

**Structure of Cell and Tissue (SCBM214)**  
**Second Semester, Academic Year 2024**

**Course Syllabus**

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|----------------------------------|---|---------------------------|
| <b>1. Program of Study</b>       | Bachelor of Science Program in Biomedical Science                       |                           |
| <b>Faculty/Institute/College</b> | Faculty of Science  |                           |
| <b>2. Course Code</b>            | SCBM 214  |                           |
| <b>Course Title</b>              | Structure of Cell and Tissue  |                           |
| <b>3. Number of Credits</b>      | 3 (2-3-5)   |                           |
| <b>4. Prerequisite</b>           | None  |                           |
| <b>5. Type of Course</b>         | Required course   |                           |
| <b>6. Session</b>                | Second semester   | <b>Academic year</b> 2024 |
| <b>7. Time:</b>                  | Tuesday 1-5pm and Wednesday 10:30am-1pm (Time as shown in the schedule) |                           |
| <b>8. Venue:</b>                 | Salaya campus   |                           |
| <b>9. Course Conditions</b>      | class size: minimum 10, maximum 80                                      |                           |

**10. Course Description**

Structural and functions of epithelium, connective tissue, muscles, nervous tissues bone, cartilage, integument, circulatory system, digestive system, lymphoid system, respiratory system, urinary system, reproductive system and endocrine system

**11. Course Objectives**

After successful completion of this course, student is able to

1. Describe histology and basic functions of organs
2. Describe cellular and molecular components that maintain the structure of organs
3. Apply the basic knowledge to explain the clinical correlation of organ malfunctions

## 12. Course Schedule

Date	Time	Class	Topics	Instructor
Tue 7 Jan 2025	13.00-17.00	Lec1-2	Course orientation, Epithelium and Connective Tissue	SS
Wed 8 Jan 2025	11.00-12.30	Lec3	Bone & Cartilage	KC
Tue 14 Jan 2025	13.00-17.00	Lab 1-2	Epithelium and Connective tissue	Gr.1: SS Gr.2: MSY Gr.3: MSR
Wed 15 Jan 2025	11.00-12.30	Lec4	Nervous Tissue	SI
Tue 21 Jan 2025	13.00-14.30	Lec5	Muscular Tissue	SA
	14.30-16.00	Lec6	Lymphoid system	MSY
Wed 22 Jan 2025	11.00-12.30	Lec7	Integumentary system	KW
Tue 28 Jan 2025	13.00-17.00	Lab3-4	Muscle and Bone & Cartilage	Gr.1: SA Gr.2: KC Gr.3: SS
Wed 29 Jan 2025	11.00-13.00	Lab5	Nervous Tissue	Gr1: SI Gr.2: PP Gr.3: AS
Tue 4 Feb 2025	13.00-17.00	Lab6-7	Integumentary system and Lymphoid system	Gr.1: MSY Gr.2: KW Gr.3: PP
Wed 5 Feb 2025	11.00-12.30	Lec8	Cardiovascular system	SA
Tue 18 Feb 2025	13.00-15.00	SG1	Clinical problems related to microanatomy of epithelium, connective tissue, lymphoid organ and nervous tissue	Gr.1: SS Gr.2: MSY Gr.3: SI Gr.4: AS
Wed 19 Feb 2025	11.00-13.00	Lab8	Cardiovascular system	Gr.1: SS Gr.2: YT Gr.3: WS
Tue 24 Feb 2025	13.00-15.00	SG2	Clinical problems related to microanatomy of bone & cartilage, integumentary system, muscle and cardiovascular system	Gr.1: SA Gr.2: KW Gr.3: SS Gr.4: KC
3 - 7 Mar 2025				
Tue 11 Mar 2025	13.00-16.00	Lec9-10	Digestive system I-II	WS
Wed 12 Mar 2025	11.00-12.30	Lec11	Respiratory system	KW
Tue 18 March 2025	13.00-16.00	Lec12-13	Urinary & Female reproductive system	RV
Wed 19 March 2025	11.00-12.30	Lec14	Male reproductive system	WW
Tue 25 March 2025	13.00-17.00	Lab 9-10	Digestive system (upper & lower parts)	Gr.1: WS Gr.2: SS Gr.3: KC

Tue 1 April 2025	13.00-17.00	Lab11-12	Respiratory system and urinary system	Gr.1: KW Gr.2: LY Gr.3: RV
Tue 8 April 2025	13.00-15.00	SG3	Clinical problems related to microanatomy of respiratory, upper & lower parts of digestive system	Gr.1: YT Gr.2: WS Gr.3: LY Gr.4: SS
Wed 9 April 2025	11.00-12.30	Lec15	Endocrine system	YT
Tue 22 April 2025	13.00-17.00	Lab13-14	Female and male reproductive system	Gr.1: RV Gr.2: WW Gr.3: YT
Tue 29 April 2025	13.00-15.00	SG4	Clinical problems related to microanatomy of endocrine, urinary, female and male reproductive system	Gr.1: WW Gr.2: PP Gr.3: KW Gr.4: RV
28 Apr - 9 May 2025			Final examination (Lec9-15 & Lab9-14)	

### 13. Teaching Methods

1. Lecture
2. Lab
3. Small group discussion

### 14. Teaching Medias

1. Handout
2. Assigned text books
3. On-line learning materials
4. Histological slides and microscopes

### 15. Measurement and Evaluation of Student Achievement

1. Written examinations: MCQ
2. Group activity evaluation: performance in Laboratory
3. Examination is graded A, B+, B, C+, C → F according to an expected standard.

	Percent
Lecture Examination I (L1-L8)	27
Lecture Examination II (L9-L14)	23
Lab Examination I	11.4
Lab Examination II	8.6
Lab Assignments	10
Student presentation	10
<b>Total</b>	<b>100</b>

### 16. Course Evaluation

1. Student comment forms on the lecturer, teaching contents, and knowledge that they can be used in the future

2. Staff meeting to evaluate on the student comments and to give suggestions to improve the course

#### **17. Recommended Textbooks and Atlases:**

1. Ross MH & Pawina W (2006). Histology: A Text and Atlas, With correlated cell and molecular biology, 5<sup>th</sup> edition, Lippincott Williams & Wilkins.
2. Stevens A & Lowe J (2005). Human Histology, third edition, Elsevier, Mosby.
3. Gartner LP & Hiatt JL (2008). Color Textbook of Histology, W.B. Saunders company.
4. Kierszenbaum AL (2007). Histology and Cell Biology: An Introduction to Pathology, 2<sup>nd</sup> edition., Mosby.

#### **18. Instructors**

Prof. Kanokpan Wongprasert (KW)  
Assoc.Prof. Kulathida Chaithirayanon (KC)  
Assoc.Prof. Somluk Asuvapongpatana (SA)  
Assoc.Prof. Wattana Weerachatanukul (WW)  
Assoc.Prof. Yotsawan Tinikul (YT)  
Assoc.Prof. Rapeepun Vanichviriyakit (RV)  
Assist.Prof. Worawit Suphamungmee (WS)  
Assist.Prof. Somyoth Sridurongrit (SS)  
Assist.Prof. Sittipon Intarapat (SI)  
Assist.Prof. Morakot Sroraya (MSY)  
Assist.Prof. Monsicha Somrit (MSR)  
Assist.Prof. Phetcharat Phanthong (PP)  
Assist.Prof. Athikhun Suwannakhan (AS)  
Dr. Laphatrada Yurasakpong (LY)

#### **19. Teaching Supporting staff:**

Mr. Apisit Tangla  
Mr. Sukit Meesombat  
Ms. Waraporn Muebsri

#### **20. Course Coordinator**

Assist. Prof. Somyoth Sridurongrit  
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