

<b>Subject name</b> <b>Practical Anatomy</b>	<b>ECTS Code</b>																
<b>Name of unit teaching the subject</b> <b>THE ZBIGNIEW RELIGA FACULTY OF MEDICAL SCIENCES IN ZABRZE,</b> <b>THE UNIVERSITY OF TECHNOLOGY IN KATOWICE</b>																	
<b>Studies</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 25%;">Field of study</th> <th style="width: 25%;">degree</th> <th style="width: 25%;">mode</th> <th style="width: 25%;">major</th> <th style="width: 25%;">specialization</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">medical</td> <td style="text-align: center;">Uniform Master's</td> <td style="text-align: center;">stationary</td> <td></td> <td></td> </tr> </tbody> </table>		Field of study	degree	mode	major	specialization	medical	Uniform Master's	stationary								
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medical	Uniform Master's	stationary															
<b>Surname of instructor (instructors)</b>																	
<b>Type of class, method of implementation and specified number of hours</b>	<b>Amount of ECTS points</b>																
<b>A.Type of class</b> <ul style="list-style-type: none"> <li>• lecture,</li> <li>• exercise classes,</li> <li>• clinical exercise classes</li> <li>• <b>seminars,</b></li> <li>• design classes</li> <li>• laboratories,</li> <li>• lectureship,</li> <li>• diploma seminar,</li> <li>• professional internship.*</li> </ul> <p>* mark where applicable</p>	<b>Description of awarding ECTS points:</b> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 70%;">Activity</th> <th style="width: 30%;">Student workload</th> </tr> </thead> <tbody> <tr> <td>Participation in lectures</td> <td style="text-align: center;">0 hours</td> </tr> <tr> <td>Participation in practical classes</td> <td style="text-align: center;">30 hours</td> </tr> <tr> <td>Preparation for practical classes and colloquiums</td> <td style="text-align: center;">20 hours</td> </tr> <tr> <td>Examination preparation</td> <td style="text-align: center;">5 hours</td> </tr> <tr> <td>Consultations</td> <td style="text-align: center;">5 hours</td> </tr> <tr> <td><b>Total number of hours</b></td> <td style="text-align: center;">60 hours / 30</td> </tr> <tr> <td><b>Amount of ECTS points per module</b></td> <td style="text-align: center;"><b>2 ETCS</b></td> </tr> </tbody> </table>	Activity	Student workload	Participation in lectures	0 hours	Participation in practical classes	30 hours	Preparation for practical classes and colloquiums	20 hours	Examination preparation	5 hours	Consultations	5 hours	<b>Total number of hours</b>	60 hours / 30	<b>Amount of ECTS points per module</b>	<b>2 ETCS</b>
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<b>B.Method of implementation</b> <ul style="list-style-type: none"> <li>• classes in a didactic room</li> <li>• on-line classes/<i>blended learning</i></li> </ul>																	
<b>C. Amount of hours in accordance with the approved curriculum</b> 30h of seminars																	
<b>Didactic cycle</b> 4 <sup>th</sup> semester																	
<b>Subject status</b> <ul style="list-style-type: none"> <li>• mandatory / <b>facultative</b></li> </ul>	<b>Language of instruction</b> Polish																
<b>Didactic methods</b> Lecture <u>Demonstration</u> <u>Instructions</u> Multimedia presentations <u>Practical exercises</u> <u>Group work</u>	<b>Forms and methods of passing and general grading criteria or examination requirements</b> <hr style="border-top: 1px dashed black;"/> <b>A. Method of passing</b> <ul style="list-style-type: none"> <li>• examination</li> <li>• <u>passing with a grade*</u></li> </ul> <p>* mark where applicable</p> <hr style="border-top: 1px dashed black;"/> <b>B. Forms of passing:</b> <ul style="list-style-type: none"> <li>• written examination: test / with open questions (exercises)/longer written statement</li> <li>• oral examination</li> <li>• <u>oral assessment/colloquium</u></li> <li>• completion of a semester assignment: preparation of a design or presentation/conducting research and presenting its results(written/oral)/<u>completion of a specified practical work</u></li> <li>• agreeing on a passing grade based on partial grades received during the course of the semester*</li> </ul> <p>* mark where applicable</p>																

**C. Basic grading criteria**  
**Participation in exercise classes and lectures**  
**Theoretical preparation for classes**  
**Ability to image selected organs**  
**Receiving a grade of at least “sufficient” from practical work**

**Definition of preparatory subjects and initial requirements**

- A. Formal requirements:** knowledge of anatomy  
**B. Initial requirements:** familiarity with the use of an ultrasound machine

**Subject aim**

Aim 1: Familiarizing the student with the images of normal organs and systems in radiologic and ultrasound images  
 Aim 2: Preparing the students for imaging organs and systems in an ultrasound examination

**Curriculum**

- discussing the basics of ultrasonography and organ imaging/ familiarizing the students with basics of ultrasonography and imaging in ultrasound
- upper limb in radiologic images and ultrasonography/anatomy of the upper limb in ultrasound images
- chest in radiologic images and ultrasonography/anatomy of the chest in ultrasound images
- anatomy of the heart in ultrasound images
- head in radiologic images and ultrasonography/anatomy of faciocranial soft tissues in ultrasound images
- anatomy of the neck in ultrasound images
- anatomy of the neck and skull vessels in ultrasound images
- abdominal cavity and lower limbs in radiologic images and ultrasonography/anatomy of the abdominal cavity in ultrasound images
- anatomy of the lower limbs in ultrasound images
- review of materials for exercise classes
- test

**Literature**

**A. Literature required to receive a final credit for classes (pass an exam):**

**A.1.** Paulsen F., Waschke J. *Atlas anatomii człowieka Sabotta*, 24<sup>th</sup> edition Urban & Partner, 2019

**A.2.** Berthold Block – *Anatomia ultrasonograficzna – kolorowy atlas*, 1<sup>st</sup> edition, Warszawa 2005, PZWL

**B. Supplementary literature**

M. Hofer, *Podręcznik ultrasonografii*, 1<sup>st</sup> edition, MediPage 2008

**Educational effects:**

Effect no	Description of an educational effect	Reference to field of study related effects
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**Knowledge:**

W1	Student knows and understands the construction and functions of the organism under normal conditions	A.W2-5
W2	Student knows and understands the basic of ultrasound examinations	A.W1

**Abilities:**

U1	Student can use an ultrasound machine	B.W1
U2	Student can indicate organs in an ultrasound examination	A.U3, A.U4

U3	Student can communicate with coworkers in a team and share his knowledge	D.U12			
<b>Social competencies:</b>					
K1	Student notices and recognizes his limitations, can self-evaluate his shortcomings and educational needs	D.U16			
<b>Methods used in the verification of educational effects</b>					
<b>Educational effect</b>	<b>Type of grade</b>				
	<b>colloquiums</b>	<b>Solving problems during exercise classes</b>	<b>Solving problems in groups</b>	<b>Oral examination</b>	<b>Written examination</b>
<b>W1</b>		<b>X</b>			
<b>W2</b>		<b>X</b>			
<b>U1</b>		<b>X</b>			
<b>U2</b>		<b>X</b>			
<b>U3</b>		<b>X</b>			
<b>K1</b>		<b>X</b>			

<b>Criteria of evaluating educational effects</b>			
<b>Educational effect</b>	<b>For a grade of 3</b>	<b>For a grade of 4</b>	<b>For a grade of 5</b>
<b>W1</b>	Exhibits familiarity with the educational content on a level of 60%-69%	Exhibits familiarity with the educational content on a level of 70%-90%	Exhibits familiarity with the educational content on a level of 90%-100%
<b>W2</b>	Exhibits familiarity with the educational content on a level of 60%-69%	Exhibits familiarity with the educational content on a level of 70%-90%	Exhibits familiarity with the educational content on a level of 90%-100%
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<b>K1</b>	Exhibits familiarity with the educational content on a level of 60%-69%	Exhibits familiarity with the educational content on a level of 70%-90%	Exhibits familiarity with the educational content on a level of 90%-100%