

**GAZI UNIVERSITY**  
**VOCATIONAL SCHOOL OF HEALTH SERVICES**  
**ECTS INFORMATION PACKAGE**

**ADMINISTRATION**

**1.Head of Vocational School**

Prof. Dr. Yusuf KALENDER, Tel: 4841125, E-mail: [kalender@gazi.edu.tr](mailto:kalender@gazi.edu.tr)

**2.Secretary of Vocational School**

Sevgi CANATAN, Tel: 4845635

**3.ECTS Coordinator**

Assoc. Prof. Dr. Arzu Evrim KOÇKAYA, Tel: 4845635, E-mail: [evrima@gazi.edu.tr](mailto:evrima@gazi.edu.tr)

**Address:** Gazi Üniversitesi Gölbaşı Kampüsü

**GENERAL INFORMATION ON THE NATIONAL HIGHER EDUCATION  
SYSTEM**

The basic structure of the Turkish National Education system consists of four main stages as pre-school education, primary education, secondary education and higher education.

Pre-school education consists of non-compulsory programs for children from birth to the age of 72 months whereas primary education is a compulsory 8 years program for all children beginning from the age of 6. The secondary education system includes “General High School” and “Vocational and Technical High Schools”. General High Schools offer programs lasting at least three years and preparing students for higher education. Within the category of General High Schools, the following sub categories exist: General High School, Foreign Language High School, Anatolian Preparation High School, Science High School, Anatolian Fine Arts High School, Anatolian Teacher Preparation High Schools. Vocational Technical High Schools offer three-years programs (vocational schools) or four-year programs (technical schools). They prepare students for employment in various occupations, or for higher education. There are four main groups of high schools within this category: technical schools for boys, technical schools for girls, commerce and tourism schools, and religious education schools.

Higher education is defined as all post-secondary programs with duration of at least two years. The system consists of universities (state and foundation) and non-university institutions of higher education (police and military academies and colleges). Each university consists of faculties and four year schools offering bachelor's level programs, the latter with a vocational emphasis, and two year vocational higher schools offering pre-bachelor's (associate's) level program of a strictly vocational nature. Anadolu University in Eskişehir offers two and four-year programs through distance education. Lectures are broadcasted on television and contact hours are available.

The establishment of foundation universities is based on Law No. 2547, the Law on Higher Education. They gain income from a foundation, tuition fees, and donations. They may receive state assistance from the Ministry of Finance provided that they meet certain requirements concerning their staff, admitted students, number of publications per faculty and scholarships awarded to their students.

Admission to higher education is based on a nation-wide Student Selection Examination (ÖSS). The examination is held every year and is administered by the Student Selection and Placement Center (ÖSYM). Candidates gain access to institutions of higher education based on their composite scores consisting of the scores on the selection examination as well as their high school grade point averages.

Beginning from the academic year 2002-2003, those who graduate from vocational-technical high schools have an opportunity to be placed in two-year vocational higher schools without taking any entrance examinations.

Those who graduate from a two-year vocational higher school can continue their education in four-year programs, based on the quotas available and their scores on a vertical transfer examination.

Graduate-level programs consist of master's and doctoral programs, coordinated by graduate schools. Master's programs are specified as "with thesis" or "without thesis" programs. "With thesis" master programs consist of a specified course completion followed by a submission of a thesis whereas "without thesis" programs consist of completion of graduate courses and a term project. The duration of these programs is a minimum of two years. Access to doctoral programs requires a master's degree. Doctoral programs have duration of a minimum of four years that consists of completion of courses, passing a doctoral qualifying examination, and preparing and defending a doctoral dissertation. Medical specialty training programs are

equivalent to doctoral level programs and carried out with the faculties of medicine and the training hospitals.

The Council of Higher Education (YÖK) regulates the Higher Education System. Established in 1981, the Council regulates the institutions' activities concerning research, governance, planning and organization. Two-year vocational schools and departments are founded by the Council whereas universities and institutions are established by the law.

## **MEDICAL LABORATORY PROGRAM**

### **Name of the qualification and title conferred:**

Tıbbi Laboratuvar, Önlisans; Medical Laboratory, Associate Degree.

### **Title conferred:**

Tıbbi Laboratuvar Teknikeri; Medical Laboratory Technician.

### **Main field(s) of study for the qualification:**

Medical laboratory background, techniques and procedures are required.

### **Name and status of awarding institution**

Gazi University, Non-profit, State recognized.

### **Name and status of institution administering studies**

Gazi University Vocational School of Health Services; Medical Laboratory Program  
Gazi Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulu Tıbbi Laboratuvar Programı.

### **Language(s) of instruction/examination:**

Turkish

## **INFORMATION ON THE LEVEL OF THE QUALIFICATION**

### **Level of qualification:**

Associate Degree

### **Official length of program:**

2 years, 2 semesters per year, 14 week per semester, 20 workdays of practical summer training course in the Central Medical Laboratory of Gazi University Medical Faculty Hospital per year, full-time practical training course in the Central Medical Laboratory of Gazi University Medical Faculty Hospital within the last semester.

**Access requirements:**

High school diploma,

Placement through a centralized national university placement examination and graduation from related vocational high schools

**INFORMATION ON THE CONTENTS AND RESULTS GAINED****Mode of study:**

Full-time

**Program requirements:****Requirements**

The Associate Degree is awarded to students who have successfully completed all courses in the curriculum, including two times 25 workdays of summer practice course and in term practical training course, and have obtained a cumulative grade point average of at least 2.00 over 4.00.

**Objectives**

The aim of this program is to prepare and graduate students for both private and public medical laboratory technician jobs.

**Program details and the individual grades/ marks obtained:**

<b>SEMESTER I</b>				<i>Hr./Week</i>
<b>CODE</b>	<b>NAME of COURSE</b>	<b>LECTURE</b>	<b>PRACTICE</b>	<b>ECTS CREDITS</b>
ATA101	History of Turkish Republic I	2	0	2
TUR101	Turkish I	2	0	2
ING101	Foreign Language I	2	0	2
ENF101	Information Technology	1	2	2
LAB101	Anatomy	2	0	2
LAB103	Biostatistics	2	0	2
LAB105	Physiology	2	0	2
LAB107	Biomedical Technology	2	2	3
LAB109	Basic Biochemistry	2	0	2
LAB111	Basic Chemistry	2	0	2
LAB113	Basic Mathematics	2	0	2
LAB115	Medical Biology and Genetics	2	0	2
LAB117	Medical Terminology	2	0	2
LAB119	General Microbiology	2	2	3
LAB121	Histology	2	0	2
	<b>Total:</b>	<b>29</b>	<b>6</b>	<b>32</b>
<b>SEMESTRE II</b>				
<b>CODE</b>	<b>NAME of COURSE</b>	<b>LECTURE</b>	<b>PRACTICE</b>	<b>ECTS CREDITS</b>
ATA102	History of Turkish Republic II	2	0	2
TUR102	Turkish II	2	0	2
ING102	Foreign Language II	2	0	2
ENF102	Computer Applications	2	2	3
LAB102	First Aid	2	0	2
LAB106	Basic Physics	2	0	2
LAB110	Clinical Microbiology	2	2	3
LAB112	Laboratory Practice	0	8	4
LAB114	Organic Chemistry	2	0	2
LAB116	Laboratory Safety	2	0	2
LAB118	Computer aided Statistics	2	2	3
LAB120	Health Services Management	2	0	2
LAB122	Patient's Psychology and Interpersonal Communication	2	0	2
LAB124	Professional English I	2	0	2
	<b>Total :</b>	<b>26</b>	<b>14</b>	<b>33</b>
<b>CODE</b>	<b>NAME of COURSE</b>	<b>LECTURE</b>	<b>PRACTICE</b>	<b>ECTS CREDITS</b>
LAB100	Summer Practice I			4
	<b>Total :</b>			<b>4</b>

<b>SEMESTRE III</b>				
<b>CODE</b>	<b>NAME of COURSE</b>	<b>LECTURE</b>	<b>PRACTICE</b>	<b>ECTS CREDITS</b>
LAB201	Analytical Chemistry	2	0	2
LAB203	Public Health and Medical Deontology	2	0	2
LAB205	Hematology	2	0	2
LAB207	Biomedical Technology	2	0	2
LAB209	Immunology	2	0	2
LAB211	Clinical Biochemistry	2	2	3
LAB213	Clinical Cytology	2	0	2
LAB215	Nuclear Medicine	2	0	2
LAB217	Pathology	2	0	2
LAB219	Behavioral Sciences	2	0	2
LAB221	Professional English II	2	0	2
LAB223	Deontology and Professional Ethics	2	0	2
LAB225	Mycology and Parasitology	2	0	2
LAB227	Infection and Disease	2	0	2
	<b>Total:</b>	<b>28</b>	<b>2</b>	<b>29</b>
<b>SEMESTRE IV</b>				
<b>CODE</b>	<b>NAME of COURSE</b>	<b>LECTURE</b>	<b>PRACTICE</b>	<b>ECTS CREDITS</b>
LAB202	Practical Course *	0	32	16
LAB204	Quality Control and Accreditation in the Medical Laboratories	4	0	4
	<b>Total:</b>	<b>4</b>	<b>32</b>	<b>20</b>
<b>CODE</b>	<b>NAME of COURSE</b>	<b>LECTURE</b>	<b>PRACTICE</b>	<b>ECTS CREDITS</b>
LAB200	Summer Practice II			4
	<b>Total:</b>			<b>4</b>
	<b>Grand Total:</b>	<b>95</b>	<b>54</b>	<b>122</b>
* The program coordinator selects practice courses departments in .the University Hospital.				

**Note:** ECTS credits and local credits are same. Therefore the both credits are given in the same column.

All are must courses and there are not any electives in this program.

The University grading systems uses letters as follows:

## Grading Scheme and Grades:

The University grading systems uses letters as follows:

GRADES	POINT
AA	4.0
BA	3.5
BB	3.0
CB	2.5
CC	2.0
DC	1.5
DD	1.0
FD	0.5
FF	0.0

Other letters and signs:

B: Passes non-credit course

K: Fails non-credit course

D: Not attended to lessons.

G: Not attended to exams

M: Exempt

S: Continuing study

E: Missing grade

DC+: Student with higher cumulative grade than 2.00 will pass

DC-: Student with lower cumulative grade than 2.00 will fail

Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA)

A student's academic performance is determined at the end of the semester by computing an average of grades she/he has received during that semester.

**Access to further study:** Graduates with the associate degree may apply to university programs in related fields according to their Cumulative Grade Point Average.

**Professional status (if applicable):** Graduates may apply to Ministry of Health or to any private medical laboratory as a laboratory technician.

ENF 101 INFORMATION TECHNOLOGY					VOCATIONAL SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	14	-			-	42	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Introducing to computer, Computer Structure, Operating Systems, Introducing to Windows Operating System, Characteristic of Windows Operating System, Introducing to WORD, Taking help, Working to document, Edit, Format, Views and printing, Developing to document, Working to tables, Working to templates, Web Pages								
<b>Course Objectives</b>	Introducing and using to computer technology								
<b>Course Outcomes</b>	Establishment of effective working capabilities with computer technology								
<b>Textbook and /or References</b>	Bülbül H.İ., etc., Basic Computer Technology and Applications, Ada Publication, Ankara, 2002.								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Introducing to Computer</b>							10	
	<b>Windows</b>							40	
	<b>Word</b>							40	
	<b>Web Pages</b>							10	
<b>Instructors</b>	Hakan TEKEDERE, tekedere@gazi.edu.tr								

LAB 101 ANATOMY-1				VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAM				
Semester							Credits	
	Lecture	Recite	Lab.		Other	Total	Credit	ECTS Credit
1/2	28	-	-	-	-	28	2	2
Language	Turkish							
Compulsory/Elective	Compulsory							
Prerequisites	none							
Course Contents	Skeletal system, Muscular system, Upper limb and Lower limb, Back, Cardiovascular system, Respiratory system, Lymphatic system, Thorax , respiratory system, digestive system, Pelvis and perineum, Nervous system: Central nervous system, peripheral nervous system, somatic nervous system, autonomic nervous system, sense organs							
Course Objectives	The meaning of human anatomy; basic Latin terminology; systematic analysis of the human anatomy with stress on motion anatomy.							
Learning Outcomes and Competences	Knowledge of the normal human anatomy, competence of interpreting anatomical structures in radiologic images							
Textbook and/or References	Netter FH : Atlas of Human Anatomy. Third edition. Icon Learning Systems. 2003 Figen Gövsa Gökmen: Sistematik Anatomi. İzmir, Güven Kitabevi, 2003							
Assessment Criteria							<i>If any, mark as (X)</i>	Percent (%)
	<i>Midterm Exams</i>						X	60
	<i>Quizzes</i>							
	<i>Homeworks</i>							
	<i>Projects</i>							
	<i>Term Paper</i>							
	<i>Laboratory Work</i>							
	<i>Other</i>							
	<b>Final Exam</b>						X	100
Instructors								
Week	<b>Subject</b>							
1	Skeletal system: axial							
2	Skeletal system: appendicular							
3	Articulations and muscles							
4	Mediastinum, circulatory system							
5	Circulatory system, lymphatic system							
6	Respiratory system							
7	Respiratory system							
8	Digestive system							
9	Digestive system							
10	Urinary system (kidney, ureters, bladder, urethra)							
11	Female and male genital organs, pelvis and perineum							
12	Central nervous system							
13	Peripheric nervous system							
14	Sense organs							

LAB103 BIOSTATISTICS I						VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME			
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	28	-			-	56	3	3
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Introduction and definitions, data collection methods, sampling, distribution criteria and applications, data classification and application-distribution criteria of classified data and application-graphs, tables and application.								
<b>Course Objectives</b>	Giving the concept of Biostatistic, data arrangement, distribution criteria, graphs and tables								
<b>Course Outcomes</b>	Learning the concept of Biostatistic, data arrangement, distribution criteria, forming graphs-tables and applications.								
<b>Textbook and /or References</b>	<ul style="list-style-type: none"> <li>• Sümbüloğlu, K., Sümbüloğlu, V., Biyoistatistik, Özdemir Yayınları, Ankara, 1995.</li> <li>• Esin, A., Ekni, M., Gangam, H., Sağlık Bilimlerinde İstatistik, Gazi Üniversitesi Yayınları, No:171, Ankara, 1991.</li> <li>• Sümbüloğlu, K., Sağlık Alanına Özel İstatistik Yöntemler, Hatiboğlu Yayınları, 1990.</li> </ul>								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
<b>Final Exam</b>							1	60	
<b>Course Category by Content (%)</b>	<b>Biostatistical Science</b>							80	
	<b>Mathematical Science</b>							15	
	<b>Social Sciences</b>							5	
<b>Instructors</b>	Öğr.Gör. İlker ÖZGEDİK, iozgedik@gazi.edu.tr								

LAB 105 PHYSIOLOGY							VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME		
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
½	28	-	-	-	-	-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Cellular physiology, Nerve and muscle physiology, Cardiovascular physiology, Respiratory physiology, Gastrointestinal physiology, Endocrine physiology								
<b>Course Objectives</b>	Giving the basic physiology lectures								
<b>Course Outcomes</b>	Learning the functional organization of the human body								
<b>Textbook and /or References</b>	-Ganong, W. F.: Review of medical physiology, Twenty-first edition, Mc Graw Hill Comp, USA, 2003 -Guyton, A. C., Hall, J.E.: Textbook of medical physiology, Tenth edition, W.B. Saunders Comp. Pennsylvania, 2002								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Sciences</b>							85	
	<b>Educational and Social Sciences</b>							15	
<b>Instructors</b>	Assoc. Prof. Birsen Kaplan bkaplan@gazi.edu.tr								

LAB 107 BIOMEDICAL TECHNOLOGY							VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME		
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
½	28	-	-	-	-	-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Introduction spectrometric methods& terminology, ultraviolet and spectrometri, Ph, santrifigation, atomics absorpsition spectrometri, chromatographic analyses								
<b>Course Objectives</b>	Giving the knowledge of biomedical technonology.								
<b>Course Outcomes</b>	Learning the knowledge of biomedical technonology.								
<b>Textbook and /or References</b>	-Ganong, W. F.: Review of medical physiology, Twenty-first edition, Mc Graw Hill Comp, USA, 2003 -Guyton, A. C., Hall, J.E.: Textbook of medical physiology, Tenth edition, W.B. Saunders Comp. Pennsylvania, 2002								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Sciences</b>							85	
	<b>Educational and Social Sciences</b>							15	
<b>Instructors</b>	Ögr. Gör. Ömer ERKAN omerkan@gazi.edu.tr								

LAB109 BASIC BIOCHEMISTRY					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
I	2	-	--			--	28	2	
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	None								
<b>Catalog Description</b>	---								
<b>Course Objectives</b>	Knowledge about general biochemistry (proteins, carbohydrates, lipids, nucleic acids, vitamins and coenzymes)								
<b>Course Outcomes</b>	Cells, Structure of amino acids, proteins, carbohydrates, lipid, enzyme, and metabolism of carbohydrate, lipid and TCA, ETZ, metabolism of hormone ve minerals.								
<b>Textbook and /or References</b>	Tekman,Şevket; Genel Bemistry lessons / İst.Gür Ay,1987 Champe,Pamela C.; Biochemistry / İst.Nobel,1997 Öztürk, Bülent; Biochemistry / Bursa,Nobel,1998 Tüzün, Celal; Biochemistry / Ank.Palme ,1997 Kalaycıoğlu,Leyla; Biochemistry / Ank Nobel.2000 Menteş, Gülriz; Biochemistry of Harper/ Barış,İstanbul,1993 Rawn,J.David; Biochemistry,Neil Patterson Publishers, North Carolina,1991								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							--	--
	<b>Homeworks</b>							--	--
	<b>Projects</b>							--	--
	<b>Term Paper</b>							--	--
	<b>Laboratory Work</b>							--	--
	<b>Other</b>							--	--
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>									
<b>Instructors</b>	Assistant Professor Dr. Elif Loğoğlu logoglu@gazi.edu.tr								

LAB 111 BASIC CHEMISTRY					VOC. SCHOOL OF HEALTH SERVICES/MADICAL LABORATORY				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-			-	-	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Types of chemical reactions, chemical equilibrium, gases, solids, liquids and solutions, properties of solutions, chemical thermodynamics, atoms, molecules and ions, oxidation-reduction, acids and bases, structures of atoms, chemical bonds, elements, periodic table.								
<b>Course Objectives</b>	Teaching of general chemical knowledge to be evaluate environmental analysis.								
<b>Course Outcomes</b>	Establishing a general chemical chemistry knowledge to make necessary analysis and evaluation of the results.								
<b>Textbook and /or References</b>	Fahrunisa Pamuk; Genel Kimya, Gazi Üniversitesi, Ankara, 1988 Ralph H. Petrucci; Genel Kimya, Palme, Ankara, 1995 Sezai A. Saraç; Üniversiteler için Modern Genel Kimya, Birsen, İstanbul, 1988 Yüksel Sarıkahya, Genel Kimya, Ege Üniversitesi, İzmir, 1989 Basri Atasoy; Genel Kimya, Ege Üniversitesi, İzmir, 1989								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>General Chemistry</b>							100	
<b>Instructors</b>	Ögr. Gör. Ömer ERKAN omerkan@gazi.edu.tr								

LAB 113 BASIC MATHEMATICS					MEDICAL LABORATORY				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-			-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Number theory and related operations, algebraic statements, relations and functions, absolute value, exponents, radicals, polynomials, factoring, inequalities, equations, ratio and proportion, logarithm.								
<b>Course Objectives</b>	Giving number theory and related operations, algebraic statements, relations and functions, absolute value, exponents, radicals, polynomials, factoring, inequalities, equations, ratio and proportion, logarithm.								
<b>Course Outcomes</b>	Learning number theory and related operations, algebraic statements, relations and functions, absolute value, exponents, radicals, polynomials, factoring, inequalities, equations, ratio and proportion, logarithm.								
<b>Textbook and /or References</b>	<ul style="list-style-type: none"> <li>• Hacısalihođlu, H.H., Temel ve Genel Matematik, Ankara, 2000.</li> <li>• Kartal, M., Temel Matematik, Aktif Yayınevi, Sivas, 1999.</li> <li>• Bizim, O., Temel Matematik, Vıfas, Bursa, 2000.</li> </ul>								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Mathematical Science</b>							100	
<b>Instructors</b>	Öđr.Gör. İlker ÖZGEDİK, iozgedik@gazi.edu.tr								

LAB115 MEDICAL BIOLOGY & GENETICS				VOCATIONAL SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	28	-	-	-	-	-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Biomolecular, structure and functions of cells, energy metabolims, photosynthesis, Mendel genetics and cell division, quality of genetic materials, DNA, RNA, protein synthesis, Genetic control, mutuation and reproduction biology.								
<b>Course Objectives</b>	To teach genetic and biological events happening in the body and terms								
<b>Course Outcomes</b>	Learning biological and genetical terms and events.								
<b>Textbook and /or References</b>	Medikal Genetik ilkeler, Prof.Dr. Bekir Sıtkı ŞAYLI Tıbbi biyoloji ve Genetik, Prof.Dr. Eşref DENİZ								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic medicine sciences</b>							70	
	<b>Natural science</b>							30	
<b>Instructors</b>	Yrd.Doc. Yakup DELİÖMEROĞLU, ydeliomeroğlu@gazi.edu.tr								

LAB117 MEDICAL TERMINOLOGY				VOCATIONAL SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/1	28	-	-	-	-	-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Anterior , Prone , Dekubitus , Frontal , Santral , Apikolordotik , Bilateral , Distal , Konjenital , Etiyoloji etc..								
<b>Course Objectives</b>	Learning radiological terminology								
<b>Course Outcomes</b>	Learning radiological terminology								
<b>Textbook and /or References</b>	Tıp Terimleri Sözlüğü, Utkan KOCATÜRK Tıbbi Terminoloji, M. Adil ARTUKOĞLU								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Clinical Medical Science</b>							50	
	<b>Internal medical science</b>							50	
<b>Instructors</b>	Öğ.Gör.Dr. Gonca ERBAŞ goncaerbas@gazi.edu.tr								

LAB 119 GENERAL MICROBIOLOGY							VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME		
Semester	Teaching Methods						Credits		
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	28					56	3	3
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	None								
<b>Catalog Description</b>	Short history of Microbiology, classification and general specifications of microorganism, cell structures, nutrition specifications, growth and genetics of bacteria; relations between microorganisms and host; flora of human; infection and spreading of microorganisms; effects of antibiotics on bacteria and resistance of bacteria to antibiotics; general structures, specifications, classifications and growth properties of viruses, fungi and parasites; sterilization and disinfection.								
<b>Course Objectives</b>	Teaching of general microbiology								
<b>Course Outcomes</b>	Establishing a general microbiology knowledge								
<b>Textbook and /or References</b>	Aksöz,Tolga; Mikrobiyoloji / Bursa,Nobel,1998 Şahin,İsmet; Genel Mikrobiyoloji / Bursa,Uludağ Üniv.1999 Ustaçelebi ,Şemsettin; Temel ve klinik mikrobiyoloji / Ank. Güneş ,1999								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Medical Sciences</b>							100	
<b>Instructors</b>	Assist.Prof..Dr. Cengiz GÜLSAYIN, gulsayin@gazi.edu.tr								

LAB 121 HİSTOLOJİ						VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME			
Semester	Teaching Methods						Credits		
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-	-			28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Epithelial tissue, connective tissue, blood tissue, cartilage tissue, bone tissue, muscle tissue, nerve tissue.								
<b>Course Objectives</b>	Giving the tissue and tissue types								
<b>Course Outcomes</b>	Learning the tissue and tissue types								
<b>Textbook and /or References</b>	<ul style="list-style-type: none"> <li>- Akay,M.Turan; Genel Histoloji / Ank. Palme, 2001</li> <li>- Erdoğan,Deniz; Genel Histoloji / Ank,Hatipoğlu,1999</li> <li>- Jungueira, L.Carlos; Temel Histoloji / İst. Barış,1998</li> <li>- Sağlam,Mahmut; Genel Histoloji / Ank..Yorum,1993</li> </ul>								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Science</b>							100	
<b>Instructors</b>	Assist. Prof. Evrim Arzu KOÇKAYA evrima@gazi.edu.tr								

ENF 102 COMPUTER APPLICATIONS				VOCATIONAL SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	28	28	-			-	56	3	3
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Introducing to Excel, Taking help, Working to worksheet, Edit, Making and formatting a table, Calculation, printing, functions, Graphics, Introducing to Powerpoint, making to presentation, making to graphics, management to slide, usement to internet, making to web page, MS Outlook								
<b>Course Objectives</b>	Teaching of effective working with Office programs and internet								
<b>Course Outcomes</b>	Establishment of effective working capabilities with Office programs and internet								
<b>Textbook and /or References</b>	Bülbul H.İ., etc., Basic Computer Technology and Applications, Ada Publishment, Ankara, 2002.								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	Midterm Exams							1	40
	Quizzes								
	Homeworks								
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam							1	60
<b>Course Category by Content (%)</b>	Excel							30	
	Powerpoint							30	
	Internet							20	
	Web Pages and MS Outlook							20	
<b>Instructors</b>	Hakan TEKEDERE, tekedere@gazi.edu.tr								

LAB 102 FIRST AID TRAINING					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	28	-	-			-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Importance and rules of first aid, disaster situations in public, causes, problems and civil defence, first aid in injury, first aid in bleedings, first aid applications in respiration and circulation systems, first aid in shock extremite bone breaking and bleeding situations, vertebra, head, thorax bone breaks and first aid, methods of rescue and carrying, burn, electrical shock, freezing, first aid in nutrition and chemical substance poisoning situations, another necessary first aid situations.								
<b>Course Objectives</b>	Giving the principles of first aid								
<b>Course Outcomes</b>	Learning and applications of the of first aid								
<b>Textbook and /or References</b>	Somyürek İ.(1998) Adım adım ilkyardım ve kurtarma Palme Yayınları- ANKARA Türkiye Kızılay Derneği, İlk Yardım El Kitabı, Pelit Ofset, Ankara, 2001.								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Social Sciences</b>							100	
<b>Instructors</b>	Sevinç AKTAŞ, sevinc@gazi.edu.tr								

LAB 106 BASIC PHYSICS					VOCATIONAL SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	28	-	-	-	-	-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Measurement and unit systems, Numerical and vectorial quantities, Motion in one dimension and two dimension, Newton's Laws, Friction and Friction force, Work-Power-Energy, Resistance and current, Series and parallel connection, Kirchoff's Law, Coulomb Law, Electric Field, Potential Energy, Magnetism.								
<b>Course Objectives</b>	Learning basics of physics and laws								
<b>Course Outcomes</b>	Learning basics of physics and laws related with radiology								
<b>Textbook and /or References</b>	Fizik İlkeleri, Editör: Prof.Dr. Kemal ÇOLAKOĞLU, Temel Fizik, Editör: Prof.Dr. Cengiz YALÇIN								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Mathematical operations</b>							30	
	<b>Basic nature science</b>							70	
<b>Instructors</b>	Öğ.Gör. Hacı DOĞAN hadogan@gazi.edu.tr								

LAB 110 CLINICAL MICROBIOLOGY							VOC. SCHOOL OF HEALTH SERVICES MEDICAL LABORATORY PROGRAMME		
Semester	Teaching Methods						Credits		
	Lecture	Recite	Lab.		Other	Total	Credit	ECTS Credit	
1/2	28	28				56	3	3	
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	None								
<b>Catalog Description</b>	Staphylococci, Streptococci, Pneumococcus, Neisseriae Gram positive aerob and anaerob bacteriar Corynebacterium ,Mycobacteria, small gram negative bacilli, Haemophylus, enteric bacteria, spiral microorganisms, fungi and yeasts, superficial and systemic fungi, Mycoplasma, Chlamydia and virusesi, Picorna, Orthomyxo, Paramyxoviruses, Rabies, Herpes, hepatitis viruses, Pox and other viruses. Plasmodium Toxoplasma, Trichomonas, Leishmania, Trypanosoma, Helminthes, Nematods, Ascaris, Strongyloides ,Trichinella, Enterobius, Trematods, Cestods sspecifications.								
<b>Course Objectives</b>	Teaching of Clinical Medical Microbiology								
<b>Course Outcomes</b>	Establishing a Clinical Medical Microbiology knowledge of specific microorganism								
<b>Textbook and /or References</b>	Aksöz,Tolga; Mikrobiyoloji / Bursa,Nobel,1998 Şahin,İsmet; Genel Mikrobiyoloji / Bursa,Uludağ Üniv.1999 Ustaçelebi ,Şemsettin; Temel ve klinik mikrobiyoloji / Ank. Güneş ,1999								
<b>Assessment Criteria</b>							<i>Number</i>	<i>%</i>	
	<b>Midterm Exams</b>						1	40	
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>						1	60	
<b>Course Category by Content (%)</b>	<b>Basic Medical Sciences</b>						100		
<b>Instructors</b>	Assist.Prof..Dr. Cengiz GÜLSAYIN, gulsayin@gazi.edu.tr								

LAB 112 LABORATORY PRACTISE				VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	42	22	40	-			104	4	4
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Laboratory methods								
<b>Course Objectives</b>	Giving the subjects and methods for laboratory								
<b>Course Outcomes</b>	Learning the practice areas in the laboratory								
<b>Textbook and /or References</b>	-Kaplan B:Deneysel fizyoloji. Haberal Eğitim Vakfı Yayınları, Ankara, 2002 --Koneman, EW:Diagnostic microbiology 4th ed. JB Lippincott Comp, 1992								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homework</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Science</b>							80	
	<b>Clinical Science</b>							20	
<b>Instructors</b>	Assoc. Dr Birsen Kaplan bkaplan@gazi.edu.tr								
	Assist. Prof. Dr Lale Türkmen lturkmen@gazi.edu.tr								

LAB114 ORGANIC CHEMISTRY						VOC.SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAM			
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	28	-	-			-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	None								
<b>Catalog Description</b>	Definition of organic chemistry, Structure of carbon, chemical bonds, organic reaction types, features of organic compounds								
<b>Course Objectives</b>	Giving the knowledge of basic organic chemistry								
<b>Course Outcomes</b>	Learning the knowledge of basic organic chemistry								
<b>Textbook and /or References</b>	Uyar.T.,Organik Kimya,9Edition,Palme Publishing ,Ankara,1998. Jones,M.,Organic Chemistry,Norton Company,New York,1997. Solomons,G.,Organik Kimya, ,Litertür Company,2002.								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	--
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Organic chemistry</b>							%80	
	<b>Inorganic chemistry</b>							%20	
<b>Instructors</b>	Öğretim Görevlisi.Ömer Erkan omerkan@gazi.edu.tr								

LAB116 LABORATORY SAFETY					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	---								
<b>Course Objectives</b>	Chemistry and biology laboratory and learning required information for health with regard chemical and biologic compounds in this laboratory taking required measurement for laboratory.								
<b>Course Outcomes</b>	First aid, properties of chemical and biologic compounds, importance of environment and Rules of protection from chemicals and biologic compounds, studying rules in the laboratory								
<b>Textbook and /or References</b>	Canel, M. (2003), Laboratory Safety , A. Ü. Fen Fak. Yayınları, Ankara Lab Safety Supply,								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Mathematics and Sciences</b>							---	
	<b>Statistical Science</b>							---	
	<b>Computer Science</b>							---	
	<b>Social Sciences</b>							---	
<b>Instructors</b>	Assistant Prof. Dr. Cengiz Gülsayın gulsayin@gazi.edu.tr								

LAB 118 COMPUTER AIDED STATISTICS				VOCATIONAL SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	28	28					56	3	3
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Basic statistics concepts, introducing to SPSS, variable defining and data access to SPSS, SPSS commands, data analysis to SPSS, frequencies, mean, correlate, T test, Anova, regression, Chi-square test, Graphics to SPSS								
<b>Course Objectives</b>	Teaching of statistics method with computer support								
<b>Course Outcomes</b>	Making of statistical analysis with SPSS								
<b>Textbook and /or References</b>	BÜYÜKÖZTÜRK, Ş., “Data Analysis Hand Book”, Pegema, ANKARA, 2003								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic statistical concepts</b>							15	
	<b>Working to SPSS and commands</b>							15	
	<b>Data analysis to SPSS</b>							35	
	<b>Commenting of analysis</b>							35	
<b>Instructors</b>	Hakan TEKEDERE, tekedere@gazi.edu.tr								

LAB120 HEALTH SERVICES MANAGEMENT					VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/1	28	28				-	56	3	3
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalogue Description</b>	Management, management process, management sources, public management, health services, protective health services, therapeutically health services, rehabilitate health services, health institutions, health institutions variety, legal structure of health institutions, hospital organizations, health services organization, legal support of health services organization in Turkey, central organizations in health services, upstate organizations in health services, hospital organizations in Turkey, hospital organizations in some countries, international health organizations.								
<b>Course Objectives</b>	To teach characteristic and management of health services and organizations.								
<b>Course Outcomes</b>	Gaining knowledge of health organizations management.								
<b>Textbook and /or References</b>	Sağlık Hizmetlerinde ve İşletmelerinde Yönetim, Yrd.Doç.Dr.Çetin Akar, Uzm.Hüseyin Özalp Sağlık Hizmetlerinde Yönetim, Prof.Dr.Doğan Benli, Uzm.Hüseyin Özalp Hastane ve Sağlık Kurumları Yönetimi, Doç.Dr.Şahin Kavuncubaşı								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
<b>Final Exam</b>							1	60	
<b>Course Category by Content (%)</b>	<b>Social Sciences</b>							100	
<b>Instructors</b>	Yrd. Doç. Dr. Hüseyin DEMİRTOLA, <a href="mailto:demirtola@gazi.edu.tr">demirtola@gazi.edu.tr</a>								

LAB 122 PATIENT'S PSYCHOLOGY AND INTERPERSONAL COMMUNICATION					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	28					-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalogue Description</b>	Introduction to psychology, fields of psychology, patient psychology, patient perspectives of health and disease, comprehensive approach to health and disease concepts, culture-health and disease, psychology and epidemiology, psychological defence mechanism and communication, stress and methods of solutions to stress problem, communication role of body language, empathy, emphatic approachment, being illness and meaning of hospitalization, psychology of patient and patient relatives, process of communication, communication tools, communication techniques and occupational communication, the communication rules paid attention by health personal, teaching of concept about occupational respect and public respect.								
<b>Course Objectives</b>	Learning about concept of patient psychology and interpersonal relations.								
<b>Course Outcomes</b>	Gaining abilities about patient psychology and interpersonal relations.								
<b>Textbook and /or References</b>	No								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Social Sciences</b>							100	
<b>Instructors</b>	Öğ.Gör Sevinç AKTAŞ, sevinc@gazi.edu.tr								

LAB124 PROFESSIONAL ENGLISH I				VOC. SCHOOL OF HEALTH SERVICES/ENVIRONMENTAL HEALTH PROGRAM						
Semester	Teaching Methods							Credits		
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit	
2/4	28	-	-			-	28	2	2	
<b>Language</b>	Turkish									
<b>Compulsory / Elective</b>	Compulsory									
<b>Prerequisites</b>	No									
<b>Catalog Description</b>	Basic medical laboratory terminology will be given to the class by assigning basic and intermediate levels of related essays, articles. Student supposed to get the main idea by reading the text and translate them at the end of the semester.									
<b>Course Objectives</b>	To be able to follow the literature published in English that is related with _medical laboratory_issues.									
<b>Course Outcomes</b>	Understanding and comprehending the _medical laboratory_ literature and thus following the developments in the world									
<b>Textbook and /or References</b>	<ul style="list-style-type: none"> <li>- Phillipson, R., Spare Time, Longman Series.</li> <li>- Cross, T., Toppare, A., Preparatory Workbook, Physical Science Reader Series, Vol. 2, Intermediate Reading, METU, 1982.</li> <li>-Cross, T., Toppare, A., Workbook, Physical Science Reader Series, Vol 3, Advanced Reading, METU, 1984.</li> </ul>									
<b>Assessment Criteria</b>	<i>Adet</i>							<b>Yüzde</b>	<b>%</b>	
	<b>Midterm Exams</b>							1	30	
	<b>Quizzes</b>							4	10	
	<b>Homeworks</b>							1	10	
	<b>Projects</b>									
	<b>Term Paper</b>							-	-	
	<b>Laboratory Work</b>							-	-	
	<b>Other</b>							-	-	
	<b>Final Exam</b>							1	50	
<b>Course Category by Content (%)</b>	<b>Dil Bilimleri</b>							100		
<b>Instructors</b>	Yrd. Doç. Dr. Evrim Arzu KOÇKAYA evrima@gazi.edu.tr									

LAB100 SUMMER PRACTISE I					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
½		25 work days		-			25 work days	4	
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Practise in the hospital, Clinical rotation,								
<b>Course Objectives</b>	Clinical laboratory experience education								
<b>Course Outcomes</b>	Clinical laboratory experience								
<b>Textbook and /or References</b>									
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homework</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
<b>Final Exam</b>							1	60	
<b>Course Category by Content (%)</b>									
	<b>Clinical Science</b>							100	
<b>Instructors</b>									

LAB201 ANALYTIC CHEMISTRY				VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
III	2	--	--			--	28	2	
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	None								
<b>Catalog Description</b>	---								
<b>Course Objectives</b>	Chemical principles that are particularly important to analytical chemistry. Fundamental principles of qualitative and quantitative chemical analysis. Theoretical basis of the gravimetric and volumetric analytical methods and some applications.								
<b>Course Outcomes</b>	Application of qualitative and quantitative analysis of some inorganic and organic compounds in various samples.								
<b>Textbook and /or References</b>	Skoog, West, and Holler, Fundamental Principles of Analytical Chemistry, 7 <sup>th</sup> edition, Saunders College publication, New York, 1996. Daniel C. Harris, Analytical Chemistry, W. H. Freeman and Company, New York, 1982								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	--
	<b>Homeworks</b>							--	--
	<b>Projects</b>							--	--
	<b>Term Paper</b>							--	--
	<b>Laboratory Work</b>							--	--
	<b>Other</b>							--	--
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>									
<b>Instructors</b>	Assistant Prof. Dr. Elif Loğoğlu								

LAB203 PUBLIC HEALTH AND MEDICAL DEONTOLOGY					VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
3	28					-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalogue Description</b>	Historical development of medicine, basic health services, health manpower and health organization in Turkey, immunity services, general nutrition, health education, business and work place health, family planning, to teach medicine ethics.								
<b>Course Objectives</b>	To teach information related with public health.								
<b>Course Outcomes</b>	Gaining information about public health.								
<b>Textbook and /or References</b>	No								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homeworks</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Health Sciences</b>							100	
<b>Instructors</b>	Yrd. Doç. Dr. Hüseyin DEMİRTOLA, demirtola@gazi.edu.tr								

LAB 205 HEMATOLOGY					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-	-			28	28	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Definition of hematology, general blood analyses, diseases of erythrocyte, diseases of leukocyte, diseases of neutrophil, diseases of bleeding, diseases of immune deficiency, cytokines								
<b>Course Objectives</b>	Giving the subjects and methods for hematology								
<b>Course Outcomes</b>	Learning the practice areas in hematology lab.								
<b>Textbook and /or References</b>	-Özer , Ali; Pratik Hematoloji / İzmir : Bilgehan 1985 -Müftüoğlu , Ekrem; Klinik Hematoloji / Diyarbakır , Şahin Basım 1995								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Wor</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Science</b>							80	
	<b>Clinical Science</b>							20	
<b>Instructors</b>	Assist. Prof. Evrim Arzu KOÇKAYA evrima@gazi.edu.tr								

LAB 209 IMMUNOLOGY					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAM				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-			-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Immunity, categories of Immunity (Natural and acquired immunities) immune system (primer and seconder lymphoid organs) ,antigens, antibodies, immunoglobulin classes, antigen-antibody reactions, immunocompetent cells in the Immune response, complement, hypersensitivity reactions (Tip I-IV).								
<b>Course Objectives</b>	Giving the knowledge of Basic Immunology								
<b>Course Outcomes</b>	Learning the knowledge of Basic Immunology								
<b>Textbook and /or References</b>	Johnson A G ,Ziegler R, Fitzgerald T J,Lukasewycz,Hawley L,Microbiology and Immunology,Department of Medical Microbiology and Immunology,Universty of Minnesota,1989 Willams&Wilkins. Temel ve Klinik Mikrobiyoloji, editör, Şemsettin USTAÇELEBİ, Güneş Kitabevi, 1999 Ankara								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	Midterm Exams							1	40
	Quizzes							-	-
	Homeworks							-	-
	Projects							-	--
	Term Paper							-	-
	Laboratory Work							-	-
	Other							-	-
	Final Exam							1	60
<b>Course Category by Content (%)</b>									
	Immunology								%100
<b>Instructors</b>	Yrd.Doç.Dr.Lale TÜRKMEN,lturkmen@gazi.edu.tr								

LAB 211 CLINICAL BIOCHEMISTRY					VOC.SCHOOL OF HEALTH SERVICE/MEDICAL LABORATORY PROGRAM				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-			-	28	2	2
<b>Language</b>									
<b>Compulsory / Elective</b>									
<b>Prerequisites</b>									
<b>Catalog Description</b>									
<b>Course Objectives</b>									
<b>Course Outcomes</b>									
<b>Textbook and /or References</b>									
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Mycology</b>							%50	
	<b>Parasitology</b>							%50	
<b>Instructors</b>									

LAB 213 CLINICAL CYTOLOGY				VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-	-			28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Definition of clinical cytology, samples of smear, hormonal cytology, infections of female genital system, cytology of effusion, BOS, cytology of respiratory system, cytology of gastrointestinal system, cytology of urine, clinical cytology and cancer								
<b>Course Objectives</b>	Giving the subjects and methods for clinical cytology								
<b>Course Outcomes</b>	Learning the practice areas in clinical cytology lab.								
<b>Textbook and /or References</b>	-Renkli Sitoloji Histoloji ve Mikr. İnsan Anatomi Atlası; Sobotta Beta Yayınları - Tuncer S, Kuzey GM, Başaran M. Servikal Sitolojik Anormalilere Klinik Yaklaşım, ASCCP Önerileri. Ankara, 2004. Astarita, R. W., ed. Practical cytopathology, Churchill Livingstone New York 1990								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homework</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Science</b>							80	
	<b>Clinical Science</b>							20	
<b>Instructors</b>	Assist. Prof. Evrim Arzu KOÇKAYA      evrima@gazi.edu.tr								

LAB 215 NUCLEER MEDICINE				VOCATIONAL SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY					
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-	-	-	-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Properties of matter and energy, energy transfer between matter and radiation, radiofarmosities, prevention from radiation, effects of radiation on genetics and cell response, response of cells and tissues to radiation, somatic effects, equipments in nuclear medicine and quality control, basics of dynamic studies in nuclear medicine, basics of radioisotope dilution methods in nuclear medicine, biological principles of sintigraphy in nuclear medicine, recognition of invitro tumeur by using radionucleid methods, doses and units, positions, analysing systems with nuclear medicine methods, clinical applications.								
<b>Course Objectives</b>	To teach necessary knowledge and experiences to students working in the nuclear medicine area in madical about nuclear medicine.								
<b>Course Outcomes</b>	Gaining sufficient knowledge and experiences in the nuclear medicine area.								
<b>Textbook and /or References</b>	Pratik nukleer Tıp, Prof.Dr. Ali GÖRPE- Prof.Dr. Sema CANTEZ								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic nuclear medicine sciences</b>							80	
	<b>Atomic and molecular physics</b>							20	
<b>Instructors</b>	From outside of the school								

LAB 217 PATHOLOGY					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAM				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-	-			28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	What is the pathology?, description of tissues, tissue processing and microtomy including frozen, special staining technics, cell and tissue damage, necrosis, degenerations and ve infiltrations, developmental defects, postmortem changes, calcification and pigmentation, inflammation, hypersensivite, wound healing and repair, circulation failure ,pathology of infection diseases, tumours.								
<b>Course Objectives</b>	Giving the normal and pathologic tissue types								
<b>Course Outcomes</b>	Learning the normal and pathologic tissue types								
<b>Textbook and /or References</b>	-Robbins ,Stanley L.; Patoloji / Ank.Güneş ,1990 - Schneider , Arthur S.; Patoloji / İst.Nobel,1998 -Yardımcı , Demet; Patoloji/ İst.Alfa 1997 -Canda , M.Şerafettin; Patolojiye Giriş / Ank.Hatiboğlu , 1984								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homework</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Wor</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Basic Science</b>							100	
<b>Instructors</b>									

LAB219 BEHAVIORAL SCIENCE					VOC. SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28					-	28	2	
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	compulsory								
<b>Prerequisites</b>	No								
<b>Catalogue Description</b>	Human development, reasons behind the behavioural changes, genetic and personal factors effecting human behaviour								
<b>Course Objectives</b>	To teach factors affecting behaviour of people								
<b>Course Outcomes</b>	Learning human's behaviour types and causes and effects of different types of behaviors								
<b>Textbook and /or References</b>	Baymur F. (1994) Genel Psikoloji Anka Basım İSTANBUL								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>								
	<b>Homework</b>								
	<b>Projects</b>								
	<b>Term Paper</b>								
	<b>Laboratory Work</b>								
	<b>Other</b>								
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>								100	
<b>Instructors</b>	Sevinç AKTAŞ, sevinc@gazi.edu.tr								

LAB 221 PROFESSIONAL ENGLISH II					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-			-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Basic medical laboratory terminology will be given to the class by assigning basic and intermediate levels of related essays, articles. Student supposed to get the main idea by reading the text and translate them at the end of the semester.								
<b>Course Objectives</b>	To be able to follow the literature published in English that is related with _medical laboratory_ issues.								
<b>Course Outcomes</b>	Understanding and comprehending the _medical laboratory_ literature and thus following the developments in the world								
<b>Textbook and /or References</b>	<p>- Phillipson, R., Spare Time, Longman Series.</p> <p>- Cross, T., Toppare, A., Preparatory Workbook, Physical Science Reader Series, Vol. 2, Intermediate Reading, METU, 1982.</p> <p>-Cross, T., Toppare, A., Workbook, Physical Science Reader Series, Vol 3, Advanced Reading, METU, 1984.</p>								
<b>Assessment Criteria</b>								<b>Number</b>	<b>%</b>
	<b>Midterm Exams</b>							1	30
	<b>Quizzes</b>							4	10
	<b>Homework</b>							1	10
	<b>Projects</b>								
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	50
<b>Course Category by Content (%)</b>	<b>Linguistic</b>							100	
<b>Instructors</b>	Yrd. Doç. Dr. Evrim Arzu KOÇKAYA evrima@gazi.edu.tr								

LAB223 DEONTOLOGY AND PROFESSIONAL ETHICS					VOCATIONAL SCHOOL OF HEALTH SERVICES/ MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
½	28	-	-	-	-	-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Introducing the lecture and program, expectations, suggestions, Occupation, professionalism, occupation philosophy, Health, Medical, Ethic concepts in Health, occupations in health services, characteristics of occupations, criterias, Health deontology and health ethics, Terms and concepts, organizing and establishment, basic principles of health ethics, approaching to the problems of health ethics, general evaluation, criticism, suggestions, patient rights and legal responsibilities.								
<b>Course Objectives</b>	To pay attention to hygienic rules, to gain communication ability with patients and patient families.								
<b>Course Outcomes</b>	Paying attention to hygienic rules, gaining communication ability with patients and patient families.								
<b>Textbook and /or References</b>	Sağlık İletişimi, Ruhi Selçuk TABAK								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Social communications</b>							50	
	<b>Occupation philosophy and patient rights</b>							50	
<b>Instructors</b>	Yrd.Doc.Dr. Nil ERCAN, nil.tokgoz@gazi.edu.tr								

LAB 225 MYCOLOGY AND PARASITOLOGY					VOC.SCHOOL OF HEALTH SERVICE/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-			-	28	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	General characteristic & classification of fungi and parasites, fungal diseases, cutaneous infections, subcutaneous mycoses, systemic mycoses, intestinal flagellates, hemoflagellates, amebas, blood sporozoans, other sporozoans, helminths.								
<b>Course Objectives</b>	Giving the knowledge of basic mycology and parasitology.								
<b>Course Outcomes</b>	Learning the knowledge of basic mycology and parasitology.								
<b>Textbook and /or References</b>									
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Mycology</b>							%50	
	<b>Parasitology</b>							%50	
<b>Instructors</b>	Assist Prof. Dr..Lale Türkmen lturkmen@gazi.edu.tr								

LAB 227 INFECTIONS AND DISEASE					VOC. SCHOOL OF HEALTH SERVICES/MADICAL LABORATORY				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
1/2	28	-	-			-	-	2	2
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Health and disease, aging, balance and out of balance of liquid-electrolyte and acid-base, shock, cancer, diseases of immune system, diseases of breathing system, diseases of heart and vascular, diseases of blood, diseases of digestive system, diseases of kidney, diseases of endocrine system, diseases of bone and articulation, diseases of nervous system.								
<b>Course Objectives</b>	Giving knowledge about the diseases								
<b>Course Outcomes</b>	Learning knowledge about the diseases in practice.								
<b>Textbook and /or References</b>	-Akdemir, N.,The Handbook in Nursing of Internal Diseases, Vehbi Koç Foundation Publishing Company, Number:9, Ankara, 1998. -Erdil, F.,and Elbaş (Özhan), N., Nursing of Surgery Diseases, Kaya Publishing, Ankara, 1996.								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Health Sciences</b>							90	
	<b>Social Sciences</b>							10	
<b>Instructors</b>	Yrd.Doç.Dr. Şükran ŞİMŞEK, ssimsek@gazi.edu.tr								

LAB202 PROFESSIONEL PRACTISE					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
½		32		-			32	16	
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Practise in the hospital								
<b>Course Objectives</b>	Clinical laboratory experience education								
<b>Course Outcomes</b>	Clinical laboratory experience								
<b>Textbook and /or References</b>									
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homework</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>									
	<b>Clinical Science</b>							100	
<b>Instructors</b>									

LAB 204 QUALITY CONTROL AND ACCREDITATION IN THE MEDICAL LABORATORIES					VOC.SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
2/2	56	-	-			-	56	4	4
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Total quality management and basic principles in the medical laboratories, quality standards in the medical laboratories, accreditation, certification, internal quality and external quality.								
<b>Course Objectives</b>	Giving the knowledge quality standards and accreditation in the medical laboratory.								
<b>Course Outcomes</b>	To provide of practice total management in the clinical laboratories.								
<b>Textbook and /or References</b>	Yenersoy G Toplam Kalite Yönetimi ,1. Baskı,Rota Yayınları,İstanbul,1997. Tanyalçın T,Köprülü FT.,Belgelendirme Akreditasyona Doğru İlk Adım.Laboratuvar kalite El Kitabı.Ati Ajans Yayınları,İzmir,2001. KLİMİK 2001,Program Kitabı,Adana,2001.								
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homeworks</b>							-	
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>	<b>Total Quality Management and accreditation</b>							%100	
<b>Instructors</b>	Assist Prof. Dr.Lale Türkmen Iturken@gazi.edu.tr								

LAB200 SUMMER PRACTISE I					VOC. SCHOOL OF HEALTH SERVICES/MEDICAL LABORATORY PROGRAMME				
Semester	Teaching Methods							Credits	
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
½		25 work days		-			25 work days	4	
<b>Language</b>	Turkish								
<b>Compulsory / Elective</b>	Compulsory								
<b>Prerequisites</b>	No								
<b>Catalog Description</b>	Practise in the hospital, Clinical rotation,								
<b>Course Objectives</b>	Clinical laboratory experience education								
<b>Course Outcomes</b>	Clinical laboratory experience								
<b>Textbook and /or References</b>									
<b>Assessment Criteria</b>								<i>Number</i>	<i>%</i>
	<b>Midterm Exams</b>							1	40
	<b>Quizzes</b>							-	-
	<b>Homework</b>							-	-
	<b>Projects</b>							-	-
	<b>Term Paper</b>							-	-
	<b>Laboratory Work</b>							-	-
	<b>Other</b>							-	-
	<b>Final Exam</b>							1	60
<b>Course Category by Content (%)</b>									
	<b>Clinical Science</b>							100	
<b>Instructors</b>									