Anatomy Course

Alma Mater Europaea University
Campus Vienna / Alma Mater Vienna
Maximilian-Niklas Bonk MD

Course Name:	Gross and microscopic Anatomy
Semester:	Fall 2024
Professor:	Maximilian-Niklas Bonk
Intended for:	Bachelor students / Physiotherapy
ECTS:	7
Language:	German
Contact:	mbonk@almamater.at

Introduction

This course will provide students with a comprehensive understanding of both gross and microscopic anatomy. Through a combination of lectures, seminars, and hands-on exercises, students will explore the structure and function of the human body from a macroscopic to a cellular level. The course is designed to bridge the gap between theoretical knowledge and practical application, which is essential for students pursuing careers in physiotherapy and related fields.

By the end of the semester, students will be able to identify and describe anatomical structures, understand their clinical relevance, and apply this knowledge in a professional context. The course will also encourage the development of critical thinking and problem-solving skills that are essential in the healthcare sector.

The course is led by Maximilian-Niklas Bonk MD, who specializes in anatomy and neurosurgery. Dr. Bonk has extensive experience in both clinical practice and teaching, making him well-equipped to guide students through this challenging yet rewarding subject.

Additional important information: Students are expected to actively participate in all class activities, including discussions and practical sessions. Attendance and engagement will be critical to succeed in this course.

Exam/paper/grading Policy

Written Exam: 60%
Oral Exam: 0%
Paper: 15%
Presentation: 15%
Class Participation: 10%.

Exams will assess students' ability to recall, understand, and apply anatomical knowledge in various formats, including multiple-choice questions, case studies, and practical tasks. The uncounted oral exam will focus on students' ability to explain anatomical concepts in a clear and structured manner. The papers will require students to research some specific anatomical topic in detail and present their findings both in writing and orally. Class participation is essential as students will need to engage in group discussions and activities throughout the course.

Assignments and important deadlines

Assignments will include research papers, presentations, and lab reports, all of which are designed to deepen your understanding of the material covered in lectures. Deadlines will be provided during the first week of classes, but students are expected to manage their time effectively and submit their work on time.

All written assignments are due by **December 15th, 2024**. Presentations will take place throughout the semester, and details will be arranged in class. Late submissions may result in grade penalties unless previously agreed upon with the professor.

Required Texts

- Christoff Zalpour „Anatomie / Physiologie" (Elsevier)
- Anatomie Atlas (ihrer Wahl)
- Welsch – Histologie (Elsevier)

Topics, Readings, and Assignments by Session

(The scope of the session content may vary.)
(This will be adjusted to the average learning pace of your cohort.)

Session	***Date***	***Topic***	***Reading***	***Assignment***
1	02.10.	Introduction	None	Review syllabus, course expectations
2	02.10	General Anatomy	Chapter 1 – Ch. Zalpour Anatomy/Physiology	Obtain anatomy textbook
3	08.10	Osteology	Chapter 4.5.5 – Bones– Ch. Zalpour Anatomy/ Physiology	Create a bone classification chart
4	10.10	Bones & Joints Upper Limb	Chapter 13 – Ch. Zalpour Anatomy/Physiology	Short essay on joint functions

5	15.10	Bones & Joints Lower Limb	Chapter 14 – Ch. Zalpour Anatomy/Physiology	Diagram of lower limb joints
6	15.10	Seminar: Upper Extremity	Review lecture notes and Chapter 13	Discussion on joint injuries
7	17.10	Trunk Anatomy	Chapter 12.4 – Ch. Zalpour Anatomy/ Physiology	Label a diagram of the thoracic cavity
8	17.10	Seminar: Lower Extremity	Review lecture notes and Chapter 14	Case study: hip replacement
9	22.10	Heart	Chapter 15 – Ch. Zalpour Anatomy/Physiology	Diagram of the heart and its valves
10	22.10	Seminar: Trunk Anatomy	Review lecture notes and Chapters 12.4/15	Presentations on cardiovascular health
11	24.10	Circulatory System	Chapter 16 – Ch. Zalpour Anatomy/Physiology	Diagram of major blood vessels
12	24.10	Lungs	Chapter 17 – Ch. Zalpour Anatomy/Physiology	Respiratory system comparison chart
13	29.10	Spine & CNS	Chapters 9 and 12– Ch. Zalpour Anatomy/ Physiology	Annotate a diagram of the spinal cord
14	29.10	Seminar: Spine & CNS	Review lecture notes and Chapters 9 / 12	Debate on spinal cord injuries
15	31.10	Embryology	Chapter 21 – Ch. Zalpour Anatomy/Physiology	Write-up on the stages of development
16	31.10	Q&A Session	Review course materials	Prepare questions for the session
17	02.12	Wrap-Up Gross Anatomy	review key anatomical structures	Final review notes
18	02.12	Wrap-Up Gross Anatomy	review key anatomical structures	Final review notes
Exam I	03.12.	Exam Gross Anatomy		
19	05.12	Introduction to Histology	Read Welsch Chapters 1 and 2	Create cell structure comparison chart
20	05.12	Muscle Tissue	Read Welsch Chapter 3	Essay on muscle cell functions
21	10.12	Cartilage	Read Welsch Chapter 7	Label cartilage types in a diagram
22	10.12	Bone Tissue	Read Welsch Chapter 7	Research on bone tissue regeneration
23	12.12	Skin	Read Welsch Chapter 16	Write-up on skin layers and functions
24	12.12	Wrap-Up Histology	review key histological structures	Final review notes
Exam II	17.12	Exam Histology		