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| |  | | --- | | **TISHK INTERNATIONAL UNIVERSITY FACULTY OF EDUCATION Department of BIOLOGY EDUCATION, 2020-2021 Fall Course Information for BIO 301 HISTOLOGY** |  |  |  | | --- | --- | | **Course Name:** | HISTOLOGY | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Code** | **Regular Semester** | **Theoretical** | **Practical** | **Credits** | **ECTS** | | BIO 301 | 5 | 2 | 2 | 3 | 5 | | | | **Name of Lecturer(s)-Academic Title:** | Hiwa Banna - Soran Kayfi - | | **Teaching Assistant:** | Nuha Nawshirwan | | **Course Language:** | English | | **Course Type:** | Main | | **Office Hours** | 9-5 | | **Contact Email:** | hiwabanna@gmail.com soran.kayfi@tiu.edu.iq  Tel:07504611336 07504302814 | | **Teacher's academic profile:** | Professor of Histology /faculty of nursing MSc | | **Course Objectives:** | 1-Enabling students to acquire understanding of the basic structure of human body at the cellular and tissue levels using microscope. 2- Histology course will deal with structure and function of cells and tissues of the body, which there are four basic types: epithelial, connective, muscular and nervous. 3-To produce efficient and effective biologists who can also teach in any of the learning areas in the high school or any other levels of the teaching profession than can bring change as well.. | | **Course Description (Course overview):** | This course will give the microscopic study of tissues and the tissue organization of organs in relation to their function using light and electron microscopy. Tissue preparation for microscopic study, histochemistry, stains and stain technology will be included. Lecture and investigative based experimental activities are incorporated into this course. In the lab section students will see the tissues under the microscope in order to learn more about what they study. | | **COURSE CONTENT**   |  |  |  |  | | --- | --- | --- | --- | | **Week** | **Hour** | **Date** | **Topic** | | **1** | 2 | 7-8/10/2020 | Orientation | | **2** | 2 | 11-15/10/2020 | Introduction to what is Histology, | |  |  |  |  | | **3** | 2 | 18-22/10/2020 | Cell structure and types | | **4** | 2 | 25-28/10/2020 | Cell organelles | |  |  |  |  | | **5** | 2 | 1-5/11/2020 | Basic primary tissues of the body :1- epithelium,general characteristic features ,simple and stratified | | **6** | 2 | 8-12/11/2020 | shape,types, function and location of simple and stratified epithelial tissues | |  |  |  |  | | **7** | 2 | 15-19/11/2020 | Connective tissue , an overview | | **8** | 2 | 22-26/11/2020 | Midterm Exam | |  |  |  |  | | **9** | 2 | 29/11-3/12/2020 | Connective tissue proper, loose and dens,types,structure and distribution in the body | | **10** | 2 | 6-10/12/2020 | Specialized types of connective tissues -bone, cartilage and blood | |  |  |  |  | | **11** | 2 | 13-17/12/2020 | Muscle tissue,characteristic features and types | | **12** | 2 | 20-24/12/2020 | Muscle tissue: Skeletal, cardiac and smooth microscopic structure and location | |  |  |  |  | | **13** | 2 | 27-31/12/2020 | Nervous tissue, characteristic features and specialty about nervous tissues | | **14** | 2 | 3-7/1/2021 | Neurons and neuroglial cells ,features of each and distribution in central and peripheral nervous system | |  |  |  |  | | **15** | 2 | 10-14/1/2021 | Final Exam | | **16** | 2 | 17-21/1/2021 | Final Exam | |  |  |  |  | | | | **COURSE/STUDENT LEARNING OUTCOMES**   |  |  | | --- | --- | |  |  | | **1** | By the end of this course, students will be able to have an understanding of how cells organize ,group together and form tissues. | | **2** | To identify types of tissues and describe their shapes and functions. | | **3** | To be able to locate in the body the four basic types of Tissues: Epithelia, Connective, Muscle and Nervous tissues. | | | | **COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES** (Blank : no contribution, I: Introduction, P: Profecient, A: Advanced )   |  |  |  | | --- | --- | --- | |  | **Program Learning Outcomes** | **Cont.** | | **1** | Write accurately and clearly about biology topics that conform to the scientific conventions of that field. | P | | **2** | Describe the molecular components of living things, their heredity transformations and the main concerns in these biological process | I | | **3** | Identify and analyze the microorganisms including bacteria, fungi and virus and their roles in nature. | I | | **4** | Characterize the features of plant organs/tissues/cells/organelles involved in cellular respiration, photosynthesis, reproduction and growth. | P | | **5** | Describe the micro and macro anatomy of the living systems and recognize the relationship between structure and function at all biological systems and levels. | I | | **6** | Apply safety and proper techniques in the laboratory, and report the results of conducted experiments. | P | | **7** | Use appropriate methods and techniques to improve their students’ critical thinking, creative thinking and problem-solving skills. | I | | **8** | Effectively organize and manage classrooms. | A | | **9** | Use required methods and techniques for student-centered teaching by considering individual and cultural differences of students. | P | | **10** | Develop research studies that applies quantitative or qualitative research methods that address research questions in the field. | A | | | | **Prerequisites (Course Reading List and References):** | To be well prepared and have red the subjects in the handouts prior to the lecture. | | **Student's obligation (Special Requirements):** | The students should feel that their active participation in the learning process is in their interest. | | **Weekly Laboratory/Practice Plan:** | |  |  |  |  | | --- | --- | --- | --- | | **Week** | **Hour** | **Date** | **Topics** | | 1 | 2 | 7-8/10/2020 | Orientation and regulations in the laboratory,safety in the laboratory | | 2 | 2 | 11-15/10/2020 | Microscopic appearance of tissues under microscope: | |  |  |  |  | | 3 | 2 | 18-22/10/2020 | Simple epithelia | | 4 | 2 | 25-28/10/2020 | Stratified epithelia | |  |  |  |  | | 5 | 2 | 1-5/11/2020 | Connective tissue : loose connective tissues | | 6 | 2 | 8-12/11/2020 | Dens connective tissues | |  |  |  |  | | 7 | 2 | 15-19/11/2020 | Connective tissue :Bone and cartilage | | 8 | 2 | 22-26/11/2020 | Connective tissue :Blood | |  |  |  |  | | 9 | 2 | 29/11-3/12/2020 | Muscle tissues: features | | 10 | 2 | 6-10/12/2020 | Skeletal, cardiac and smooth types of muscle | |  |  |  |  | | 11 | 2 | 13-17/12/2020 | Nervous tissue : 1 | | 12 | 2 | 20-24/12/2020 | Nervous tissue :2 | |  |  |  |  | | 13 | 2 | 27-31/12/2020 | Nervous tissue: 3 | | 14 | 2 | 3-7/1/2021 | Review | |  |  |  |  | | 15 | 2 | 10-14/1/2021 | Review | | 16 | 2 | 17-21/1/2021 | Final Exam | |  |  |  |  | | | **Course Book/Textbook:** | chars 1-Junqueira's Basic Histology Text & Atlas (14th ed.) Edition: 14th, Publisher: McGraw-Hill Medical 2- Text/Atlas of HISTOLOGY by Leeson,Leeson& Paparo , publisher Sauders newest edition. 3-Wheater's Functional Histology: A Text and Colour Atlas , fifth Ed. Churchill Livingstone; 6 edition (November 18, 2013) 4- Plus numerous varieties of references from internet listed in the reference list at the end of each chapter . | | **Other Course Materials/References:** | professors handouts and lab notes | | **Teaching Methods (Forms of Teaching):** | Lectures, Practical Sessions | | **COURSE EVALUATION CRITERIA**   |  |  |  | | --- | --- | --- | | **Method** | **Quantity** | **Percentage (%)** | | Participation | 1 | 6 | | Quiz | 2 | 3 | | Homework | 3 | 1 | | Midterm Exam(s) | 1 | 20 | | Laboratory | 1 | 10 | | Lab/Practical Exam(s) | 1 | 15 | | Final Exam | 1 | 40 | | **Total** | | **100** | | **Examinations:**True-False, Fill in the Blanks, Short Answers, Matching |  |  | | | | **Extra Notes:** | | | **ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD**   |  |  |  |  | | --- | --- | --- | --- | | **Activities** | **Quantity** | **Workload Hours for 1 quantity\*** | **Total Workload** | | Theoretical Hours | 16 | 2 | 32 | | Practical Hours | 16 | 2 | 16 | | Final Exam | 1 | 12 | 12 | | Participation | 1 | 12 | 12 | | Quiz | 2 | 46 | 92 | | Homework | 3 | 9 | 27 | | Midterm Exam(s) | 1 | 10 | 10 | | Laboratory | 1 | 8 | 8 | | Lab/Practical Exam(s) | 1 |  | 0 | | **Total Workload** | | | **209** | | **ECTS Credit (Total workload/25)** | | | **8.36** | | |   **Peer review**   |  |  |  | | --- | --- | --- | | Signature: | Signature: | Signature: | | Name: | Name: | Name: | | Lecturer | Head of Department | Dean | |