Last update: 07-07-2019

370514 - PROCEDIMEN - Clinical Procedures in Optometry

Coordinating unit: 370 - FOOT - Terrassa School of Optics and Optometry
Teaching unit: 731 - OO - Department of Optics and Optometry
Academic year: 2019
Degree: BACHELOR'S DEGREE IN OPTICS AND OPTOMETRY (Syllabus 2009). (Teaching unit Compulsory)
ECTS credits: 6 Teaching languages: Catalan

Teaching staff

Coordinator:
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Others:
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Degree competences to which the subject contributes

Specific:

7. Knowing how to do clinical examinations and interpret the results
8. Do properly refractive vision exams
9. Do properly binocular and accommodative tests.
11. Know interpret functional and health test results of the visual system.
13. Interpret the registers obtained with different techniques. Determine the status of ocular structures.

Generical:

1. Extract the main points of a text or any source of information (oral or written)
2. Synthesize and organize information to convey it effectively orally and / or written
3. Display information orally and in writing of reasonably and coherent.
5. Encourage methodical work, rigorous, consistent and innovative
6. Working with evidence, methodology and rigour.

Teaching methodology

The subject consists of 1,5 hour per week of classroom lectures (large group) and 18 two-hour sessions in small groups in the laboratory (practical).
- The theory classes are kind of explanation combined with cooperative learning activities.
· The practices will be in couples in the optometry 1 lab.
· The independent learning include: the study by the student, open lab sessions, collect data from patients and complement clinical training.
To take advantage of the course, follow the directions and terms described in Atenea.

Last update: 07-07-2019

370514 - PROCEDIMEN - Clinical Procedures in Optometry

Learning objectives of the subject

At the end of the course of clinical procedures in optometry, the student has to have achieved the following objectives:

- Acquire skills in the instrument testing for assessing visual function and eye health.
- Ability to measure and interpret the refractive defects.
- Understand the principles and have the ability to measure accommodative anomalies of binocular vision.
- To apply and interpret the evidence related to the instrumental visual health problems.
- Ability to measure and interpret the data obtained in psychophysical assessment of visual perception.
- Acquire the skills necessary for clinical examination and treatment of patients.

Study load

Total learning time: 144h	Hours large group:	0h	0.00%
	Hours medium group:	18h	12.50%
	Hours small group:	42h	29.17%
	Guided activities:	0h	0.00%
	Self study:	84h	58.33%

Last update: 07-07-2019

370514 - PROCEDIMEN - Clinical Procedures in Optometry

Content

1. Introduction to Optometry

Learning time: 2h

Practical classes: 1h
Self study : 1h

Description:
1. 1. History of Optometry
1. 2. Visual examination scheme
1. 3. preliminary
1. 3. 1. interpupillary distance

Related activities:
Labs:
Practice. - The optometric office.

2. Refractive Exams

Learning time: 16h

Practical classes: 6h
Self study : 10h

Description:
2.3. retinoscopy
2. 3. 1. Clinical usefulness of retinoscopy
2. 3. 2. Characteristics of reflection retinoscópico
2. 3. 3. Method of neutralizing ametropia
2. 4. Subjective examination of refraction in VL
2. 4. 1. Review monocular
2. 4. 2. Biocular and binocular balance

370514 - PROCEDIMEN - Clinical Procedures in Optometry

3. Binocular vision and accommodation tests	Learning time: 26h Practical classes: 8h Self study : 18h

Description:

3. 1. Sensory aspects of binocular vision
3. 2. sensory examination
3. 2. 1. Simultaneous assessment of Perception
3. 2. 2. Assessment of Fusion
3. 2. 3. Assessment of stereopsis
3. 3. Motor aspects of binocular vision
3. 3. 1. Components of the convergence
3. 3. 2. Latent and manifest deviations
3. 4. Motor examination. Description, normal values ''and interpretation of results:
3. 4. 1. Lateral phoria and reservations
3. 4. 2. Vertical phoria and reservations
3. 4. 3. Graphing
3. 4. 4. Near point of convergence
3. 4. 5. Flexibility of convergence
3. 5. Components of accommodation and proximal triad
3. 6. Tests accommodative. Description, normal values ''and interpretation of results:
3. 6. 1. Amplitude of accommodation
3. 6. 2. Relative amplitudes: RNA and ARP
3. 6. 3. accommodative lag
3. 6. 4. Flexible accommodation

Last update: 07-07-2019

370514 - PROCEDIMEN - Clinical Procedures in Optometry

4. Eye Health Exams	Learning time: 25h Practical classes: 7h Self study : 18h

Description:

4. 1. oculomotrices skills
4. 1. 1. fixation
4. 1. 2. saccadic
4. 1. 3. monitoring
4. 2. Visual Field
4. 2. 1. Examination Techniques
4. 2. 2. Interpretation of automated perimetry results
4. 3. ophthalmoscopy
4. 3. 1. Techniques for observing the fundus
4. 3. 2. Exploration of the fundus
4. 4. Color Vision
4. 4. 1. Classification of abnormal color vision
4. 4. 2. Description of tests to evaluate color vision
4. 4. 3. Interpretation of results in each test
4. 5. pupillary function
4. 5. 1. Examination of pupillary function
4. 5. 2. Disorders of pupillary function
4. 6. tonometry
4. 6. 1. Factors that alter the intraocular pressure
4. 6. 2. Measurement techniques
4.7. Biomicroscopy

Last update: 07-07-2019

370514 - PROCEDIMEN - Clinical Procedures in Optometry

Planning of activities

1. PRACTICES OF REFRACTIVE EXAM

Hours: 18h
Laboratory classes: 16h
Self study: 2h

Description:
Practices are made in the laboratory in sessions of two hours.
They used artificial eyes and then the students will make the eye exams among themselves in pairs.
The student must come to the lab with the corresponding contents of similar theory. The laboratory will have to carry out the experimental recording the results of the optometric tab.

Support materials:
All materials needed to perform visual examinations of the practice sessions will be available in the laboratory.

Descriptions of the assignments due and their relation to the assessment:
Registration attendance at practice.
Retinoscopy test (15%).

Specific objectives:
At the end of the block of refractive practice exam the student must be able to:
- Get the objective and subjective refraction of a patient.

2. BINOCULAR VISION AND ACCOMMODATION PRACTICE

Hours: 12h
Laboratory classes: 10h
Self study: 2h

Description:
Practices are made in the laboratory, in sessions of two hours.
Students will make visual examinations among themselves in pairs.
The student must come to the lab with the corresponding contents of similar theory. The laboratory will have to carry out the experimental recording the results of the optometric tab.

Support materials:
All materials needed to perform visual examinations of the practice sessions will be available in the laboratory.
Educational videos available from Atenea.

Specific objectives:
At the end of the block practice of binocular vision and accommodation, students must be able to:
- Measure and interpret anomalies accommodative and binocular vision.

3. EYE HEALTH PRACTICES

Hours: 6h
Laboratory classes: 4h
Self study: 2h

Support materials:
All materials needed to perform visual examinations of the practice sessions will be available in the laboratory.

Descriptions of the assignments due and their relation to the assessment:
Registration attendance at practice.

Last update: 07-07-2019

370514 - PROCEDIMEN - Clinical Procedures in Optometry

Specific objectives:
At the end of the pad eye care practices the student must be able to:
- Perform and interpret the exhibits for the evaluation of visual function and eye health.

4. EXAM	Hours: 6h Self study: 6h

5. GLOBAL THEORY TEST	Hours: 13h Practical classes: 2h Self study: 11h

Specific objectives:
The student must demonstrate that it has achieved the objectives of the course.
The comprehensive test includes all course content and has a weight of 40%.

6. GLOBAL PRACTICE TEST	Hours: 6h Laboratory classes: 4h Self study: 2h

Specific objectives:
The student must demonstrate that it has achieved the objectives and implementing clinical studies that are part of the course.
The test includes all course content and has a weight of 25%.

7. CLINICAL TRAINING SUPPLEMENT	Hours: 2h Self study: 2h

name english	Hours: 4h Laboratory classes: 2h Self study: 2h

9. OPEN THE DOORS IN LAB	Hours: 8h Self study: 8h

Specific objectives:
Students have at their disposal to improve their teaching laboratory clinical learning. ATHENA will be published in the days and times that you can access the facilities to the students can point to.

370514 - PROCEDIMEN - Clinical Procedures in Optometry

Regulations for carrying out activities

- If not done any of the laboratory activities and continuous assessment will be evaluated with a zero.
- Under no circumstances can have any formulary on the tests.
- In case of partial or total copy of any evaluations of the course will apply the provisions of General Academic Regulations of the UPC: "Les accions irregulars que poden conduir a una variació significativa de la qualificació d?un o més estudiants constitueixen una realització fraudulenta d?un acte d?avaluació. Aquesta acció comporta la qualificació descriptiva de suspens i numèrica de 0 de l?acte d?avaluació i de l?assignatura, sense perjudici del procés disciplinari que es pugui derivar com a conseqüència dels actes realitzats".
- La qualificació de no presentat, que significa que l?estudiant no ha estat avaluat, s?atorga quan no ha participat en cap dels actes d?avaluació previstos per a l?assignatura, excepte en el cas que la guia docent de l?assignatura publicada especifiqui alguna cosa diferent.

Bibliography

Basic:

Borràs, M. Rosa [et al.]. Optometría: manual de exámenes clínicos. 3a ed. Barcelona: Edicions UPC, 1999. ISBN 8483013096.

Carlson, Nancy B. [et al.]. Procedimientos clínicos en el exámen visual. Madrid: Ciagami, 1994. ISBN 8488985002.

Complementary:

Optometria. Barcelona: Masson, 1993. ISBN 8445800574.

Eskridge, J. Boyd. Clinical procedures in optometry. Philadelphia: J.B. Lippincott Company, 1991. ISBN 0397509847.

Borish's clinical refraction. Philadelphia: W.B. Saunders, 1998. ISBN 0721656889.

Others resources: