

T.C.

ÜSKÜDAR ÜNİVERSİTY

OPTICIAN DEPARTMENT OF SHORT CYCLE

Opticians, optical equipment has been designed to eliminate visual defects and implementation of the patient to achieve a supply of qualified college graduates trained medical technicians.

The purpose of this program is the general knowledge of public health, entrepreneurship and self-renew, adopted the philosophy of total quality and be able to support institutional processes, related to the profession of environmental, social and ethical issues and responsibilities related knowledge, considers health and safety precautions related to the profession of technical train staff.

Students who graduate from this program, "optician" with the title of their optical stores, they may, as companies belonging opticianry work as the responsible manager. Opticians are employed in enterprises that makes and sells glasses

Associate Degree in Vocational Schools and Open Education Graduates Graduates are also the continuation of studies in the areas of use of the provisions of the Regulation on vertical transmission if the quota is opened Exam (DGS) and gain the right to enroll in undergraduate programs.

OPTICIAN COURSE DESCRIPTIONS

FIRST CLASS

I.MİDTERM

(ATA 101) Atatürk's Principles and History of Revolution I (2+0), ECTS:3

The Ottoman Empire Order and Reforms in the Ottoman Empire and Fall of the Disruption; Anatolia, Mustafa Kemal Pasha, Organization of National Struggle Opening of the First Parliament, Military and Political Developments Between 1920-1922, Revolution and Counter reactions; Constitutional System; Republican Era Domestic and International Politics of the Turkish Revolution, Basic Characteristics and Intellectual Movements, Law, Education, Economy, and Social Life; Atatürk's Principles and General Characteristics of these principles; Evaluation of Kemalism from an ideological perspective.

(TURK 101) Turkish Language I (2+0), ECTS:3

What is language: the language of theories about the birth, language, culture and society relationship; Language Revolution: Turkish Language Association and the work of the World Languages: Language families of Turkish among the world languages; Turkey Turkish: Voice features, Morphology, Syntax, , Spelling, Punctuation, Correspondence: Resume, Application, letter, business letter, telegram

(İNGU 101) English I (3+0), ECTS AKTS:3

Markers; Prepositions: Place, Time, Motion, Singular and Plural Nouns: Countable and uncountable nouns; Times: tense, present continuous tense, past tense structures; Paradigms: Will, Should, Should not, Must, Must not, Can; comparative structures; Pronouns: pronouns, possessive pronouns, adjectives, positive sentences, negative sentences and interrogative sentences; Conjunctions: And, But, When, because.

(RPSI209) Positive Psychology and Communication Skills (2+0), ECTS: 3

Definition of positive psychology, basic concepts, theoretical foundations and applications, examining brain behavior systems of emotional experience and behavior, knowing yourself and others, psycho-social life skills and problem solving skills, motivation and planning, anger, aggression, violence, relationship management, healthy decision making, perseverance and compromise.

(OPT 113) Anatomy and Physiology of The Eye -(2+0), ECTS : 4

To introduce the anatomical and physiological functions of the eye and related structures. Frequently observed in the normal visual acuity and visual system diseases will be emphasized, the main components of the eye, ocular structures will be introduced to the anatomical structure of the helper while the process of seeing the relationship to be announced, during the eye movements of the eye and visual function in harmony are explained, breakage related errors will be introduced in the process of vision, photopic and scotopic vision defined colors, the mechanism of vision, the eye causes and symptoms of the nervous system and explained some of the main eye diseases.

(OPT 117) Geometrical Optics Physics I (2+0) , ECTS: 4

The nature of light, wave model of light (wavelength, frequency, electromagnetic spectrum), the particle model of light (photon energy), the laws of reflection and refraction, dispersion prisms and prisms, total internal reflection, the laws of reflection of plane and spherical mirrors, refraction Global crusher surfaces, thin lens relation, thin lens systems, thick lenses.

(MAT 101) Basic Math (2+0), ECTS:3

Numbers, exponents, and radical expressions, first-degree expressions koordinatlanması plane, the equation of the plane, first-degree inequalities, first-degree equations and inequalities involving absolute value sign, vectors, matrices and determinants

(OPT 119) Opticianry I (2+2), ECTS:6

Eye, glasses, optician and optician definitions. Application: Introduction of machines, History of vision and optical lenses. Practice: Introducing the hand tools used during professional practice, opticianry date of application in Turkey: Introducing supplies, Laws and Regulations About Optician in Turkey, ethical practice: Acetate frame, the processing of organic glass, refraction and refractive errors Application: Metal frame, organic glass processing, Definition and calculations of diopters Application: Lenses according to dioptric values, Identification of optical lenses Application: Recognition of lenses according to their raw materials and physical structures, Contact lenses Application: Diopter measurement using a lens meter, Frames according to raw materials Application: Metal frame - organic glass work, Spherical, Dioptric and manual identification of cylindrical and sphereocylindrical lenses. Application: Reading in the lens meter, definition of transposition, calculations. Application: Calculations in the lens meter, Prescription types and

reading. Introduction, Refraction, optical lenses, prescription, transposition processes, consolidation of technical terms Application: Reinforcement of basic skills

FIRST CLASS

II. MIDTERM

(ATA102) Atatürk's Principles and History of Revolution II (2+0), ECTS:3

The Ottoman Empire Order and Reforms in the Ottoman Empire and Fall of the Disruption; Anatolia, Mustafa Kemal Pasha, Organization of National Struggle Opening of the First Parliament, Military and Political Developments Between 1920-1922, Revolution and Counter reactions; Constitutional System; Republican Era Domestic and International Politics of the Turkish Revolution, Basic Characteristics and Intellectual Movements, Law, Education, Economy, and Social Life; Atatürk's Principles and General Characteristics of these principles; Evaluation of Kemalism from an ideological perspective.

(TURK 102) Turkish Language II (2+0) , ECTS:3

The right to use their native language for gaining the skills that the students who come to college in gaining skills in order to enhance the ability of producing ideas and thinking in this area is based on the course of writing, punctuation, and spelling rules, rules of composition, writing exercises related to these types of writing are discussed and examples. In addition, various novels, poetry books and plays are read and discussed. Reading plays in the classroom, a variety of techniques and diction lessons are applied stress and intonation.

(İNGU 102) English II (3+0), ECTS:3

Tenses: Present tense, past tense, past tense, future tense structures; Modes: Might, Could, Can, Must, May, Envelopes: Location, Direction, Purpose, adverbs, adjectives: Order of adjectives, Comparative, Superlative forms; passive structure: Current, Wide, The Past, the Future also passive voice; Conditionals; Adjective Clauses, Relative Clauses; Verb Structures: TO,-ing, noun clauses; Adverbial Clauses; Comparative Constructions.

(OPU 102) Opticianry II (2+2), ECTS:6

Fitting the spectacle lenses to the frame, the shape of the spectacle lenses, the edge forms in the spectacle lenses, prescription writing rules and addition concept, verification of the prescription and data control, selection of spectacle lenses and frames in accordance with prescription data, pricing of spectacle glasses and frames, standards regarding glasses and glasses frames, centration and decentration. Mounting single-chamber lenses to the glasses frame and making glasses, Mounting cylindrical lenses to the glasses frame and determining the axle, Adjusting the glasses frames on the human face, Marking the eye's axis of reflection on the glasses frame on the vertical and horizontal axis, focal point taking methods, For single and multifocal lenses methods of focusing from the eye, measurement methods of pupillary distance, types of Bifocal lenses, production stages, segment structure, visible and invisible type bifocal lenses, Bifocal, trifocal and progressive and structural properties of lenses, surface properties of lenses , marking, blocking, generalization, smoothing, polishing and cleaning, the edge forms and forms of lenses, their usage areas according to the types of glasses and frames, vertex strengths and focal distance of lenses, superficial diopter powers,

structure of lens shaving discs, and properties Equals, Lens assembly methods to frames made of various raw materials, Geometric and optical centers of lenses.

(OPT114) Physics Geometric Optics II (2+0), ECTS:4

Distribution in prisms and prisms, laws of reflection in spherical mirrors, refraction on spherical refractive surfaces, thin lens relations, thin lens systems, thick lenses. Interference, coherence, polarization constructive and derstructive interference, diffraction (diffraction), scattering, reflection, transmission and absorption of rays, properties of illumination light, laser sources, laser output

(OPT140) Glasses Glass Technologies (2+0), ECTS:2

Definition of glass types in the optical industry. Spherical and Aspheric lenses, Organic glasses, Mineral glasses, Astigmatic glasses and their advantages, disadvantages, Prism glasses (Fresnel). Lens aberrations Current methods of organic glass production. Ophthalmic lens material and design, Special type glasses, Sports glasses glasses, Bifocal glasses and Lenticular glasses.

(OPT238) Eye Diseases (2+0), ECTS:4

Diseases of the eyelids, glaucoma, corneal disease, cataract, uveitis, retinal diseases, eye movements and strabismus, optic nerve disease, eye injuries, ultraviolet and eye diseases and diseases of the conjunctiva.

(OPT242) Work and Social Security Law (2+0), EC:4

Business Law Concept, Emergence. Location legal system. Principles and Sources of the Turkish Labor Law, and Legal Framework for Development. Labor Code. Business Relationship Kuru1ması, Regulation on fees, Minimum Wage, Business Times, Travel and Vacation, Regulations on Special Protected Groups, Business Relationship and Results of Termination Termination, Worker Health and Safety, Birth of the trade unions, the legal framework, the establishment, management, Termination . A member of the union. Acquisition and Termination of Membership, Collective Labour Agreement, Strike and Lockout Law, Emergence Framework. Definition of the collective bargaining process, Application, Termination, Collective Labour Disputes, peaceful settlements, strikes and lockouts definition, elements, results of Termination, Social Security, Societies, Scope and Financing of Social Insurance, Pension Fund and Bag-Kur 'as the General Insurance Branch

SECOND CLASS

III. SEMESTER

(OPT201) Opticianry III (2 + 4), ECTS: 11

Focal point determination and marking with multi-focus and prismatic lenses. Ophthalmic prisms, prismatic effect, calculation of prism direction and amount, principles of prism use, fields. Recognition of telescopic glasses. Montage studies of single and multifocal lenses on frames in various materials. General information about contact lenses. Transposition operations and calculation of the addition value, errors in software and application of glasses prescription. Low vision tools, special purpose frames, glasses repair, template removal and centering. Giving information about the mounting of lenses on nylon and glaze glasses. Reflections and coatings in lenses, prevention and benefits of reflection, absorption, polysizing lenses and their mounting - Calculation of the right amount and edge and center thicknesses of lenses, determination of nominal and true dioptric powers of lenses, effect of vertex distance on the dioptric power of glass, High

dioptric and lenticular lenses, aphakic lenses, standards of lenses, relations of the eyeglass shop with official institutions and organizations and information about optician law - Functioning in eyeglasses shops, rules and ethics of optician. Recognition of automatic glass shaving machines, seeing the operation of these machines during store visits, store visits with spectacle glass and frame manufacturers.

(OPT235) Vision Optics and Refraction I (2+0), ECTS:5

This course physical optics, geometrical optics, refraction, symptoms and signs, such as occurs ametropi and ametropia correction of refractive defects, diagnosis, and treatment techniques,

(OPT237) Clinical Optics and Rehabilitation (2 + 0), ECTS: 4

Geometric Optics, Optical Irregularities, Optics of the Human Eye, Refractive Errors, Lenses, Anamnesis, Wrong Prescribing, Subjective Examination Methods, Prism, Refraction and Prescription in Children, Objective Examination Methods, Optical Evaluation in Refractive Surgery, Color Vision, Legal Blindness, Telescope and Optical Devices

(OPT239) Contact Lenses (2+0) ECTS:4

The definition of the contact lens is applied to the relationship between the cornea and contact lenses, contact lenses, optical properties and principles necessary for the examinations, contact lenses, the intended use, desired-demand features contact lenses, contact lenses, glasses comparison, hard contact lenses, rigid gas permeable contact lenses, soft contact lenses, hydrogel lenses, silicone lenses, hybrid contact lenses, contact lenses disposable, therapeutic contact lenses, aphakic contact lenses, contact lenses, pediatric ophthalmology, cleaning solutions, rinse solutions, contact areas, disinfectants, soaking solutions, lens cases and other materials, use of contact areas, the use of cosmetics and contact lenses, adaptation symptoms of toxic-infectious-allergic and other complications of contact lenses, lens kontakat rules to be followed in the contact lenses manipulation.

(OPT203) Customer Relations and Marketing Strategies in Opticianry (2+0), ECTS:4

This course covers consumer behavior and its effects on businesses; the importance of consumer behavior in marketing, customer satisfaction, creating customer loyalty; consumption phenomenon, needs and wants; consumer behavior concept and features; consumer behavior and marketing strategy; purchasing behavior and decisions of consumers; factors affecting consumers' purchasing behavior; procurement decision process examines consumer buying habits.

SECOND CLASS

IV. SEMESTER

(OPT244) Opticianry VI (2 + 6), ECTS: 12

Focal point determination and marking with multi-focus and prismatic lenses. Ophthalmic prisms, prismatic effect, calculation of prism direction and amount, principles of prism use, fields. Recognition of telescopic glasses. Montage studies of single and multifocal lenses on frames in various materials. General information about contact lenses. Transposition operations and calculation of the addition value, errors in software and application of glasses prescription. Low vision tools, special purpose frames, glasses repair, template removal and centering. Giving information about the mounting of lenses on nylon and glaze glasses. Reflections and coatings in

lenses, prevention and benefits of reflection, absorption, polysizing lenses and their mounting - Calculation of the right amount and edge and center thickness of lenses, determination of nominal and true dioptric forces of lenses, the effect of vertex distance on the dioptric power of glass, High dioptric and lenticular lenses, aphakic lenses, standards of lenses, relations of the eyeglass shop with official institutions and organizations, and information about opticism law - Operation in glasses stores, rules and ethics of optician. Recognition of automatic glass shaving machines, seeing the operation of these machines during store visits, store visits with spectacle glass and frame manufacturers.

(OPT236) Vision Optics and Refraction II (2 + 0), ECTS: 5

Acomodocation, dioptric changes occurring during accommodating, correction of presbyopia and other accommodation disorders, types of ametropia, types of ametropia, types of hyperopia, hyperopia, myopia, types of myopia, types of anisocoxia, types of anisocoria, anisocoxia, anomalies of anisocoxia, surgery, correction, comparison of refraction defects with glasses, contact lenses and surgical correction, low vision, rehabilitation of low vision, cataract, aphakia. Ametropy Correlation: Glasses, contact lenses, contact lens principles, intraocular lens. Surgical treatment techniques of refractive defects, laser in ophthalmology, laser techniques, surgical techniques in cataract surgery, rehabilitation of cataract surgery.

(MYO015) Social Responsibility Project (2 + 0), ECTS: 2

Introduction to the course, basic concepts, the concept of social responsibility and an overview of social responsibility campaigns, determining the project topics (children, elderly people, women, environmental problems, those having education and learning problems, patients and health problems etc.) project preparation presentation. to recognize non-governmental organizations and their work.

(OPT240) Opticianry History and Professional Ethics (2+0),ECTS:4

Various branches of the World Optical related terms and optics, refraction opticianry in the world and history, Optician and historical development in Turkey. Optical and Optometric professions and professionals, National and international organizations related to Opticianry. The definition of Opticianry as a profession and the philosophy of Opticianry. The duties and responsibilities of the Optician in eye health. The need for Turkey's optician. Relationship of opticianism with other optometric professions and optician's optometric professionals. Optical professions education in the world. Optical vocational education in Turkey. Optical and optometric profession in Europe. Laws and Regulations on Opticianry and Optometric professions in Europe and other World countries. Laws and Regulations about Opticianry and Optometric Professions in Turkey