Course Syllabus

1. Program of Study Bachelor of Science (Biological Science)
Faculty/Institute/College Mahidol University International College

2. Course Code ICBI 301
Course Title Functional Histology

3. Number of Credits 4 (3-2-7) (Lecture/Lab/Self-Study)

4. Prerequisite *(s)* none

5. Type of Course Elective

6. Trimester/ Academic Year
2nd trimester / Every academic year

7. Course Condition
Number of students is 20-30.

8. Course Description
Microscopic characteristics of cells, tissues, and organs of the human body; systematic and sequential consideration of fundamental cytology; normal histology of basic tissues; embryological development and microscopic organization of the major organs and organ systems.

9. Course Objective *(s)*
1. Learn the vocabulary needed for communicating aspects of cell and tissue structure/function.
2. Gain an understanding of how cells and tissues perform specific functions and how each function relates to the structural plan of a particular organ.
3. Gain a basic understanding of how tissue function is dependent on specialized and differentiated activities of cells at the biochemical and molecular level.
4. Be able to describe the normal structural features of tissue and organ systems; this baseline information is needed for understanding changes that occur in various disease and pathological conditions.
5. Be able to apply these concepts to specific clinical situations.

10. Course Outline

week	Topics/Seminar	Hours			Instructor
		Lecture	Lab	Self-study	
1	-Introduction to Histology -Connective tissues I Lab: Introduction	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
2	-Connective tissues II Lab: Connective Tissues I	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee

					Jiraungkoorskul
3	-Epithelial tissues -Nerve tissue Lab: Connective Tissues II	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
4	-Muscle and Skeletal tissue Lab: Epithelial, muscle, nerve and skeletal tissue	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
5	-Respiratory system Lab: Respiratory system	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
6	-Cardiovascular system Lab: Cardiovascular system	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
7	**Midterm examination**	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
8	-Gastrointestinal system Lab: Gastrointestinal system	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
9	-Urinary system Lab: Urinary system	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
10	-Male reproductive systems Lab: Male reproductive systems	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
11	-Female reproductive systems Lab: Female Reproductive systems	3	2	7	Dr. Somphong Sahaphong Dr. Suda Riengrojpitak Dr. Wannee Jiraungkoorskul
Final Examnination					
		33	22	77	

11. Teaching Method *(s)*

1. Lecture
2. Suggested readings
3. Discussion in class

12. Teaching Media

1. Powerpoint Presentations
2. Texts and teaching materials

13. Measurement and Evaluation of Student Achievement

Student achievement is measured and evaluated by

13.1 The ability to understand the vocabulary needed for communicating aspects of cell and tissue structure/function.

13.2 The ability to understand how cells and tissues perform specific functions and how each function relates to the structural plan of a particular organ.

13.3 The ability to understand how tissue function is dependent on specialized and differentiated activities of cells at the biochemical and molecular level.

13.4 The ability to describe the normal structural features of tissue and organ systems; this baseline information is needed for understanding changes that occur in various disease and pathological conditions.

13.5 The ability to apply these concepts to specific clinical situations

Student's achievement will be graded according to the college and university standard using the symbols: A, B+, B, C+, C, D+, D and F. Students must attend at least 80% of the total class hours of this course.

Ratio of mark

Midterm examination	35%
Final examination	35%
Midterm laboratory examination	10%
Final laboratory examination	20%
Total	100%

14. Course evaluation

14.1 Students' achievement as indicated in number 13 above.

14.2 Students' satisfaction towards teaching and learning of the course using questionnaires.

15. Reference *(s)*

1. Young, B. and Heath, J.W. Wheater's functional histology. 4th Edition. Canada. Churchill Livingstone. 2001.
2. Gartner, L.P. and Hiatt, J.L. Color atlas of histology. 3rd Edition. USA. W.B.Saunders. 2000**.**
3. Kerr, J.B. Atlas of functional histology, 1st Edition. UK. Mosby International, 1999.
4. Fawcett, D.W and Jensh, R. P. Bloom and Fawcett's concise histology, 2nd Edition. USA. W.B. Saunders. 2002.
5. Pappas, G.S. Laboratory manual of histology**,** 2nd Edition. USA. Wm. C. Brown Communications, Inc., 1994.

16. Instructor *(s)*

Associate Professor Dr. Somphong Sahaphong
Associate Professor Dr. Suda Riengrojpitak
Dr. Wannee Jiraungkoorskul

17. Course Coordinator

Associate Professor Dr. Somphong Sahaphong