008. Operating System Concepts, John Wiley, ISBN0-471-26272-2, USA
Recommended Readings: Tanenbaum, A., 2008, Modern Operating Systems, Prentice Hall, ISBN 0-13-600663-9
Stallings, w., 2008, Operating Systems: Internals and Design Principles, PrenticeHall, ISBN 978-0-13-230998-1

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction to operating systems
	Practice	
	Laboratory	
Week 2	Theoretical	Operating system structures
	Practice	
	Laboratory	
Week 3	Theoretical	Computer hardware properties
	Practice	
	Laboratory	



Week 4	Theoretical	Multi-processing I
	Practice	
	Laboratory	
Week 5	Theoretical	Multi-processing II
	Practice	
	Laboratory	
Week 6	Theoretical	Process synchronization
	Practice	
	Laboratory	
Week 7	Theoretical	Threads
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm Exam
	Practice	
	Laboratory	
Week 9	Theoretical	Deadlocks
	Practice	
	Laboratory	
Week 10	Theoretical	Memory management
	Practice	
	Laboratory	
Week 11	Theoretical	Virtual memory management
	Practice	
	Laboratory	
Week 12	Theoretical	CPU scheduling algorithms
	Practice	
	Laboratory	
Week 13	Theoretical	File system
	Practice	
	Laboratory	
Week 14	Theoretical	Disk subsystem
	Practice	
	Laboratory	
Week 15	Theoretical	Project Presentations
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	1	4	3	2	4	5	4	3	1	3	1	1
OC2	3	3	2	2	4	3	4	5	2	4	2	3
OC3	2	2	4	3	4	5	2	4	1	4	5	2
OC4	5	3	3	5	1	4	2	2	5	1	3	4
OC5	4	4	3	2	2	5	2	3	4	2	4	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Database 1		
Course Code	BİL 1106	Activity Type	Compulsory
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Dr. MURAT KILINÇ
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

To manage database, to consider tables and diagrams, to make performace analysis and improvements

The Aim of Course

Designing and creating databases, querying, using database management fuctions

Learning Outcomes

1. The ability of designing database
2. The ability of making basic table operations
3. The ability of making advanced table operations
4. The ability of managing database server

Evaluation Criteria

Vize (%20) Proje (%20) Final (%60)

Recommended or Required Reading

Veri Tabanı Yönetim Sistemleri 2 (2 Cilt), Turgut ÖzsevenVeri Tabanı 2 (2 Cilt), Kurtuluş Beylan

Course Content

Week	Topic	Content
Week 1	Theoretical	Demand Analyses of Database
	Practice	
	Laboratory	
Week 2	Theoretical	Normalisation
	Practice	
	Laboratory	
Week 3	Theoretical	NormalisationCreating DataBase and Tables
	Practice	
	Laboratory	
Week 4	Theoretical	Creating Tables and Changing Its Properties
	Practice	
	Laboratory	



Week 5	Theoretical	Table Operations
	Practice	
	Laboratory	
Week 6	Theoretical	Making Queries
	Practice	
	Laboratory	
Week 7	Theoretical	Making Queries
	Practice	
	Laboratory	
Week 8	Theoretical	Making Queries
	Practice	
	Laboratory	
Week 9	Theoretical	Mid Term
	Practice	
	Laboratory	
Week 10	Theoretical	Making Queries
	Practice	
	Laboratory	
Week 11	Theoretical	Making Queries
	Practice	
	Laboratory	
Week 12	Theoretical	Making Queries
	Practice	
	Laboratory	
Week 13	Theoretical	Relational Tables
	Practice	
	Laboratory	
Week 14	Theoretical	Relational Tables
	Practice	
	Laboratory	
Week 15	Theoretical	Relational Tables
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	1	3	1	5	4	3	5	1	4	5	0
OC2	4	4	5	2	4	1	1	3	2	3	0	4
OC3	3	2	1	0	3	5	4	2	3	2	0	3
OC4	5	2	2	5	0	1	5	5	5	3	3	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Database 2		
Course Code	BİL 2101	Activity Type	Compulsory
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Dr. MURAT KILINÇ
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

To manage database, to consider tables and diagrams, to make performace analysis and improvements

The Aim of Course

Designing and creating databases, querying, using database management fuctions

Learning Outcomes

1. To be able to designing database
2. To be able to making basic table operations
3. To be able to making advanced table operations
4. To be able to managing database server

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Database Management Systems2 (2 Cilt), Turgut Özseven

Course Content

Week	Topic	Content
Week 1	Theoretical	Installing server programs of at least two different producers
	Practice	
	Laboratory	Practise about this topic.
Week 2	Theoretical	Installing database management panel, creating database and defining users
	Practice	
	Laboratory	Practise about this topic.
Week 3	Theoretical	Creating database and defining users, creating tables and managing diagrams
	Practice	
	Laboratory	Practise about this topic.
Week 4	Theoretical	Defining tables and managing diagrams, making data transfer operations
	Practice	
	Laboratory	Practise about this topic.



Week 5	Theoretical	Making data transfer operations, creating a new database from an existing database
	Practice	
	Laboratory	Practise about this topic.
Week 6	Theoretical	Creating a new database from an existing database, arranging views, triggers,
	Practice	
	Laboratory	Practise about this topic.
Week 7	Theoretical	Arranging views, triggers, subroutines and indexes, creating user roles and user-defined
	Practice	
	Laboratory	Practise about this topic.
Week 8	Theoretical	Mid-term exam
	Practice	
	Laboratory	
Week 9	Theoretical	Creating user roles and user-defined data type
	Practice	
	Laboratory	Practise about this topic.
Week 10	Theoretical	Arranging rules and default values
	Practice	
	Laboratory	Practise about this topic.
Week 11	Theoretical	Arranging rules and default value, data-copying operations and making maintenance
	Practice	
	Laboratory	Practise about this topic.
Week 12	Theoretical	Data-copying operations and making maintenance plans
	Practice	
	Laboratory	Practise about this topic.
Week 13	Theoretical	Making performance analysis and improvements
	Practice	
	Laboratory	Practise about this topic.
Week 14	Theoretical	Making performance analysis and improvements
	Practice	
	Laboratory	Practise about this topic.
Week 15	Theoretical	Making performance analysis and improvements
	Practice	
	Laboratory	Practise about this topic.

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	3	4	2	5	1	4	3	4	2	4	5
OC2	2	4	2	5	4	1	5	4	4	3	3	2
OC3	3	4	3	5	1	2	3	4	4	2	5	4
OC4	4	3	4	3	3	3	3	5	4	3	4	5



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Foreing Language		
Course Code	YDI 2102	Activity Type	Compulsory
Semester	Spring	Semester	4
Course Language	Turkish	National Credit	4
Hours Per Week	4	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor EMEL GENÇ
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Elementary level vocabulary, grammar and four skills of English.

The Aim of Course

The aim of this course is to provide the first year students with the opportunity of getting familiar with basic English

Learning Outcomes

1. To be able to understand basic English grammar.
2. To be able to grasp the meaning of basic vocabulary.
3. To be able to speak, read and write in English at Elementary Level.
4. To be able to introduce yourself.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Headway-Elementary (Oxford)

Course Content

Week	Topic	Content
Week 1	Theoretical	regular/irregular verbs
	Practice	Writingtelling a story
	Laboratory	
Week 2	Theoretical	Unit 7Introducing peopletime expressions
	Practice	reading sixty years of flight
	Laboratory	
Week 3	Theoretical	unit 8 countable and uncountable nounshow much/how many
	Practice	reading and speaking"The history of the sandwich" okuma parçasını okuyup
	Laboratory	
Week 4	Theoretical	some/any
	Practice	Listening"What's your favourite sandwich"
	Laboratory	



Week 5	Theoretical	unit 9ComparativesHave got/has gotSuperlatives
	Practice	Reading " Mega cities"
	Laboratory	
Week 6	Theoretical	adjectivesUnit 10Present continuous tensein/on/at
	Practice	Describing a flatWritingComparing people you know
	Laboratory	
Week 7	Theoretical	Midterm Exam
	Practice	
	Laboratory	
Week 8	Theoretical	Present continuous tensein/on/atSimple present& present continuous
	Practice	
	Laboratory	
Week 9	Theoretical	Present continuous tensein/on/atSimple present& present continuous
	Practice	Reading "Living in Space"
	Laboratory	
Week 10	Theoretical	Unit 11going to/willmaking suggestions
	Practice	WritingDescribing a holiday"
	Laboratory	
Week 11	Theoretical	Unit 11Simple past& present perfect
	Practice	speakingTalking about youHave you ever?
	Laboratory	
Week 12	Theoretical	Simple past& present perfecttense revision
	Practice	TalkSurvey 'What can you do?'Reading and speaking'Super Children'Writing letters for
	Laboratory	
Week 13	Theoretical	Unit 6couldWas bornhomonym for
	Practice	Using 'could' for past skills.Define where and when you are born.Finding the same
	Laboratory	
Week 14	Theoretical	Revision
	Practice	Overview
	Laboratory	
Week 15	Theoretical	Overview
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	0	0	0	0	0	0	0	0	0	0	0	0
OC2	0	0	0	0	0	0	0	0	0	0	0	0
OC3	0	0	0	0	0	0	0	0	0	0	0	0
OC4	0	0	0	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Mathematic 1		
Course Code	BİL 1101	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	3
Hours Per Week	3	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Algebra, polynomials, Ratio and proportion, Equations and Inequalities, total symbol, multiplication symbol, sequences, Basic geometry, basic trigonometry, Parabola

The Aim of Course

Aim of this course is to teach adequate and efficient mathematics to create an infrastructure for students.

Learning Outcomes

1. To be able to solve applications of algebra
2. To be able to solve applications of Equations and inequalities
3. To be able to solve applications of sequences
4. To be able to solve applications of geometry
5. To be able to solve applications of trigonometry
6. To be able to solve applications of parabola

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

textbook Balcı, M.Analiz I, Balcı Publishing, 2001F. AYRES, Calculus Schaums Outline Series, 1979D. ÇOKER, General Mathematics I, Detay Publishing

Course Content

Week	Topic	Content
Week 1	Theoretical	Algebra
	Practice	
	Laboratory	
Week 2	Theoretical	Polynomial operations and polynomials
	Practice	
	Laboratory	
Week 3	Theoretical	Ratio and proportion concepts and applications
	Practice	
	Laboratory	
	Theoretical	Equations and Inequalities



Week 4	Practice	
	Laboratory	
Week 5	Theoretical	Inequality
	Practice	
	Laboratory	
Week 6	Theoretical	total symbolmultiplication symbol sequences
	Practice	
	Laboratory	
Week 7	Theoretical	total symbolmultiplication symbol sequences
	Practice	
	Laboratory	
Week 8	Theoretical	midterm-exam
	Practice	
	Laboratory	
Week 9	Theoretical	arithmetic sequencegeometric sequenceinfinite geometric sequenceBasic
	Practice	
	Laboratory	
Week 10	Theoretical	geometric objectscoordinate systems Conics
	Practice	
	Laboratory	
Week 11	Theoretical	basic trigonometry
	Practice	
	Laboratory	
Week 12	Theoretical	trigonometric functions
	Practice	
	Laboratory	
Week 13	Theoretical	The basic operations of FunctionsTypes of functions
	Practice	
	Laboratory	
Week 14	Theoretical	Parabola and the graph
	Practice	
	Laboratory	
Week 15	Theoretical	overview
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	2	2	1	2	4	1	3	2	2	3	1
OC2	1	0	1	1	2	0	3	1	2	0	0	3
OC3	2	2	1	0	2	3	1	0	0	0	2	1
OC4	0	3	1	4	2	3	2	0	2	3	2	1
OC5	0	2	0	2	0	4	1	0	3	2	1	2
OC6	2	2	2	1	0	3	1	0	2	2	1	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Basics of Programming		
Course Code	BİL 1103	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	3
Hours Per Week	3	ECTS	5
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Algorithm and programming logic, algorithms, flow diagrams, Pascal programming language, Programming by using Pascal

The Aim of Course

By teaching principles and logic of algorithm and programming, make students capable of using structural programming language Pascal and develop programs (at least at basic level)

Learning Outcomes

1. To be able to comprehend algorithm and programming logic
2. To be able to generate (form) flow diagram
3. To be able to program a problem which has a generated actual flow diagram
4. To be able to use strings in Pascal programming language

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

- Ellies Horowitz, Sartaj Sahni, "Fundamentals of Data Structures Pitman", Publishing Limited.
- Kaşlı, A., "Algorithm Design and Programming", E.U.Computer Engineering, (1999).
- Trembley, J.P. & Bunt, R.B., "Introduction to Computer Science: An Algorithmic Approach", McGraw-Hill, (1989).
- Çölkesen, R., "Programming Art Algorithms", Papatya Publishing.

Course Content

Week	Topic	Content
Week 1	Theoretical	Machine language, binary number system, algorithm definitions.
	Practice	Basic Algorithm Examples.
	Laboratory	
Week 2	Theoretical	Algorithm Flowchart. Compiler, linker, interpreter, object code and library concepts.
	Practice	Basic Algorithm Flowchart Examples.
	Laboratory	
Week 3	Theoretical	Integrated Software Development Interface.
	Practice	Programming tools setup and use with interfaces.
	Laboratory	



Week 4	Theoretical	Data types, variable and constant definition, value assignment, local and global variables.
	Practice	Defining variables and constants, assigning values, coding for local and global variables
	Laboratory	
Week 5	Theoretical	Input and output operations, type conversion.
	Practice	Input and output operations with programming language, encodings related to type
	Laboratory	
Week 6	Theoretical	Mathematical, string, assignment, logical, comparison, bit operations, increment and
	Practice	Coding of operators with programming language.
	Laboratory	
Week 7	Theoretical	Decision structures. If, If-else, If-else-if structures, switch-case structure.
	Practice	Coding of decision structures with programming language.
	Laboratory	
Week 8	Theoretical	Loop Controls. For, ForEach, While, Do-While loops.Midterm
	Practice	Coding of loop controls with programming language.
	Laboratory	
Week 9	Theoretical	The use of the words Continue and Break, the use of goto - label.
	Practice	Encodings with the words Continue and Break.
	Laboratory	
Week 10	Theoretical	Array concept, definition of arrays, one-dimensional arrays.
	Practice	Coding of one-dimensional arrays with programming language.
	Laboratory	
Week 11	Theoretical	Methods of arrays, multidimensional arrays.
	Practice	Coding of multidimensional arrays with programming language.
	Laboratory	
Week 12	Theoretical	Arrays and string operations.
	Practice	Arrays and encodings for string operations.
	Laboratory	
Week 13	Theoretical	Subroutine concept, subroutine writing and calling, non-value returning subprograms.
	Practice	Subprogram encodings.
	Laboratory	
Week 14	Theoretical	Subprograms that return values. Static and dynamic subprograms.
	Practice	Encodings for static and dynamic subroutines that return values.
	Laboratory	
Week 15	Theoretical	Self-recursive subprograms. An overview.
	Practice	Recursive subprogram encodings.
	Laboratory	

Program and Learning Outcomes Relations

OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	5	1	2	0	4	0	0	0	0	0	0
OC2	5	5	5	2	0	4	0	0	0	0	0	0
OC3	5	5	5	2	0	4	0	0	0	0	0	0
OC4	5	5	2	2	0	4	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Basics Of Web Design		
Course Code	BİL 1105	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Definition of internet and web, basic HTML tags, text and appearance tags, making a connection(bridge), table transactions, forms, frames, multimedia, style sheet(css) basics, style sheet(css) features, style sheet(css) menu process, browser problems

The Aim of Course

Students are given the ability of doing HTML in WEB Project.

Learning Outcomes

1. To be able to do basic operations for HTML pages and web pages.
2. To be able to create advanced features for HTML pages and web pages.
3. To be able to configure the style template (CSS).
4. To be able to prepare a web page.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Narrating method, case study, demonstration, problem solving, question answer method

Course Content

Week	Topic	Content
Week 1	Theoretical	İnternet and Web definitionHtml Basic Labels
	Practice	Html Basic Labels
	Laboratory	
Week 2	Theoretical	Html Basic TagsText and appearance tags
	Practice	Text and appearance labels
	Laboratory	
Week 3	Theoretical	Text and appearance labelsMaking a connection(bridge)
	Practice	Text and appearance labelsMaking a connection(bridge)
	Laboratory	
Week 4	Theoretical	Making a connection(bridge)Table actions
	Practice	Making a connection(bridge)Table actions



	Laboratory	
Week 5	Theoretical	Table actionsForms
	Practice	Table actionsForms
	Laboratory	
Week 6	Theoretical	Forms
	Practice	Forms
	Laboratory	
Week 7	Theoretical	Frames
	Practice	Frames
	Laboratory	
Week 8	Theoretical	Multimedia ToolsMidterm
	Practice	Multimedia Tools
	Laboratory	
Week 9	Theoretical	Multimedia Tools
	Practice	Multimedia Tools
	Laboratory	
Week 10	Theoretical	Multimedia Tools
	Practice	Multimedia Tools
	Laboratory	
Week 11	Theoretical	CSS Basics
	Practice	CSS Basics
	Laboratory	
Week 12	Theoretical	Style (CSS) Features
	Practice	Style (CSS) Features
	Laboratory	
Week 13	Theoretical	Style (CSS) FeaturesStyle (CSS) Menü Process
	Practice	Style (CSS) FeaturesStyle (CSS) Menü Process
	Laboratory	
Week 14	Theoretical	Style (CSS) Menü Process
	Practice	Style (CSS) Menü Process
	Laboratory	
Week 15	Theoretical	Browser Problems and Solutions
	Practice	Browser Problems and Solutions
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	4	4	2	2	3	3	0	2	0	0	0
OC2	5	4	3	2	4	4	3	0	1	0	0	0
OC3	5	4	4	1	1	4	4	0	1	0	0	0
OC4	5	5	5	3	1	4	4	0	1	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Information Technology		
Course Code	BİL 1107	Activity Type	Compulsory
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Information technologies, computing concepts, algorithms and flow charts, computer systems, basic concepts of software and hardware, bases of operating systems, up-to-date operating systems, desktop publishing; file management, utilities; word processing programs, database management systems, web design, use of internet in education, effects of computer and internet on children / youth.

The Aim of Course

To ensure that teacher candidates are literate in information technology and acquire knowledge of computational thinking.

Learning Outcomes

1. To be able to explain the basic concepts of Information Technologies and computational thinking.
2. To be able to explain the concepts and approaches to problem solving.
3. To be able to explain the main components of computer systems.
4. To be able to use Microsoft Office programs effectively.
5. To be able to explain the basic concepts of web design.
6. To be able to use applications of using the Internet as an educational tool.
7. To be able to tell the precautions to be taken for computer and internet security.
8. To be able to explain the ethics of informatics.
9. To be able to tell the effects of computer and internet on children / young people.

Evaluation Criteria

Midterms (%40) Final (%60)

Recommended or Required Reading

<https://support.office.com/tr-tr>Şahin, S. (Ed.) (2017). Eğitimde Bilişim Teknolojileri I-II, Pegem Akademi
YayıncılıkUzunboylu, H. (Ed.) (2017). Bilişim Teknolojileri, Seçkin Yayıncılık

Course Content

Week	Topic	Content
Week 1	Theoretical	Basic concepts of Information Technologies (data, information, science, technology,
	Practice	Expression through presentation
	Laboratory	
Week 2	Theoretical	The history of computers • Types of computers. Computational thinking and activities
	Practice	Expression through presentation



	Laboratory	
Week 3	Theoretical	Problem solving approaches in information technologies • Algorithm and flow chart
	Practice	Expression through presentation
	Laboratory	
Week 4	Theoretical	Working logic of the computer • Hardware-software concepts
	Practice	Expression through presentation
	Laboratory	
Week 5	Theoretical	Operating systems and their features, current operating systems and their features •
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 6	Theoretical	Input and output units, storage units • Microsoft Office Word word processing program
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 7	Theoretical	Microsoft Office Word word processing program
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 8	Theoretical	Midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Microsoft Office Excel spreadsheets
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 10	Theoretical	Prepare a Microsoft Office PowerPoint presentation
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 11	Theoretical	Microsoft Office Publisher publishing program, Microsoft Office Access Desktop
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 12	Theoretical	Applications of using the Internet as an educational tool, Computer and internet security
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 13	Theoretical	Computer viruses and protection methods, IT ethics • The effects of computer and
	Practice	Expression through presentation, demonstration method
	Laboratory	
Week 14	Theoretical	Applications of using the internet as an educational tool, Computer and internet security
	Practice	Expression through presentation
	Laboratory	
Week 15	Theoretical	Computer viruses and protection methods, IT ethics • The effects of computer and
	Practice	Expression through presentation
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	5	2	3	3	2	1	4	1	2	5	3
OC2	0	2	2	4	1	2	5	2	4	1	2	3
OC3	5	2	1	4	2	1	5	2	4	3	2	5
OC4	1	5	2	2	5	4	1	2	2	2	1	4
OC5	3	0	2	1	1	2	0	1	2	3	3	5
OC6	2	1	4	5	2	5	2	3	5	4	1	2
OC7	3	5	2	5	2	2	4	4	5	5	1	1
OC8	3	3	5	5	4	4	1	1	1	2	2	3
OC9	5	5	1	2	2	5	4	2	3	5	4	4



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Mobile Application Development		
Course Code	BİL 1203	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Overview of mobile programming. Requirements and setup of the development environment. The Basics of Android Apps. Designing a user interface with Android. Intents, Intent Filters, Broadcasts, BroadcastReceiver. Database management and content providers. Positioning and map management.

The Aim of Course

The emergence of a new generation of highly capable mobile devices and platforms has created new opportunities for application developers. This course will require students to propose, review, and document a mobile application for mobile phones by creating small collective design groups from students who will place or exchange mobile environment applications on their programming, use, and interaction designs with related computers.

Learning Outcomes

1. To be able to use different operating systems and development platforms used on modern mobile devices.
2. To be able to describe the advantages and disadvantages of mobile browsers and native coding.
3. To be able to develop basic level software for Android systems With the Java programming language, .
4. To be able to prepare the interface for Android software.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Advanced Android Application Development, Addison-Wesley Professional; Fourth edition

Course Content

Week	Topic	Content
Week 1	Theoretical	Mobile programming overview and content.
	Practice	
	Laboratory	
Week 2	Theoretical	Requirements and setup of the development environment.
	Practice	
	Laboratory	
Week 3	Theoretical	The Basics of Android Apps.
	Practice	
	Laboratory	



Week 4	Theoretical	Life Cycle of Android Apps.
	Practice	
	Laboratory	
Week 5	Theoretical	Designing a user interface with Android.
	Practice	
	Laboratory	
Week 6	Theoretical	Intents, Intent Filters, Broads, BroadcastReceiver.
	Practice	
	Laboratory	
Week 7	Theoretical	Prefences and file management.
	Practice	
	Laboratory	
Week 8	Theoretical	Database management and content providers.Midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Internet access.
	Practice	
	Laboratory	
Week 10	Theoretical	Background processing, Service and alarm concepts.
	Practice	
	Laboratory	
Week 11	Theoretical	Positioning and map management.
	Practice	
	Laboratory	
Week 12	Theoretical	Implement Android markete installation.
	Practice	
	Laboratory	
Week 13	Theoretical	Project Presentations.
	Practice	
	Laboratory	
Week 14	Theoretical	Project Presentations.
	Practice	
	Laboratory	
Week 15	Theoretical	Project Presentations.
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	4	0	0	0	0	0	0	0	0	0	0
OC2	4	0	3	0	0	0	0	0	0	0	0	0
OC3	5	0	0	0	0	5	0	0	0	0	0	0
OC4	0	5	0	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Basic Electronics		
Course Code	BİL 1205	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Transistor, FET, operational amplifier, osilator and active filtres

The Aim of Course

To be able to identify structure and working of electronics components

Learning Outcomes

1. To be able to recognize materials used in semiconductors and electronic features to recognize.
2. To be able to apply the principles of DC circuit analysis.
3. To be able to recognize the operational amplifiers, electrical properties to understand, to apply principles of analysis.
4. To be able to understand the operation of basic operational amplifier circuits, operational amplifier applications to interpret.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Lecture NotesOther electronics component books

Course Content

Week	Topic	Content
Week 1	Theoretical	Transistors polarization
	Practice	
	Laboratory	
Week 2	Theoretical	Transistor amplifier circuits
	Practice	
	Laboratory	
Week 3	Theoretical	FETs polarization
	Practice	
	Laboratory	
Week 4	Theoretical	FET amplifier circuits
	Practice	Transistor's and Fet's Measurements



	Laboratory	Industrial Electronics Laboratory
Week 5	Theoretical	Analysis of amplifier frequency
	Practice	Analysis of amplifier frequency
	Laboratory	Industrial Electronics Laboratory
Week 6	Theoretical	Difference amplifier
	Practice	
	Laboratory	
Week 7	Theoretical	Opamp polarization
	Practice	
	Laboratory	
Week 8	Theoretical	Analysis of the characteristics of operational amplifier
	Practice	
	Laboratory	
Week 9	Theoretical	Stability control of transistors and detection of their terminals.Midterm
	Practice	
	Laboratory	
Week 10	Theoretical	Operational amplifier
	Practice	
	Laboratory	
Week 11	Theoretical	Operational amplifier circuits with applications
	Practice	
	Laboratory	
Week 12	Theoretical	Operational amplifier circuits with applications
	Practice	Operational amplifier circuits with applications
	Laboratory	Industrial Electronics Laboratory
Week 13	Theoretical	Operational amplifier compensators
	Practice	
	Laboratory	
Week 14	Theoretical	Instrumentation amplifiers
	Practice	Instrumentation amplifiers
	Laboratory	Industrial Electronics Laboratory
Week 15	Theoretical	Oscillators and active filters
	Practice	Oscillators and active filters
	Laboratory	Industrial Electronics Laboratory

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	3	4	0	0	0	0	0	0	4	0	0
OC2	4	0	3	0	0	0	0	0	0	5	0	0
OC3	3	0	0	0	0	0	0	0	0	5	0	0
OC4	4	0	0	0	5	5	4	0	0	5	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Algorithm and Flowcharts		
Course Code	BİL 1207	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Algorithm, flow diagram, programming tools, Variables and constants, input-output process, operators, decision structures, loop controls, array concept, subprograms, sequential files, random access files.

The Aim of Course

The aim of this course is to gain the basics of programming qualifications to the student.

Learning Outcomes

1. Introduction to make programme
2. To design program flow before coding
3. Using control statements
4. Array operations
5. To deal with subroutines
6. To doing file processes

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Ellies Horowitz, Sartaj Sahni, "Fundamentals of Data Structures Pitman", Publishing Limited. • Kaşlı, A., "Algoritma Tasarımı ve Programlama", E.Ü.Bilgisayar Mühendisliği, (1999). • Trembley, J.P. & Bunt, R.B., "Introduction to Computer Science: An Algorithmic Approach", McGraw-Hill, (1989). • Çölkesen, R., "Programlama Sanatı Algoritmalar", Papapathy Yayıncılık.

Course Content

Week	Topic	Content
Week 1	Theoretical	Algorithm
	Practice	
	Laboratory	
Week 2	Theoretical	Flow diagrams
	Practice	
	Laboratory	
Week 3	Theoretical	Tools of programming, Variables and constants
	Practice	



	Laboratory	
Week 4	Theoretical	input-output process, operators
	Practice	
	Laboratory	
Week 5	Theoretical	decision structures
	Practice	,
	Laboratory	
Week 6	Theoretical	loop controls
	Practice	
	Laboratory	
Week 7	Theoretical	loop controls
	Practice	
	Laboratory	
Week 8	Theoretical	One-Dimensional Arrays
	Practice	
	Laboratory	
Week 9	Theoretical	One-Dimensional ArraysMidterm Exam
	Practice	
	Laboratory	
Week 10	Theoretical	Multi-Dimensional Arrays
	Practice	
	Laboratory	
Week 11	Theoretical	Subroutines
	Practice	
	Laboratory	,.
Week 12	Theoretical	Subroutines
	Practice	
	Laboratory	
Week 13	Theoretical	Sequential files
	Practice	
	Laboratory	
Week 14	Theoretical	Random access files
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	3	2	0	0	0	0	0	0	0	0	0
OC2	5	3	0	3	0	0	0	0	0	0	0	0
OC3	5	3	0	0	0	0	0	0	0	0	0	0
OC4	5	3	0	3	0	0	0	0	0	0	0	0
OC5	5	4	0	0	0	0	0	0	0	0	0	0
OC6	5	4	0	4	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Graphic Design		
Course Code	BİL 1215	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Resolution and color images, visual design concepts, design forms.

The Aim of Course

This course aims to teach graphic design and animations frequently encountered on the desktop and web environment with design programs that have widespread use in the literature.

Learning Outcomes

1. To be able to explain graphic design programs and basic concepts.
2. To be able to use a design program.
3. To be able to design in a graphic design program.
4. To be able to prepare magazine pages, brochures, announcements and banners.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

-- Photoshop CS5 - Turgut ÖZSEVEN - Murathan Publishing House-- Course presentation files

Course Content

Week	Topic	Content
Week 1	Theoretical	Visual design principles and elements.
	Practice	
	Laboratory	
Week 2	Theoretical	Visual design concepts.Picture, Audio and Video File Formats.
	Practice	
	Laboratory	
Week 3	Theoretical	Graphic Design Program Setup.Resolution and Color Views.
	Practice	Graphic Design Program Setup.Resolution and Color Views.
	Laboratory	
Week 4	Theoretical	Program Menus -1
	Practice	Program Menus -1
	Laboratory	



Week 5	Theoretical	Program Menus -2
	Practice	Program Menus -2
	Laboratory	
Week 6	Theoretical	Use of Program Toolbar Objects.
	Practice	Use of Program Toolbar Objects.
	Laboratory	
Week 7	Theoretical	Layer Operations - Add and Merge Text.
	Practice	Layer Operations - Add and Merge Text.
	Laboratory	
Week 8	Theoretical	Retouch.
	Practice	Retouch.
	Laboratory	
Week 9	Theoretical	Repair.MIDTERM EXAM
	Practice	Repair.
	Laboratory	
Week 10	Theoretical	Working with selections.
	Practice	Working with selections.
	Laboratory	
Week 11	Theoretical	Gif and Web Graphics Creation.
	Practice	Gif and Web Graphics Creation.
	Laboratory	
Week 12	Theoretical	Filters.
	Practice	Filters.
	Laboratory	
Week 13	Theoretical	Working with Bitmap and Vector Graphics and Effects.
	Practice	Working with Bitmap and Vector Graphics and Effects.
	Laboratory	
Week 14	Theoretical	Hand announcement, brochure, poster design
	Practice	Hand announcement, brochure, poster design
	Laboratory	
Week 15	Theoretical	Magazine page design
	Practice	Magazine page design
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	1	1	0	0	1	4	0	1	0	0	0
OC2	5	5	5	0	0	1	5	0	1	0	0	0
OC3	5	5	5	0	0	4	4	0	4	0	0	0
OC4	5	5	5	2	1	5	5	0	4	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Communication Techniques		
Course Code	BİL 1217	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The course includes subject as what is communication, oneway communication practice, two way communication practice, transactional communication, ego pyramid and function, four basic rules and five basic steps of effective communication, communication games and types, analysis of communication games.

The Aim of Course

The aim of this course is to gain students the knowledge and skills about verbal and nonverbal communication techniques which are used in interpersonal communication.

Learning Outcomes

1. To be able to comprehend the characteristics of interpersonal communication process
2. To be able to comprehend barriers in interpersonal communication
3. To be able to use skills about basic verbal and nonverbal interpersonal communications
4. To be able to have formal and non-formal communication

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Dökmen Ü. (1994). Contact Conflict and Empathy. İstanbul: Sistem Pub. [In Turkish]Berne E. (1964). Games People Play. İstanbul: Yaprak Pub. [In Turkish]Akkoyun F. (1995). Introduction to Transactional Analysis. Ankara: TDFO Ltd. Sti. [In Turkish]Cüceloğlu D. (2002). Contact Equipment. İstanbul: Remzi Bookstore. [In Turkish]

Course Content

Week	Topic	Content
Week 1	Theoretical	What is communication? Communication items
	Practice	
	Laboratory	
Week 2	Theoretical	What is interpersonal communication? Consideration points for interpersonal
	Practice	
	Laboratory	
Week 3	Theoretical	Verbal communication and its effective communication elements
	Practice	
	Laboratory	



Week 4	Theoretical	Non-verbal communication and effective communication elements
	Practice	
	Laboratory	
Week 5	Theoretical	Communication barriers, listening and talking skills
	Practice	
	Laboratory	
Week 6	Theoretical	Empathy and emotional intelligence
	Practice	
	Laboratory	
Week 7	Theoretical	The outer appearance and personal image, self presentation
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Interpersonal communication conflicts and ways of solving conflicts
	Practice	
	Laboratory	
Week 10	Theoretical	Question and answer techniques
	Practice	
	Laboratory	
Week 11	Theoretical	Persuasive communication techniques
	Practice	
	Laboratory	
Week 12	Theoretical	Verbal communication techniques that supports persuasive speech application
	Practice	
	Laboratory	
Week 13	Theoretical	Non-verbal communication techniques that supports persuasive speech application
	Practice	
	Laboratory	
Week 14	Theoretical	Verbal and non-verbal communication techniques that supports persuasive speech
	Practice	
	Laboratory	
Week 15	Theoretical	Evaluation of the course
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	1	3	1	2	1	2	1	4	3	4	3	3
OC2	2	0	0	2	0	2	1	2	4	5	3	2
OC3	1	1	1	0	1	2	1	4	4	4	3	3
OC4	0	0	1	0	0	1	1	5	3	5	4	4



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Entrepreneurship		
Course Code	BİL 1219	Activity Type	Optional
Semester	Autumn	Semester	1
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Testing of entrepreneurial characteristics, business idea development and creativity exercises, business plan concept and items (market research, marketing plan, production plan, management plan, financial plan), Workshop studies to consolidate business plan items, Writing and presentation of the business plan.

The Aim of Course

This course enables to gain the key factors for the students who will be engaged to work in private sector, and also entrepreneurial cultures to those who have the potential to work. It is aimed that the students who have the potential of entrepreneurship are able to use and develop these features. Examination of the examples and creation of new ideas, legal, financial, economical evaluation of entrepreneurship will increase the motivation of the students. Students who are successful in this course will also be entitled to Small and Medium Sized Enterprises Development Organisation "ENTREPRENEURSHIP" certificate.

Learning Outcomes

1. To be able to question the characteristics of his own entrepreneurship from the characteristics of entrepreneurship
2. To be able to compare the activities related to types of entrepreneurship
3. To be able to develop his own entrepreneurship characteristics by evaluating entrepreneurship traits of successful entrepreneurship

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

1. Yavuz Odabaşı (editor), Entrepreneurship, Anadolu University Publishing no: 1567, 2004.2. Tamer Müftüoğlu and Tülin Durukan, Entrepreneurship and Small and Medium Sized Enterprises, Gazi Book store, 2004.3. Semra Arkan, Entrepreneurship: Basic Concepts and Some current issues, Siyasal Bookstore, 2002.4. R. Hisrich, Michael Peters ve Dean Shepherd, Entrepreneurship, McGraw Hill, Fourth Edition, 2006.5. G. Yukl, Leadership in Organizations, Prentice Hall, 2006.6. Leaders and the Leadership Process Readings, Self-Assessments, and Applications, Pierce, McGraw Hill, 2003 7. P.Lambing ve C.Kuehl, Entrepreneurship, Prentice Hall, 4. Edition, 2007. ISBN: 0-13-228174-0.

Course Content

Week	Topic	Content
Week 1	Theoretical	Basic concepts of entrepreneurship and entrepreneurshipFactors affecting
	Practice	



	Laboratory	
Week 2	Theoretical	Testing of entrepreneurship features, business idea development and creativity exercises
	Practice	
	Laboratory	
Week 3	Theoretical	Responsible entrepreneurship concept and sharing of experience
	Practice	
	Laboratory	
Week 4	Theoretical	Business concept, business functions
	Practice	
	Laboratory	
Week 5	Theoretical	Types of businesses, types of organizations
	Practice	
	Laboratory	
Week 6	Theoretical	Financial and legal responsibilities Business plan concept and items (Market research,
	Practice	
	Laboratory	
Week 7	Theoretical	Financial and legal responsibilities Business plan concept and items (Market research,
	Practice	
	Laboratory	
Week 8	Theoretical	Mid-term Exam
	Practice	
	Laboratory	
Week 9	Theoretical	Business plan concept and items (Production plan)
	Practice	
	Laboratory	
Week 10	Theoretical	Business plan concept and items (Management plan)
	Practice	
	Laboratory	
Week 11	Theoretical	Business plan concept and items (Financial Plan)
	Practice	
	Laboratory	
Week 12	Theoretical	Workshop studies on business model and business plan (Market research, Marketing
	Practice	
	Laboratory	
Week 13	Theoretical	Workshop studies on business model and work plan (Production plan)
	Practice	
	Laboratory	
Week 14	Theoretical	Workshop studies on business model and work plan (management plan)
	Practice	
	Laboratory	
Week 15	Theoretical	Workshop studies on business model and business plan (Financial plan)
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	4	3	4	4	4	3	0	3	4	3	4
OC2	5	4	3	2	2	4	3	3	5	5	2	2
OC3	4	4	0	2	2	1	2	1	3	3	3	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Mathematic 2		
Course Code	BİL 1102	Activity Type	Compulsory
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

numbersExponential-radical numbersabsolute valuefactorizationsolving equationsproblems

The Aim of Course

Students learn basic math calculations and to develop problem-solving skills.

Learning Outcomes

1. To be able to students learn basic math calculations and to develop problem-solving skills.
2. To be able to having analytical thinking necessary to solve professional problems
3. To be able to algorithmic approach to problems

Evaluation Criteria

Vize (%20) Derse Katılım (%20) Final (%60)

Recommended or Required Reading

Publications prepared by the course instructor notes and open education

Course Content

Week	Topic	Content
Week 1	Theoretical	numbers
	Practice	
	Laboratory	
Week 2	Theoretical	numbers
	Practice	
	Laboratory	
Week 3	Theoretical	numbers
	Practice	
	Laboratory	
Week 4	Theoretical	numbers
	Practice	
	Laboratory	
	Theoretical	Exponential-radical numbers



Week 5	Practice	
	Laboratory	
Week 6	Theoretical	Exponential-radical numbers
	Practice	
	Laboratory	
Week 7	Theoretical	Exponential-radical numbers
	Practice	
	Laboratory	
Week 8	Theoretical	absolute value
	Practice	
	Laboratory	
Week 9	Theoretical	Examination
	Practice	
	Laboratory	
Week 10	Theoretical	absolute value
	Practice	
	Laboratory	
Week 11	Theoretical	factorization
	Practice	
	Laboratory	
Week 12	Theoretical	factorization
	Practice	
	Laboratory	
Week 13	Theoretical	solving equationsproblems
	Practice	
	Laboratory	
Week 14	Theoretical	solving equationsproblems
	Practice	
	Laboratory	
Week 15	Theoretical	solving equationsproblems
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	1	4	1	2	2	2	2	2	4	3	3
OC2	4	1	2	1	2	3	3	2	3	4	2	3
OC3	3	2	2	1	1	2	2	3	3	1	3	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Data Structures		
Course Code	BİL 1104	Activity Type	Compulsory
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	3
Hours Per Week	3	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Orkun TEKE
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Algorithmic program design and flow diagrams, Program execution speed and memory requirements, Sequencing algorithms, Search algorithms, Lists, Linked lists and applications, Stacks, Queues, Tree data model and applications, Graph concept and data model, Graph algorithms, Data compression methods.

The Aim of Course

The aim of this course is to teach students the concepts of abstract data structures that form the basis of the design and analysis of computer algorithms. This course deals with basic abstract data structures and presents some data structures and algorithms that enable these structures to be implemented in practice. Topics covered include stacks, binary trees, AVL trees, and sorting algorithms.

Learning Outcomes

1. To be able to learn models of data structures
2. To be able to learn and apply search and sort algorithms

Evaluation Criteria

Vize (%20) Ödev (%20) Final (%60)

Recommended or Required Reading

Malik, D.S. 2009. C ++ programming, Program Design Including Data Structures. Fourth Edition. Thomson Course Technology. ISBN: 978-1-4188-3640-5

Course Content

Week	Topic	Content
Week 1	Theoretical	Computers and hardware
	Practice	
	Laboratory	
Week 2	Theoretical	Algorithmic approach and C language
	Practice	
	Laboratory	
Week 3	Theoretical	Data structures and models
	Practice	
	Laboratory	
	Theoretical	Program execution speed and memory space allocation



Week 4	Practice	
	Laboratory	
Week 5	Theoretical	Recursion
	Practice	
	Laboratory	
Week 6	Theoretical	Linked lists and their applications
	Practice	
	Laboratory	
Week 7	Theoretical	Stacks, queues
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm Exam
	Practice	
	Laboratory	
Week 9	Theoretical	Search algorithms
	Practice	
	Laboratory	
Week 10	Theoretical	Sort algorithms
	Practice	
	Laboratory	
Week 11	Theoretical	Tree data structure and applications
	Practice	
	Laboratory	
Week 12	Theoretical	Binary Trees
	Practice	
	Laboratory	
Week 13	Theoretical	Graph concept and data models
	Practice	
	Laboratory	
Week 14	Theoretical	Graph algorithms
	Practice	
	Laboratory	
Week 15	Theoretical	Data compression methods
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	4	3	4	4	3	3	2	5	1	2	1
OC2	4	1	5	2	1	3	4	5	2	4	5	4



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Internet Programming 1		
Course Code	BİL 1110	Activity Type	Compulsory
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Dynamic Page Design for Web Site Preparation, Installing and Setting Up the Programs Required for the Server Computer, Using HTML Form Tags and Scripts for Dynamic Pages, Use of Web Based Programming Language; Connecting to a Database Using Web Based Programming Language; Variable Definitions; Usage of Variables; Data Types and Operators; Control Statements; Loop Commands; Functions; File Operations.

The Aim of Course

It is aimed to give the skills for designing a database connected web site using server side scripts and using the dynamic programming interfaces of the web editor in these processes.

Learning Outcomes

1. To be able to install and test the necessary software for web based programming
2. To be able to prepare web page with basic commands of web programming language
3. To be able to prepare web page by using function and object in programming language
4. To be able to make web form applications
5. To be able to using web services

Evaluation Criteria

Vize (%20) Ödev (%20) Final (%60)

Recommended or Required Reading

<http://www.php.net>/<http://www.easyphp.org>/<https://www.mysql.com>/Web programming and e-commerce with ASP

Course Content

Week	Topic	Content
Week 1	Theoretical	Software installations and publishing for the web server
	Practice	Software installations and publishing for the web server
	Laboratory	
Week 2	Theoretical	Variables and constants, operators and process priority
	Practice	Variables and constants, operators and process priority
	Laboratory	
Week 3	Theoretical	Decision control statementsLoop control statements
	Practice	Decision control statementsLoop control statements
	Laboratory	



Week 4	Theoretical	User defined functions
	Practice	User defined functions
	Laboratory	
Week 5	Theoretical	Ready functions
	Practice	Ready functions
	Laboratory	
Week 6	Theoretical	Array operations
	Practice	Array operations
	Laboratory	
Week 7	Theoretical	File operations
	Practice	File operations
	Laboratory	
Week 8	Theoretical	Web Forms
	Practice	Web Forms
	Laboratory	
Week 9	Theoretical	Web FormsMidterm
	Practice	Web Forms
	Laboratory	
Week 10	Theoretical	Data transfer between pages
	Practice	Data transfer between pages
	Laboratory	
Week 11	Theoretical	Data transfer between pages
	Practice	Data transfer between pages
	Laboratory	
Week 12	Theoretical	Database connectivity
	Practice	Database connectivity
	Laboratory	
Week 13	Theoretical	Database operations-1
	Practice	Database operations-1
	Laboratory	
Week 14	Theoretical	Database operations-2
	Practice	Database operations-2
	Laboratory	
Week 15	Theoretical	XML applications and Web services
	Practice	XML applications and Web services
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	4	4	3	2	0	3	0	0	0	0	0
OC2	4	5	4	5	4	3	4	0	0	0	0	0
OC3	4	3	4	5	4	3	4	0	0	0	0	0
OC4	4	3	4	5	4	3	4	0	0	0	0	0
OC5	5	3	4	4	5	4	5	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Object Oriented Programming 1		
Course Code	BİL 1112	Activity Type	Compulsory
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	3
Hours Per Week	3	ECTS	5
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Orkun TEKE
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Object oriented programming logic, Class space and methods, Local and global variables, Standard and advanced components.

The Aim of Course

With this course students; Be able to program using an object-based language.

Learning Outcomes

1. To be able to do necessary software installations for programming.
2. To be able to prepare applications by using functions in programming language.
3. To be able to work with components.
4. To be able to perform database operations.

Evaluation Criteria

Vize (%20) Ödev (%20) Final (%60)

Recommended or Required Reading

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Course Content

Week	Topic	Content
Week 1	Theoretical	Establishing the Software for Programming
	Practice	
	Laboratory	
Week 2	Theoretical	Constant, Variable and Object Usage, Usage of Operators
	Practice	
	Laboratory	
Week 3	Theoretical	Decision Control Statements, Loop Control Statements
	Practice	
	Laboratory	
Week 4	Theoretical	User Defined Functions, Ready Functions,
	Practice	
	Laboratory	



Week 5	Theoretical	Class, Area and Method Usage
	Practice	
	Laboratory	
Week 6	Theoretical	Class, Area and Method Usage
	Practice	
	Laboratory	
Week 7	Theoretical	Local and Global References
	Practice	
	Laboratory	
Week 8	Theoretical	Series
	Practice	Series
	Laboratory	
Week 9	Theoretical	Multidimensional SeriesMID-TERM EXAM
	Practice	Multidimensional SeriesMID-TERM EXAM
	Laboratory	
Week 10	Theoretical	Standard Components
	Practice	
	Laboratory	
Week 11	Theoretical	Advanced Components
	Practice	
	Laboratory	
Week 12	Theoretical	Advanced Components
	Practice	
	Laboratory	
Week 13	Theoretical	Database Connectivity, Database Queries
	Practice	Database Connectivity, Database Queries
	Laboratory	
Week 14	Theoretical	Database Connectivity, Database Queries
	Practice	Database Connectivity, Database Queries
	Laboratory	
Week 15	Theoretical	Database Connectivity, Database Queries
	Practice	Database Connectivity, Database Queries
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	5	5	2	0	2	2	0	0	0	0	0
OC2	5	5	5	1	0	2	0	0	0	0	0	0
OC3	5	5	5	2	0	2	2	0	0	0	0	0
OC4	4	5	5	5	3	3	2	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Professional Ethics		
Course Code	BİL 1202	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

This course critically examines ethical and morality issues that arise in professional life. The course will examine not only the general relationship between ethics and professional life but the particular consequences of ethical considerations within the student's own profession and the professions of others with whom the student must live and work and . additionally, The concept of social responsibility

The Aim of Course

The course aimed to gain competencies related to professional ethics.

Learning Outcomes

1. To examine the ethical and moral concepts
2. To Comply with the principles of professional ethics
3. To Understand the concepts of social responsibility
4. Consequences of unethical behavior and meaning

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Onbasioğlu, S. U. (2003), Mühendislik Etiği, Doga Yayıncılık, _stanbul, ISBN 973-97305-6-1- Özlem, D. (2004), Etik - Ahlak Felsefesi-, Bütün Eserlerine Doğru:12, _nkılap Kitapevi, _stanbul, ISBN 975-10-2248-7- Pieper,A. (1999), Etige Giriş, Ayrıntı Yayınları, _stanbul,“Einführung in die Etik” kitabından çevirenler Veysel Atayman, Gönül Sezer, ISBN 975-539-194-0- Resnik, D.B. (2004), Bilim Etiği , Ayrıntı Yayınları, İstanbul, “The Ethics of Science An Introduction” kitabından çeviren Vicdan Mutlu, ISBN 975-539-402-8- Atayman,V. (2005), Etik , Donkisot Yayınları, Temel Kültür ve Düşünce Dizisi, ISBN:9756511354, 83s.-Cevizci,A. (2002), Etige Giriş, Felsefe Dizisi 20.Kitap,Paradigma Yayınları, _stanbul, ISBN 975-7819- 26-3-Çakıroğlu, D., Başpınar,N.Ö. 2011. Meslek EtiğiNobel Akademik Yayıncılık Danışmanlık

Course Content

Week	Topic	Content
Week 1	Theoretical	Course outline; Introduction
	Practice	
	Laboratory	
Week 2	Theoretical	Examine the ethical and moral concepts
	Practice	



	Laboratory	
Week 3	Theoretical	Examine ethical systems
	Practice	
	Laboratory	
Week 4	Theoretical	Examine the factors that play a role in the formation of systems of ethical review of
	Practice	
	Laboratory	
Week 5	Theoretical	Investigate the factors that play a role in the formation of Morality
	Practice	
	Laboratory	
Week 6	Theoretical	Examine the ethics of profession
	Practice	
	Laboratory	
Week 7	Theoretical	Examine the ethics of profession
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Examine the ethics of profession
	Practice	case study
	Laboratory	
Week 10	Theoretical	Analyzing the results of unethical behavior and corruption and professional lives of
	Practice	case study
	Laboratory	
Week 11	Theoretical	Analyzing the results of unethical behavior and corruption and professional lives of
	Practice	case study
	Laboratory	
Week 12	Theoretical	Professional corruption
	Practice	case study
	Laboratory	
Week 13	Theoretical	Professional corruption
	Practice	case study
	Laboratory	
Week 14	Theoretical	to examine the concept of social responsibility
	Practice	
	Laboratory	
Week 15	Theoretical	to examine the concept of social responsibility
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	3	3	2	2	0	1	1	0	2	1	4
OC2	3	3	0	0	0	0	1	4	2	2	3	4
OC3	3	2	4	0	4	4	3	4	3	2	2	3
OC4	2	2	2	2	0	3	0	3	3	0	0	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	IT Ethics		
Course Code	BİL 1204	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The concept of informatics ethics is to have knowledge about the basic problems of this field, how to use information resources ethically, and cyber crimes and security.

The Aim of Course

To understand the importance of the concept of ethics for information and communication technologies, to have information on ethics and security.

Learning Outcomes

1. Explain the concept of IT ethics;
2. Know the basic problems of IT ethics;
3. Knows how to use IT sources ethically;
4. Have information about IT crimes and security;

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Canbek, G. ve Sağiroğlu, Ş. (2007). Çocukların ve gençlerin bilgisayar ve internet güvenliği. Politeknik Dergisi, 10(1), 33–39. Özçağlayan, M. (1998). Yeni iletişim teknolojileri ve değişim. İstanbul: Alfa Basım Yayım Dağıtım. Resnik, D., B. (2004). Bilim etiği. İstanbul: Ayrıntı Yayınları.

Course Content

Week	Topic	Content
Week 1	Theoretical	Course introduction-planning
	Practice	
	Laboratory	
Week 2	Theoretical	Relationship between ethics and moral, concepts and types of ethics
	Practice	
	Laboratory	
Week 3	Theoretical	The development of the Internet, increasing risks and virtual threats
	Practice	
	Laboratory	
	Theoretical	New communication technologies and effects, New media / Digital media



Week 4	Practice	
	Laboratory	
Week 5	Theoretical	To know the concepts of IT ethics
	Practice	
	Laboratory	
Week 6	Theoretical	Ethical problems of the IT age: Intellectual property and privacy, accessibility and
	Practice	
	Laboratory	
Week 7	Theoretical	Personality rights and new media
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 9	Theoretical	Cyberbullying
	Practice	
	Laboratory	
Week 10	Theoretical	Social media and its effects on society
	Practice	
	Laboratory	
Week 11	Theoretical	Types of social media perception
	Practice	
	Laboratory	
Week 12	Theoretical	The concept and importance of copyright, license types
	Practice	
	Laboratory	
Week 13	Theoretical	Virtual crimes and legal regulations
	Practice	
	Laboratory	
Week 14	Theoretical	Student presentations
	Practice	
	Laboratory	
Week 15	Theoretical	Student presentations
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	3	2	2	2	2	2	2	0	0	3	3
OC2	0	4	3	3	2	3	2	3	2	2	3	5
OC3	2	2	2	2	0	1	1	0	2	2	0	4
OC4	1	4	1	2	3	2	2	3	1	2	3	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Intelligence Games		
Course Code	BİL 1210	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Definition of Intelligence, Types of Intelligence and Ways to Improve Intelligence Definition, relationship between game and intelligence development. The definition of visual perception and the importance of the difference between looking and seeing. The importance of the terms induction and deduction in games that improve visual perception and reinforcement with applications. Determination and implementation of different strategies according to the game flow, Games that develop Problem Solving Skills, Games that improve visual perception, Games that develop thinking skills.

The Aim of Course

The aim of this course is; to introduce different intelligence and mind games to improve the thinking skills of prospective teachers and to improve their students' thinking skills with similar practices when they start their teaching profession and to use them effectively in acquiring skills in other lessons.

Learning Outcomes

1. Knows the aims of education of intelligence games they play using their mental abilities such as logic, attention and memory,
2. Explains the importance of intelligence games,
3. Understands the types and characteristics of intelligence and chooses the games suitable for students
4. Prepares the suitable environment for the game,
5. Explains the types and applications of intelligence games that improve visual perception,
6. Explains the types and applications of intelligence games that develop thinking skills,
7. Explains the types and applications of intelligence games that improve productive thinking
8. Selects the tools and equipment to be used in the game
9. Relates the gains in different lessons and the mind and mind games.

Evaluation Criteria

Vize (%20) Derse Katılım (%20) Final (%60)

Recommended or Required Reading

MEB, (2018). Geleneksel Oyunlar Ve Zekâ Oyunları Alanı. AnkaraMEB, (2013) Zeka Oyunları Dersi Öğretim Programı. Ankara

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction of the course and planning of the semester
	Practice	



	Laboratory	
Week 2	Theoretical	Definition of Intelligence, Types of Intelligence and Ways to Develop Intelligence.
	Practice	
	Laboratory	
Week 3	Theoretical	Definition of Game, Relationship between Game and Intelligence Development
	Practice	
	Laboratory	
Week 4	Theoretical	Mangala game, its rules and application
	Practice	
	Laboratory	
Week 5	Theoretical	Checkers game, its rules and application (Turkish Checkers, 10x10 International Checkers
	Practice	
	Laboratory	
Week 6	Theoretical	Checkers game, its rules and application (Chinese Checkers, Color Checkers (Skippity)
	Practice	
	Laboratory	
Week 7	Theoretical	Reversi game, rules and implementation
	Practice	
	Laboratory	
Week 8	Theoretical	Qwirkle game, rules and implementation
	Practice	
	Laboratory	
Week 9	Theoretical	Midterm
	Practice	
	Laboratory	
Week 10	Theoretical	Hanoi towers game, rules and application
	Practice	
	Laboratory	
Week 11	Theoretical	Domino and Mikado game, rules and application
	Practice	
	Laboratory	
Week 12	Theoretical	3-9-12 Stone games, their rules and application Jenga game, its rules and application
	Practice	
	Laboratory	
Week 13	Theoretical	Path and Magic Pyramid games, rules and application
	Practice	
	Laboratory	
Week 14	Theoretical	Nim and Resfebe games, rules and application
	Practice	
	Laboratory	
Week 15	Theoretical	Mindware Skippity games, rules and application
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	2	3	1	4	3	4	1	3	2	1	3
OC2	3	2	0	0	2	3	2	0	2	3	0	3
OC3	4	4	4	0	3	4	2	0	2	2	1	1
OC4	4	3	2	0	2	4	1	2	3	2	0	1
OC5	5	4	4	0	3	3	2	4	3	3	1	2
OC6	4	3	4	2	2	3	2	2	3	2	1	1
OC7	3	3	3	1	3	3	2	3	3	2	2	2
OC8	3	3	3	2	3	3	3	1	2	1	0	2
OC9	3	3	3	2	3	3	3	2	2	2	0	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Professional Mathematics		
Course Code	BİL 1212	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

numbersExponential-radical numbersabsolute valuefactorizationsolving equationsproblems

The Aim of Course

Students learn basic math calculations and to develop problem-solving skills.

Learning Outcomes

1. Students learn basic math calculations and to develop problem-solving skills.

Evaluation Criteria

Vize (%20) Derse Katılım (%20) Final (%60)

Recommended or Required Reading

Publications prepared by the course instructor notes and open education

Course Content

Week	Topic	Content
Week 1	Theoretical	numbers
	Practice	
	Laboratory	
Week 2	Theoretical	numbers
	Practice	
	Laboratory	
Week 3	Theoretical	numbers
	Practice	
	Laboratory	
Week 4	Theoretical	numbers
	Practice	
	Laboratory	
Week 5	Theoretical	Exponential-radical numbers
	Practice	



	Laboratory	
Week 6	Theoretical	Exponential-radical numbers
	Practice	
	Laboratory	
Week 7	Theoretical	Exponential-radical numbers
	Practice	
	Laboratory	
Week 8	Theoretical	absolute value
	Practice	
	Laboratory	
Week 9	Theoretical	absolute value
	Practice	
	Laboratory	
Week 10	Theoretical	absolute value
	Practice	
	Laboratory	
Week 11	Theoretical	factorizationsolving equations problems
	Practice	
	Laboratory	
Week 12	Theoretical	factorizationsolving equations problems
	Practice	
	Laboratory	
Week 13	Theoretical	factorizationsolving equations problems
	Practice	
	Laboratory	
Week 14	Theoretical	factorizationsolving equations problems
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	2	2	1	3	3	2	2	4	2	2	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Sectoral Applications in Information Technologies		
Course Code	BİL 1214	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content
Sectoral application processes in Information Technology
The Aim of Course
Information Technology by teaching sector applications to gain perspective on the Hill

Learning Outcomes
1. To be able to learn institutions related to Information Technology standardization and standardization 2. To be able to learn the risks that may arise in Information Technology and the precautions to be taken for them 3. To be able to learn product marketing and sales proposal in Information Technology 4. To be able to learn the operational process of import and export 5. To be able to learn apply current developments in Information Technology to the sector

Evaluation Criteria
txtDegerlendirmeKriteri

Recommended or Required Reading
In Information Technology, publications such as web pages and made on a sectoral basis, research papers in economics

Course Content		
Week	Topic	Content
Week 1	Theoretical	Information Technology standardisation
	Practice	
	Laboratory	
Week 2	Theoretical	The competent institutions and organizations for Standardization
	Practice	
	Laboratory	
Week 3	Theoretical	May encounter risks in Information Technology
	Practice	
	Laboratory	
	Theoretical	The risks that may be encountered in Information Technology measures that can be taken



Week 4	Practice	
	Laboratory	
Week 5	Theoretical	Discuss the topics required for buyers
	Practice	
	Laboratory	
Week 6	Theoretical	Discuss the topics required for vendors
	Practice	
	Laboratory	
Week 7	Theoretical	On a sectoral basis preparation of sales quotes
	Practice	
	Laboratory	
Week 8	Theoretical	Export processing stepsMidterm Exam
	Practice	
	Laboratory	
Week 9	Theoretical	Export processing steps
	Practice	
	Laboratory	
Week 10	Theoretical	Operational process of export
	Practice	
	Laboratory	
Week 11	Theoretical	Import processing steps
	Practice	
	Laboratory	
Week 12	Theoretical	Operational process of Import
	Practice	
	Laboratory	
Week 13	Theoretical	To analyze the export letters of credit
	Practice	
	Laboratory	
Week 14	Theoretical	Letter of credit terms
	Practice	
	Laboratory	
Week 15	Theoretical	Sectoral applications of current technologies in Information Technology
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	5	2	2	2	0	3	3	0	0	0	0
OC2	4	4	0	2	2	3	3	2	0	0	0	0
OC3	3	4	4	4	3	4	4	0	0	0	0	0
OC4	2	3	1	0	3	2	0	3	0	0	0	0
OC5	4	5	4	3	5	2	4	4	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Linear Algebra and Its Applications		
Course Code	BİL 1216	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	2
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Systems of linear equations, the matrix equation, linear independence, matrix algebra, echelon form of a matrix, Gauss-Jordan elimination, inverse of a matrix, vector spaces and subspaces, basis for a vector space, determinants, dimension and rank of vector spaces, eigenvalues and eigenvectors, diagonalization, orthogonality.

The Aim of Course

To develop the theory of matrices, systems of linear equations, vectors and vector spaces, with emphasis on concepts and techniques used in physics and engineering.

Learning Outcomes

- 1- To be able to solve systems of linear equations.
- 2- To be able to do operations on matrices, such as finding the inverse of a matrix.
- 3- To be able to solve matrix equations.
- 4- To be able to calculate determinants.
- 5- To be able to use the Cramer's Rule.
- 6- To understand algebraically and geometrically the vector spaces and subspaces.
- 7- To be able to find a basis and the dimension of a vector space.
- 8- To understand the eigenvalues and eigenvectors.
- 9- To be able to diagonalize a matrix.
- 10- To be able to understand orthogonality; the method of Least Squares and their applications.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

D.C. Lay (2000). Linear Algebra and Its Applications, 2nd ed., Addison Wesley.

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction. Preliminaries. Basic Facts
	Practice	
	Laboratory	
Week 2	Theoretical	Systems of Linear Equations
	Practice	



	Laboratory	
Week 3	Theoretical	Matrices, Matrix operations
	Practice	
	Laboratory	
Week 4	Theoretical	Echelon form of a matrix. Gauss-Jordan Elimination. Solving Matrix Equations
	Practice	
	Laboratory	
Week 5	Theoretical	Inverse of a Matrix. Elementary matrices.
	Practice	
	Laboratory	
Week 6	Theoretical	Determinants. Cofactors. Cramer's Rule.
	Practice	
	Laboratory	
Week 7	Theoretical	Review.
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm Test.
	Practice	
	Laboratory	
Week 9	Theoretical	Vector Spaces and Subspaces.
	Practice	
	Laboratory	
Week 10	Theoretical	Linear combinations. Linear Independence.
	Practice	
	Laboratory	
Week 11	Theoretical	Basis and Dimension of a vector space.
	Practice	
	Laboratory	
Week 12	Theoretical	Eigenvalues and Eigenvectors
	Practice	
	Laboratory	
Week 13	Theoretical	Diagonalisation of a matrix. Orthogonality
	Practice	
	Laboratory	
Week 14	Theoretical	Gram-Schmidt Orthogonalization Process. The Method of Least Squares and its
	Practice	
	Laboratory	
Week 15	Theoretical	General Review. Applications to physics and engineering.
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	0	2	1	3	3	1	3	0	1	3	1
OC2	0	1	2	1	3	2	2	2	0	0	3	2
OC3	4	2	1	0	2	2	3	2	0	0	0	0
OC4	3	1	1	3	3	3	4	2	0	0	2	3
OC5	3	1	1	1	3	3	2	2	0	3	1	2
OC6	1	2	2	2	3	1	2	3	0	3	0	0
OC7	3	2	0	3	1	2	0	0	0	3	2	0
OC8	4	1	2	3	2	0	1	2	0	3	2	2
OC9	3	0	0	2	0	2	1	0	0	3	0	0
OC10	1	2	2	2	2	0	1	1	0	2	1	1



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Professional Foreign Language		
Course Code	BİL 1218	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

basic grammar structures and technical words and expressions

The Aim of Course

gaining talent to comprehend a foreign language on technical level

Learning Outcomes

1. To be able to understand a foreign language at a technical level
2. To be able to use professional concepts and definitions

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Öğr. Gör. Güven Özal, Business English, Seçkin Publishing, 1. Edition June 2018

Course Content

Week	Topic	Content
Week 1	Theoretical	Professional proficiency in foreign languages as the basis for updating the repetition of
	Practice	
	Laboratory	
Week 2	Theoretical	Professional proficiency in foreign languages as the basis for updating the repetition of
	Practice	
	Laboratory	
Week 3	Theoretical	Professional proficiency in foreign languages as the basis for updating the repetition of
	Practice	
	Laboratory	
Week 4	Theoretical	studying basic words and phases about marketing
	Practice	
	Laboratory	
Week 5	Theoretical	studying basic words and phases about marketing
	Practice	



	Laboratory	
Week 6	Theoretical	studying basic words and phases about marketing
	Practice	
	Laboratory	
Week 7	Theoretical	studying basic words and phases about marketing
	Practice	
	Laboratory	
Week 8	Theoretical	midterms
	Practice	
	Laboratory	
Week 9	Theoretical	advanced level phrases about marketing
	Practice	
	Laboratory	
Week 10	Theoretical	advanced level phrases about marketing
	Practice	
	Laboratory	
Week 11	Theoretical	advanced level phrases about marketing
	Practice	
	Laboratory	
Week 12	Theoretical	advanced level phrases about marketing
	Practice	
	Laboratory	
Week 13	Theoretical	use of language skills in the job field
	Practice	
	Laboratory	
Week 14	Theoretical	use of language skills in the job field
	Practice	
	Laboratory	
Week 15	Theoretical	Final exam
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	2	2	0	1	3	3	1	1	3	1	2
OC2	2	2	3	3	3	2	0	0	2	3	2	1



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Quality Assurance and Standards		
Course Code	BİL 1240	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The Concept of Quality, Standards and Standardization, the importance of the standard manufacturing and service sector, management quality and standards, environmental standards for quality and standards of Directors Environmental standards, Quality management system models, models of quality management system, strategic management, strategic management to participate in management, process management system, resource management system, resource management system, the EFQM Excellence Model, the production quality control inspection and sampling, inspection and sampling of Total Quality Control, Total Quality Control , Control Charts, Statistical Distributions.

The Aim of Course

Quality, standardization and to provide information about environmental standards.

Learning Outcomes

1. To be able to define environmental standards and resource management systems
2. To be able to protect the health and safety of human life
3. To be able to facilitate the exchange of information and agreements between related groups

Evaluation Criteria

Vize (%20) Derse Katılım (%20) Final (%60)

Recommended or Required Reading

Reflective, mass media, calculation tools, paper, pencil, eraser, lecture notes

Course Content

Week	Topic	Content
Week 1	Theoretical	The concept of quality
	Practice	
	Laboratory	
Week 2	Theoretical	The concept of quality and standardization
	Practice	
	Laboratory	
Week 3	Theoretical	Standards and standardization
	Practice	



	Laboratory	
Week 4	Theoretical	The importance of manufacturing and service sector of the standard
	Practice	
	Laboratory	
Week 5	Theoretical	The importance of manufacturing and service sector of the standard
	Practice	
	Laboratory	
Week 6	Theoretical	EFQM Excellence Model, the production quality control
	Practice	
	Laboratory	
Week 7	Theoretical	Strategic management, participation in management
	Practice	
	Laboratory	
Week 8	Theoretical	Strategic management, participation in management
	Practice	
	Laboratory	
Week 9	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 10	Theoretical	Process management system
	Practice	
	Laboratory	
Week 11	Theoretical	Quality management system models
	Practice	
	Laboratory	
Week 12	Theoretical	Control charts
	Practice	
	Laboratory	
Week 13	Theoretical	Inspection and sampling
	Practice	
	Laboratory	
Week 14	Theoretical	Total quality control
	Practice	
	Laboratory	
Week 15	Theoretical	Statistical distributions
	Practice	
	Laboratory	

Program and Learning Outcomes Relations

OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	4	3	3	0	3	2	3	2	2	4	1
OC2	3	3	1	3	3	4	2	2	2	3	2	0
OC3	2	2	1	4	2	0	0	1	2	0	3	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Technology Management		
Course Code	BİL 1222	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Create value from science and technology. Critical factors in technology management. Sources and types of the innovations. Case analysis on innovation. Technology and competitiveness of the company. Basic competences and technology life cycle. The commercialization of the technology. Technology strategy. Technology planning. Technology transfer. Green technology management. National innovation systems.

The Aim of Course

To introduce methods and models which are used in technology management at comprehensive and interpretive level.

Learning Outcomes

1. To be able to improve knowledge and faculty continuously to adapt the rapidly changing technological environment and to find methods improving existing information
2. To be able to express his ideas and findings effectively either oral or written as regards the subject of the research
3. To be able to explain the general definitions, terms and principals which are used in technology management

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

1. Robert C. Megantz, Technology Management: Developing and Implementing Effective Licensing Programs, 2002, Wiley. 2. M. V. Zedtwitz, G. Haour, T. Khalil, Management of Technology, 2003, Pergamon Press. 3. Joseph Tidd, Joe Tidd (Ed.), From Knowledge Management to Strategic Competence: Measuring Technological, Market and Organizational Innovation (Technology Management), 2000, Imperial College Press. 4. Schilling, Strategic Management of Technological Innovation, 2009, McGraw-Hill. 5. Brown, C.V., DeHayes, D.W., Hoffer, J.A. & Martin, W.E., Managing Information Technology, 2011, Prentice Hall. 6. Betz, F. Managing Technological Innovation: Competitive Advantage from Change, 2011, John Wiley & Sons.

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction
	Practice	
	Laboratory	
Week 2	Theoretical	Create value from science and technology
	Practice	



	Laboratory	
Week 3	Theoretical	Create value from science and technology
	Practice	
	Laboratory	
Week 4	Theoretical	Critical factors in technology management
	Practice	
	Laboratory	
Week 5	Theoretical	Sources and types of the innovations
	Practice	
	Laboratory	
Week 6	Theoretical	Case analysis on innovation
	Practice	
	Laboratory	
Week 7	Theoretical	Technology and competitiveness of the company
	Practice	
	Laboratory	
Week 8	Theoretical	Basic competences and technology life cycle
	Practice	
	Laboratory	
Week 9	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 10	Theoretical	Commercialization of technology
	Practice	
	Laboratory	
Week 11	Theoretical	Commercialization of technology
	Practice	
	Laboratory	
Week 12	Theoretical	Technology strategy
	Practice	
	Laboratory	
Week 13	Theoretical	Technology planning
	Practice	
	Laboratory	
Week 14	Theoretical	Technology transfer
	Practice	
	Laboratory	
Week 15	Theoretical	Green technology management
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	3	5	5	3	3	4	3	3	3	1	2
OC2	4	4	4	3	3	4	5	3	5	4	4	4
OC3	4	4	3	4	0	3	2	4	3	4	5	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Innovation Management		
Course Code	BİL 1224	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Innovation: Introduction and Challenges, Innovation Management: Introduction, Innovation in Context: Business Environment, Role of the State, Impact of Technology, Innovation Process, Innovation: Major theories, Innovation: Creativity and Human Factors Individual, Team, and Leadership, Managing innovation within firms, Managing intellectual property, Managing organizational knowledge, Management of research and development, New product development & service innovation, Open innovation and technology transfer

The Aim of Course

The objective of this course is to draw on various theoretical foundations and business cases to develop an understanding of the factors that lead to successful innovation in organizations and manage innovation.

Learning Outcomes

1. To be able to learn the various types of innovation in organizations
2. To be able to understand on the major organizational barriers to innovation and creativity
3. To be able to understand the roles played by leadership and organizational design factors in innovation
4. To be able to have information on the steps in the innovation process, and mechanisms for directing and controlling the process
5. To be able to understand contextual influences on innovation within organizations

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Trott, P. (2008). Innovation Management and New Product Development, 4th ed. Harlow: Pearson. Millson, M. & Wilemon, D. (2007). The Strategy of Managing Innovation and Technology. Prentice Hall. Tidd J, and Bessant J. (2009) Managing Innovation 4th Edition. John Wiley and Sons, Chichester, UK

Course Content

Week	Topic	Content
Week 1	Theoretical	Innovation
	Practice	
	Laboratory	
Week 2	Theoretical	Innovation Management: Introduction
	Practice	
	Laboratory	



Week 3	Theoretical	Innovation in Context: Business Environment, Role of the State
	Practice	
	Laboratory	
Week 4	Theoretical	Innovation in Context: Impact of Technology
	Practice	
	Laboratory	
Week 5	Theoretical	Innovation Process
	Practice	
	Laboratory	
Week 6	Theoretical	Innovation: Major theories
	Practice	
	Laboratory	
Week 7	Theoretical	Creativity and Human Factors Individual
	Practice	
	Laboratory	
Week 8	Theoretical	Team, and Leadership
	Practice	
	Laboratory	
Week 9	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 10	Theoretical	Managing innovation within firms
	Practice	
	Laboratory	
Week 11	Theoretical	Managing intellectual property
	Practice	
	Laboratory	
Week 12	Theoretical	Management of research and development
	Practice	
	Laboratory	
Week 13	Theoretical	New product development & service innovation
	Practice	
	Laboratory	
Week 14	Theoretical	New product development & service innovation
	Practice	
	Laboratory	
Week 15	Theoretical	Open innovation and technology transfer
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	2	1	0	3	2	3	2	3	0	2	1
OC2	3	2	1	0	2	3	2	2	0	0	2	3
OC3	2	3	2	0	4	1	2	2	3	0	2	1
OC4	2	2	2	0	2	2	3	3	0	0	1	1
OC5	3	4	1	0	3	1	3	1	1	0	1	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Communication and Ethics		
Course Code	BİL 1226	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Concepts of ethics and ethics, ethics in communication, basic ethical problems in the media are examined.

The Aim of Course

The purpose of this derste ethics is to present the concepts of ethics with historical, theoretical and institutional backgrounds, to discuss the ethical problems encountered in the media through current examples, and to introduce students to the in-service supervision mechanisms.

Learning Outcomes

1. To be able to explain the concepts of morality and ethics
2. To be able to demonstrate the difference between moral and ethical concepts and legal norms
3. To be able to explain the basic elements of communication in communication
4. Be able to develop a critical perspective on the current ethical issues of the media at academic level

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Andrew Belsey, Ruth Chadwick, Ethical Issues in Media and Journalism, Detail Publications, 1998Bülent Çaplı, Hakan Tuncel, Ethics in TV Journalism, Ankara University Faculty of Communication, 2009

Course Content

Week	Topic	Content
Week 1	Theoretical	Basic concepts of morals and morality
	Practice	
	Laboratory	
Week 2	Theoretical	Basic concepts about ethics and ethics
	Practice	
	Laboratory	
Week 3	Theoretical	Property and Media Auditing in the Media
	Practice	
	Laboratory	
Week 4	Theoretical	Basic ethical problems in the media
	Practice	



	Laboratory	
Week 5	Theoretical	Third page news
	Practice	
	Laboratory	
Week 6	Theoretical	News source and contacts
	Practice	
	Laboratory	
Week 7	Theoretical	News source and contacts
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Nationalism
	Practice	
	Laboratory	
Week 10	Theoretical	Judicial news
	Practice	
	Laboratory	
Week 11	Theoretical	Press during the election period
	Practice	
	Laboratory	
Week 12	Theoretical	Press during the election period
	Practice	
	Laboratory	
Week 13	Theoretical	Press during the election period
	Practice	
	Laboratory	
Week 14	Theoretical	New media and ethical issues
	Practice	
	Laboratory	
Week 15	Theoretical	New media and ethical issues
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	1	1	2	0	2	1	1	1	0	0	4	2
OC2	0	1	2	0	2	0	1	1	0	0	3	3
OC3	2	3	1	0	1	0	2	0	0	0	2	2
OC4	2	2	0	0	1	1	0	0	0	0	3	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Art and Aesthetics		
Course Code	BİL 1228	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The aim of this course is to provide students with an aesthetic awareness and perspective. In addition, showing the functions that art fulfills in the life of the individual and society is to introduce different understandings of art.

The Aim of Course

To understand the importance of art both in individual and social world; recognize the importance of viewing world from different perspectives; to gain insight into the differences between aesthetics and philosophy of art.

Learning Outcomes

1. Gain an aesthetical consciosness;
2. Classificate the arts with different criteria;
3. Learn the function of art both in society and in the life of individual;
4. Gain insight into different art conceptions;
5. See the replacment of aesthetic essentialism by anti-essentialism in 20th century;
6. Learn the bases and kinds of art criticism;
7. Gain an aesthetical consciosness;

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

N. Bozkurt, Sanat ve Estetik Kuramları, Bursa, Say yay, 2006Ahmet Cevizci, Felsefe, Ankara, Nobel yayınları, 2011.

Course Content

Week	Topic	Content
Week 1	Theoretical	Definition of aesthetics as a branch of philosophy; division of the subject area of aesthetics
	Practice	
	Laboratory	
Week 2	Theoretical	Basic concepts of aesthetics: aesthetic object and subject.
	Practice	
	Laboratory	
Week 3	Theoretical	Aesthetic value; concept of beauty; distinction between natural and artificial beauty.
	Practice	
	Laboratory	



Week 4	Theoretical	Basic properties of aesthetic judgement.
	Practice	
	Laboratory	
Week 5	Theoretical	Aesthetic subjectivism/relativism – aesthetic objectivism/absolutism.
	Practice	
	Laboratory	
Week 6	Theoretical	Classification of arts with different criteria.
	Practice	
	Laboratory	
Week 7	Theoretical	Introduction to Essentialist art conceptions; Plato's mimetical view of art.
	Practice	
	Laboratory	
Week 8	Theoretical	midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Aristotle's both mimetical and cathartic art conception.
	Practice	
	Laboratory	
Week 10	Theoretical	Romantic view of art.
	Practice	
	Laboratory	
Week 11	Theoretical	Formalist and Expressionist art conceptions.
	Practice	
	Laboratory	
Week 12	Theoretical	Introduction to anti-essentialist art conceptions; Institutional view of art.
	Practice	
	Laboratory	
Week 13	Theoretical	Postmodern view of art; historicist art conception.
	Practice	
	Laboratory	
Week 14	Theoretical	Main currents in art.
	Practice	
	Laboratory	
Week 15	Theoretical	Art criticism.
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	1	3	0	1	0	1	1	1	0	2	3
OC2	3	1	4	0	2	3	1	1	0	0	1	3
OC3	2	3	2	0	2	3	2	0	2	0	3	1
OC4	2	1	2	0	2	0	0	2	3	0	3	1
OC5	3	2	2	0	2	2	1	0	2	0	3	2
OC6	2	2	3	0	0	2	2	1	2	0	2	4
OC7	3	1	3	0	1	4	3	0	3	0	2	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Sustainable Development and Information Technologies		
Course Code	BİL 1230	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Sustainability concept and usage areas; sustainability in terms of social sciences and science; sustainability in the context of social change; education and sustainability; the future of humanity and sustainability; immigration, poverty and inequality; sustainable environment; ecology, global environmental problems and sustainability; sustainable society in harmony with nature; population, economic system and natural environment; technological developments, consumption habits and the environment; social responsibility studies, sustainability in terms of tangible and intangible cultural heritage; the rethinking of human-nature relations on the axis of sustainability.

The Aim of Course

Enabling students to gather sustainability concept and usage areas.

Learning Outcomes

1. The student explains the economic direction of education.
2. The student grasps the concept of economic development.
3. The student analyzes the relationship between economic development and education.
4. The student determines the externalities of the education.
5. The student analyzes the relationship between social inequality and education.
6. The student explains the relationship between employment and education.
7. Students appreciate the importance of transferring cultural heritage in economic development.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Günkör, C. (2017). Eğitim ve kalkınma ilişkisinin incelenmesi. Uluslararası Sosyal Bilimler Eğitimi Dergisi, 3(1), 14-32. Karakütük, K. (2012). Eğitim Planlaması. Ankara: Elhan. Hanusek, E. ve Woessmann, L. (2007). The role of education quality for economic growth. World Bank Policy Research Working Paper No. 4122. Gürlük, S. (2010). Sürdürülebilir kalkınma geliştirmekte olan ülkelerde uygulanabilir mi? Eskişehir Osmangazi Üniversitesi İİBF Dergisi, 5(2), 85-99.

Course Content

Week	Topic	Content
Week 1	Theoretical	Basic economic concepts
	Practice	



	Laboratory	
Week 2	Theoretical	The relationship between education and economy
	Practice	
	Laboratory	
Week 3	Theoretical	Relationship between development and education
	Practice	
	Laboratory	
Week 4	Theoretical	Man power planning
	Practice	
	Laboratory	
Week 5	Theoretical	Sustainability concept
	Practice	
	Laboratory	
Week 6	Theoretical	Sustainable development and education
	Practice	
	Laboratory	
Week 7	Theoretical	Environmental education and sustainable development
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm 1
	Practice	
	Laboratory	
Week 9	Theoretical	Human capital and education
	Practice	
	Laboratory	
Week 10	Theoretical	Migration, education and development
	Practice	
	Laboratory	
Week 11	Theoretical	Education in the context of globalization
	Practice	
	Laboratory	
Week 12	Theoretical	Education and teaching in the information society
	Practice	
	Laboratory	
Week 13	Theoretical	Industry 4.0 and the new educational qualities required
	Practice	
	Laboratory	
Week 14	Theoretical	Lifelong learning
	Practice	
	Laboratory	
Week 15	Theoretical	Human power planning
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	1	0	1	0	0	0	4	4	2	2	0	0
OC2	0	1	0	0	0	0	4	3	0	2	0	0
OC3	0	0	0	0	1	0	3	3	3	2	0	1
OC4	1	0	0	3	0	1	3	4	2	1	3	0
OC5	0	1	0	0	2	0	0	5	3	2	2	2
OC6	0	0	1	0	0	1	2	4	4	1	2	2
OC7	0	0	2	0	2	0	3	3	2	0	0	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Research Methods and Techniques		
Course Code	BİL 1238	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Definition of research and the importance of research, General Principles of the Data Collecting, Processing and Measurement Scales, Investigation of Causal Relationships, Mistakes in Research, Planning Research, Stages and Types, Sampling Methods, Survey Method, Observation Method, Use of Research Methods, Data Analysis and Preparation of Research Ethics, Table and Chart Construction Method, Report Writing Skills, Resource Representation

The Aim of Course

This course, intended to acquire the necessary competence to do research in the field of environment are met.

Learning Outcomes

1. To be able to the definition of research, the importance of the principles of data collection
2. To be able to analyze the causal relationships, to identify errors in this research
3. To be able to describe the planning stages of the research. Identify the sampling methods
4. To be able to describe the planning stages of the research. Identify the sampling methods
5. To be able to the table and graph can again write a research report sample
6. To be able to representation of the source. Browse the library resources
7. To be able to prepare a research proposal

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Halil SEYİDOĞLU, Scientific Research and Writing HandbookBooks and other resources that help you

Course Content

Week	Topic	Content
Week 1	Theoretical	Prepare a research proposal
	Practice	
	Laboratory	
Week 2	Theoretical	Types of Scientific Research and
	Practice	
	Laboratory	
	Theoretical	Data and Resources



Week 3	Practice	
	Laboratory	
Week 4	Theoretical	Mistakes in Research
	Practice	
	Laboratory	
Week 5	Theoretical	Stages of Planning Research and
	Practice	
	Laboratory	
Week 6	Theoretical	sampling
	Practice	
	Laboratory	
Week 7	Theoretical	Data Collection and Methods
	Practice	
	Laboratory	
Week 8	Theoretical	Midterms
	Practice	
	Laboratory	
Week 9	Theoretical	Research Ethics Rules
	Practice	
	Laboratory	
Week 10	Theoretical	Scanning the literature
	Practice	
	Laboratory	
Week 11	Theoretical	Data Analysis and Preparation
	Practice	
	Laboratory	
Week 12	Theoretical	Methods in Scientific Writing
	Practice	
	Laboratory	
Week 13	Theoretical	Table and Chart Construction Method
	Practice	
	Laboratory	
Week 14	Theoretical	Footnote And Welding Show
	Practice	
	Laboratory	
Week 15	Theoretical	Footnote And Welding Show
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	1	0	1	3	3	2	1	1	3	3	3	1
OC2	1	0	2	3	3	2	1	1	0	3	1	0
OC3	0	0	2	2	3	1	2	0	2	0	2	0
OC4	0	0	0	2	2	0	0	1	1	2	0	0
OC5	0	0	2	4	2	1	0	0	0	0	2	0
OC6	0	0	0	5	1	0	0	2	0	2	0	1
OC7	0	0	1	1	1	1	2	0	3	3	2	2



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Environmental Protection		
Course Code	BİL 1232	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Physicochemical Processes in Environmental Management / Air and Water Pollution Monitoring and Waste Processes Principles of Physical and Chemical Analysis of Air Pollution, Water Pollution, Solid Waste Disposal / Environmental Impact Assessment / Solid Waste Management / Water Treatment Plants / Environmental Management / Environmental Microbiology / Water Quality Management / air Pollution Control / Environmental Problems in Turkey.

The Aim of Course

Provide environmental protection awareness of relevant legal regulations and the requirements for teaching

Learning Outcomes

1. To be able to comply with environmental and human health protection rules.
2. To be able to revise the environmental protection measures in the workplace.
3. To be able to use up-to-date methods by following legal regulations about environment.
4. To be able to think about environment-related applications for future generations.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Textbook, textbooks and other resources to help

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction of environmental regulations, the purpose and content of short
	Practice	
	Laboratory	
Week 2	Theoretical	Environmental regulations, environmental rules specified in
	Practice	
	Laboratory	
Week 3	Theoretical	Environmental regulations regulate the working environment as specified in
	Practice	
	Laboratory	



Week 4	Theoretical	Risk analysis of the definition, purpose, conducting risk analysis related to work
	Practice	
	Laboratory	
Week 5	Theoretical	Interpreting the results of analysis of threat identification, risk control implementation, to
	Practice	
	Laboratory	
Week 6	Theoretical	Waste Management, Waste Regulations, waste control, waste reductionNatural resources,
	Practice	
	Laboratory	
Week 7	Theoretical	Waste Management, Waste Regulations, waste control, waste reductionNatural resources,
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm-exam
	Practice	
	Laboratory	
Week 9	Theoretical	Promotion of workers' health and safety at work regulationsIndividual protection
	Practice	
	Laboratory	
Week 10	Theoretical	Introduction to ISO 14001 and ISO 9001 quality system standard
	Practice	
	Laboratory	
Week 11	Theoretical	The importance of compliance with ISO 14001 and ISO 9001 quality system standard
	Practice	
	Laboratory	
Week 12	Theoretical	International health and safety alerts
	Practice	
	Laboratory	
Week 13	Theoretical	International health and safety alerts
	Practice	
	Laboratory	
Week 14	Theoretical	Ventilation, lighting systems, fire-fighting and emergency intervention systems
	Practice	
	Laboratory	
Week 15	Theoretical	Overview
	Practice	
	Laboratory	

Program and Learning Outcomes Relations

OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	3	4	0	1	0	3	4	2	0	4	5
OC2	2	2	2	1	2	0	3	2	3	0	4	5
OC3	3	3	3	1	1	0	3	4	3	0	5	5
OC4	2	2	3	2	1	0	4	4	3	0	4	5



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	First Aid		
Course Code	BİL 1234	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

General first aid information

The Aim of Course

Grasping the importance of giving first aid and first aid information

Learning Outcomes

1. To be able to know first aid in situations that require applications to
2. To be able to apply their skills to use in case of emergency first aid information
3. To be able to rapid assessment, decision-making skills to use and apply
4. To be able to first-aid tools and supplies needed for the application now and rapidity

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Textbook, textbooks and other resources to help

Course Content

Week	Topic	Content
Week 1	Theoretical	How can a life-threatening emergency is detected
	Practice	
	Laboratory	
Week 2	Theoretical	How and When We should act in accordance with the Emergency Medical System
	Practice	
	Laboratory	
Week 3	Theoretical	How makes the difference as a Result of an Emergency
	Practice	
	Laboratory	
Week 4	Theoretical	How to Make a Basic Life Support
	Practice	
	Laboratory	



Week 5	Theoretical	Emergency Response
	Practice	
	Laboratory	
Week 6	Theoretical	Survival Chain
	Practice	
	Laboratory	
Week 7	Theoretical	Medical Emergency
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm exam
	Practice	
	Laboratory	
Week 9	Theoretical	Emergency First Aid Techniques
	Practice	
	Laboratory	
Week 10	Theoretical	What are normal body functions / What are the Normal Heart and Lung Functions
	Practice	
	Laboratory	
Week 11	Theoretical	Heart attack and / or stroke What are the Risk Factors for State
	Practice	
	Laboratory	
Week 12	Theoretical	First Aid Case of Heart Attack and Stroke
	Practice	
	Laboratory	
Week 13	Theoretical	In case of choking First Aid
	Practice	
	Laboratory	
Week 14	Theoretical	General principles of triage
	Practice	
	Laboratory	
Week 15	Theoretical	Signs and Symptoms of Sudden Illness
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	2	0	0	0	0	0	2	0	1	0	2
OC2	2	2	0	0	0	0	0	2	0	1	0	2
OC3	1	3	0	0	0	0	0	2	0	2	0	1
OC4	3	0	0	0	0	0	0	2	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Business Administration		
Course Code	BİL 1236	Activity Type	Optional
Semester	Spring	Semester	2
Course Language	Turkish	National Credit	2
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Basic concepts of business, foundation of a business company, management functions, functions of human resource management.

The Aim of Course

The aim of this course is to familiarize the students with the basic concepts of business, foundation of business, management functions and functions of human resource management.

Learning Outcomes

1. To be able to describe basic concepts of economics
2. To be able to explain how to found a business company
3. To be able to business company
4. To be able to start to business activity

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

E. Ünsaler, B. Şimşeker (2011), Basic Business Informations (Temel İşletmecilik Bilgileri in Turkish), Ankara: Detay Publishing.

Course Content

Week	Topic	Content
Week 1	Theoretical	Microeconomic Data To Follow
	Practice	
	Laboratory	
Week 2	Theoretical	To Analyze The Macroeconomic Indicators
	Practice	
	Laboratory	
Week 3	Theoretical	To Identify Gaps In The Market
	Practice	
	Laboratory	
Week 4	Theoretical	Carry Out Feasibility Studies
	Practice	



	Laboratory	
Week 5	Theoretical	To Select The Most Appropriate By Evaluating Investment Alternatives
	Practice	
	Laboratory	
Week 6	Theoretical	Knowing the business Environment
	Practice	
	Laboratory	
Week 7	Theoretical	Demand Analysis and forecast of the Business Enterprise To locate in
	Practice	
	Laboratory	
Week 8	Theoretical	Determine the location of the business organization and determine the structure of legal
	Practice	
	Laboratory	
Week 9	Theoretical	midterm exam
	Practice	
	Laboratory	
Week 10	Theoretical	Determine the Cost of Total Investment Financing Capacity Achieving and determining
	Practice	
	Laboratory	
Week 11	Theoretical	Make Estimated Income and Expenditure Account
	Practice	
	Laboratory	
Week 12	Theoretical	To make Estimated Income and Expenditure Account, Business and Production Plan
	Practice	
	Laboratory	
Week 13	Theoretical	Doing Business and Investment in Production Plan To carry out the installation
	Practice	
	Laboratory	
Week 14	Theoretical	Open structure in place to create the appropriate business
	Practice	
	Laboratory	
Week 15	Theoretical	General Assessment
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	1	1	0	0	0	2	2	0	0	0	1
OC2	0	0	2	0	0	0	2	2	0	0	0	1
OC3	0	1	2	0	0	0	1	1	0	0	0	2
OC4	0	0	0	0	0	0	0	1	0	0	0	1



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Object Oriented Programming 2		
Course Code	BİL 2103	Activity Type	Compulsory
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	4
Hours Per Week	3	ECTS	5
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Orkun TEKE
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Installing Configuring Software for Object-Oriented ProgrammingPrepare the Basic programming language statements Console ApplicationsPrepare the Basic programming language statements Operating System Based ApplicationsDecision Control Statements, Loop Control StatementsControl Objects and ArraysControl Objects and ArraysUse of Object and OperatorsUse of Object and OperatorsStandard Functions, User Defined FunctionsComponent LibraryData StructuresOperating System ObjectsMenu Design and FormsDatabase OperationsInteractive Data Objects

The Aim of Course

Using an object-based language for writing program aimed to gain qualifications.

Learning Outcomes

1. To be able to set up the software needed for programming
2. To be able to develop an advanced application based on operating system
3. To be able to implement object-oriented programming paradigms
4. To be able to design connection to the database application
5. To be able to develop database-connected application

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Lecture notes, Case Studies, Prepared Slides.

Course Content

Week	Topic	Content
Week 1	Theoretical	Installing Configuring Software for Object-Oriented Programming
	Practice	
	Laboratory	
Week 2	Theoretical	Prepare the Basic programming language statements Console Applications.Prepare the
	Practice	
	Laboratory	
Week 3	Theoretical	Decision Control Statements, Loop Control Statements
	Practice	



	Laboratory	
Week 4	Theoretical	Control Objects and Arrays
	Practice	
	Laboratory	
Week 5	Theoretical	Control Objects and Arrays
	Practice	
	Laboratory	
Week 6	Theoretical	Use of Object and Operators
	Practice	
	Laboratory	
Week 7	Theoretical	Use of Object and Operators
	Practice	
	Laboratory	
Week 8	Theoretical	Standard FunctionsMIDTERM EXAM
	Practice	
	Laboratory	
Week 9	Theoretical	User Defined Functions
	Practice	
	Laboratory	
Week 10	Theoretical	Component Library
	Practice	
	Laboratory	
Week 11	Theoretical	Data Structures
	Practice	
	Laboratory	
Week 12	Theoretical	Operating System Objects
	Practice	
	Laboratory	
Week 13	Theoretical	Menu Design and Forms
	Practice	
	Laboratory	
Week 14	Theoretical	Interactive Data Objects
	Practice	
	Laboratory	
Week 15	Theoretical	Database Operations
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	5	5	2	0	2	2	0	0	0	0	0
OC2	5	5	5	3	4	4	3	0	0	0	0	0
OC3	5	5	5	2	2	3	2	0	0	0	0	0
OC4	5	5	5	5	4	3	2	0	0	0	0	0
OC5	5	5	5	5	4	3	2	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Computer Networks and Communication		
Course Code	BİL 2105	Activity Type	Compulsory
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Introduction to data and computer communication, Data transmission, Network topologies, Computer networks and classification, OSI reference model, items used in computer networks

The Aim of Course

Make students acquainted with the knowledge of technologies that infrastructure computer networks, and capable of setting up a basic computer network

Learning Outcomes

1. To explain computer network concept
2. To explain and annotate physical items of computer networks

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction to data and computer communication
	Practice	
	Laboratory	
Week 2	Theoretical	Serial communication, wired and wireless communication modes
	Practice	
	Laboratory	
Week 3	Theoretical	Modem communication, data transmission modes
	Practice	
	Laboratory	
Week 4	Theoretical	Computer networks and classification
	Practice	
	Laboratory	
	Theoretical	Network topologies



Week 5	Practice	
	Laboratory	
Week 6	Theoretical	Network topologies
	Practice	
	Laboratory	
Week 7	Theoretical	OSI reference model and its layers
	Practice	
	Laboratory	
Week 8	Theoretical	OSI reference model and its layers
	Practice	
	Laboratory	
Week 9	Theoretical	Midterm
	Practice	
	Laboratory	
Week 10	Theoretical	OSI reference model and its layers
	Practice	
	Laboratory	
Week 11	Theoretical	Items used in computer networks (wires, network interface card)
	Practice	
	Laboratory	
Week 12	Theoretical	Items used in computer networks (bridges, direction/orientation devices,...)
	Practice	
	Laboratory	
Week 13	Theoretical	Ethernet frame structure CSMA/CD operation principles
	Practice	
	Laboratory	
Week 14	Theoretical	TCP/IP layers
	Practice	
	Laboratory	
Week 15	Theoretical	IP addressing classifications
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	3	5	2	2	4	2	5	1	3	5	1	4
OC2	2	5	4	3	3	4	4	2	2	5	1	3



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Internet Programming 2		
Course Code	BİL 2107	Activity Type	Compulsory
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Application software Installation and Testing Variables and Constants, Operators Ready Decision Control Structures Loop Control Structures Functions Arrays and Objects User Defined Functions Filing Procedures Database Data Transfer Methods Between Web Forms Pages XML and Web services transactions.

The Aim of Course

This course is a client-side programming languages that run on the internet is to gain proficiency coding.

Learning Outcomes

1. To be able to install and test software required for server side programming.
2. To be able to prepare WEB page with basic commands of server side programming language.
3. To be able to form applications with server-side programming language.
4. to be able to use web services in a server-side program.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

-- Internet Programming 1-2 , Ebubekir Yaşar and Turgut Özseven - Murathan Publishing House -- Course presentation files

Course Content

Week	Topic	Content
Week 1	Theoretical	.Net Framework Lecture
	Practice	.Net Framework Lecture
	Laboratory	
Week 2	Theoretical	Asp.Net Project Types
	Practice	Asp.Net Project Types
	Laboratory	
Week 3	Theoretical	Asp.Net Controls
	Practice	Asp.Net Controls
	Laboratory	
Week 4	Theoretical	Asp.Net Controls
	Practice	Asp.Net Controls



	Laboratory	
Week 5	Theoretical	Asp.Net Validation
	Practice	Asp.Net Validation
	Laboratory	
Week 6	Theoretical	Asp.Net UserControl
	Practice	Asp.Net UserControl
	Laboratory	
Week 7	Theoretical	Asp.Net Master Page
	Practice	Asp.Net Master Page
	Laboratory	
Week 8	Theoretical	Asp.Net State Management
	Practice	Asp.Net State Management
	Laboratory	
Week 9	Theoretical	Web Forms Applications.Midterm Exam
	Practice	Web Forms Applications.
	Laboratory	
Week 10	Theoretical	Web Forms Applications.
	Practice	Web Forms Applications.
	Laboratory	
Week 11	Theoretical	Data Transfer Methods Between Pages.
	Practice	Data Transfer Methods Between Pages.
	Laboratory	
Week 12	Theoretical	Database Operations-1
	Practice	Database Operations
	Laboratory	
Week 13	Theoretical	Database Operations-2
	Practice	Database Operations
	Laboratory	
Week 14	Theoretical	XML and Web services -1
	Practice	XML and Web services
	Laboratory	
Week 15	Theoretical	XML and Web services -2
	Practice	XML and Web services
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	4	4	3	4	4	3	1	0	0	0	0
OC2	5	5	5	4	4	5	3	1	0	0	0	0
OC3	5	5	5	4	4	5	3	1	0	0	0	0
OC4	4	4	4	4	4	5	3	1	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Software Architectures		
Course Code	BİL 2201	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Requirement analysis, selecting the software architecture and software developing model, using design tools, software designing, coding, file version control tools, testing of the software, project management tools, maintenance and repair process.

The Aim of Course

With this course students, aimed to gain qualifications related to software architectures.

Learning Outcomes

1. To be able to develop software.
2. To be able to perform maintenance and test of the software.
3. To be able to determine software requirements.
4. To be able to explain relationships software and hardware.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Lecturer notes.

Course Content

Week	Topic	Content
Week 1	Theoretical	Identifying requirements and perform analysis.
	Practice	---
	Laboratory	
Week 2	Theoretical	Select a model of software development and software architecture.
	Practice	---
	Laboratory	
Week 3	Theoretical	Select a model of software development and software architecture.
	Practice	---
	Laboratory	
Week 4	Theoretical	Using designing tools.
	Practice	---



	Laboratory	
Week 5	Theoretical	Designing the software with accordance to requirements.
	Practice	---
	Laboratory	
Week 6	Theoretical	Designing the software with accordance to requirements.
	Practice	---
	Laboratory	
Week 7	Theoretical	Software coding.
	Practice	---
	Laboratory	
Week 8	Theoretical	Software coding.
	Practice	---
	Laboratory	
Week 9	Theoretical	Using the file version control tools.Midterm Exam.
	Practice	---
	Laboratory	
Week 10	Theoretical	Using the file version control tools.
	Practice	---
	Laboratory	
Week 11	Theoretical	Using the test tools.
	Practice	---
	Laboratory	
Week 12	Theoretical	Using the test tools, Testing the software.
	Practice	---
	Laboratory	
Week 13	Theoretical	Testing the software.
	Practice	---
	Laboratory	
Week 14	Theoretical	Using the project management tools.
	Practice	---
	Laboratory	
Week 15	Theoretical	Performing repair and maintenance process.
	Practice	---
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	5	5	3	3	3	0	0	0	0	0	0
OC2	5	3	4	2	1	0	0	0	0	0	0	0
OC3	4	3	4	1	0	2	3	0	0	0	0	0
OC4	4	2	4	1	2	0	0	0	0	2	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Software Installation and Management		
Course Code	BİL 2203	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Operating system, security programs, office programs, server operating systems

The Aim of Course

With this course, students will acquire competencies related to software aimed.

Learning Outcomes

1. To be able to install the operating system
2. To be able to install the hardware drivers
3. To be able to make advanced setup.
4. To be able to install application software.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

-- Software Requirements, Karl E. Wiegers, Microsoft-- Course Notes

Course Content

Week	Topic	Content
Week 1	Theoretical	Operating Systems
	Practice	
	Laboratory	
Week 2	Theoretical	Operating Systems
	Practice	
	Laboratory	
Week 3	Theoretical	Operating System Installation
	Practice	Operating System Installation
	Laboratory	
Week 4	Theoretical	Operating System Installation
	Practice	Operating System Installation
	Laboratory	



Week 5	Theoretical	System Features
	Practice	System Features
	Laboratory	
Week 6	Theoretical	System FeaturesControl Panel
	Practice	System FeaturesControl Panel
	Laboratory	
Week 7	Theoretical	Control Panel
	Practice	Control Panel
	Laboratory	
Week 8	Theoretical	Server operating system installation
	Practice	Server operating system installation
	Laboratory	
Week 9	Theoretical	Group PoliciesMidterm Exam
	Practice	Group Policies
	Laboratory	
Week 10	Theoretical	Group Policies
	Practice	Group Policies
	Laboratory	
Week 11	Theoretical	Operating System to Augment
	Practice	Operating System to Augment
	Laboratory	
Week 12	Theoretical	Security Software
	Practice	Security Software
	Laboratory	
Week 13	Theoretical	Security SoftwareOffice Software
	Practice	Security SoftwareOffice Software
	Laboratory	
Week 14	Theoretical	Office Software
	Practice	Office Software
	Laboratory	
Week 15	Theoretical	Other Application Software
	Practice	Other Application Software
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	0	0	0	0	0	0	0	0	0	0	0
OC2	5	0	2	0	0	0	0	0	0	0	0	0
OC3	5	3	3	0	0	0	0	0	0	0	0	0
OC4	5	0	0	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	E-Commerce and Applications		
Course Code	BİL 2205	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Introduction to e-commerce, e-commerce infrastructure, building e-commerce web sites, e-commerce security and payment, business models for e-commerce, e-commerce marketing, e-commerce advertising, ethics, laws and e-commerce, online media, social networks and communities, online railing and services, B2B e-commerce, state of e-commerce in the world and Turkey.

The Aim of Course

The aim of this course is to teach e-commerce and the emerging basic concepts regarding to e-commerce. In this course, students will determine e-commerce customers according to product and sales strategies of company and they will learn e-commerce based on customers' characteristics. The students will have knowledge about how a e-commerce web site build step by step. In addition, the students will perform an e-commerce project within the course.

Learning Outcomes

1. to be able to learn basic concepts of e-commerce,
2. to be able to understand e-commerce models,
3. to be able to know advantages and disadvantages of e-commerce,
4. to be able to have knowledge about the information economy and technologies,
5. to be able to learn the tools and installation of infrastructure of e-commerce web site,
6. to be able to have opinion about the how provide security in e-commerce.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Laudon, K. C. and Traver, C. G. 2011. E-Commerce 2011 (7th Ed.), Pearson.

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduce to course, Introduction to E-commerce
	Practice	
	Laboratory	
Week 2	Theoretical	Business Models for E-commerce (B2B, B2C, C2C, P2P)
	Practice	
	Laboratory	



Week 3	Theoretical	E-commerce Infrastructure: Internet and Web
	Practice	
	Laboratory	
Week 4	Theoretical	Building E-commerce Web Sites
	Practice	
	Laboratory	
Week 5	Theoretical	E-commerce Security and Payment
	Practice	
	Laboratory	
Week 6	Theoretical	E-commerce Marketing
	Practice	
	Laboratory	
Week 7	Theoretical	E-commerce Advertising
	Practice	
	Laboratory	
Week 8	Theoretical	Ethics E-commerceMIDTERM EXAM
	Practice	
	Laboratory	
Week 9	Theoretical	Laws E-commerce
	Practice	
	Laboratory	
Week 10	Theoretical	Online Retailing and Services
	Practice	
	Laboratory	
Week 11	Theoretical	Online Media
	Practice	
	Laboratory	
Week 12	Theoretical	Social Networks and Communities
	Practice	
	Laboratory	
Week 13	Theoretical	B2B E-commerce
	Practice	
	Laboratory	
Week 14	Theoretical	Project Presentations
	Practice	
	Laboratory	
Week 15	Theoretical	Project Presentations
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	3	0	0	0	0	0	0	0	0	0	0
OC2	3	1	0	0	0	0	0	0	0	0	0	0
OC3	3	0	0	0	0	0	0	0	0	0	0	0
OC4	3	0	0	0	0	0	0	0	0	0	0	0
OC5	3	0	4	0	4	3	0	0	0	0	0	0
OC6	3	0	3	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Client-Side Programming		
Course Code	BİL 2207	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Application software Installation and Testing Variables and Constants, Operators Ready Decision Control Structures Loop Control Structures Functions Arrays and Objects User Defined Functions Filing Procedures Database Data Transfer Methods Between Web Forms Pages XML and Web services transactions.

The Aim of Course

This course is a client-side programming languages that run on the internet is to gain proficiency coding.

Learning Outcomes

1. To be able to evaluate the differences, advantages and disadvantages of Internet applications in different types.
2. To be able to develop web-based complex solutions by using "Web Server, Database and SSL".
3. To be able to use web scripting languages.
4. To be able to develop dynamic web applications with JS.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Internet Programming, 1-2 , Ebubekir Yaşar -Turgutözseven, Murathan Publishing House

Course Content

Week	Topic	Content
Week 1	Theoretical	Installation and Testing Application software.
	Practice	Installation and Testing Application software.
	Laboratory	
Week 2	Theoretical	Variables and Constants, Operators.
	Practice	Variables and Constants, Operators.
	Laboratory	
Week 3	Theoretical	Decision Control Structures.
	Practice	Decision Control Structures.
	Laboratory	
Week 4	Theoretical	Loop Control Structures.
	Practice	Loop Control Structures.



	Laboratory	
Week 5	Theoretical	User Defined Functions.
	Practice	User Defined Functions.
	Laboratory	
Week 6	Theoretical	Available Functions.
	Practice	Available Functions.
	Laboratory	
Week 7	Theoretical	Arrays and Objects.
	Practice	Arrays and Objects.
	Laboratory	
Week 8	Theoretical	Filing Procedures.
	Practice	Filing Procedures.
	Laboratory	
Week 9	Theoretical	Web Forms Applications.Midterm Exam
	Practice	Web Forms Applications.
	Laboratory	
Week 10	Theoretical	Web Forms Applications.
	Practice	Web Forms Applications.
	Laboratory	
Week 11	Theoretical	Data Transfer Methods Between Pages.
	Practice	Data Transfer Methods Between Pages.
	Laboratory	
Week 12	Theoretical	Database Operations-1
	Practice	Database Operations
	Laboratory	
Week 13	Theoretical	Database Operations-2
	Practice	Database Operations
	Laboratory	
Week 14	Theoretical	XML and Web services -1
	Practice	XML and Web services
	Laboratory	
Week 15	Theoretical	XML and Web services -2
	Practice	XML and Web services
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	0	3	0	0	0	0	0	0	0	0	0
OC2	3	1	3	0	0	1	0	0	0	0	0	0
OC3	1	1	4	0	0	0	0	0	0	0	0	0
OC4	1	1	5	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Web Editor		
Course Code	BİL 2209	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Web Editor Basic Tools Text Processing Table Operations Multi-Media Operations links Border Operations Templates Library Operations Form Processing interactive Elements Layer Operations Accessibility and Site Management

The Aim of Course

WEB will provide competencies in designing a web page using the editor.

Learning Outcomes

1. Perform basic operations with html codes for web pages
2. Html code to create web pages with advanced features for
3. Style sheet (CSS) configuration to perform

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Lecture notes, course books and podcasts

Course Content

Week	Topic	Content
Week 1	Theoretical	Web Editor Basic Tools
	Practice	
	Laboratory	
Week 2	Theoretical	Text Processing
	Practice	
	Laboratory	
Week 3	Theoretical	Table Operations
	Practice	
	Laboratory	
Week 4	Theoretical	Multi-Media Operations
	Practice	
	Laboratory	



Week 5	Theoretical	Multi-Media Operations
	Practice	
	Laboratory	
Week 6	Theoretical	links
	Practice	
	Laboratory	
Week 7	Theoretical	Border Transactions
	Practice	
	Laboratory	
Week 8	Theoretical	Templates
	Practice	
	Laboratory	
Week 9	Theoretical	TemplatesMidterm Exam
	Practice	
	Laboratory	
Week 10	Theoretical	Library Operations
	Practice	
	Laboratory	
Week 11	Theoretical	Library Operations
	Practice	
	Laboratory	
Week 12	Theoretical	Form Actions
	Practice	
	Laboratory	
Week 13	Theoretical	Interactive Elements
	Practice	
	Laboratory	
Week 14	Theoretical	Layer Operations
	Practice	
	Laboratory	
Week 15	Theoretical	Accessibility and Site Management
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	0	2	0	0	0	0	0	0	0	0	0
OC2	5	3	3	0	0	0	0	0	0	0	0	0
OC3	4	1	2	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	Mathematics Applications in Information Technologies		
Course Code	BİL 2211	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Propositions and logic; sets; relations and functions; Boolean Algebra and modern logic; number theory; probability theory; trees and hierarchy; matrices; Graph Theory and its applications; analysis of algorithm.

The Aim of Course

To provide a particular set of mathematical facts which take part on the theoretical basis of informatics, present the instruction that will guide students on when and how to use mathematical theories and principles in informatics, and help students to develop mathematical thinking which they need in informatics.

Learning Outcomes

1. The student will learn the basic concepts and terminology.
2. The student will decide how to use different types of discrete structures.
3. The student will learn the applications of mathematical theories and principles in informatics.
4. The student will have a sufficient body of knowledge to reach and use the relevant resources on mathematics.
5. The student will apply the theoretical knowledge about the mathematics (ex. Algorithms, functions, logic, and etc.) in informatics field as needed.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Ayrık Matematik ve Uygulamaları, Kenneth H. Rosen, Çevirenler: Ömer Akın Murat Özbayoğlu, Palme Yayınevi, 2015. Bilişim Matematiği: Uygulamalı Ayrık Matematik, Çölkesen, R., Papatya Yayıncılık Eğitim, 2015. Discrete Mathematics and Its Applications, Kenneth H. Rosen, McGraw-Hill Discrete Mathematics, R. Johnsonbaugh, Prentice Hall Discrete Mathematics, Kenneth A. Ross, Prentice Hall

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction to Informatics and Mathematics
	Practice	
	Laboratory	
Week 2	Theoretical	Propositions and Logic
	Practice	
	Laboratory	



Week 3	Theoretical	Sets 1
	Practice	
	Laboratory	
Week 4	Theoretical	Sets 2
	Practice	
	Laboratory	
Week 5	Theoretical	Relations and Functions-I
	Practice	
	Laboratory	
Week 6	Theoretical	Relations and Functions-II
	Practice	
	Laboratory	
Week 7	Theoretical	Boolean Algebra and Modern(Symbolic) Logic
	Practice	
	Laboratory	
Week 8	Theoretical	Midterm 1
	Practice	
	Laboratory	
Week 9	Theoretical	Fuzzy Logic
	Practice	
	Laboratory	
Week 10	Theoretical	Numbers Theory
	Practice	
	Laboratory	
Week 11	Theoretical	Probability Theory
	Practice	
	Laboratory	
Week 12	Theoretical	Trees and Hierarchy
	Practice	
	Laboratory	
Week 13	Theoretical	Calculations of Matrices and Determinants
	Practice	
	Laboratory	
Week 14	Theoretical	Graph Theory
	Practice	
	Laboratory	
Week 15	Theoretical	Analysis of Algorithm
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	2	1	0	0	0	2	0	1	1	0	0
OC2	2	0	0	0	0	0	2	0	0	1	0	0
OC3	1	0	2	0	0	0	3	0	1	0	0	0
OC4	0	3	0	0	0	0	1	0	0	1	0	0
OC5	2	1	1	0	0	0	0	0	1	1	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	System Analysis and Design		
Course Code	BİL 2213	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

With this course the student, using his technical knowledge in the sector be able to create a viable project in detail.

The Aim of Course

With this course the student, using his technical knowledge in the sector be able to create a viable project in detail.

Learning Outcomes

1. To be able to determine the scope of the final project
2. To be able to do more research on the subject project
3. To be able to preparation for the writing of the project code
4. To be able to writing project
5. To be able to installation package, and report preparation of the project, will gain competencies

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

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Course Content

Week	Topic	Content
Week 1	Theoretical	Select the subject area of the project for
	Practice	Select the subject area of the project for
	Laboratory	
Week 2	Theoretical	Submit Information Obtained
	Practice	Submit Information Obtained
	Laboratory	
Week 3	Theoretical	Identify the issues and analysis of the project Working Environment
	Practice	Identify the issues and analysis of the project Working Environment
	Laboratory	
Week 4	Theoretical	Detecting the data to be saved in the project, and Types
	Practice	Detecting the data to be saved in the project, and Types



	Laboratory	
Week 5	Theoretical	Submit Information Obtained
	Practice	Submit Information Obtained
	Laboratory	
Week 6	Theoretical	Identify the project's Algorithm and Flow Chart
	Practice	Identify the project's Algorithm and Flow Chart
	Laboratory	
Week 7	Theoretical	Establishing a Platform for the project's working
	Practice	Establishing a Platform for the project's working
	Laboratory	
Week 8	Theoretical	Preparation of the Terms
	Practice	Preparation of the Terms
	Laboratory	
Week 9	Theoretical	Main Subjects Code writing and testing of the project
	Practice	Main Subjects Code writing and testing of the project
	Laboratory	
Week 10	Theoretical	Presentation of the project
	Practice	Presentation of the project
	Laboratory	
Week 11	Theoretical	Detailed Proposals for the project to import, code writing and testing
	Practice	Detailed Proposals for the project to import, code writing and testing
	Laboratory	
Week 12	Theoretical	Presentation of the project
	Practice	Presentation of the project
	Laboratory	
Week 13	Theoretical	Prepare the Project Installation Package
	Practice	Prepare the Project Installation Package
	Laboratory	
Week 14	Theoretical	Prepare booklet covering all stages of the project report
	Practice	Prepare booklet covering all stages of the project report
	Laboratory	
Week 15	Theoretical	Prepare booklet covering all stages of the project report
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	0	2	3	0	0	5	0	0	0	0	0	0
OC2	0	1	0	0	0	5	0	0	0	0	0	0
OC3	0	1	3	0	0	5	0	0	0	0	0	0
OC4	0	1	3	0	0	5	0	0	0	0	0	0
OC5	0	0	0	0	0	5	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES

Computer Programming
The Course Description Form

Course Name	3D Modeling		
Course Code	BİL 2215	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

2D designs,3D designs,Draftings, Using lights

The Aim of Course

Creating 3D designs

Learning Outcomes

1. To be able to recognize and use toolbars and drawing elements.
2. To be able to draw 3D elements.
3. To be able to create compound and more complex shapes from these elements.
4. To be able to make corrections on the shapes obtained.
5. Using light and shading.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

www.autodesk.com

Course Content

Week	Topic	Content
Week 1	Theoretical	Installation of the application program. Introduction of toolbars
	Practice	
	Laboratory	
Week 2	Theoretical	3D drawing tools
	Practice	
	Laboratory	
Week 3	Theoretical	3D drawing tools
	Practice	
	Laboratory	
Week 4	Theoretical	3D drawing tools
	Practice	



	Laboratory	
Week 5	Theoretical	3D element produced by 2D elements
	Practice	
	Laboratory	
Week 6	Theoretical	3D element produced by 2D elements
	Practice	
	Laboratory	
Week 7	Theoretical	Modification over existing drawings
	Practice	
	Laboratory	
Week 8	Theoretical	Modification over existing drawingsMidterm exams
	Practice	
	Laboratory	
Week 9	Theoretical	Modification over existing drawings
	Practice	
	Laboratory	
Week 10	Theoretical	Modification over existing drawings
	Practice	
	Laboratory	
Week 11	Theoretical	Modification over existing drawings
	Practice	
	Laboratory	
Week 12	Theoretical	Detailed 3d drawings
	Practice	
	Laboratory	
Week 13	Theoretical	Detailed 3d drawings
	Practice	
	Laboratory	
Week 14	Theoretical	Using lights and shadowing
	Practice	
	Laboratory	
Week 15	Theoretical	Using lights and shadowing
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	0	5	2	0	0	0	0	0	0	0	0	0
OC2	0	5	1	0	0	0	0	0	0	0	0	0
OC3	0	5	1	0	0	0	0	0	0	0	0	0
OC4	0	5	1	0	0	0	0	0	0	0	0	0
OC5	0	5	1	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Cyber Security and IT Law		
Course Code	BİL 2221	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Ethics as a concept; historical development of computer security; relationship between ethics and vocation, professional ethics; the nature of ethical principles; ethical responsibilities of digital citizenship and information society; ethical problems in the use of information resources; accuracy of information; access to information; privacy; data protection; intellectual property, copyright, patents and license agreements; IT law; cyber crimes; social effects of it crimes; basic concepts of cyberspace and cybersecurity; cyber actors and attack methods; cyber defense methods; security in mobile and social media environments; network security; personal and institutional data security management; informatics legislation and law.

The Aim of Course

The main aim of the course is to improve the level of concept knowledge and practical implementation skills of teacher candidates on generating solutions to current problems of informatics ethics and IT security.

Learning Outcomes

1. To be able to explain technological and pedagogical knowledge for problems related to computer security and informatics ethics.
2. To be able to generate solutions for social conflicts of the information age.
3. To be able to explain ethical theories in computer education.
4. To be able to develop strategies for ethics education of the next generation.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Barger, R. N. (2008). Computer ethics: A case-based approach. New York, NY: Cambridge University Press. Mason, R. O. (1986). Four ethical issues of information age. MIS Quarterly, 10(1), 5-12. Bynum, T. (2001). Computer ethics: Its birth and its future. Ethics and Information Technology, 3(2), 109-112. Kert, S. B., Uz, C., & Gecü, Z. (2014). Effectiveness of an Electronic Performance Support System on Computer Ethics and Ethical Decision-Making Education. Educational Technology & Society, 17 (3), 320-331.

Course Content

Week	Topic	Content
Week 1	Theoretical	Introduction to course, descriptions, content, weekly schedule, assessment policy,
	Practice	
	Laboratory	



Week 2	Theoretical	Ethics as a concept, ethical theory, basic philosophical approaches, the relationship
	Practice	
	Laboratory	
Week 3	Theoretical	Informatics ethics as an ethical branch, history of informatics ethics.
	Practice	
	Laboratory	
Week 4	Theoretical	The importance of individual responsibilities in the context of using application in digital
	Practice	
	Laboratory	
Week 5	Theoretical	Four ethical issues of information age: Privacy, accuracy, property, accessibility.
	Practice	
	Laboratory	
Week 6	Theoretical	The case samples used for informatics ethics education.
	Practice	
	Laboratory	
Week 7	Theoretical	The steps of process towards solving ethical issues.
	Practice	
	Laboratory	
Week 8	Theoretical	Personal and instutional data security management.Midterm
	Practice	
	Laboratory	
Week 9	Theoretical	Informatics legislation and law.
	Practice	
	Laboratory	
Week 10	Theoretical	Personal and instutional data security management; informatics legislation and law.
	Practice	
	Laboratory	
Week 11	Theoretical	Basic concepts of cyber space and cyber security; cyber actors and attack methods; cyber
	Practice	
	Laboratory	
Week 12	Theoretical	Basic concepts of cyber space and cyber security; cyber actors and attack methods; cyber
	Practice	
	Laboratory	
Week 13	Theoretical	Security and ethics in mobile and social media environments, network security.
	Practice	
	Laboratory	
Week 14	Theoretical	Security and ethics in mobile and social media environments, network security.
	Practice	
	Laboratory	
Week 15	Theoretical	Security and ethics in mobile and social media environments, network security.
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	4	0	0	0	1	0	3	0	0	0	4
OC2	3	5	0	0	0	2	0	2	0	0	0	4
OC3	3	4	0	0	0	0	0	0	0	0	0	2
OC4	2	5	0	0	0	0	0	2	0	0	0	4



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Open Source Software Development		
Course Code	BİL 2223	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

In this course, related to the use of open-source operating system aimed to gain qualifications.

The Aim of Course

In this course, related to the use of open-source operating system aimed to gain qualifications.

Learning Outcomes

1. Open-source operating system to do the installation and basic settings
2. Open-source operating system, use of tools
3. Management of open-source operating system to perform
4. Open-source operating system, add packages
5. Open-source operating system to perform network connections

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

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Course Content

Week	Topic	Content
Week 1	Theoretical	Open Source Operating System Structure
	Practice	Open Source Operating System Structure
	Laboratory	
Week 2	Theoretical	Basic Desktop Concepts and Operations
	Practice	Basic Desktop Concepts and Operations
	Laboratory	
Week 3	Theoretical	File System and Operating Logic
	Practice	File System and Operating Logic
	Laboratory	
Week 4	Theoretical	Open Source Operating System Basic Tools and Applications
	Practice	Open Source Operating System Basic Tools and Applications



	Laboratory	
Week 5	Theoretical	Basic Network Programs and Network Settings
	Practice	Basic Network Programs and Network Settings
	Laboratory	
Week 6	Theoretical	Basic Network Programs and Network Settings
	Practice	Basic Network Programs and Network Settings
	Laboratory	
Week 7	Theoretical	Internet Connection
	Practice	Internet Connection
	Laboratory	
Week 8	Theoretical	Basic User and Group Operations
	Practice	Basic User and Group Operations
	Laboratory	
Week 9	Theoretical	Open Source Operating System Editor
	Practice	Open Source Operating System Editor
	Laboratory	
Week 10	Theoretical	Program Installation and update
	Practice	Program Installation and update
	Laboratory	
Week 11	Theoretical	Shell Operations
	Practice	Shell Operations
	Laboratory	
Week 12	Theoretical	Shell Operations
	Practice	Shell Operations
	Laboratory	
Week 13	Theoretical	File and Directory Sharing
	Practice	File and Directory Sharing
	Laboratory	
Week 14	Theoretical	File and Directory Sharing
	Practice	File and Directory Sharing
	Laboratory	
Week 15	Theoretical	File and Directory Sharing
	Practice	File and Directory Sharing
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	4	4	1	3	2	0	0	0	0	0	0
OC2	5	5	4	3	4	4	0	0	0	0	0	0
OC3	5	5	4	4	4	4	0	0	0	0	0	0
OC4	5	5	4	1	4	4	0	0	0	0	0	0
OC5	5	5	2	1	4	3	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Mobile Programming		
Course Code	BİL 2225	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Overview of mobile programming. Requirements and setup of the development environment. The Basics of Android Apps. Designing a user interface with Android. Intents, Intent Filters, Broadcasts, BroadcastReceiver. Database management and content providers. Positioning and map management.

The Aim of Course

The emergence of a new generation of highly capable mobile devices and platforms has created new opportunities for application developers. This course will require students to propose, review, and document a mobile application for mobile phones by creating small collective design groups from students who will place or exchange mobile environment applications on their programming, use, and interaction designs with related computers.

Learning Outcomes

1. To be able to use different operating systems and development platforms used on modern mobile devices.
2. To be able to describe the advantages and disadvantages of mobile browsers and native coding.
3. To be able to develop basic level software for Android systems With the Java programming language, .
4. To be able to prepare the interface for Android software.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

Advanced Android Application Development, Addison-Wesley Professional; Fourth edition

Course Content

Week	Topic	Content
Week 1	Theoretical	Mobile programming overview and content.
	Practice	
	Laboratory	
Week 2	Theoretical	Requirements and setup of the development environment.
	Practice	
	Laboratory	
Week 3	Theoretical	The Basics of Android Apps.
	Practice	
	Laboratory	



Week 4	Theoretical	Life Cycle of Android Apps.
	Practice	
	Laboratory	
Week 5	Theoretical	Designing a user interface with Android.
	Practice	
	Laboratory	
Week 6	Theoretical	Intents, Intent Filters, Broads, BroadcastReceiver.
	Practice	
	Laboratory	
Week 7	Theoretical	Prefences and file management.
	Practice	
	Laboratory	
Week 8	Theoretical	Database management and content providers.
	Practice	
	Laboratory	
Week 9	Theoretical	Internet access, Background processing.Midterm exam
	Practice	
	Laboratory	
Week 10	Theoretical	Service and alarm concepts.
	Practice	
	Laboratory	
Week 11	Theoretical	Positioning and map management.
	Practice	
	Laboratory	
Week 12	Theoretical	Implement Android market installation.
	Practice	
	Laboratory	
Week 13	Theoretical	Project Presentations.
	Practice	
	Laboratory	
Week 14	Theoretical	Project Presentations.
	Practice	
	Laboratory	
Week 15	Theoretical	Project Presentations.
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	4	0	0	0	0	0	0	0	0	0	0
OC2	4	0	3	0	0	0	0	0	0	0	0	0
OC3	5	0	0	0	4	5	0	0	0	0	0	0
OC4	4	5	0	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Microcontrollers		
Course Code	BİL 2227	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Microcontroller architecture, microcontroller memory and its registers, addressing modes, microprocessor programming instructions, program compiling and troubleshooting.

The Aim of Course

With this course, it is aimed to gain proficiency related with selecting microcontroller, designing flowchart and algorithm, writing microcontroller program code, loading program to a microcontroller, making basic microcontroller applications.

Learning Outcomes

1. To be able to comprehend and explain microcontroller architecture and its hardware.
2. To be able to design flowchart and algorithm.
3. To be able to develop program for microcontroller.
4. To be able to develop basic microcontroller programs.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

- 1) Barry B. Brey and C. R. Sama, "The Intel Microprocessors", Pearson Education, 2007.2) The 8051 Microcontroller ARCHITECTURE, PROGRAMMING and APPLICATIONS, West Publishing Company, 1991, Kenneth J. Ayala, ISBN: 0-314-77278-2 3) The 8051 Microcontroller, Prentice-Hall, Inc., 1995, I.Scott MacKenzie, ISBN: 0-02-373660-7 4) MCS@51 Microcontroller Family User's Manual, INTEL, 1994, INTEL, ISBN: 272383-002

Course Content

Week	Topic	Content
Week 1	Theoretical	Microcontroller architecture and hardware.
	Practice	
	Laboratory	
Week 2	Theoretical	Microcontroller architecture and hardware.
	Practice	
	Laboratory	
Week 3	Theoretical	Loading a program to a microcontroller.
	Practice	Practises about this topic.
	Laboratory	



Week 4	Theoretical	Designing algorithm.
	Practice	Practises about this topic.
	Laboratory	
Week 5	Theoretical	Flowcharts.
	Practice	Practises about this topic.
	Laboratory	
Week 6	Theoretical	Microcontroller memory and its registers.
	Practice	Practises about this topic.
	Laboratory	
Week 7	Theoretical	Microcontroller memory and its registers.
	Practice	Practises about this topic.
	Laboratory	
Week 8	Theoretical	Microcontroller programming instructions.Midterm exam.
	Practice	Practises about this topic.
	Laboratory	
Week 9	Theoretical	Microcontroller programming instructions.
	Practice	Practises about this topic.
	Laboratory	
Week 10	Theoretical	Microcontroller programming instructions.
	Practice	Practises about this topic.
	Laboratory	
Week 11	Theoretical	Basic input / output programs.
	Practice	Practises about this topic.
	Laboratory	
Week 12	Theoretical	Program compiling and troubleshooting.
	Practice	Practises about this topic.
	Laboratory	
Week 13	Theoretical	Button and LED applications with microcontroller.
	Practice	Practises about this topic.
	Laboratory	
Week 14	Theoretical	Seven segment display applications with microcontroller.Keypad applications with
	Practice	Practises about this topic.
	Laboratory	
Week 15	Theoretical	LCD applications with microcontroller.
	Practice	Practises about this topic.
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	2	0	5	0	0	0	0	0	0	0	0	0
OC2	2	3	5	0	0	0	0	0	0	0	0	0
OC3	2	3	5	0	0	0	0	0	0	0	0	0
OC4	2	3	5	0	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Virtualization and Cloud Computing		
Course Code	BİL 2229	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Semih GENÇAY
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

The basics of cloud computing, The importance of cloud computing for business world, The advantages of cloud computing, The elements of cloud computing, The technical basis of cloud computing, Data management in cloud, Standards, Management and security of cloud services, Service based architecture, cloud environment management.

The Aim of Course

The aim of the course is to explain cloud computing bases from business and technology perspectives. The course also introduces the concepts and components necessary to establish a cloud computing environment.

Learning Outcomes

1. To be able to understand basic terms and concepts related to cloud computing.
2. To be able to understand the importance of cloud computing for the business world.
3. To be able to understand cloud computing architecture, storage and services.
4. To be able to understand the bases of cloud management.
5. To be able to understand virtualization.
6. To be able to understand service based architecture.

Evaluation Criteria

txtDegerlendirmeKriteri

Recommended or Required Reading

1. Cloud Computing Bible, Barrie Sosinsky, Wiley; 1 E (January 11, 2011), ISBN: 04709035622. Cloud Computing, A Practical Approach, Toby Velte, Anthony Velte, Robert Elsenpeter, McGraw Hill, 2009, ISBN: 0071626948

Course Content

Week	Topic	Content
Week 1	Theoretical	Fundamentals of cloud computing I
	Practice	
	Laboratory	
Week 2	Theoretical	Fundamentals of cloud computing II
	Practice	
	Laboratory	
Week 3	Theoretical	Cloud architecture
	Practice	
	Laboratory	



Week 4	Theoretical	Cloud services and applications
	Practice	
	Laboratory	
Week 5	Theoretical	Abstraction and virtualization
	Practice	
	Laboratory	
Week 6	Theoretical	Amazon web services
	Practice	
	Laboratory	
Week 7	Theoretical	Platform as a ServiceMidterm
	Practice	
	Laboratory	
Week 8	Theoretical	Platform as a Service
	Practice	
	Laboratory	
Week 9	Theoretical	Google web services and Microsoft cloud services
	Practice	
	Laboratory	
Week 10	Theoretical	Cloud security
	Practice	
	Laboratory	
Week 11	Theoretical	Service-based architecture and cloud computing
	Practice	
	Laboratory	
Week 12	Theoretical	Cloud management
	Practice	
	Laboratory	
Week 13	Theoretical	Moving applications to the cloud
	Practice	
	Laboratory	
Week 14	Theoretical	Project
	Practice	
	Laboratory	
Week 15	Theoretical	Project Review
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	5	0	3	4	5	0	0	0	0	0	0	0
OC2	2	0	2	2	0	0	0	0	0	0	0	0
OC3	4	0	3	5	3	0	0	0	0	0	0	0
OC4	4	0	3	4	0	0	0	0	0	0	0	0
OC5	5	0	4	4	4	0	0	0	0	0	0	0
OC6	3	0	4	3	0	0	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Discrete Mathematics for Computer Science		
Course Code	BİL 2233	Activity Type	Optional
Semester	Autumn	Semester	3
Course Language	Turkish	National Credit	3
Hours Per Week	2	ECTS	3
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

In this course, students will learn about the basic concepts of discrete mathematics and logic. In addition, solving Discrete mathematics and logic problems, Discrete mathematics and logic concepts and computer science problems, Discrete mathematics and logic concepts and problems in different disciplines; Will be able to design efficient algorithms with discrete mathematics and logic concepts.

The Aim of Course

To teach mathematical and logical structures which are basis of computer science.

Learning Outcomes

1. Have a knowledge of basic concepts of discrete mathematics and logic.
2. Be able to solve problems of discrete mathematics and logic.
3. Be able to solve computer science problems by using discrete mathematics and logic concepts.
4. Be able to design efficient algorithms by using discrete mathematics and logic concepts.
5. Be able to solve problems of different type of disciplines by using concepts of discrete mathematics and logic.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Textbook(s): Discrete Mathematics and Its Applications, Kenneth H. Rosen, ISBN: 0072424346. Supplementary Book(s): Bilgisayar Bilimi ve Mühendisliğinde Ayrık Matematik, Rifat Çölkesen, ISBN: 975-6796-XX-X.

Course Content

Week	Topic	Content
Week 1	Theoretical	Logic Propositional equivalences Quantifiers
	Practice	
	Laboratory	
Week 2	Theoretical	Proofs Methods of proving theorems Mistakes in proofs
	Practice	
	Laboratory	
Week 3	Theoretical	Sets The power set Cartesian products Set operations
	Practice	



	Laboratory	
Week 4	Theoretical	Functions One-to-one and onto functions Inverse functions and compositions of functions
	Practice	
	Laboratory	
Week 5	Theoretical	Algorithms Searching, sorting and greedy algorithms Big-O notation Complexity of
	Practice	
	Laboratory	
Week 6	Theoretical	The integers and division Modular arithmetic The Euclidean algorithm Applications of
	Practice	
	Laboratory	
Week 7	Theoretical	Matrices Matrix arithmetic
	Practice	
	Laboratory	
Week 8	Theoretical	Mid-term exam
	Practice	
	Laboratory	
Week 9	Theoretical	Induction Sequences and summations
	Practice	
	Laboratory	
Week 10	Theoretical	Recursion Recursive algorithms
	Practice	
	Laboratory	
Week 11	Theoretical	Counting The pigeonhole principle Permutations and combinations Binomial coefficients
	Practice	
	Laboratory	
Week 12	Theoretical	Discrete probability Probability theory Expected value and variance
	Practice	
	Laboratory	
Week 13	Theoretical	Advanced counting techniques Recurrence relations Divide-and conquer algorithms
	Practice	
	Laboratory	
Week 14	Theoretical	Relations Representing relations Closures of relations Equivalence and ordering relations
	Practice	
	Laboratory	
Week 15	Theoretical	Boolean algebra Logic gates Minimization of circuits
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	2	0	0	0	3	0	0	0	1	0	0
OC2	4	3	1	0	0	2	0	0	0	1	1	0
OC3	3	3	1	0	0	1	0	0	0	0	0	0
OC4	5	4	1	0	0	0	0	0	0	0	0	0
OC5	2	2	0	0	0	3	0	0	0	1	0	0



Manisa Celal Bayar University

Computer Programming

Computer Programming

The Course Description Form

Course Name	Vocational Training in Workplace		
Course Code	MYO 2002	Activity Type	Compulsory
Semester	Spring	Semester	4
Course Language	Turkish	National Credit	4
Hours Per Week	5	ECTS	18
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Instructor Emre BAYSAL
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

To find opportunity to apply their knowledge in public or private organizations in accordance with the lessons they have seen, to apply production and service processes in the workplace.

The Aim of Course

To develop students' knowledge, skills, attitudes and working habits in their learning periods, skills and experiences in laboratory and workshop practices, to provide their responsibilities, relationships, organization and production processes and new technologies to learn.

Learning Outcomes

1. To be able to prepare for business
2. To be able to be ready to group work
3. To be able to improve knowledge and skill of production methods
4. To be able to understand the importance of quality and control in manufacturing

Evaluation Criteria

Vize (%20) Final (%50)

Recommended or Required Reading

Manisa Celal Bayar University Vocational Training in Workplace Directive
(<https://ime.cbu.edu.tr/ISS/Application/Content/HomePage/Files/SUS-Yonerge.pdf>)

Course Content

Week	Topic	Content
Week 1	Theoretical	Introducing the internship, studying the physical possibilities of the employer.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 2	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 3	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.



Week 4	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 5	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 6	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 7	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 8	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 9	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 10	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 11	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 12	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 13	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 14	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	
Week 15	Theoretical	To do maintenance, repair and assembly applications related to the field of industry.
	Practice	Inspection, observation and reporting of work done.
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	4	4	0	3	5	3	0	0	0	0	0	0
OC2	4	4	0	3	5	3	0	0	0	0	0	0
OC3	4	4	0	3	5	3	0	0	0	0	0	0
OC4	4	5	0	3	5	3	0	0	0	0	0	0



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Atatürk's Principles and History of Revolution		
Course Code	AİT 2102	Activity Type	Compulsory
Semester	Spring	Semester	4
Course Language	Turkish	National Credit	4
Hours Per Week	4	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Lecturer SERKAN CANSEVEN
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

1 - Principles of Atatürk and purpose of the course, taught2 - The causes of decay of the Ottoman Empire3 - World War I and the results4 - Response to the occupation and Mustafa Kemal Pasha5 - National Pact and T.B.M.M. 's opening6 - Wars and the Treaty of Lausanne

The Aim of Course

1 - Ataturk's principles and reforms, independent, democratic and secular training of generations2 - Turkish youth, to gain confidence in national history and consciousness3 - Basic understand the dynamics of Turkish Modernization

Learning Outcomes

1. To be able to comprehend developments in European history and Ottoman modernization
2. To be able to decline the Ottoman Empire to explain the reasons
3. To be able to learn the causes and consequences of World War I
4. To be able to understand Turkish National Struggle,
5. To be able to understand the foundation philosophy of the Republic of Turkey better

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

1- Sound, I, II, III2- Atatürk's Lectures and Statements I, II, III3- Ataturk Way
Professor Dr. Hamza Eroğlu Professor Dr. Mustafa Aysan4- Çankaya
Principles and History of Turkish Revolution Professor Dr. Refik Turan
Safran Professor Dr. Necdet Hayta Professor Dr. Turan Feyzioğlu
Falih Rıfkı Atay5- Atatürk's
Professor Dr. Mustafa

Course Content

Week	Topic	Content
Week 1	Theoretical	Reading for the Purpose of the Atatürk Principles and Revolution History Class The Fall
	Practice	
	Laboratory	
Week 2	Theoretical	The Fall of the Ottoman Empire Administrative Reforms and I. Constitutionalism
	Practice	
	Laboratory	
	Theoretical	Reasons for the Monarchy and the Turkish Revolution



Week 3	Practice	
	Laboratory	
Week 4	Theoretical	World War I and the Armistice Agreement
	Practice	
	Laboratory	
Week 5	Theoretical	General Situation of the country against the occupation Mustafa Kemal Pasha's Response
	Practice	
	Laboratory	
Week 6	Theoretical	Mustafa Kemal Pasha at Samsun and The Congresses
	Practice	
	Laboratory	
Week 7	Theoretical	Mustafa Kemal Pasha at Samsun and The Congresses
	Practice	
	Laboratory	
Week 8	Theoretical	Mid-term\exam
	Practice	
	Laboratory	
Week 9	Theoretical	Opening of Meclis-i Mebusan and Misak-ı Milli
	Practice	
	Laboratory	
Week 10	Theoretical	T.B.M.M.'s Opening and Structure
	Practice	
	Laboratory	
Week 11	Theoretical	Facades, I. and II. Inonu, Sakarya War, The Great Raid, The Treaty of Mudanya
	Practice	
	Laboratory	
Week 12	Theoretical	The Treaty of Lausanne
	Practice	
	Laboratory	
Week 13	Theoretical	Proclamation of the Republic, Turkey's geopolitical position
	Practice	
	Laboratory	
Week 14	Theoretical	Foreign Policy of the Republic of Turkey
	Practice	
	Laboratory	
Week 15	Theoretical	Overview
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	0	0	0	0	0	0	0	0	0	0	3	0
OC2	0	0	0	0	0	0	0	0	0	0	3	0
OC3	0	0	0	0	0	0	0	0	0	0	3	0
OC4	0	0	0	0	0	0	0	0	0	0	3	0
OC5	0	0	0	0	0	0	1	0	0	0	3	1



Manisa Celal Bayar University
MANİSA VOCATIONAL SCHOOL OF TECHNICAL SCIENCES
Computer Programming
The Course Description Form

Course Name	Turkish Language		
Course Code	TDL 2102	Activity Type	Compulsory
Semester	Spring	Semester	4
Course Language	Turkish	National Credit	4
Hours Per Week	4	ECTS	4
Prerequisite	N/A	Co-requisites	

Name of Lecturer	Lecturer MUSTAFA YEMİŞ
Name of Assistant Lecturer	
Presentation Date of Form	18.04.2023

Course Content

Each student in the graduate and undergraduate education, according to comprehend the main language structure and function of language-thought in terms of connectivity, through written and oral expression, the Turkish right and gain the ability to use beautiful, these rules and native speakers of the language in an awareness of judges and they will have to make. The perfect way to express ideas in accordance with the purpose of rhetoric, including the necessary rules (speaking) knowledge of each profession for educated young people has become a very important need. In this regard, given to institutions of higher education courses in Turkish language, Turkish, and literature courses in high schools as a continuation of the rhetoric, especially in the field will be useful to intensify. On the other hand, a written essay as well as young people, to acquire the habit of speaking correctly and effectively is an issue that should not be neglected. Western countries, drawing upon the books written on this topic, Turkish course programs to address the audience, it is possible to teach techniques and methods of the rule. In this regard, particularly as Ataturk, the Turkish speaker's valuable speech will be taken to benefit from the texts.

The Aim of Course

The overall objective of this course, individuals who understand the subtlety and depth listening, and reading the Turkish language-rich, well-established and productive to show that a language, language and consciousness awaken love, pleasure and acquire the habit of reading, to adopt the core values of Turkish society; briefly thinking and communication skills of individuals to develop.

Learning Outcomes

1. To be able to explain the characteristics of Turkish language by sensing its usage procedure with examples.
2. To be able to express the function, dimensions of language and its relationship with thought, culture, and society.
3. To be able to distinguish between the concepts of spoken language and written language;
4. To be able to analyze a text they read or follow a program they watch.
5. To be able to correctly and affectively express their feelings, thoughts, impressions, observations both in written and spoken language.
6. To be able to identify the historical background of Turkish and its location among world languages;
7. To be able to apply the basic concepts of morphology;
8. To be able to explain the concepts about syntax and semantics.
9. To be able to identify the mistakes in the usage of the language and show them on the texts.
10. To be able to become an individual who is tolerant and cares about his values, and also, someone who can find solutions to the problems and correctly express his ideas about these problems both in written and spoken language.

Evaluation Criteria

Vize (%40) Final (%60)

Recommended or Required Reading

Bu belge, güvenli elektronik imza ile imzalanmıştır.
Evrak sorgulaması <https://turkiye.gov.tr/ebd?eK=4049&eD=BSEZF0R4UY&eS=529242> adresinden yapılabilir.



Aksan, Dogan, Every Direction Language / Linguistics with Main Lines, c.1,2,3, Turkish Language Institution, 1979-1982Aksoy, Ömer Asım, Dictionary of Proverbs, İnkılap Bookstore, January 1988Aksoy, Ömer Asım, Dictionary of Idioms, İnkılap Bookstore, January 1988Atatürk, Mustafa Kemal, SpeechBanguoğlu, Tahsin, Turkish Grammer, Turkish Language Institute Publications, 2000Bozkurt, Fuat, Turkish, Istanbul, 1975Buckley, Reid, Speaking at the Community, System Publishing, May 2001Dilçin, Cem, New Screening Dictionary, Ankara, 1983Ergin, Muharrem, Turkish Language for Universities, Bayrak Publications, 2002Gencan, Tahir Nejat, Grammar, Ayraç Publishing House, October 2001Karaalioglu, Seyit Kemal, Composition Art, Istanbul, January 1999Karahana, Leyla, Türkçede Syntax, Akçağ Publications, 1999Kudret, Cevdet, Literature Information by Examples, c. 1, 2, İnkılap Bookstore, 1980Koç, Nurettin, New Grammar, Istanbul, 1990Moran, Berna, A Critical Look at Turkish Names, c. 1, 2, 3, Communication Publications, 1983-1994Özdemir, Emin, Güzel and Effective Speech Art, Remzi Bookstore, January 1999Özen, Mustafa Nihat, Introduction to Writing Art and Composition, İstanbul, 1971

Course Content		
Week	Topic	Content
Week 1	Theoretical	What is language? In people's life the importance of language as a social institution.
	Practice	
	Laboratory	
Week 2	Theoretical	Language in terms of structure and origin. Place of Turkish language among world
	Practice	
	Laboratory	
Week 3	Theoretical	The development of Turkish written language. Historical stages of Turkish written
	Practice	
	Laboratory	
Week 4	Theoretical	The current status of the Turkish language, expansion areas of the Turkish language.
	Practice	
	Laboratory	
Week 5	Theoretical	Phonetic, sounds in Turkish and its classification.
	Practice	
	Laboratory	
Week 6	Theoretical	Turkish sound features and sound knowledge of the rulesThe structure of syllables in
	Practice	
	Laboratory	
Week 7	Theoretical	Midterm-exam
	Practice	
	Laboratory	
Week 8	Theoretical	Spelling rules and application.Mid-term exam.
	Practice	
	Laboratory	
Week 9	Theoretical	Spelling rules and application.Mid-term exam.
	Practice	
	Laboratory	
Week 10	Theoretical	Punctuation and its applications.
	Practice	
	Laboratory	
Week 11	Theoretical	Morphology, lexis structure, word formation.
	Practice	
	Laboratory	
Week 12	Theoretical	Construction and suffixes, word analysis.
	Practice	
	Laboratory	
Week 13	Theoretical	The word types. Noun, adjective.
	Practice	
	Laboratory	
Week 14	Theoretical	The word types. Adverb, pronouns, prepositions, conjunctions and interjections
	Practice	
	Laboratory	



Week 15	Theoretical	The word types. Verbs, gerunds, infinitives, active-passive.
	Practice	
	Laboratory	

Program and Learning Outcomes Relations												
OC	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10	PC11	PC12
OC1	0	0	0	0	0	0	0	0	0	0	0	0
OC2	0	0	0	0	0	0	0	0	0	0	5	0
OC3	0	0	0	0	0	0	0	0	0	0	0	0
OC4	3	3	0	0	0	0	0	0	0	0	4	0
OC5	0	0	0	0	0	0	0	0	5	0	3	0
OC6	0	0	0	0	0	0	0	0	0	0	0	0
OC7	0	0	0	0	0	0	0	0	0	0	0	0
OC8	0	0	0	0	0	0	0	0	0	0	0	0
OC9	3	4	0	0	0	0	0	0	0	0	0	0
OC10	0	0	0	0	0	0	0	0	3	0	5	0

