**T.C.**

**ATILIM UNIVERSITY FACULTY OF MEDICINE**

**EDUCATION IN 2020-2021 ACADEMIC YEAR**

**ACADEMIC CALENDAR**

**\*\* Schedule for MED105 committee was revised and re-organized due to COVID-19 pandemic. Laboratory Practices listed below will be held at 2nd Semester. \*\***

**Laboratory Lessons:**

1. RNA isolation from cell (4 hours, Dr. Özalp)
2. Spectrophotometer (2 hours, Dr. Kılıç)
3. Kinetics of enzymes (2 hours, Dr. Kılıç)
4. Fetal and maternal histology (2 hours, Dr. Aykanat)
5. Serum protein determination (2 hours, Dr. Kılıç)
6. Neoplasia (2 hours, Dr. Boduroğlu-Dr. Yurdakan)
7. Analysis of carbohydrates (2 hours, Dr. Kılıç)
8. Mitotic Division (4 hours, Dr. Köse)

|  |  |  |
| --- | --- | --- |
| **COMMITTEE NAME** | **STARTING DATE** | **COMPLETION DATE** |
| **MED 101** | 05.10.2020 | 30.10.2020 |
| **MED 102** | 22.02.2021 | 02.04.2021 |
| **MED 103** | 02.11.2020 | 18.12.2020 |
| **MED 104** | 05.04.2021 | 14.05.2021 |
| **MED 105** | 21.12.2020 | 15.01.2021 |
| **MED 106** | 17.05.2021 | 11.06.2021 |

|  |
| --- |
| **COMMITTEE NAME** |
|  | **MED 101** | **MED 102** | **MED 103** | **MED 104** | **MED 105** | **MED 106** |
| **ANATOMY PRACTICAL EXAM DATE** |  |  |  |  | - |  |
| **HISTOLOGY AND EMBRYOLOGY PRACTICAL EXAM DATE** |  |  |  |  | - |  |
| **COMMITTEE EXAM DATE** |  |  |  |  | 22.01.2021 |  |

**MED105 GROWTH AND DEVELOPMENT**

|  |  |
| --- | --- |
| **PHASE I COORDINATOR** | Prof. Dr. Veli Cengiz ÖZALP |
| **PHASE I VICE COORDINATOR**  | Asst. Prof. Dr. Nuriye Ezgi BEKTUR AYKANAT |
| **CHAIRMAN OF THE MED 105 COMMITTEE** | Asst. Prof. Dr. Sevil KÖSE |
| **MED 105 COMMITTEE DATE RANGE** | 17.12.2020- 08.01.2021 |
| **ACADEMIC STAFF AT THE** **MED 105 COMMITTEE** | Prof. Dr. Nedret KILIÇ- BiochemistryProf. Dr. Gamze YURDAKAN- Medical PathologyProf. Dr. Cengiz ÖZALP – Medical Biology and GeneticsAssoc. Prof. Dr. Müge TECDER- Medical PharmacologyAsst. Prof. Dr. Esin BODUROĞLU- PathologyAsst. Prof. Dr. Sevil KÖSE - Medical Biology and GeneticsAsst. Prof. Dr. Nuriye Ezgi BEKTUR AYKANAT- Histology and Embryology |
|

|  |  |
| --- | --- |
|  |  |

**ACADEMIC STAFF** | **THEORETICAL LESSON TIME** | **PRACTICAL LESSON TIME** | **INTERACTIVE EDUCATION****TIME** | **TOTAL TIME** |
| **Medical Biochemistry** | 21 | 8 |  | 29 |
| **Medical Biology**  | 11 | 8 |  | 19 |
| **Medical Pathology** | 7 | 2 |  | 9 |
| **Histology and Embryology** | 11 | 2 | 1 | 14 |
| **Medical Pharmacology** | 3 | - |  | 3 |
| **TOTAL** | 53 | 20 | 1 | 74 |

|  |  |
| --- | --- |
| **Office Hour** | 17.02.2021 |

|  |
| --- |
| **CONTENT OF THE MED 105 COMMITTEE**  |
| Understanding the genetic material structure and abnormalities, the cell cycle, the mechanisms effecting and regulating the cell cycle, DNA repair mechanisms, cell death mechanisms, biochemistry of nucleic acids, carbohydrates, fatty acids, phospholipids, steroids, fertilization, implantation and development of human and ongoing of embryonic period, gametogenesis, general concept of inflammation, neoplasm, molecular basis of cancer epidemiology, pharmacodynamics of drugs.  |
| **MED 105 COMMITTEE AIM** |
| To give information about the genetic control and biochemistry of nucleic acids, pharmacodynamics of drugs, development of human embryo and extraembryonic structures, molecular basis of cancer, oncogenic viruses and epidemiology of cancer.  |
| **MED 105 COMMITTEE LEARNING OBJECTIVES** |
| The students who succeeded in this course;1. Describes the cell division and its results.
2. Describes the cellular proliferation and the regulation of it.
3. Describes the cellular aging process.
4. Describes the types of cell death and the mechanisms of them.
5. Explains the mutation, its varieties, mechanisms of occurrence and detection methods.
6. Explains the packaging of DNA into chromosome and the molecules taking role in this process.
7. Explains DNA repair mechanisms.
8. Describes the biochemistry of nucleic acids, carbohydrates, fatty acids, phospholipids, steroids.
9. Uses the laboratory materials necessary for all experiments.
10. Explains the development of cells and tissues, the relationship and differentiation between cells in embryological period.
11. Explains the development of human embryo and extraembryonic structures.
12. Identifies anomalies that may develop during embryological period with their mechanisms.
13. Explains the molecular basis of cancer, oncogenic viruses and epidemiology of cancer.
14. Explains the fertilization and implantation.
15. Explains the embryonic stages.
16. Explains the developmental events in fetal period.
17. Explains the reasons for the development of birth defects.
18. Indicates the formation mechanism of multiple pregnancies.
19. Indicates the methods used in prenatal diagnosis.
20. Explains the birth defects.
21. Describes the inflammation.
22. Describes the tissue repair.
23. Describes the neoplasm and epidemiology.
24. Describes the molecular basis of cancers.
 |
| **RECOMMENDED BOOKS**1. Harper’s Illustrated Biochemistry (30th Edition); Victor W. Rodwell, David Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil; McGraw-Hill, 2015.
2. Lippincott Illustrated Reviews: Biochemistry (Seventh Edition); Denise R. Ferrier; Lippincott Wilwims & Wilkins; Philadelphia, 2017.
3. Marks’ Basic Medical Biochemistry A Clinical Approach (5th Edition); Michael Lieberman, Alisa Peet; Wolters Kluwer, Philadelphia, 2018.
4. Thompson & Thompson Genetics in Medicine (8th Edition); Robert L. Nussbaum, Roderick R. McInnes, Huntington F. Willard; ; Elsevier, Philadelphia, 2016.
5. The Developing Human (10th Edition); T. V. N. Persaud,Mark G. Torchia Keith L. Moore, Elsevier Health Books, 2015.
6. Cell and molecular biology (2th edition); Nalini Chandar, PhD, Susan Viselli, PhD, Lipincot Wiliams & Wilkins, 2019.
7. Molecular cell biology (8th edition); Harvey Lodish, W.H.Freeman & Co Ltd, 2016.
8. Molecular biology of the cell (6th edition); Bruce Alberts, W. W. Norton & Company,2015.
9. Basic & Clinical Pharmacology (13th Edition); Bertram G. Katzung,‎ Anthony J. Trevor; McGraw-Hill, 2015.
10. Robbins Basic Pathology (10th edition), Vinay Kumar, Abul K. Abbas, Jon C. Aster, 2018.
 |
| **MED 105 COMMITTEE EXAM WEEK** |
| **DATE** | **EXAM NAME** | **EXAM HOUR** |
| 22.01.2021 | MED 105 Committee Exam | 10:30-13:20 |
| **Teaching Methods and Techniques** |

|  |  |  |  |
| --- | --- | --- | --- |
| [x]  Lecture | [ ]  Case based learning | [x] Case discussion | [ ]  Student presentation |
| [ ]  Role playing | [ ]  Problem based learning | [ ] Project | [ ] Homework |
| [x] Laboratory practice | [ ]  Team based learning | [x]  Free Study |  |

 |
| **Evaluation Method** | Theoretical Exam (70%), Homework Assignment (30%) |
| **Lesson Language** | English |