COURSE/SUBJECT UNIT DESCRIPTION

COURSE/SUBJECT  GENERAL ANATOMY I
COURSE 1ST
SEMESTER 1ST
DEGREE (S): PHYSIOTHERAPY
TYPE OF COURSE: ATTENDANCE IS REQUIRED
ACADEMIC YEAR 2015/2016
SCHOOL OF MEDICINE
1. COURSE/SUBJECT IDENTITY

1.- SUBJECT:

<table>
<thead>
<tr>
<th>Name: General Anatomy I</th>
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<tbody>
<tr>
<td>Code: d126</td>
</tr>
<tr>
<td>Year: First</td>
</tr>
<tr>
<td>Semester(s): First</td>
</tr>
<tr>
<td>Type: Basic</td>
</tr>
<tr>
<td>ECTS: 3</td>
</tr>
<tr>
<td>Language: English &amp; Spanish</td>
</tr>
<tr>
<td>Mode: Basic Common Knowledge</td>
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<tr>
<td>Degree this subject is taught: Physiotherapy</td>
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<tr>
<td>School this subject is taught: Medicine</td>
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2.- SUBJECT ORGANIZATION:

<table>
<thead>
<tr>
<th>Department: Basic Medical Sciences</th>
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<tr>
<td>Subject Area: Human Anatomy &amp; Embryology</td>
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2. TEACHING STAFF

1.- NAMES AND CONTACT INFORMATION:

<table>
<thead>
<tr>
<th>STAFF</th>
<th>CONTACT INFORMATION</th>
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</thead>
<tbody>
<tr>
<td>Rodolfo Orozco Fariñas</td>
<td>e-mail: <a href="mailto:rorozco@ceu.es">rorozco@ceu.es</a>&lt;br&gt;Office: MED 1.02</td>
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<tr>
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<td>e-mail: <a href="mailto:aherrero@ceu.es">aherrero@ceu.es</a>&lt;br&gt;Office: MED 1.02</td>
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</tbody>
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2.- TUTORIAL ACTIVITY:

Students can contact teachers by e-mail, phone or visiting their office during the teacher’s tutorial times published on the students’ gateway or by appointment.
3. COURSE OBJECTIVES

LEARNING OUTCOMES

SUBJECT OBJECTIVES

- The origin and embryonic development of the main structures that compose the organs and systems in humans with special interest in the musculoskeletal and neuromuscular systems.

- To correctly identify and to describe the anatomy of the organs and structures of the cervical, thoracic and abdominal zones. Understand their integration by functional systems and their neurological control, as well as their topographic relations.

Based on the above objectives the student should be able to:

- The application this knowledge for the reasoning and understanding of the nosological organization, the physical exploration and the specific therapeutic techniques, in their profession as physiotherapist.

4. TEACHING METHODOLOGY OF THE COURSE

LEARNING ACTIVITIES

I- DURING SCHEDULED CLASSES

1.- THEORY:

The learning activities will be directed to the fulfillment to the objectives and basic competencies determined by the current laws of education.

The priority of the theoretical classes is the transmission of knowledge by the teaching staff. This requires the previous study or preparation of the material by the students for the active participation, under the teacher’s supervision, of the students in the reasoning and interpretation of the subject matter.

The calendar is specified in the course plan.

The teaching staff will show certain introductory aspects and develop the most relevant aspects of the different subjects and their integration to the general program of the subject matter. There could be certain didactic material used for teaching. This material could include photocopies and digital material. In addition the students should utilize basic and complementary bibliography in order to confront, contrast and acquire deep knowledge of the theoretical material given during class.
2- LABORATORY PRACTICALS:

During practical classes, the learning activities will be directed to the fulfillment to the objectives and basic competencies determined by the current laws of education. It will be a priority for the student the fulfillment of the practical activities in order to apply the theoretical knowledge and the acquisition and development of practical knowledge and abilities.

This activity should be performed in a practical laboratory suitable for the subject matter to fulfill the contents and practical abilities. These could include: Work with anatomical models and/or dissected material. This material will be used to visualize, identify, describe, and palpate the different anatomical structures.

The practical schedule and location will be promptly published.

These practical classes will be taught in a model room and/or in the anatomical dissection room.

The students will organize in working groups and perform the practical under the supervision of a teacher responsible for the practical. In addition the students should analyze and discuss the practical material.

The practical classes could have a systematic evaluation and will have a final examination.

II- OUTSIDE SCHEDULED CLASSES

- Reading and analysis of the bibliography
- Search of relevant information in databases and bibliographical stocks
- Consultation reading and analysis of bibliography in libraries and other centers
- Consultation of material distributed through the student gateway (Virtual Campus)
- Elaborate assignments
- Perform the practical notebooks
- Study for exams

5. ASSESSMENT

1.- CLASS ATTENDANCE:

- In order to develop a continuous evaluation, the students must attend over 75% in lectures. Attendance control will be performed. Justification of non-attendance will not be accepted since the student is allowed to miss 25% of lectures.
- Attendance to practices is obligatory at 100%. In properly justified cases the practical could be taken with other group as long as it has been coordinated with the supervising teachers.
2.- ASSESSMENT CRITERIA:

ORDINARY EXAMINATION. CONTINUOUS ASSESSMENT:

- The course objectives will be evaluated through written exercises containing multiple choice questions, short questions and individual task.
- Only students that had fulfill the assistance requirements could participate in the ordinary/continuous evaluation.
- There will be 2 midterm examinations thought the semester. The dates of these exams will be announce at least 7 days in advance. These exams are not eliminatory and will carry 20% each of the final grade for the ordinary examination.
- There will be one final exam worth 60% of the final grade. This exam will cover the entire subject matter. A pass grade need to be obtain for this final exam to count towards the final grade.
- When a student does not take one ordinary examination his or her grades won’t be taken in consideration having to take the exam during the extraordinary examination call.
- The laboratory practicum will be assessed by observation, lab notebook and practical examination. This exam could be done using images and/or models. The assistance to the practicum is mandatory. To pass the practicum a grade equal or greater than 5.0 is necessary.
- The final grade will be calculated in such a way that the theoretical examination will count a total of 70% and the practical will count 30%.

EXTRAORDINARY EXAMINATION CALL:

Students that do not have a passing grade in the ordinary/continuous examinations should take the final exam during the extraordinary call. This exam will have theoretical and practical components and will cover the entire subject matter.

The grading percentages established in the continuous evaluation won’t apply for the extraordinary call.

EXAM REVISION:

Revisions will take place only during the established official schedule. The revisions will only take place face to face. There will not be revisions done by e-mail, telephone or other similar means.

3.- STUDENTS’ FINAL RESULTS:

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<thead>
<tr>
<th>SISTEMA DE EVALUACIÓN</th>
<th>PORCENTAJE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical assessment</td>
<td>70</td>
</tr>
<tr>
<td>Midterms and continuous assessment</td>
<td>28</td>
</tr>
<tr>
<td>Final examination</td>
<td>42</td>
</tr>
<tr>
<td>Practicum</td>
<td>30</td>
</tr>
<tr>
<td>Final grade</td>
<td>100%</td>
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6. COURSE PROGRAM

1.- SYLLABUS:

THEORETICAL PROGRAM:

EMBRYOLOGY

1.- Introduction: Gametogenesis, spermatogenesis and oogenesis, mitosis and meiosis. Chromosomes and chromosomal abnormalities.
2.- Ovulation, fertilization, Cleavage and implantation in uterus. Stages of Embryonic development.
3.- Second and third weeks: bilaminar and trilaminar discs
4.- Trophoblast development. Placenta and umbilical cord
5.- Germ layer development. Gastrulation.
6.- Development of the musculoskeletal system.
7.- Development of the musculoskeletal system.
8.- Nervous system development.
9.- Branchial (Pharyngeal) arches.
10.- Most relevant aspects of the fetal period.

THORACIC, ABDOMINAL AND PELVIC VISCERA

1.- Pharynx
2.- Larynx.
3.- Morphology of the thyroid gland, vascularization and innervation.
4.- Vascularization, innervation and lymphatic nodes of the neck
5.- Thoracic cavity and its organs.
6.- Mediastinum.
7.- Pleura and lungs.
8.- Heart: External configuration
9.- Heart: Internal configuration.
10.- Circulatory system. Irrigation of the thoracic and peritoneal viscera
11.- Peritoneal and abdominal cavity. Peritoneal folds and visceral classification related to the peritoneum.
12.- Abdominal digestive viscera. Organization and topographic relations of the duodenum, intestines pancreas, spleen and liver.
13.- Liver and bile ducts
14.- Retroperitoneal viscera. Adrenal gland, kidney, renal pelvis and abdominal ureter
15.- Pelvic viscera, Rectus, bladder, and pelvis ureter
16.- Male genitalia
17.- Female genitalia (I). Ovary, uterus and vagina
18.- Female genitalia (II). Female perine and breast.
19.- Visceral innervation. Autonomic (vegetative) nervous system
20.- Imaging techniques for visceral anatomy

PRACTICAL WORK:

1.- Study of the thoracic viscera
2.- Study of the abdominal viscera, true (lesser) pelvic and perineum
3.- Revision in dissecting room.
4.- Exam.
7. BIBLIOGRAPHY*

1.- BASIC BIBLIOGRAPHY:


2.- COMPLEMENTARY BLIBIOGRAPHY:


* Note: the titles in this list are the Spanish editions. Students should be able to find their English version.

4.- USEFUL WEB RESOURCES:

http://www.anatomy.org
http://embryo.soad.umich.edu/index.html
http://virtualhumanembryo.lsuhsc.edu/
http://www.bibliotecaceu.es/

8. ATTITUDE IN THE CLASSROOM

REGULATIONS:

Any irregular act of academic integrity (no reference to cited sources, plagiarism of work or inappropriate use of prohibited information during examinations) or signing the attendance sheet for fellow students not present in class will result in the student not being eligible for continuous assessment and possibly being penalized according to the University regulations.