

DEGREE IN OPTICS AND OPTOMETRY (2019-20)

Código: C056	Fecha de aprobación: 22/03/2012	Precio: 20,27 1st-registration credits
Créditos: 240	Título: Undergraduate 3-5 years (ECTS)	

RAMA

Health Sciences

PLAN

DEGREE IN OPTICS AND OPTOMETRY

TIPO DE ENSEÑANZA

Face-to-face

CENTROS DONDE SE IMPARTE

Faculty of Science

ESTUDIO IMPARTIDO CONJUNTAMENTE CON

Solo se imparte en esta universidad

FECHAS DE EXAMEN

[Acceda al listado de fechas de examen para esta titulación.](#)

PLAN DE ESTUDIOS OFERTADO EN EL CURSO 2019-20

Nodo inicial:

Leyenda: No ofertada Sin docencia

FIRST YEAR

CORE SUBJECTS 54 créditos

Curso	Título	Créditos	Subject
1	CORE	6	24010 - VISUAL SYSTEM ANATOMY AND HUMAN
1	CORE	6	24011 - BIOLOGY
1	CORE	6	24012 - PHYSICS
1	CORE	6	24013 - MATHEMATICS
1	CORE	6	24014 - CHEMISTRY
1	CORE	6	24015 - PHYSIOLOGY OF THE HUMAN VISUAL SYSTEM
1	CORE	6	24016 - BIOCHEMISTRY
1	CORE	6	24018 - GEOMETRICAL OPTICS
1	CORE	6	24019 - STATISTICS

COMPULSORY SUBJECTS 6 créditos

Curso	Título	Créditos	Subject
1	COMPULSORY	6	24017 - FUNDAMENTALS OF OPTOMETRY

BRIDGING COURSE FOR DIPLOMA HOLDERS

SUBJECTS 36 créditos

Curso	Título	Créditos	Subject
3	COMPULSORY	6	24034 - CLINICAL OCULAR PATHOLOGY AND PUBLIC HEALTH
3	COMPULSORY	6	24039 - OPTOMETRY : SPECIFIC POPULATION GROUPS
4	COMPULSORY	18	24000 - TRAINEESHIP
4	END OF DEGREE WORK	6	24499 - FINAL PROJECT

OPTIONAL SUBJECTS 1 créditos

Superado este bloque se obtiene
DEGREE IN OPTICS AND OPTOMETRY

SECOND YEAR

CORE SUBJECTS 6 créditos

Curso	Título	Créditos	Subject
2	CORE	6	24020 - OPTICAL MATERIALS

COMPULSORY SUBJECTS 54 créditos

Curso	Título	Créditos	Subject
2	COMPULSORY	6	24021 - VISUAL OPTICS I
2	COMPULSORY	6	24022 - OPTOMETRY I
2	COMPULSORY	6	24023 - OPTICAL SYSTEMS
2	COMPULSORY	6	24024 - PATHOLOGY OF THE HUMAN VISUAL SYSTEM
2	COMPULSORY	6	24025 - OPTICAL PHYSICS I
2	COMPULSORY	6	24026 - VISUAL OPTICS II
2	COMPULSORY	6	24027 - OPTOMETRY II
2	COMPULSORY	6	24028 - INSTRUMENTAL OPTICS
2	COMPULSORY	6	24029 - PHARMACOLOGY

THIRD YEAR

COMPULSORY SUBJECTS 60 créditos

Curso	Título	Créditos	Subject
3	COMPULSORY	6	24030 - OPTICAL PHYSICS II
3	COMPULSORY	6	24031 - OPHTHALMIC OPTICS I
3	COMPULSORY	6	24032 - CONTACTOLOGY I
3	COMPULSORY	6	24033 - OPTOMETRY III
3	COMPULSORY	6	24034 - CLINICAL OCULAR PATHOLOGY AND PUBLIC HEALTH
3	COMPULSORY	6	24035 - PSYCHOPHYSICS AND VISUAL PERCEPTION
3	COMPULSORY	6	24036 - OPHTHALMIC OPTICS II
3	COMPULSORY	6	24037 - CONTACTOLOGY II
3	COMPULSORY	6	24038 - OPTOMETRY IV
3	COMPULSORY	6	24039 - OPTOMETRY : SPECIFIC POPULATION GROUPS

FOURTH YEAR

COMPULSORY SUBJECTS

42 créditos

Curso	Título	Créditos	Subject
4	END OF DEGREE WORK	6	<u>24499 - FINAL PROJECT</u>
4	COMPULSORY	18	<u>24000 - TRAINEESHIP</u>
4	COMPULSORY	9	<u>24040 - OPHTHALMIC OPTICS III</u>
4	COMPULSORY	9	<u>24041 - OPTOMETRY AND CLINICAL CONTACTOLOGY</u>

OPTIONAL SUBJECTS

18 créditos

Curso	Título	Créditos	Subject
4	OPTIONAL	6	<u>24042 - ENVIRONMENTAL AND OCCUPATIONAL OPTOMETRY</u>
4	OPTIONAL	6	<u>24043 - MICROBIOLOGY AND OCULAR INFECTION THERAPEUTICS</u>
4	OPTIONAL	6	<u>24044 - NEW TRENDS IN CONTACT LENSES</u>
4	OPTIONAL	6	<u>24045 - ALTERNATIVES TO VISUAL COMPENSATION</u>
4	OPTIONAL	6	<u>24046 - ADVANCED TECHNIQUES FOR THE STUDY OF THE HUMAN EYE: OCULAR ABERROMETRY</u>
4	OPTIONAL	6	<u>24047 - LOW VISION</u>

LANGUAGE

Superado este bloque se obtiene

DEGREE IN OPTICS AND OPTOMETRY

AIMS

The Optician/Optomertist profession is largely related to health care; as stated in the General Health Care Act governing health care professionals (LOPS) of 21st November 2003, the work of an Optician/Optomertist consists of: *“developing ways of detecting defects in ocular refraction... to the use of re-education, prevention and visual hygiene techniques, to the adaptation... of useful optics”*. Thus, the Optician/Optomertist must be capable of undertaking duties which benefit the visual health and wellbeing of people, including the prevention of diseases in the ocular system and the exchange of information with other professionals in the healthcare sector. However, in addition to these fundamental aspects, the profession also includes experimental aspects: in relation to the professional duties of an Optician/Optomertist, the General Health Care Act in Spain of 21st November 2003 also states : *“through instrumental measures,..., to the adaptation, verification and control of optical aids”*.

The foregoing explains the high proportion of health-related subjects included in the Degree course, enabling the graduate to attend to patients in areas such as primary visual health care, visual rehabilitation and the production of contact lenses, and also explains the high percentage of experimental subjects, enabling the graduate to acquire the necessary skills to operate optical instrumentation, to assemble and control ophthalmic lenses and frames, and to handle and assemble visual aids.

- [Estructura por créditos](#)
- [Distribución de créditos por tipo de materia](#)
- [Explicación general del plan de estudios](#)

ESTRUCTURA POR CRÉDITOS

El Grado en Óptica y Optometría se organiza en asignaturas semestrales de 6 créditos europeos ECTS cada una. En concreto, los estudiantes deberán cursar en cada semestre 5 asignaturas para completar 30 créditos alcanzando, de este modo, los 60 créditos por curso académico y un total de 240 créditos en cuatro cursos académicos.

Para facilitar la posibilidad de compatibilizar los estudios con otras actividades se establece la posibilidad de que el alumnado pueda ser estudiante a tiempo parcial, cursando 30 ECTS por curso académico.

DISTRIBUCIÓN DE CRÉDITOS POR TIPO DE MATERIA

Tipo de materia	Créditos
Formación básica	60
Obligatorias	138
Optativas	18
Prácticas externas obligatorias	18
Trabajo Fin de Grado	6
Créditos totales	240

EXPLICACIÓN GENERAL DEL PLAN DE ESTUDIO

Los 240 créditos del plan de estudios incluyen toda la formación teórica y práctica que el estudiante debe adquirir, de acuerdo con la distribución de materias básicas, obligatorias, optativas y trabajo de fin de grado.

En esta estructura se opta por un tronco unitario de competencias (conocimientos y habilidades) consideradas básicas para el ejercicio profesional.

Este esquema conlleva necesariamente una tasa de optatividad baja. Asimismo, al trabajo Fin de Grado se le asigna el número de créditos mínimo reconocido por la legislación vigente (6 ECTS cada uno; Real Decreto de 26 de octubre de 2007 por el que se establece la ordenación de las Enseñanzas Universitarias Oficiales).

Por contra, a las Prácticas Externas se le asignan un alto valor (18 ECTS), dada la importancia de la práctica en esta titulación, por lo que supone de contacto entre el alumno y la realidad del mundo laboral.

En cuanto a la optatividad, se oferta un abanico de asignaturas de formación más específica. El título se organiza en módulos y Materias, asociando a cada una de estas últimas el logro de una serie de competencias. Las competencias a adquirir se recogen dentro de cinco grandes módulos denominados respectivamente como:

- Módulo de Formación Básica
- Módulo de Óptica
- Módulo de Optometría
- Módulo de Patología del sistema visual
- Módulo de Prácticas tuteladas y Trabajo fin de grado

A su vez, en una clasificación mas detallada, el bloque de Óptica puede subdividirse en tres materias: Óptica, Visión y Óptica Oftálmica, y por otra parte propone para el bloque de Optometría la denominación alternativa de "Optometría y Contactología".

Previamente a la matrícula del trabajo de fin de grado, el estudiante debe acreditar las competencias en un idioma extranjero. Entre otras formas de acreditación, en la Universidad de Alicante se considera necesario superar como mínimo, el nivel B1 del Marco de Referencia Europeo para las lenguas modernas, que podrá ser elevado en el futuro.

LANGUAGE REQUIREMENT (IN A FOREIGN LANGUAGE)

Students who study an **undergraduate degree** at the University of Alicante must **confirm** a minimum **level of B1 in a foreign language** (a B2 is recommended) in order to **obtain the diploma**.

The required language level is in accordance with the Common European Framework of Reference for Languages.

The language accreditation requirement can be obtained previously or at any time during university studies. However, the language requirement will be necessary in order to be able to **assess the final year project**.

The **different forms** of obtaining such language requirement can be consulted in the additional information in this section.

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LANGUAGE TEACHING COMPETENCE CERTIFICATE

Students who want to have a career in non-university **teaching** when they finish their studies are **recommended** to obtain the **teaching competence certificate** (Valencian and/or foreign languages).

This certificate can be obtained by taking specific itineraries in your university studies or by taking the **UA teaching competence course in Valencian, German, French and English**.

[+info](#)

FINAL YEAR PROJECT (TFG)

All the official undergraduate degrees must be completed by preparing and defending a final year project, which must be done in the final phase of the studies and be aimed at the assessment of competences associated to the degree.

The final year project must be an original, independent and personal work. The elaboration of it may be individual or coordinated. Each student will prepare this project under the supervision of a tutor, allowing students to show the received training content in an integrated way, as well as the acquired competences associated to the undergraduate degree.

In order to **register in the final year project**, students must comply with the requirements established in the "Regulations for continuation studies for students registered in undergraduate degrees at the University of Alicante". Among the requirements established to be able to register in the final year project, a minimum of 168 credits must be passed in undergraduate degrees with a total of 240 credits, and a minimum of 228 credits in undergraduate degrees with a total of 300 credits or more.

In order for **the final year project to be assessed**, a B1 level of a foreign language (B2 is recommended) must be confirmed.

[+info](#)

- [Access routes](#)
- [Procedure for applying for admission](#)
- [Recommended applicant profile](#)
- [Number of places and pass marks](#)

ACCESS ROUTES

Admission to this degree course is open to any applicant who meets one of the following entrance requirements:

1. **SPANISH BACCALAUREATE (LOMCE) UNIVERSITY ENTRANCE EXAM (PAU):** Although students can access university by means of any Baccalaureate specialization, the recommended one is **Sciences**.

ADMISSION SCORES FOR THIS DEGREE CAN BE IMPROVED BY TAKING THE SPECIFIC MODULES OF THE UNIVERSITY ENTRANCE EXAM (PAU) AS INDICATED IN THE TABLE BELOW WITH THEIR RESPECTIVE WEIGHTINGS.

TABLE 1

MODULE WEIGHTINGS		PERFORMING ARTS	BIOLOGY	AUDIO VISUAL CULTURE I	TECHNICAL DRAWING II	DESIGN	BUSINESS ECONOMICS	PHYSICS	FUNDAMENTALS OF ART II	GEOGRAPHY	GEOLOGY	GREEK II	HISTORY OF PHILOSOPHY	HISTORY OF ART	LATIN II	MATHEMATICS APPLIED TO SOCIAL SCIENCES II	MATHEMATICS II	CHEMISTRY
		Academic year 2017/18	0,1										X					
	0,2		X					X									X	X

2. **PREVIOUS BACCALAUREATES WITH OR WITHOUT A PASS IN THE UNIVERSITY ENTRANCE EXAM (PAU):** Students who have completed their Baccalaureate under previous education systems and have passed the PAU will be able to use the mark obtained in their application.

HOWEVER, STUDENTS CAN TAKE SPECIFIC EXAM MODULES DURING THE VOLUNTARY PAU EXAM PERIOD IN ORDER TO IMPROVE THEIR ADMISSION SCORE AS SHOWN IN TABLE 1. THEY CAN ALSO SIT FOR THE OBLIGATORY PAU EXAMS, IN WHICH CASE THEY WILL HAVE TO TAKE ALL THE EXAMS SCHEDULED DURING THIS PERIOD.

3. **VOCATIONAL EDUCATION:** Vocational educational qualifications such as senior technician, senior technician of plastic arts and design, or senior technician in sports is the preferred professional area although access to this degree may be through any professional field.

ADMISSION SCORES CAN BE IMPROVED BY TAKING THE PAU EXAM IN UP TO 4 OF THE MODULES IN TABLE 1.

4. **STUDENTS FROM EDUCATION SYSTEMS IN COUNTRIES OF THE EUROPEAN UNION OR OTHER STATES WITH WHICH SPAIN HAS AN INTERNATIONAL AGREEMENT:** Accreditation is required and issued by *Universidad Nacional de Educación a Distancia (UNED)*.

STUDENTS CAN SIT FOR EXAMS IN SUBJECTS INCLUDED IN THE PRUEBAS DE COMPETENCIAS ESPECÍFICAS (PCE), ORGANISED BY THE UNED, IN ORDER TO IMPROVE THEIR ADMISSION SCORE UP TO 14 POINTS AS INDICATED IN THE WEIGHTINGS IN TABLE 1.

5. **STUDENTS FROM FOREIGN EDUCATION SYSTEMS:** Prior to applying for the validation of their foreign Baccalaureate, students may sit for up to 4 exams in subjects offered by the *Pruebas de Competencias Específicas (PCE)* organised by UNED (at least one subject from the core subjects).

THE WEIGHTINGS INDICATED IN TABLE 1 WILL BE APPLIED TO CORE AND/OR OPTIONAL SUBJECTS.

6. **OTHER:** University degrees and other similar qualifications. University entrance exam for students over 25 (preferential option: Health Sciences). Access on the basis of professional experience (applicants over 40 years of age). Access to applicants aged 45 years or more by means of an exam.

Weightings of the subjects of the specific phase of the Proof of Access to the University (PAU) in the previous years

High School Diploma Subjects	Weighting parameters	Music Analysis II	Biology	Earth and Environmental Sciences	Drawing II	Technical Drawing II	Design	Business Economics	Electronics	Physics	Geography	Greek II	History of Music and Dance	Art History	Latin II	Musical Language and Practice	World Literature	Mathematics Applied to the Social Sciences II	Mathematics II	Chemistry	Expressive techniques in the Arts and Crafts	Industrial Technology II	
Academic Years 2010-11	0.1																						
2011-12	0.2		x	x		x			x	x									x	x			x
Academic Years 2012-13	0.1			x																			
2013-14																							
2014-15	0.2		x							x									x	x			
2015-16																							
2016-17																							

PROCEDURE FOR APPLYING FOR ADMISSION: PRE-ENROLMENT AND REGISTRATION

- Anticipated number of places offered during the first pre-enrolment session: 70
- In order to apply for a place, the procedure and pre-enrolment periods established each year must be observed. It is normally necessary to pre-enrol, and two pre-enrolment periods are established for this. The first period, or phase A is held in mid-June and the second, or phase B, is held in mid-September. During the second period, places may only be applied for on courses which have not been filled following phase A. Places are awarded on the basis of the preferences, criteria and reserve quotas established by current legislation. [Information concerning the application procedure \(Pre-enrolment\)](#).
- Applicants admitted to a course must formally register within the timescale established annually in the enrolment calendar (usually at the end of July and the end of September). Registration [Information](#).

RECOMMENDED APPLICANT PROFILE

Among the qualities the future Optics and Optometry student should possess, the following are of especial relevance:

- Capacity for work (perseverance, method and rigour).
- Capacity for reasoning and critical analysis.
- Scientific spirit.
- Capacity to obtain, interpret and apply knowledge.
- Problem-solving skills.
- Capacity for synthesis and abstraction.
- Recommended complementary education: English and user-level computing skills.

NUMBER OF PLACES AND PASS MARKS

YEARS	NUMBER OF PLACES	PASS MARKS						
		GENERAL	OVER 25	OVER 40	OVER 45	GRADUATES	SPORTPEOPLE	DISABLED
2010-11	70	8,010	8,175	---	---	7,300	---	---
2011-12	70	7,689	7,323	---	---	7,540	---	---
2012-13	70	7,874	6,923	---	7,900	---	---	---

2013-14	70	6,423	6,075	---	---	6,380	---	---
2014-15	70	6,952	5,000	---	---	7,120	---	---
2015-16	70	7,706	6,120	---	5,700	6,340	---	---
2016-17	70	8,070	5,690	---	---	7,110	---	---
2017-18	70	8,010	5,590	---	---	7,700	---	---

- "Court notes" indicated correspond to the results of the first adjudication of June.
- The definitive notes can be inferior to the here collected.

PROFESSIONAL PROFILE

Optician/Optomertist. The graduate is qualified to practice as an Optician/Optomertist, regulated in Spain according to the Law 44/2003 Governing Health Care Professionals of 21st November (LOPS; BOE 280 of 22nd November 2003).

The Optician/Optomertist profession is fundamentally related to health care. Thus, the Optician/Optomertist must be capable of undertaking duties which benefit the visual health and wellbeing of people, including the prevention of diseases in the ocular system and the exchange of information with other professionals in the healthcare sector. However, in addition to these fundamental aspects, the profession also includes experimental aspects. Therefore, the degree course necessarily contains a high proportion of health-related subjects, enabling the graduate to attend to patients in areas such as primary visual health care, visual rehabilitation and the production of contact lenses, but also a high percentage of experimental subjects, enabling the graduate to acquire the necessary skills to operate optical instrumentation, to assemble and control ophthalmic lenses and frames, and to handle and assemble visual aids.

Professional profiles of the Degree Course

In addition to its nation-wide recognition as a health care profession under the General Health Care Act (44/2003), optical clinics are considered healthcare establishments under Spanish Law 1277/2003 of 10th October, which establishes general guidelines for the licensing of centres, services and healthcare establishments. In these clinics, the Optician/Optomertist undertakes the following duties:

- 1 To evaluate sight capabilities through appropriate optometric tests. In general, these include detection of refraction dysfunctions, correction and/or coordination of binocular vision, and early detection of visual pathologies for referral to ophthalmology.
- 2 To improve visual performance according to the requirements of the individual, through physical means such as optical aids, visual health education and safety, and techniques in visual ergonomics, etc.
- 3 To carry out visual health promotion among the general population
- 4 The preparation, assembly, fitting, supply, verification and control of adequate means for ensuring the safety, protection, compensation and improvement of vision.
- 5 The fitting, assembly and testing of aids for limited vision.
- 6 The visual rehabilitation for those with limited vision.
- 7 The fitting of ocular prostheses.

All primary eye health care duties, assembly and testing of aids and ocular prostheses and visual rehabilitation, etc., carried out in optical clinics and optician departments in pharmacies, are conducted under the direction and control of a licensed optician/optomertist who acts as the establishment's Technical Director. Thus, the latter's presence is required at all times and with no exceptions, irrespective of the assistance with his/her responsibilities which may be provided by the assistants or auxiliaries he/she considers appropriate.

In recent years a new career opportunity has emerged in private and public Ophthalmology clinics. Thus, the training provided by the current degree in optics and optometry is highly valued by doctors specialising in ophthalmology. The role of the opticians/optomertists during consultations is to detect visual dysfunction, operate optical measurement and clinical diagnosis instruments and interpret the results of the same, fit contact lenses, supply provide information and advice on optical aids available and perform all tests before and after various surgical procedures, primarily refractive and cataract surgery.

The responsibilities of an Optician/Optomertist:

- Contribute to the maintenance and improvement of the general population's visual quality and health.
- Perform efficient visual examinations at each of the following stages: taking the medical history, selection and execution of diagnostic tests, establishing prognosis, choice and implementation of treatment, and preparation, where appropriate, of referral reports.
- Advise and guide the patient and family throughout treatment.
- Refer patients to other professionals with the corresponding report detailing the levels of care required to ensure the best possible care for the patient.

- Critically reflect on clinical, scientific, ethical and social questions encountered in day-to-day Optometry practice.
- Give opinions, reports and expert appraisal when necessary.
- Evaluate and incorporate those technological improvements necessary for satisfactory professional practice.
- Participate in the planning and management of a service or small business in the field of Optics/Optomety.
- Plan and carry out research projects that contribute to the advancement of knowledge in the field of Optometry, transmitting scientific knowledge through professional channels.
- Expand and improve professional practice skills through continuous training.
- Transmit the basic Optometry knowledge acquired intelligibly.
- Contextualise new information and resulting interpretations.
- Demonstrate an understanding of the general structure of the discipline of Optometry and its connection to other specific or complementary disciplines.
- Demonstrate and implement methods of critical analysis, development of theories and their application to the disciplinary field of Optometry.
- Demonstrate possession of knowledge, skills and abilities in patient health care.
- Demonstrate the capacity to act as a primary eye health care practitioner.
- Demonstrate the ability to participate effectively in multidisciplinary teams in projects related to Optometry.

The specific skills can be organised according to theoretical knowledge and practical skills acquired, as shown below:

A. Theoretical knowledge:	B. Practical skills:
1) Anatomy of the Ocular System. 2) Refractive and presbyopia abnormalities. 3) Accommodative and binocular vision abnormalities. 4) Sensory and ocular alignment abnormalities. 5) Limited sight and visual rehabilitation. 6) Biochemistry of the ocular system. 7) Clinical optometry. 8) Professional legal, labour, ethical and management context. 9) Epidemiology and visual health. 10) Visual Ergonomics. 11) Pharmacology of the Ocular System. 12) Physiology of the Ocular System. 13) Optometric Instruments. 14) Contact lenses. 15) Ophthalmic lenses and their assembly. 16) Optical Materials. 17) Scientific Methodology and statistics. 18) Neurophysiology of vision. 19) Optical Physics. 20) Optical Physiology.	1) Collecting data for the compilation of medical histories. 2) Explanation of diagnosis and optical compensation or other therapeutic treatment requirements. 3) Preparation of reports and communication with other professionals in the joint care of patients. 4) Ability to adapt the examination sequence to individual patient needs. 5) Ability to observe and relate visual and ocular signs and symptoms. 6) Carry out and relate instrumental tests in each clinical case. 7) Ability to diagnose and recommend treatment and/or adequate compensatory measures. 8) Proficiency in contact lens fitting procedures. 9) Ability to carry out visual education programmes and evaluate improvements to visual capabilities. 10) Ability to study, prescribe and educate patients with limited vision. 11) Ability to study and propose ergonomic improvements to the patient/user's visual. 12) Ability to contribute to the prevention of ocular and visual anomalies. 13) Ability to detect ocular and visual anomalies. 14) Ability to assess the causes of intolerance or failure of prescriptions or treatments. 15) Operation of instruments used to observe ocular and visual signs. 16) Operation of instruments used to measure ocular and visual parameters. 17) Ability to interpret and relate instrumental data with other clinical data. 18) Ability to interpret visual and ocular instrumental data associated with surgical procedures. 19) Operation of instruments for the production, assembly, fitting and control of optical aids. 20) Proficiency in the design and manufacture ophthalmic lenses. 21) Ability to participate in research programmes. 22) Ability to participate in educational programmes. 23) Ability to carry out epidemiological studies.

- 21) Geometrical Optics.
- 22) Geriatric Optometry.
- 23) Paediatric Optometry.
- 24) Pathology of the Ocular System.
- 25) Visual Therapy.

IMPLEMENTATION**TIMESCALE**

Academic Year	Implementation of the new Degree in Optics and Optometry	Phasing out of the Diploma in Optics and Optometry (*)
2010-2011	1 st Year	2010-2011
2011-2012	2 nd Year	2011-2012
2012-2013	3 rd Year	2012-2013
2013-2014	4 th Year	

(*) Although this course is no longer being taught, students are entitled to sit two annual examinations for the corresponding year, in the two academic years following the implementation of the new degree course.

CREDIT EQUIVALENCE BETWEEN THE PRESENT COURSE AND THE NEW DEGREE IN OPTICS AND OPTOMETRY

Students who have completed the first course of Diploma in Optometry will be recognized first degree courses, addition to subjects allocated to them on the other courses by applying the table adaptation described below:

2000 PROGRAMME	CREDIT	2010 PROGRAMME	ECTS
ANATOMY AND OCULAR HISTOLOGY OF THE VISUAL SYSTEM	4,5	ANATOMY OF THE HUMAN VISUAL SYSTEM (HVS)	6
GENERAL BIOLOGY	4,5	BIOLOGY	6
PHYSICS	9	PHYSICS	6
MATHEMATICS	9	MATHEMATICS	6
FUNDAMENTALS OF CHEMISTRY	7,5	CHEMISTRY	6
.....		BIOCHEMISTRY	6
GEOMETRICAL OPTICS	10,5	GEOMETRICAL OPTICS	6
OPTOMETRY I	13,5	FUNDAMENTALS OF OPTOMETRY	6
OCULAR PHYSIOLOGY	4,5	PHYSIOLOGY OF THE HVS	6
STATISTICS FOR OPTICS	6	STATISTICS	6
PRINCIPLES OF PATHOLOGY AND OCULAR PHARMACOLOGY	7,5	PATHOLOGY OF THE HVS	6
		PHARMACOLOGY	6
PHYSIOLOGICAL OPTICS I	7,5	VISUAL OPTICS I	6
OPTOMETRY I	13,5	OPTOMETRY I	6
GEOMETRICAL + INSTRUMENTAL OPTICS	10,5 10,5	OPTICAL SYSTEMS	6
OPTICAL MATERIALS	6	OPTICAL MATERIALS	6
OPTICAL PHYSICS	9	OPTICAL PHYSICS I	6
OPTOMETRY II	12	OPTOMETRY II	6
INSTRUMENTAL OPTICS	10,5	INSTRUMENTAL OPTICS	6
PHYSIOLOGICAL OPTICS II	4,5	VISUAL OPTICS II	6
OPTICAL PHYSICS	9	OPTICAL PHYSICS II	6
OPTICAL TECHNOLOGY I	15	OPHTHALMIC OPTICS I	6
CONTACTOLOGY	12	CONTACTOLOGY I	6
OPTOMETRY II	12	OPTOMETRY III	6
PRINCIPLES OF PATHOLOGY AND OCULAR PHARMACOLOGY + PUBLIC HEALTH IN OCULAR SCIENCES	13,5	CLINICAL OCULAR PATHOLOGY AND PUBLIC HEALTH	6
OPTICAL TECHNOLOGY I	15	OPHTHALMIC OPTICS II	6
CONTACTOLOGY	12	CONTACTOLOGY II	6
OPTOMETRY II	12	OPTOMETRY IV	6
PAEDIATRIC AND GERIATRIC OPTOMETRY	6	OPTOMETRY : SPECIFIC POPULATIN GROUPS	6
PHYSIOLOGICAL OPTICS III	4,5	PSYCHOPHYSICS AND VISUAL PERCEPTION	6
OPTICAL TECHNOLOGY I + OPTICAL TECHNOLOGY II	19,5	OPHTHALMIC OPTICS III	9
CLINICAL OPTOMETRY + CLINICAL CONTACTOLOGY	15 4,5	OPTOMETRY AND CLINICAL CONTACTOLOGY	9

Correspondence between degree courses in the Faculty of Sciences at the UA:

The Faculty of Sciences at the University of Alicante has proposed five degree courses in the area of the Sciences (Biology, Marine Sciences, Geology, Chemistry and Mathematics) and one degree course in the area of Health Sciences (Optics and Optometry). With the aim of enabling mobility between courses at the end of the first year, it has been agreed that recognition will be given to the credits obtained in their first year of study by students taking other degree courses offered by the Faculty of Sciences and who then choose to enrol on the Optics and Optometry degree. This may mean that in the second year of the Degree, some students lack a basic foundation, which could hinder the progress of their studies. In these cases, tutorial help will be offered to students in order to remedy this lack and provide guidance in certain fundamental areas.

BRIDGING COURSE FOR HOLDERS OF THE DIPLOMA IN OPTICS AND OPTOMETRY WHO WISH TO OBTAIN THE DEGREE IN OPTICS AND OPTOMETRY

- [Rationale](#)
- [Entry and admission of students](#)
- [Course Programme](#)
- [Implementation timescale](#)

.Rationale

In view of the document issued by the State Secretariat of Universities dated 20th November, 2009 and entitled "Report on access to officially recognised Degrees for holders of diplomas, architectural technician and engineering qualifications corresponding to the previous Ordinance", establishing guidelines for the provision of bridging courses, the University of Alicante has deemed it appropriate to offer a bridging course for holders of the Diploma in Optics and Optometry.

Therefore, concurrently with the implementation of the Degree course, the University of Alicante will offer bridging courses in 2010-11, 2011-12 and 2012-13 with the aim of enabling holders of the Diploma in Optics or the Diploma in Optics and Optometry to obtain a Degree. Duration of the course will be one academic year, and places will be limited to 60 per year.

.Entry and admission of students

Student entry requirements are as follows: to hold a "Diploma in Optics" or a "Diploma in Optics and Optometry". Students holding a Diploma in Optics or in Optics and Optometry from other universities and who wish to obtain a Degree in Optics and Optometry from the University of Alicante will be required to take the subjects indicated by the Centre's Commission for Recognition and Transfer of Credits, determined according to the subjects studied previously for the Diploma. Where students would need to study subjects which are not included in the bridging course, these Diploma holders will not be admitted to the course.

Admission will be decided according to the following selection criteria:

- Academic record: up to 40%
- Diploma in Optics or in Optics and Optometry awarded by the University of Alicante: 30%
- Enrolled on or holder of the Master's Degree in Advanced Optometry and Vision Sciences at the University of Alicante 30%

.Course Programme

Course content has been determined in accordance with Royal Decree 1393/2007, and Order CIN/727/2009, which regulate the profession and the list of credit equivalences given in chapter 10 of the report on the Degree in Optics and Optometry at the University of Alicante.

Accordingly, the following general considerations are proposed:

- 1.- The new programme will incorporate a compulsory subject, "Work experience" (18 credits), whereas in the 2000 programme, work experience was optional and of limited duration, worth 4, 5 and 9 credits.
- 2.- The Royal Decree establishes the obligatory nature of a Final Project; consequently, in the new programme the Final Project will be a compulsory subject, worth 6 ECTS credits.
- 3.- In accordance with Order CIN/727/2009, two new subjects will be incorporated into the Degree course: Public Health and the Spanish Health System.

Therefore, a bridging course worth 36 ECTS credits is proposed, with the following structure:

- CLINICAL OCULAR PATHOLOGY AND PUBLIC HEALTH 6 ECTS
- OPTOMETRY: SPECIAL POPULATIONS 6 ECTS
- WORK EXPERIENCE 18 ECTS
- FINAL PROJECT 6 ECTS

Teaching content of the above-mentioned subjects will be the same as that described in the corresponding documents concerning modules and subjects taught on the new Degree course. As regards the timetable, a structure is proposed which will spread the teaching load over two semesters. The Final Project will be undertaken in the second semester, whilst work experience may be undertaken in two modules of nine credits each, offered in both semesters. With this structure, all students will study 36 credits but credit distribution over the course may vary for each student, from 15 to 24 credits in the first semester and from 21 to 30 credits in the second.

Bridging course timetable.

SUBJECT	Semester 1	Semester 2	Academic Year
Optometry: special populations		6 ECTS	10/11, 11/12, 12/13
Clinical ocular pathology and Public Health	6 ECTS		10/11, 11/12, 12/13
Work experience	9/18 ECTS	9/18 ECTS	10/11, 11/12, 12/13
Final Project		6 ECTS	10/11, 11/12, 12/13

.Implementation timescale

It is envisaged that implementation of the bridging course enabling diploma holders to obtain a Degree in Optics and Optometry will begin in the academic year 2011-2012, and will be offered until academic year 2012-2013.

DEGREE IN OPTICS AND OPTOMETRY. SYLLABUS SUMMARY

ESTRUCTURA DEL PLAN DE ESTUDIOS POR TIPO DE MATERIA

TIPO DE MATERIA	CRÉDITOS
Formación básica (FB)	60
Obligatorias incluidas Prácticas Externas (OB)	156
Optativas (OP)	18
Trabajo Fin de Grado	6
Total créditos	240

DISTRIBUCIÓN POR CURSOS

PRIMER CURSO		SEGUNDO CURSO		TERCER CURSO		CUARTO CURSO	
Semestre 1	Semestre 2	Semestre 3	Semestre 4	Semestre 5	Semestre 6	Semestre 7	Semestre 8
Anatomía del Sistema Visual y Humana 6 ECTS	Fisiología del Sistema Visual y Humana 6 ECTS	Materiales Ópticos 6 ECTS	Óptica Física I 6 ECTS	Óptica Física II 6 ECTS	Psicofísica y Percepción Visual 6 ECTS	Asignatura Optativa ⁽²⁾ 6 ECTS	Asignatura Optativa ⁽²⁾ 6 ECTS
Biología 6 ECTS	Bioquímica 6 ECTS	Óptica Visual I 6 ECTS	Óptica Visual II 6 ECTS	Óptica Oftálmica I 6 ECTS	Óptica Oftálmica II 6 ECTS	Asignatura Optativa ⁽²⁾ 6 ECTS	Prácticas Externas 18 ECTS
Física 6 ECTS	Óptica Geométrica 6 ECTS	Sistemas Ópticos 6 ECTS	Óptica Instrumental 6 ECTS	Contactología I 6 ECTS	Contactología II 6 ECTS	Óptica Oftálmica III 9 ECTS	
Matemáticas 6 ECTS	Estadística 6 ECTS	Optometría I 6 ECTS	Optometría II 6 ECTS	Optometría III 6 ECTS	Optometría IV 6 ECTS	Optometría y Contactología Clínica 9 ECTS	Trabajo Fin de Grado ⁽¹⁾ 6 ECTS
Química 6 ECTS	Fundamentos de Optometría 6 ECTS	Patología del Sistema Visual Humano 6 ECTS	Farmacología 6 ECTS	Patología Ocular Clínica y Salud Pública 6 ECTS	Optometría: Poblaciones Especiales 6 ECTS		

⁽¹⁾ Previamente a la evaluación del Trabajo Fin de Grado, el estudiante debe acreditar las competencias en un idioma extranjero. Entre otras formas de acreditación, en la Universidad de Alicante se considera necesario superar como mínimo, el nivel B1 del Marco de Referencia Europeo para las lenguas modernas, que podrá ser elevado en el futuro.

⁽²⁾ **Optatividad:** 18 ECTS de asignaturas optativas orientadas a la especialización.

ASIGNATURAS OPTATIVAS	
Baja Visión	6 ECTS
Nuevas Tendencias en Lentes de Contacto	6 ECTS
Optometría Ambiental y Ocupacional	6 ECTS
Alternativas a la Compensación Visual	6 ECTS
Microbiología y Terapéutica de las Infecciones Oculares	6 ECTS
Técnicas Avanzadas para el Estudio del Ojo Humano: Aberrometría Ocular	6 ECTS

- [Verified Memory](#)
- [Resolution Council of Universities \(CU\): Positive Verification](#)
- [Resolution from the Universities Council: Accreditation renewal](#)
- [Released Generalitat Valenciana](#)

Internal Quality Assurance System (SGIC) of the Title

- [Structure of the Centre for Quality](#)
 - [Comission of Internal Quality Guarantee](#)
 - [Other Commissions](#)
- [Handbook SGIC](#)
- [Procedures](#)
 - [Strategic \(PE\)](#)
 - [Key \(PC\)](#)
 - [Support \(PA\)](#)
 - [Measurement \(PM\)](#)
- [Management of the SGIC \(Access to ASTUA\)](#) 

Follow-up of the Title

- [Self-reports UA](#)
- [External reports AVAP](#)
- [Other reports](#)
- [Improvement Plans](#)
- [Progress and Learning Outcomes](#)

Information about the Centre	General information for students
<ul style="list-style-type: none"> • Faculty of Sciences Telephone:+ 34 96 590 3557 Fax:+ 34 96 590 3781 facu.ciencias@ua.es http://ciencias.ua.es/en/ • Mobility Programmes • Work experience with companies and institutions • Reception and welcome events • Tutorial Action Programme 	<ul style="list-style-type: none"> • Grants and assistance • Accommodation • Student refectories and cafeterias • Transport • Emergency medical care • Insurance • Services for students with special needs • Student representation and participation • University student identity card (TIU) • Frequently asked questions
UA: General Regulations	+ Information about qualifications
<ul style="list-style-type: none"> • Academic regulations and procedures of the University of Alicante 	<ul style="list-style-type: none"> • Official State Gazette (BOE) on publication of course programmes • Own Web • Information pamphlet • Video presentation of the degree