



**MUĞLA SITKI KOÇMAN UNIVERSITY FACULTY of MEDICINE
PHASE 2
ENGLISH MEDICINE PROGRAM**

2022/2023 Academic Year

Committee 3 GUIDEBOOK

Prepared By:

PHASE 2 COORDINATOR AND VICE-COORDINATORS

PREFACE

Dear Students,

Welcome to the phase 2 committee 3 which is an important part of your education.

This guide describes what you will learn and perform during your committee program, the rules you must follow in the committee, and the working conditions. We wish you all success with the belief that this guide will guide you through the committee.

Phase 2 Coordinatorship

GENERAL INFORMATION on COURSE

A. GENERAL INFORMATION	
Year	Phase 3- Committee 3
Course Title	Nervous System
Level of Course	First Cycle
Required/Elective	Required
Language	English
Course Code(s) (MED 2200)	<p>Committee Courses</p> <ol style="list-style-type: none"> 1. MED 2001 Medical Biochemistry 2. MED 2002 Biophysics 3. MED 2004 Anatomy 4. MED 2003 Histology and Embryology 5. MED 2006 Physiology 6. MED 2007 Medical Microbiology 7. MED 2010 Special Study Module <p>Other Courses</p> <ol style="list-style-type: none"> 1. YDB 2801 English III 2. YDB 2802 English IV 3. YDB 2813 German III 4. YDB 2814 German IV 5. YDB 2815 French III 6. YDB 2816 French IV
Duration of the course	8 weeks
ECTS:	12

TEACHING STAFF

Phase Coordinator	Asist. Prof. Dr. Hasan Tetiker
Vice -Coordinators	Assoc. Prof. Dr. Turan Demircan Asist. Prof. Dr. Egemen Kaya Asist. Prof. Dr. Şehbal Yeşilbaş M.D. Zeynep Nisa Karakoyun
Head of the Committee	Assoc. Prof. Dr. Serkan Aksu
Teaching staff of the Committee Program (Disciplines and special interests should be noted)	Department of Anatomy <ol style="list-style-type: none"> 1. Prof. Dr. Mehmet İlkey Koşar 2. Assist. Prof. Dr. Hasan Tetiker 3. Assist. Prof. Dr. Ceren Uğuz Gençer 4. M.D. Zeynep Nisa Karakoyun Department of Physiology <ol style="list-style-type: none"> 1. Assist. Prof. Dr. Egemen Kaya Department of Histology and Embryology <ol style="list-style-type: none"> 1. Prof. Dr. Feral Öztürk 2. Assoc. Prof. Dr. Hülya Elbe 3. Assist. Prof. Dr. Gürkan Yiğittürk Department of Medical Biochemistry <ol style="list-style-type: none"> 1. Prof. Dr. İsmail Çetin Öztürk 2. Assist. Prof. Dr. Ercan Saruhan Department of Medical Microbiology <ol style="list-style-type: none"> 1. Assist. Prof. Dr. Alper Aksözek 2. Assist. Prof. Dr. Burak Ekrem Çitil Department of Biophysics <ol style="list-style-type: none"> 1. Assist. Prof. Dr. Tanju Mercan

TEACHING METHODS-TECHNIQUES

Theoretical	
Classroom Lesson	+
Practice	
Laboratory Studies	+
Structured Free Study Hours	+
Special Study Module	+

PHYSICAL SPACES

Classrooms and Study Areas	<ol style="list-style-type: none"> 1. Faculty of Medicine Classroom-II 2. Anatomy Laboratory 3. Microbiology Laboratory 4. Microscopy Laboratory 5. Seminar Room
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RELATED LEGISLATION

<http://www.tip.mu.edu.tr/tr/ilgili-mevzuat-6641>

COMMITTEE CLASS HOURS DISTRIBUTION

	Theoretical L.H.	Practical L.H.	Total L.H.
Anatomy	41	24	65
Medical Biochemistry	4	-	4
Physiology	18	2	20
Histology and Embryology	16	2	18
Medical Microbiology	25	3	28
Biophysics	13	-	13
Foreign Language	21		21
Special Study Module			14
Total	137	31	182

AIM(S) of the COMMITTEE

1.	In this committee, it is aimed that the students evaluate the embryological development of the nervous system and sensory organs, their developmental anomalies, the structures and functions that make up these systems, and their anatomical, histological, physiological and biochemical properties by associating them with the laws of biophysics.
2.	In this committee, it is aimed that the students be able to classify bacteria of medical importance and to comprehend, compare and interpret their structural features, pathogenesis, diseases caused, prevention and treatment.
3.	In this committee, it is aimed that the students understand the basic information about antibacterial drugs and the mechanisms of resistance to antibacterial drugs.
4.	With the special study module, it is aimed that students develop their independent learning skills in their fields of interest, learn and apply the basic principles of scientific methodology, and develop their skills in presenting scientific studies in written and oral form.

OBJECTIVE(S) of the COMMITTEE

1.	To be able to distinguish between the central nervous system and the peripheral nervous system, to be able to define the details of these anatomical structures, to be able to establish their connections and relations with each other, and to be able to show their location on a cadaver and model
2.	To be able to describe the connections of descending and ascending pathways in detail, to be able to explain the clinical reflections of damage to these pathways
3.	To be able to describe nuclei, course, and anatomy of cranial nerves
4.	To be able to define brain vessels, meninges, dura mater vein sinuses and CSF circulation
5.	To be able to explain the detailed anatomical structure and function of the autonomic nervous system
6.	To be able to define the anatomy of the eye, ear and its appendages, to be able to establish the basic connections of the visual and auditory pathways
7.	To be able to count the organs/structures and histological layers that make up the central nervous system and peripheral nervous system
8.	To be able to count the embryological structures in which the central nervous system and peripheral nervous system organs develop
9.	To be able to define the histological layers of the structures that make up the eye and when the structures of the eye develop from which embryonic layers
10.	To be able to define the histological layers of the structures that make up the ear and when they develop from which embryonic layers
11.	To be able to count the structures and histological layers that make up the skin and its appendages completely
12.	To be able to explain the types of stimuli and the mechanisms of perception and transmission of various stimuli and the mechanisms of creating appropriate responses to stimuli
13.	To be able to describe and interpret the normal functions of various parts of the central nervous system and sensory organs
14.	To be able to interpret the functional relationship of various parts of the central nervous system with each other
15.	To be able to explain how the states of consciousness and affect are regulated by the

	nervous system
16.	To be able to explain the mechanisms by which the nervous system regulates human behavior
17.	To be able to describe neurotransmitters, their receptors, and to be able to explain their synthesis and degradation pathways
18.	To be able to describe the properties and mechanisms of synaptic transmission and nervous system biochemistry
19.	To be able to explain the basics of information in biological systems, EEG and evoked potentials, biophysical basis of visual activity and eye defects
20.	To be able to explain the classification and structural features of bacteria of medical importance
21.	To be able to describe, compare and interpret the pathogenesis of medically important bacteria, the diseases they cause, their prevention and treatment
22.	To be able to explain basic information about antibacterial drugs, resistance mechanisms to antibacterial drugs and their importance
23.	To be able to work within the scope of learner-centered practices, communication, time management, questioning perspective, orientation to different interests and getting to know the target area for career choice
24.	To be able to demonstrate effective communication and presentation skills by working more closely in small groups within teamwork
25.	To be able to compile scientific data, summarize with tables and graphs, analyze scientific data with appropriate methods and interpret the results, which are included in basic medicine practices
26.	To be able to plan a research using scientific principles and methods
27.	To be able to access current literature information and to be able to read it with a critical eye, to be able to apply the principles of evidence-based medicine in clinical decision-making process
28.	To be able to interpret the health level of the service area using health level indicators
29.	To be able to work within the scope of learner-centered practices, communication, time management, questioning perspective, orientation to different interests and getting to know the target area for career choice
30.	To be able to demonstrate effective communication and presentation skills by working more closely in small groups within teamwork

INTENDED LEARNING OUTCOME(S)

1.	Can distinguish between the central nervous system and the peripheral nervous system, can define the details of these anatomical structures, can establish their connections and relations with each other, and can show their location on a cadaver and model.
2.	Can describe the connections of descending and ascending pathways in detail, can explain the clinical reflections of damage to these pathways.
3.	Can describe nuclei, course, and anatomy of cranial nerves.
4.	Can define brain vessels, meninges, dura mater vein sinuses and CSF circulation.
5.	Can explain the detailed anatomical structure and function of the autonomic nervous system.
6.	Can define the anatomy of the eye, ear and its appendages, can establish the basic connections of the visual and auditory pathways.
7.	Can count the organs/structures and histological layers that make up the central nervous system and peripheral nervous system.
8.	Can count the embryological structures in which the central nervous system and peripheral nervous system organs develop.
9.	Can define the histological layers of the structures that make up the eye and when the structures of the eye develop from which embryonic layers.
10.	Can define the histological layers of the structures that make up the ear and when they develop from which embryonic layers.
11.	Can count the structures and histological layers that make up the skin and its appendages completely.
12.	Can explain the types of stimuli and the mechanisms of perception and transmission of various stimuli and the mechanisms of creating appropriate responses to stimuli.
13.	Can describe and interpret the normal functions of various parts of the central nervous system and sensory organs.
14.	Can interpret the functional relationship of various parts of the central nervous system with each other.
15.	Can explain how the states of consciousness and affect are regulated by the nervous system.

16.	Can explain the mechanisms by which the nervous system regulates human behavior.
17.	Can describe neurotransmitters, their receptors, and can explain their synthesis and degradation pathways.
18.	Can describe the properties and mechanisms of synaptic transmission and nervous system biochemistry.
19.	Can explain the basics of information in biological systems, EEG and evoked potentials, biophysical basis of visual activity and eye defects.
20.	Can explain the classification and structural features of bacteria of medical importance.
21.	Can describe, compare and interpret the pathogenesis of medically important bacteria, the diseases they cause, their prevention and treatment.
22.	Can explain basic information about antibacterial drugs, resistance mechanisms to antibacterial drugs and their importance.
23.	Can work within the scope of learner-centered practices, communication, time management, questioning perspective, orientation to different interests and getting to know the target area for career choice.
24.	Can demonstrate effective communication and presentation skills by working more closely in small groups within teamwork
25.	Can compile scientific data, summarize with tables and graphs, analyze scientific data with appropriate methods and interpret the results, which are included in basic medicine practices.
26.	Can plan a research using scientific principles and methods
27.	Can access current literature information and can read it with a critical eye, can apply the principles of evidence-based medicine in clinical decision-making process.
28.	Can interpret the health level of the service area using health level indicators.
29.	Can work within the scope of learner-centered practices, communication, time management, questioning perspective, orientation to different interests and getting to know the target area for career choice.
30.	Can demonstrate effective communication and presentation skills by working more closely in small groups within teamwork.

RECOMMENDED RESOURCE(S)

KEY RESOURCE(S)

Recommended Reading/ Studying materials	<p>Anatomy</p> <ol style="list-style-type: none"> 1. Yasin Arifoğlu, Her yönüyle Anatomi. 2016, İstanbul Tıp Kitabevi 2. Moore Clinically Oriented Anatomy 7th Edition 3. Sobotta Atlas of Human Anatomy, 15th Edition 4. Netter İnsan Anatomisi Atlası, 6. Baskı- Frank H. Netter, M.D 5. Atlas of Human Anatomy, Sixth Edition- Frank H. Netter, M.D 6. Arıncı K, Elhan A; Anatomi 1-2. Güneş kitabevi 7. Snell RS, Klinik Anatomi, Nobel Tıp Kitabevi <p>Medical Biochemistry</p> <ol style="list-style-type: none"> 1. Bhagavan's Medical Biochemistry 2. Tietz Textbook of Clinical Chemistry 3. Harper's Biochemistry 4. Marks' Essentials of Medical Biochemistry <p>Physiology</p> <ol style="list-style-type: none"> 1. Guyton and Hall Textbook of Medical Physiology 13e pdf 2. Ganong's Review of Medical Physiology, 26th Edition 3. İnsan Fizyolojisi, Halis KOYLU, 3. Baskı 4. Vander's Human Physiology 14th ed. <p>Histology and Embryology</p> <ol style="list-style-type: none"> 1. Histoloji. Hücre, Doku, Sistemler, Teknikler-Moleküller-Laboratuvar-Klinik Yönleriyle Yaklaşımlar. Editör: M. KURUŞ. Akademisyen Kitabevi, 2020. 2. Textbook of Histology 5th Edition. Leslie P. Gartner, PhD, Elsevier, 2020. 3. Klinik Yönleriyle İnsan Embriyolojisi. Moore Keith L. (Çeviri editörü: H. Dalçık). Nobel Tıp Kitabevi, 2016. 4. Genel Histoloji-Özel Histoloji. Eşrefoğlu Mukaddes. İstanbul Tıp Kitabevi, 2016. 5. Histology: A Text and Atlas. Ross MH, Pawlina W. 8th ed. Lippincott Williams & Wilkins, USA, 2019. 6. Human Embryology & Developmental Biology Carlson BM. 6th ed. Mosby Elsevier, Philadelphia, 2018. <p>Medical Microbiology</p> <ol style="list-style-type: none"> 1. Abul K. Abbas, Andrew H. Lichtman : Temel İmmünoloji; Warren Levinson : Review of Medical Microbiology Immunology
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	<p>2. Jawetz, Melnick ve adelberg Tıbbi Mikrobiyoloji 2014; Doan T, Melvold R:Lippincot İmmünoloji 2014</p> <p>Biophysics</p> <ol style="list-style-type: none">1. Biyofizik; Prof. Dr. Ferit Pehlivan, Hacettepe-Taş Yayınları2. Temel Biyofizik Cilt-1: Biyomekanik, Prof. Dr. İsmail Günay Çukurova Nobel tıp yayınları3. Biyofizik, Prof. Dr. Gürbüz Çelebi; İzmir4. Biyomedikal Fizik, Prof. Dr. Gürbüz Çelebi, Barış Yayınları5. Biophysics: An Introduction, Rodney M. J. Cotterill6. From Neuron to Brain, JG Nichols, AR Martin, BG Wallace (Sinauer)
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ASSESSMENT and EVALUATION

PHASE 2 COMMITTEE 3 EXAM SCHEDULE

COMMITTEE 3 EXAM SCHEDULE

Theoretical Examination: 17 February 2023 Friday Hour: 10.30

Practical Examination(s):

Histology and Embryology Laboratory Exam: 15 February 2023 Wednesday Hour: 08.30-12.20

Medical Microbiology Laboratory Exam: 16 February 2023 Thursday Hour: 08.30-12.20

Anatomy Laboratory Exam: 16 February 2023 Thursday Hour: 13.30-17.20

PHASE 2 COMMITTEE 3 QUESTION DISTRUBITION

2022-2023 Academic Year Phase 2 Committee 3 Question Distribution

Committee Lessons	Number of questions
Anatomy	44
Histology and Embryology	12
Physiology	14
Medical Microbiology	18
Biophysics	9
Medical Biochemistry	3
Total	100

ASSESSMENT AND EVALUATION IN COMMITTEE EVALUATION EXAM

COMMITTEE EXAM EVALUATION		
Activities	Number	Value (%)
Practice exam Anatomy Histology and Embryology Medical Microbiology	One for each lesson The application method of the Practical Exams is determined by the relevant Department.	It will be announced at least one week before the exam.
Oral exam	There is no oral examination in this committee.	-
Professional Skills Practice Exam	-	-
Written exam	1	It will be announced at least one week before the exam.
Total		100

COMMITTEE EXAM SPECIFICATION TABLE

Committee Exam Specification Table				
	Objective	Teaching Method	Evaluation Method	Exam score distribution
1.	To be able to distinguish between the central nervous system and the peripheral nervous system, to be able to define the details of these anatomical structures, to be able to establish their connections and relations with each other, and to be able to show their location on a cadaver and model	T, P	MC, PE	20
2.	To be able to describe the connections of descending and ascending pathways in detail, to be able to explain the clinical reflections of damage to these pathways	T, P	MC, PE	4

3.	To be able to describe nuclei, course, and anatomy of cranial nerves	T, P	MC, PE	8
4.	To be able to define brain vessels, meninges, dura mater vein sinuses and CSF circulation	T, P	MC, PE	2
5.	To be able to explain the detailed anatomical structure and function of the autonomic nervous system	T, P	MC, PE	2
6.	To be able to define the anatomy of the eye, ear and its appendages, to be able to establish the basic connections of the visual and auditory pathways	T, P	MC, PE	8
7.	To be able to count the organs/structures and histological layers that make up the central nervous system and peripheral nervous system	T, P	MC, PE	3
8.	To be able to count the embryological structures in which the central nervous system and peripheral nervous system organs develop	T, P	MC, PE	3
9.	To be able to define the histological layers of the structures that make up the eye and when the structures of the eye develop from which embryonic layers	T, P	MC, PE	2
10.	To be able to define the histological layers of the structures that make up the ear and when they develop from which embryonic layers	T, P	MC, PE	2
11.	To be able to count the structures and histological layers that make up the skin and its appendages completely	T, P	MC, PE	2
12.	To be able to explain the types of stimuli and the mechanisms of perception and transmission of various stimuli and the mechanisms of creating appropriate responses to stimuli	T	MC	3
13.	To be able to describe and interpret the normal functions of various parts of the central nervous system and sensory organs	T	MC	3
14.	To be able to interpret the functional relationship of	T	MC	3

	various parts of the central nervous system with each other			
15.	To be able to explain how the states of consciousness and affect are regulated by the nervous system	T	MC	3
16.	To be able to explain the mechanisms by which the nervous system regulates human behavior	T	MC	2
17.	To be able to describe neurotransmitters, their receptors, and to be able to explain their synthesis and degradation pathways	T	MC	2
18.	To be able to describe the properties and mechanisms of synaptic transmission and nervous system biochemistry	T	MC	1
19.	To be able to explain the basics of information in biological systems, EEG and evoked potentials, biophysical basis of visual activity and eye defects	T	MC	9
20.	To be able to explain the classification and structural features of bacteria of medical importance	T, P	MC, PE	10
21.	To be able to describe, compare and interpret the pathogenesis of medically important bacteria, the diseases they cause, their prevention and treatment	T, P	MC, PE	4
22.	To be able to explain basic information about antibacterial drugs, resistance mechanisms to antibacterial drugs and their importance	T, P	MC, PE	4
23.	To be able to work within the scope of learner-centered practices, communication, time management, questioning perspective, orientation to different interests and getting to know the target area for career choice	P	PE	2
24.	To be able to demonstrate effective communication and presentation skills by working more closely in small groups within teamwork	P	PE	2
25.	To be able to compile scientific data, summarize with tables and graphs, analyze scientific data with	P	PE	1

	appropriate methods and interpret the results, which are included in basic medicine practices			
26.	To be able to plan a research using scientific principles and methods	P	PE	1
27.	To be able to access current literature information and to be able to read it with a critical eye, to be able to apply the principles of evidence-based medicine in clinical decision-making process	P	PE	1
28.	To be able to interpret the health level of the service area using health level indicators	P	PE	1
29.	To be able to work within the scope of learner-centered practices, communication, time management, questioning perspective, orientation to different interests and getting to know the target area for career choice	P	PE	1
30.	To be able to demonstrate effective communication and presentation skills by working more closely in small groups within teamwork	P	PE	1

T: Theoretical education, P: Practical education, SSM: Special Study Module, MC: Multiple choice exam, PE: Practical Exam.

COURSE CONTENT OF THE COMMITTEE

Course content	<p>Department of Anatomy</p> <ol style="list-style-type: none"> 1. Central Nervous System 2. Spinal Cord 3. Medulla oblongata and rhomboid fossa 4. Pons 5. Mesencephalon 6. Cerebellum 7. Subthalamus, epithalamus and metathalamus 8. Thalamus 9. Hypothalamus 10. Nuclei Basales 11. Cerebral Hemispheres 12. Cerebral cortex and white matter 13. The Orbit and Its Contents and the Eyeball 14. Supporting Apparatus of Orbita 15. Eyeball 16. Visual pathway 17. The ear 18. Auditory System: Pathways 19. Vestibular System 20. Tract of Spinal Cord I 21. Tract of Spinal Cord II 22. The olfactory Pathway and Rhinencephalon and Limbic System 23. Arterial Blood Supply to Brain 24. Cranial meninges and Venous drainage of Brain 25. Ventricular System of Brain and CSF 26. Cranial Nerves 27. Autonomic Nervous System <p>Department of Histology and Embryology</p> <ol style="list-style-type: none"> 1. Nervous System 2. Development of Nervous System 3. Histology and Development of Eye 4. Histology of Ear 5. Integument <p>Department of Physiology</p> <ol style="list-style-type: none"> 1. Nerve Action Potential, Synaptic Transmission, 2. Neurotransmitters and Receptors 3. Brain Blood Flow, Blood Brain Barrier and Circulatory Cerebrospinal Fluid 4. Introduction to Sensory Physiology, Sensory Receptors, Sensory Pathways 5. Pain Sense
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	<ol style="list-style-type: none"> 6. Motor Functions of the Spinal Cord 7. Reflexes 8. Motor Function Control: Cortex 9. Motor Function Control: Brainstem 10. Motor Function Control: Basal Ganglia 11. Motor Function Control: Cerebellum 12. Mental Activity of Cortex, Learning and Memory 13. Limbic System and Hypothalamus 14. Electrical Activity of the Brain and Sleep Physiology 15. Pineal Gland and Melatonin Hormones 16. Special Senses: Vision Optics and Refraction 17. Special Senses: Neurophysiology of Visual Sense 18. Special Senses: Taste and Odor 19. Special Senses: Hearing and Balance <p>Department of Medical Biochemistry</p> <ol style="list-style-type: none"> 1. Biochemistry of Nervous System & Synaptic impulses 2. Neurotransmitters <p>Department of Biophysics</p> <ol style="list-style-type: none"> 1. Information in Biological Systems 2. Receptors and Psychophysics 3. Synapses Models and Synaptic Potentials 4. Electroencephalography and Stimulated Potentials 5. Synapses and Numerical Applications of EEG 6. Refraction and Reflection of Light 7. Lenses and Defects 8. Visual Activity and Eye Defects 9. Biophysics of Hearing <p>Department of Medical Microbiology</p> <ol style="list-style-type: none"> 1. Gram-Positive Cocci 2. Aerobic Gram Positive Rods 3. Neisseriae, Haemophilus 4. Enterobacteriaceae 5. Gram negative rods other than Enterobacteriaceae (Aeromonas, Vibrio, Pseudomonas, Brucella, Legionella, etc.) 6. Mycobacteria 7. Anaerobic bacteria 8. Campylobacter, Helicobacter, Spirochetes 9. Mycoplasma and intracellular bacteria 10. Antibacterial Drugs 11. Resistance to Antibacterial Drugs <p>Special Study Module</p> <ol style="list-style-type: none"> 1. Special Study Module

THE RELATIONSHIP WITH THE LEARNING OBJECTIVES AND THE ACTIVITY IN THE TRAINING PROGRAM

COURSE PROGRAM RELATION MATRIX WITH AIMS, OBJECTIVES AND ACHIEVEMENTS			
	COURSE CONTENT	RELATED AIMS, OBJECTIVES AND ACHIEVEMENTS	Evaluation Method
	Anatomy	1	MC, PE
1	Central Nervous System	1,2	MC, PE
2	Spinal Cord	1,2,3	MC, PE
3	Medulla oblongata and rhomboid fossa	1,2,3	MC, PE
4	Pons	1,2,3	MC, PE
5	Mesencephalon	1	MC, PE
6	Cerebellum	1	MC, PE
7	Subthalamus, epithalamus and metathalamus	1,2	MC, PE
8	Thalamus	1	MC, PE
9	Hypothalamus	1,2	MC, PE
10	Nuclei Basales	1,2	MC, PE
11	Cerebral Hemispheres	1,2	MC, PE
12	Cerebral cortex and white matter	1	MC, PE
13	The Orbit and Its Contents and the Eyeball	6	MC, PE
14	Supporting Apparatus of Orbita	6	MC, PE
15	Eyeball	6	MC, PE
16	Visual pathway	2	MC, PE
17	The ear	2	MC, PE
18	Auditory System: Pathways	2	MC, PE
19	Vestibular System	2	MC, PE
20	Tract of Spinal Cord I	2	MC, PE

21	Tract of Spinal Cord II	1,2	MC, PE
22	The olfactory Pathway and Rhinencephalon and Limbic System	4	MC, PE
23	Arterial Blood Supply to Brain	4	MC, PE
24	Cranial meninges and Venous drainage of Brain	4	MC, PE
25	Ventricular System of Brain and CSF	3	MC, PE
26	Cranial Nerves	5	MC, PE
27	Autonomic Nervous System	1	MC, PE
	Histology and Embryology		
28	Nervous System	7	MC, PE
29	Development of Nervous System	8	MC, PE
30	Histology and Development of Eye	9	MC, PE
31	Histology of Ear	10	MC, PE
32	Integument	11	MC, PE
	Physiology		
33	Nerve Action Potential, Synaptic Transmission,	12	MC
34	Neurotransmitters and Receptors	12, 13	MC
35	Brain Blood Flow, Blood Brain Barrier and Circulatory Cerebrospinal Fluid	13	MC
36	Introduction to Sensory Physiology, Sensory Receptors, Sensory Pathways	13	MC
37	Pain Sense	13	MC
38	Motor Functions of the Spinal Cord	14	MC
39	Reflexes	14	MC
40	Motor Function Control: Cortex	15,16	MC
41	Motor Function Control: Brainstem	15,16	MC
42	Motor Function Control: Basal Ganglia	15,16	MC
43	Motor Function Control: Cerebellum	15,16	MC
44	Mental Activity of Cortex, Learning and Memory	15,16	MC
45	Limbic System and Hypothalamus	15,16	MC
46	Electrical Activity of the Brain and Sleep Physiology	15,16	MC
47	Pineal Gland and Melatonin Hormones	15,16	MC

48	Special Senses: Vision Optics and Refraction	15,16	MC
49	Special Senses: Neurophysiology of Visual Sense	15,16	MC
50	Special Senses: Taste and Odor	15,16	MC
51	Special Senses: Hearing and Balance	15,16	MC
	Medical Biochemistry		
52	Biochemistry of Nervous System & Synaptic impulses	17	MC
53	Neurotransmitters	18	MC
	Biophysics		
54	Information in Biological Systems	19	MC
55	Receptors and Psychophysics	19	MC
56	Synapses Models and Synaptic Potentials	19	MC
57	Electroencephalography and Stimulated Potentials	19	MC
58	Synapses and Numerical Applications of EEG	19	MC
59	Refraction and Reflection of Light	19	MC
60	Lenses and Defects	19	MC
61	Visual Activity and Eye Defects	19	MC
62	Biophysics of Hearing	19	MC
	Medical Microbiology		
63	Gram-Positive Cocci	20	MC, PE
64	Aerobic Gram Positive Rods	20	MC, PE
65	Neisseriae, Haemophilus	20	MC, PE
66	Enterobacteriaceae	20	MC, PE
67	Gram negative rods other than Enterobacteriaceae (Aeromonas, Vibrio, Pseudomonas, Brucella , Legionella, etc.)	20	MC, PE
68	Mycobacteria	20,21	MC, PE
69	Anaerobicbacteria	20,21	MC, PE
70	Campylobacter, Helicobacter, Spirochetes	20,21	MC, PE
71	Mycoplasma and intracellular bacteria	20,21	MC, PE
72	Antibacterial Drugs	22	MC, PE
73	Resistance to Antibacterial Drugs	22	MC, PE
	Special Study Module		

74	Special Study Module	23,24,25,26,27,28,29,30	PE
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DUTIES and RESPONSIBILITIES OF STUDENTS and OTHER ISSUES

EDUCATIONAL PROGRAM

1. Education in the faculty is carried out with an integrated system, the subjects and hours of which are arranged on the basis of coordination.
2. Education; In Phase I, Phase II and Phase III, it consists of common compulsory and elective courses with course committees conducted in an integrated system. In Phase I, Phase II and Phase III, one year is a whole and is considered as a single course, excluding common compulsory and elective courses.

LESSONS

1. Each semester in the faculty's education program is a prerequisite for the next semester. Except for the common compulsory courses and elective courses, it is not possible to proceed to the next semester without completing all the courses, practices and courses of a semester.
2. Students who fail common compulsory and elective courses in Phase I, Phase II and Phase III continue to the next semester. However, students must be successful in these courses before starting Phase IV.

ECTS:

1. The sum of course credits for an academic year is 60 ECTS.
2. In order to graduate from the Faculty of Medicine at the end of 6 years of education, the minimum graduation credit must be 360 ECTS and the overall grade point average must be at least 2.00.

OBLIGATION TO CONTINUE

1. The principles regarding the attendance of students in Phase I, Phase II and Phase III are as follows:

2. Attendance at the faculty is compulsory. The follow-up method of attendance at the faculty is determined by the Dean's Office.
3. Each of the committees in Phase I, Phase II and Phase III are evaluated within itself. A student who does not attend more than 30% of the theoretical courses in these course committees, with or without an excuse, receives a zero grade from that course committee and cannot take the exam.
4. In Phase I, Phase II and Phase III, students who exceed 30% in all theoretical courses in a phase, whether or not they have an excuse for absenteeism, are not entitled to take the final and make-up exams. These students are given a TT grade.
5. With or without an excuse, a student who does not attend more than 20% of the total practical course hours of the department with 10 or more practical lessons is not taken to the practical exam of that department and the practice grade is evaluated as zero. In this case, the student is treated as having a score under the threshold from the practical exam separately.
6. With or without an excuse, a student who does not attend two hours of the practical courses of the department with less than 10 hours of practical lessons in a course committee is not taken to the practical exam of that department and the practice grade is evaluated as zero. In this case, the student is treated as having a score under the threshold from the practical exam separately.
7. Professional (vocational) skills practices are evaluated as a whole. If the total professional skills practices in a course committee are less than 10 hours, the student who does not participate in the 2 course hours, and if the total professional skills practices in the course committee are more than 10 hours, the student who does not attend more than 20% of the total course hours, the professional skills practice / application grade in that course committee is evaluated as zero. In this case, the student will be below the threshold in addition to the professional skills practice/practice exam.

RECOGNITION OF PRIOR EDUCATION

1. Students apply to the Dean's Office with a petition **within the first week of the academic year** in order to have the courses they have taken and succeeded from other higher education institutions recognized and adapted.
2. In the petition, the courses they want to be exempted from and the grades they get from these courses are clearly stated. In the annex of the petition, documents approved by the

official authorities regarding their previous education, the grades of the courses they have previously completed, and their content are submitted.

EVALUATION OF SUCCESS IN PHASE I, PHASE II, PHASE III EXAMS

1. The following principles are followed in calculating the exam grades of the course committees:
2. Board exams are made as written exams and/or by using alternative methods such as homework/project. Exams can be conducted face-to-face and/or using digital facilities. In addition to the written exams, practical-practice and/or oral exams can be made by using face-to-face and/or digital facilities in the committees with practice. Different assessment methods can be determined for problem-based teaching, vocational skills training and other similar training practices.
3. The total grade of practical courses and their distribution according to the courses, the grade weight of the vocational skills practices, problem-based teaching (PBL) and other similar education and examination practices and the distribution according to the boards are determined by the Phase coordinators in line with the content of the education-training program.
4. In a course committee exam, each course and practice/practice exam has its own threshold. The threshold limit is 50%. If the student gets a grade below 50% in one or more of the courses that make up the board in the course committee exam, the score difference between the score obtained in that branch and 50% of the total score of that branch is deducted from the total score of the exam, and the exam grade of that course committee is determined. For the courses whose number of questions is less than 5% of the total number of questions in that exam, the relevant phase coordinator may decide to combine the dam application. Theoretical and practical points of the courses that make up the course committee are added together, and the course board exam score is found.
5. If the result is negative in the calculation of the total score of the course committee, this score is evaluated as zero.
6. Phase committees average grade: To calculate the phase committees average grade point; The ECTS value of each committee in that period is multiplied by the coefficient of the letter grade received from that committee. The values found as a result of the multiplication are added together and the total value obtained is divided by the total ECTS value of these committees. The resulting average is displayed as two decimal places.

7. Course committees are made by using alternative methods such as end-of-Phase (final) and make-up exams, written exams and/or homework/projects. Exams can be conducted face-to-face and/or using digital facilities. In addition to the written exams, a practical (practice) and/or oral exam can also be conducted using face-to-face and/or digital facilities.
8. In order to be considered successful, it is obligatory to get at least 50 points from the course committees end-of- Phase exam or the course committees make-up exam.
9. The final grade of the course committees is the grade obtained by adding 60% of the average grade of the course committees and 40% of the grade received from the final exam. In the calculation of the final grade of the students who fails, the grade taken from the make-up exam is taken as a basis instead of the grade from the final exam. In order for the student to move up to the next grade, he/she must get at least 50 from the course committees end-of-Phase exam or make-up exam, and The final grade of the course committees must be at least 60 out of 100.
10. The provisions of Muğla Sıtkı Koçman University Associate and Undergraduate Education Regulations published in the Official Gazette dated 27/8/2011 and numbered 28038 are applied in the conduct of common compulsory courses and non-TIP/MED coded elective/compulsory courses and in the evaluation of their exams.

RIGHT TO EXEMPTION FROM THE END OF PHASE (FINAL) EXAM

1. Students with an average grade of 85 and above in the course committees and a score of at least 60 and above from each course committee are not required to take the end-of- Phase exam. The average grade of the course committees of the students who have the right to be exempted from the end-of- Phase exam is accepted as the end-of- Phase success grade of the course committees.
2. Students who want to take the the end-of- Phase exam, although they have obtained the right to be exempted from the end-of- Phase exam, must notify the Dean's Office in writing at least 7 days before the exam date. For students who take the end-of- Phase exam in order to raise their grades, the end-of- Phase exam score is taken into consideration when calculating the final grade of the course committees.

PHASE REPEAT

1. A student whose end-of- Phase exam grade or make-up exam grade and course committees end-of-semester success grade is below the scores specified in this regulation is

considered unsuccessful and failed in the class. These students repeat that semester one more time and retake the exams. In these repetitions, students are obligated to attend classes.

RESPONSIBILITIES

1. They strive to make the classroom atmosphere nurturing to learning.
2. They are fair in their judgments about their friends and respectful of the existence of all people in the resolution of conflicts.
3. They respect cultural differences.
4. They are intolerant of all kinds of discrimination.
5. They maintain academic integrity and act accordingly.
6. They take an impartial attitude towards research, explain the results accurately, and state the studies and ideas that have been made or developed by others.
7. They act in a respectful and cooperative manner in interaction with all members of the healthcare team.
8. Take care of their appearance, be present in a professional and clean manner, and do not wear clothing and jewelry (jewelry, tattoos, or other symbols) that may interfere with the physical care of patients or communication with them.
9. They behave professionally in 9th grade classes, in clinical settings, in the way of speaking before the patient, reliability and appearance.
10. In their clinical practice, they always carry the university's identity or name badges on their aprons.
11. They introduce themselves to patients and their relatives as "**medical students**".
12. They participate in all clinical practices they are assigned to and inform the relevant people about their excuses in advance.
13. Respect the privacy of patients when interacting with them.
14. They consider confidentiality a fundamental obligation in patient care.
15. In their interaction with patients, instructors cannot act without their supervision or knowledge.
16. They keep all medical records related to patient care confidential and ensure that educational discussions about these records are held in accordance with the principles of confidentiality.
17. They report any illegal and unprofessional practices they observe to the authorities.
18. They make discussions about hospital staff and patients in a way that no one can hear except in common areas.

19. They treat patients and their relatives, as well as other members of the healthcare team, with respect and seriousness in their dialogue and discussion.
20. They know their limitations and seek help when their experience is insufficient.
21. During training and practice studies and exams, they do not make any unauthorized video, audio and similar recordings and do not share these recordings with third parties (including in social media, internet and similar environments), do not use or collect them for other purposes.
22. They act in accordance with the principles regarding attendance and other matters of Phase I, II and III students in the MSKU Faculty of Medicine Education-Training and Examination Regulations.
23. Students know the rules to be followed by students in MSKU Faculty of Medicine Pre-Graduation Education, students' responsibilities and duties and act accordingly.
24. Students know the issues in the Student Guides for MSKU Faculty of Medicine Student Laboratory Practices and act in accordance with these issues.

Please read:

1. The Rules to be Followed by Students in MSKU Faculty of Medicine Pre-Graduation Education, Students' Responsibilities and Duties
2. Student Guides for MSKU Faculty of Medicine Student Laboratory Practices

ENGLISH MEDICINE PROGRAM

Common Compulsory Courses English Medicine Program: Foreign Language (English-German-French 1-2-3-4), Principles of Atatürk and Revolutionary History 1-2 (International Student: ATBY2801, ATBY2802), Turkish Language 1-2 (International Student: TDBY1801, TDBY1802), Introduction to Information & Communication Technologies (Names and codes of the lessons may differ slightly from year to year)

MSKU Faculty of Medicine Education and Examination Regulations: Students who fail common compulsory and elective courses in Phase I, Phase II and Phase III continue to the next semester. However, students must be successful in these courses before starting Phase IV.

Compulsory Observation Training 1-2: Students who successfully complete the Phase 1 do their compulsory observation training in a primary healthcare institution for ten working days during the summer or half year vacation period; Students who successfully complete

Phase 2 do their compulsory observation training in a secondary or tertiary healthcare institution for ten working days during the summer or half year vacation period. Completing the observation trainings is a prerequisite for starting Phase 4. It is a prerequisite to pass the Occupational Health and Safety course in order to do the Compulsory Observation Training. Compulsory Observation Training Course is planned to come into effect in the 2023-2024 academic year.

International students enrolled in the English Medicine Program: Until Phase 4, the original document proving that they can speak Turkish at the B2 level, taken from the centers providing Turkish education (Turkish and Foreign Language Application and Research Center-TÖMER, etc.) accepted by YÖK, has to be submitted to the Dean's Office. Students who cannot meet the Turkish proficiency requirement cannot continue to Phase 4 until they have the prerequisite Turkish proficiency certificate.

Courses Required Before Passing to Phase 4 of the English Medicine Program: Foreign Language (English-German-French) 1-2-3-4, Principles of Atatürk and Revolutionary History 1-2 (Foreign Student: ATBY2801, ATBY2802), Turkish Language 1-2 (Foreign Student: TDBY1801, TDBY1802), Introduction to Information & Communication Technologies, Phase 1 Elective Course, Compulsory Observation Training 1-2, Turkish Proficiency Certificate specified in the regulation for international students (Names and codes of the lessons may differ slightly from year to year) (Register from the Student Information System and check your success at regular intervals.)

Registration for Common Compulsory Courses and Elective Courses: Students have to register for these courses themselves through the student information system and follow up all the courses that you have to achieve regularly through the student information system by entering the student information system at least once a week.

Disclaimer:

The information given in the guide above is for informing students only and does not have any legal status. Keep in mind that there may be changes over time due to the names of the courses, their codes, legal regulations, the decisions of board of coordinators, the decisions of the term coordinator and similar reasons.