



Course Title Human Anatomy I
Course Code ICBI 305

Undergraduate Program
Mahidol University International College
Science Division

TQF 3 Course Specifications

Section 1 General Information

1. Course code and course title

Thai ICBI 305 กายวิภาคศาสตร์ของมนุษย์ ๑

English ICBI 305 Human Anatomy I

2. Number of credits 4 (2-4-6)

3. Program and type of subject

3.1 Program Biological Sciences (International Program)

3.2 Type of Subject Major Elective (Biomedical Concentration)

4. Course Coordinator and Course Lecturer

4.1 Course Lecturer Sani Baimai, M.D.

4.2 Course Coordinator Asst.Prof.Dr.Tumnoon Charaslertrangsi, Ph.D.

4.3 Lab instructors Asst.Prof.Sani Baimai, M.D.

Asst. Prof.Dr. Thanaporn Rungruang, Ph.D

Asst.Prof.Dr.Apichaya Niyomchan, Ph.D.

5. Trimester/ Year of Study

5.1 Trimester All trimester

5.2 Course Capacity 25 students

6. Pre-requisite ICBI 221 Animal Biology

7. Co-requisites N/A

8. Venue of Study Faculty of Medicine Siriraj Hospital, Mahidol
University

9. Date of Latest Revision Aug 2022



Course Title Human Anatomy I
Course Code ICBI 305

Undergraduate Program
Mahidol University International College
Science Division

Section 2 Goals and Objectives

1. Course Goals

Students should possess the knowledge of human anatomy and function, specifically the upper part of the human body: head, neck, back, anterior chest wall, and upper limb. This course focuses heavily on practical components, where students will have hands-on laboratory exercises.

2. Objectives of Course Development/Revision

2.1 Course Objectives

Objectives of course development/revision is to align with the Biological Sciences Program's Expected Learning Outcomes.

2.2 Course-level Learning Outcomes (CLOs)

By the end of the course, students will be able to (CLOs)

CLO1 – Possess knowledge in human biology by understanding the key human anatomy and function

CLO2 – Perform dissection on preserved human cadaver



Course Title Human Anatomy I
Course Code ICBI 305

Undergraduate Program
Mahidol University International College
Science Division

Section 3 Course Management

1. Course Description

(Thai) กายวิภาคของมนุษย์ในส่วนของกระดูก กายวิภาคพื้นผิว อวัยวะ โครงสร้าง หน้าที่ ความสัมพันธ์ระหว่างโครงสร้างของลำตัวด้านหน้าและหลัง รยางค์บน ศีรษะและคอ อวัยวะรับสัมผัสพิเศษ รวมทั้งการประยุกต์ใช้ทางคลินิก ศึกษาโดยการชำแหละจากอาจารย์ใหญ่ และชิ้นเนื้อของอาจารย์ใหญ่ที่ชำแหละแล้ว

(English) Anatomy of human bones, surface anatomy, organs, structures, functions, relationships between various structures of body wall, upper extremity, head and neck, as well as organ of special senses including clinical applications; studied by cadaveric dissection and dissected cadaveric specimens.

2. Credit hours per trimester

Lecture (Hour(s))	Laboratory/field trip/internship (Hour(s))	Self-study (Hour(s))
2 credits (24 hrs)	4 credits (48 hrs)	6 credits (72 hrs)

3. Number of hours that the lecturer provides individual counseling and guidance.

4 hours per week



Course Title Human Anatomy I
Course Code ICBI 305

Undergraduate Program
Mahidol University International College
Science Division

Section 4 Development of Students' Learning Outcome

1. Short summary on the knowledge or skills that the course intends to develop in students (CLOs)

Human Anatomy is a third-year major elective courses in biomedical science concentration (medical science module). Thus, students are expected to grasped the basic biology knowledge as well as dissection skills. Human anatomy is divided into two courses, namely ICBI 305 Human Anatomy I and ICBI 306 Human Anatomy II. The focus of ICBI 305 is on the upper part of the body, while the ICBI 306 will focus on the lower part of the body.

2. Teaching methods for developing the knowledge or skills specified in item 1 and evaluation methods of the course learning outcomes

ICBI 305	Teaching methods	Evaluation Methods
CLO1	Lectures and class discussion, study problem	Written assessment
CLO2	Laboratory exercises	Written and practical assessment



Section 5 Teaching and Evaluation Plans

1. Teaching plan

Week	Topic	Number of Hours		Teaching Activities/ Media	Lecturer
		Lecture Hours	Lab/Field Hours		
1	Introduction to human anatomy I, surface anatomy, and back region	2		Lecture, multi-media presentation	SB
	Dissection of back region		4	Laboratory exercise	SB
2	Pectoral region	2		Lecture, multi-media presentation	TR
	Dissection of pectoral region		4	Laboratory exercise	TR
3	Axilla, brachial plexus, shoulder region, front and back of arm	2		Lecture, multi-media presentation	SB
	Dissection of axilla, brachial plexus, shoulder region, front and back of arm		4	Laboratory exercise	SB
4	Cubital fossa, front and back of forearm, and hand	2		Lecture, multi-media presentation	SB
	Dissection of cubital fossa, front and back of forearm, and hand		4	Laboratory exercise	SB
5	Clinical application of body wall and upper extremity	2		Lecture, multi-media presentation	SB
	Laboratory review		4	Laboratory exercise	SB
	Lecture Examination				



Course Title Human Anatomy I
 Course Code ICBI 305

Undergraduate Program
 Mahidol University International College
 Science Division

	Laboratory Examination				
6	Triangle of neck and deep structure of neck	2		Lecture, multi-media presentation	AN
	Dissection of triangle of neck and deep structure of neck		4	Laboratory exercise	AN
7	Root of neck, skull, face, muscle of facial expression and mastication	2		Lecture, multi-media presentation	TR
	Dissection of root of neck, muscle of facial expression and mastication		4	Laboratory exercise	TR
8	Parotid region and Infratemporal region	2		Lecture, multi-media presentation	TR
	Dissection of parotid region and infratemporal region		4	Laboratory exercise	TR
9	Spinal cord and vertebral column and its joint	2		Lecture, multi-media presentation	TR
	Dissection of spinal cord and vertebral column		4	Laboratory exercise	TR
10	Brain, meninges, blood supply, CSF, and cranial nerve	2		Lecture, multi-media presentation	TR
	Dissection of brain, meninges, blood supply, CSF, and cranial nerve		4	Laboratory exercise	TR
11	Nose, mouth, teeth, and pharynx	2		Lecture, multi-media presentation	SB
	Dissection of nose, mouth, teeth, and pharynx		4	Laboratory exercise	SB
12	Clinical application of head, neck, brain, and spinal cord	2		Lecture, multi-media presentation	SB



Course Title Human Anatomy I
 Course Code ICBI 305

Undergraduate Program
 Mahidol University International College
 Science Division

	Laboratory review		4	Laboratory exercise	SB
	Lecture Examination Laboratory Examination				
	Total	24	48		

2. Plan for Assessing Course Learning Outcomes

2.1 Assessing and Evaluating Learning Achievement

a. Formative Assessment

CLOs	Assessment Method	Assessment Activity	Assessment Ratio	Remark
CLO1, 2	Written and laboratory practical assessment	Mid-term assessment	40%	
CLO1, 2	Assignments and quizzes	Assignments and quizzes	20%	
Total			60%	

b. Summative Assessment

(1) Tools and Percentage Weight in Assessment and Evaluation

Learning Outcomes	Assessment Methods	Assessment Ratio (Percentage)
CLO1	Written assessment	20%
CLO2	Laboratory practical assessment	20%
Total		40%

3. Student Appeals

Student's appeal process will be according to the policy set forth by MUIC and those stated in the Student Handbook.

Section 6 Teaching Materials and Resources



Course Title Human Anatomy I
Course Code ICBI 305

Undergraduate Program
Mahidol University International College
Science Division

1. Textbooks and/or other documents/materials

- Agur AMR, Dalley AF. Grant's Atlas of Anatomy. Philadelphia : Wolters Kluwer; 2021.
- Course and laboratory hand-outs

2. Recommended textbooks and/or other documents/materials

- N/A

3. Other Resources (If any)

N/A



Section 7 Evaluation and Improvement of Course Management

1. Strategies for evaluating course effectiveness by students

Post course evaluation by students using the SKY System. Post course evaluation include course content, course management (management of teaching, learning, and grading), qualification and responsibility, teaching techniques and methods, and overall satisfaction.

2. Strategies for evaluating teaching methods

Student's feedback. Post course evaluation. Instructors' reflection

3. Improvement of teaching methods

- Student's verbal feedbacks and post course evaluation.
- Faculty peer observation of teaching.
- Workshop on scholarship in teaching and learning to improvement the teaching pedagogy and students' engagement.

4. Verification process for evaluating students' standard achievement outcomes in the course

Analysis of grade distribution of written examination (e.g., mean, median, mode, standard deviation), class attendance, group activity, and laboratory exercises

5. Review and plan for improving the effectiveness of the course

Review the course before each trimester and address the teaching and learning concerns



Appendix

Alignment between Courses and Program

Table 1 The relationship between course and Program Learning Outcomes (PLOs)

Human Anatomy	Program Learning Outcomes (PLOs)					
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
ICBI 305	P			R	R	P

Note: I - Introduced, R - Reinforced, P - Practice or M - Mastery

Table 2 The relationship between CLOs and PLOs

ICBI 305 Human Anatomy	Program Learning Outcomes (PLOs)					
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6
CLO1 – Possess knowledge in human biology by understanding the key human anatomy and function	1.1				5.1, 5.2, 5.3, 5.4	6.1, 6.2, 6.3
CLO2 – Perform dissection on preserved human cadaver	1.3			4.2, 4.3		

Table 3 The description of PLOs and Sub LOs of the course



Course Title Human Anatomy I
 Course Code ICBI 305

Undergraduate Program
 Mahidol University International College
 Science Division

Program Learning Outcomes (PLOs)	SubPLOs
1. Apply knowledge and technical skills of diverse biological disciplines to address health, societal and environmental issues	1.1 Explain the fundamental and detailed knowledge of biological sciences
	1.2 Apply knowledge in biological sciences to address health, societal and environmental issues
	1.3 Perform experimentation in laboratory or field
	1.4 Apply technical skills in biological sciences to address health, societal and environmental issues
	1.5 Integrate biological sciences knowledge and technical skills across different disciplines to solve problems in biological sciences
2. Critically appraise information from scientific articles/journals, biological research methodology and experimentation to draw meaningful conclusion from the materials	2.1 Explain qualitative and quantitative data and/or ideas in basic biological sciences
	2.2 Draw meaningful conclusion from the learning materials such as scientific articles, research methodology, and scientific findings
	2.3 Retrieve relevant scientific information independently from textbooks, literatures and databases
	2.4 Manage scientific literatures using a reference-management program
	2.5 Assess the scientific relevance of information acquired to the objective at hand
3. Proficient in oral and written communication of biological sciences concepts formally and informally to both scientific community and general audience	3.1 Proficient in oral communication of ideas, concepts and findings in biological sciences to both the scientific community and the wider society
	3.2 Proficient in written communication of ideas, concepts and findings biological sciences to both the scientific community and the wider society
4. Apply scientific integrity, professionalism, and competencies to	4.1 Maintain data integrity using appropriate tools and acceptable methods



Course Title Human Anatomy I
 Course Code ICBI 305

Undergraduate Program
 Mahidol University International College
 Science Division

Program Learning Outcomes (PLOs)	SubPLOs
function independently as well as a team player	4.2 Work independently or coordinate with others to complete tasks at hand
	4.3 Apply concepts of lab and fieldwork safety when carrying out the tasks
	4.4 Set, plan and accomplish the assigned project in a timely manner
5. Apply moral and ethical values when dealing with issues relating to humans, animals and the environment, enabling actions based on moral and ethical judgment	5.1 Recognize ethical issues in human and animal experimentation
	5.2 Recognize emerging ethical issues in biological sciences
	5.3 Apply accepted ethical standards to resolve ethical dilemma
	5.4 Implement the course of action in accordance with moral and ethical judgement
6. Demonstrate innovative mindset to formulate and create solutions for situations relevant to oneself, the well-being of others, and the natural environment	6.1 Formulate lines of enquiry to drive problem solving relevant to oneself, the well-being of others, and the natural environment
	6.2 Formulate a process for data acquisition based on scientific methodology
	6.3 Demonstrate systematic and logical thinking in formulating solutions through the application of knowledge and technical skills acquired from the different biological science disciplines
	6.4 Explain the potential for knowledge transfer to innovation
	6.5 Create networks to learn from others and create new ideas