COMMITTEE COURSE CONTENT

University: Muğla Sıtkı Koçman University
Faculty: Faculty of Medicine**/ Program:** English Program
Academic Year: 2018-2019
Phase: 1 **/ Comitee:** 3 (Cell Sciences)
Course Code: MED 1300 **/ ECTS: 11 / Theoric+Practice Lesson +Laboratory Lesson**
Course Type : Compulsory/ Course Length : 8 weeks **/ Type of Teaching : Formal/ Language of Instruction : English**

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

Practical:

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

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 (2 hour)

Practical:

1.

Medical Biochemistry (MED 1001)

Theoretical:

1. Biosynthesis of Fatty Acids (2 hour)
2. Cholesterol metabolism (2 hour)
3. Degradation of Proteins, Detoxification of Ammonia & Urea synthesis (2 hour)
4. Disorders of Lipid Metabolism (2 hour)
5. Enzyme activity Assay Methods (2 hour)
6. Enzyme kinetics (Enzyme inhibition) (4 hour)
7. Enzymes & Classification (2 hour)

8. Fatty Acids and Derivatives (2 hour)
9. Hemoglobin - Myoglobin (4 hour)
10. Ketone bodies (2 hour)
11. Lipid transport and deposition (2 hour)
12. Lipids - Classification — Chemical Structures (2 hour)
13. Oxidation of Fatty Acids (2 hour)
14. Peptide Bond and Peptide Plane Primary, secondary, tertiary, quaternary structures of Proteins. (4 hour)
15. Posttranslational Modifications of Proteins (2 hour)
16. Protein synthesis (4 hour)

Practical:

1. Case (Lipid metb. Disorders) (2 hour)
2. Lipid Assay Methods (2 hour)
3. Protein Assay Methods (2 hour)

Biophysics (MED 1006)

Theoretical:

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

Practical:

1.

Biostatistics (MED 1004)

Theoretical:

1. Chi-Square Tests (2 hour)
2. Comparing Proportions (2 hour)
3. Confidence Interval for a Population Mean with Statistical Software R (2 hour)
4. Correlation and Linear Regression (2 hour)
5. Nonparametric Tests: Wilcoxon Signed Rank Test, Wilcoxon-Mann-Whitncy Test (2 hour)
6. One-Sample t-test with Statistical Software R (2 hour)
7. Two-sample t-tests, Paired t-test (2 hour)

Practical:

1. Checking Conditions for Hypothesis Tests and Stating Conclusions (2 hour)

Medical Biology (MED 1015)

Theoretical:

1. Autosomal and gonosomal chromosomal disorders (2 hour)
2. Chromosome Structure and Organization (2 hour)
3. DNA repair mechanism (4 hour)
4. Human genome organization and genome project (2 hour)
5. Inheritance patterns (2 hour)
6. Karyotype analysis Lab (2 hour)
7. Mendel's law and pedigree (3 hour)
8. Mutation and Mutagens (2 hour)
9. Nonmendelian inheritance (2 hour)
10. Numerical and structural chromosome anomalies (2 hour)
11. Prenatal diagnosis (2 hour)

Practical:

1.

Professional Skills (MED 1013)

Theoretical:

1.

Practical:

1. Doctor-patient Communication Skills (4 hour)
2. Physical Examination Methods (4 hour)
3.

Other:

1.

Non- Comitee Courses:

1. English (YDB 1831)(24 hour)
2. Principles of Atatürk and Revolutionary History (ATB 1801) (14 hour)
3. Turkish I (TDB 1801)(11 hour)