## COMMITTEE COURSE CONTENT

University: Muğla Sıtkı Koçman University

Faculty: Faculty of Medicine/ Program: English Program

Academic Year: 2016-2017

Phase: 1 / Comitee: 3 (Cell Sciences)

Course Code: MED 1300 / ECTS: 10 / Theoric+Practice Lesson + Laboratory Lesson

Course Type : Compulsory/ Course Length : 8 weeks / Type of Teaching : Formal/ Language of Instruction : English

#### Professional Skills (MED 1013)

Theoretical:

- 1. Fizik Muayene Yöntemleri (1 hour)
- 2. Hasta ile Görüşme Teknikleri (2 hour)

Practical:

- 1. Fizik Muayene Yöntemleri (4 hour)
- 2. Hasta ile Görüşme Teknikleri (8S)

### Anatomy (MED 1008)

#### Theoretical:

- 1. Bones of upper extremity I (2 hour)
- 2. Bones of upper extremity II (2 hour)
- 3. General information about the bones (2 hour)
- 4. General information about the joints (2 hour)
- 5. Introduction to Anatomy (2 hour)
- 6. Joints of the lower extremity I (4 hour)
- 7. Joints of the upper extremity II (4 hour)
- 8. Terminology (2 hour)
- 9. Terms of Anatomical positions, planes, axis (1 hour)
- 10. Terms of the movement Anatomical terms of movement (1 hour)
- 11. The bones of the lower extremity I (2 hour)
- 12. The bones of the lower extremity II (2 hour)
- 13. The term commonly used in medicine (A-K) (2 hour)
- 14. The term commonly used in medicine (L-Z) (2 hour)

#### **Practical:**

- 1. Bones of upper extremity (2 hour)
- 2. Bones of upper extremity (2 hour)
- 3. Joints of the lower extremity (4 hour)
- 4. Joints of the lower extremity (4 hour)
- 5. Laboratory presentation (2 hour)
- 6. The appendicular skeleton (2 hour)
- 7. The bones of the lower extremity (2 hour)

### 8.

# Behavioral Sciences (MED 1005)

# Theoretical:

- 1. Behaviour (2 hour)
- 2. Emotion and affect (2 hour)
- 3. Functions of ego. Defense mechanisms and theories (2 hour)
- 4. Intelligence and related psychopathology, The definition of intelligence, Measuring intelligence (2 hour)

### Practical:

Med. Biochemistry (MED 1001) Theoretical:

- 1. Cholesterol Metabolism (2 hour)
- 2. Degredation of Proteins, Detoxification of Ammonia Urea synthesis (2 hour)
- 3. Disorders of Lipid Metabolism (2 hour)
- 4. Fatty Acids (2 hour)
- 5. Hemoglobin Myoglobin (4 hour)
- 6. Ketone bodies (2 hour)
- 7. Lipid transport and deposition (6S)
- 8. Lipids Classification Chemical Structures (2 hour)
- 9. Metabolism of Fatty Acids (4 hour)
- 10. Peptide Bond and Peptide Plane Primary, secondary', tertiary, quaternary' structures of Proteins. (4 hour)
- 11. Protein synthesis (4 hour)

### Practical:

- 1. Case (Lipid metb. Disorders) (2 hour)
- 2. Lipid Assay Methods (4h)
- 3. Protein Assay Methods (2 hour)
- 4. Urea Assay Methods (2 hour)

## **Biophysics (MED 1006)**

## Theoretical:

- 1. Bioelectrical events on muscles and EMG (2 hour)
- 2. Biomagnetism (2 hour)
- 3. Biophysics practice (1 hour)
- 4. Calcium channel (1 hour)
- 5. Compound Action Potential (3 hour)
- 6. Equivalent Circuits for cell membrane (1 hour)
- 7. Hodgkin Huxley Action Potential (1 hour)
- 8. Introduction to Biophysics, concept of system and bioenergetics (2 hour)
- 9. Ion channels and HH channel model (1 hour)
- 10. Ions, electrical and chemical gradients (1 hour)
- 11. Muscle contraction: Biomechanic and bioenergetics relations (3 hour)
- 12. Nemst and Goldmann equations (1 hour)
- 13. Potassium channel (1 hour)
- 14. Sodium channel (1 hour)
- 15. Subthreshold events and action potential (2 hour)
- 16. Transport mechanisms on cell membrane and resting potential (1 hour)

#### Practical: 1.

### **Biostatistics (MED 1004)**

# Theoretical:

- 1. Chi-Square Tests with Statistical Software (2 hour)
- 2. Correlation and Linear Regression (2 hour)
- 3. Correlation and Regression Analysis with Statistical Software (2 hour)
- 4. Hypothesis Testing with Statistical Software (2 hour)
- 5. Hypothesis Tests (2 hour)
- 6. Multiple and Logistic Regression (2 hour)
- 7. Nonparametric Tests (2 hour)
- 8. Nonparametric Tests with Statistical Software (2 hour)

# Practical:

# Medical Biology (MED 1015)

### Theoretical:

- 1. Biology of Aging (2 hour)
- 2. Cancer Biology (4 hour)
- 3. Epigenetic Mechanisms (2 hour)
- 4. Human Genome and Human Genome Project (2 hour)
- 5. Molecular Biology of Development (2 hour)

- 6. Pathways of Cell Death (2 hour)
- 7. Stem Cell Biology (2 hour)

# Practical:

# Medical Genetics (MED 1014)

# Theoretical:

- 1. Autosomal Dominant Inheritance (2 hour)
- 2. Laboratory application (2 hour)
- 3. Medical Genetics, Introduction (1 hour)
- 4. Mendel's Genetics and Pedigrees (2 hour)
- 5. Multifactorial Inheritance and Mitocondrial Inheritance (2 hour)
- 6. Mutations (Type of Mutations and Their consequences) (2 hour)
- 7. Nonaditional Modes of Inheritance (1 hour)
- 8. Pattern of Inheritance (1 hour)
- 9. Patterns of single gene inheritance (1 hour)
- 10. Sex Linked Inheritance (1 hour)

## Practical:

# Other:

#### 1. Non- Comitee Courses:

- 1. Principles of Atatürk and Revolutionary History (ATB 1801) (14 hour)
- 2. Turkish Language (TDB 1801) (12 hour)
- 3. Foreign Language (ENG 1801) (24 hour)