

Teacher(s)	Constantinescu Stefan (coordinator) ;Pierreux Christophe ;Tyteca Donatienne ;
Language :	French
Place of the course	Bruxelles Woluwe
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Learning outcomes	
Evaluation methods	<p>The final assessment covers the theoretical part (seen in the lecture hall by the three teachers) and the tutorial part (seen by the assistant).</p> <p>The theoretical part consists of a written exam based on a series of multiple-choice questions (MCQs) and short-answer questions (SAQs), aimed in particular at testing the ability to integrate information from different parts of the course or general training, and/or at analyzing one or two ultrastructural documents in a molecular and functional context. The distribution of points is based on the number of hours taught and is roughly equivalent to 50% for Prof. Constantinescu's part and 25% for each of Prof. Tyteca's and Prof. Pierreux's parts.</p> <p>The tutorials are assessed during the written exam in the form of open-ended questions on the different sessions and their links to the theoretical part.</p> <p>The final grade consists of 18 points for the theoretical part and 2 points for the tutorials. As the tutorials are organized to support the theoretical course, professors may ask questions related to the tutorials in the theoretical part of the exam.</p> <p>Students are advised not to skip any of the parts or subjects taught. A serious failure in one or more parts/subjects of the exam will be penalized by one or more penalties. The final grade will be decided by the teaching team.</p> <p>The type of assessment chosen for the first exam session may be subject to change depending on the number of students registered for the second session.</p>
Teaching methods	<p>The theoretical course covers all the topics of the course, aiming for a systemic normal-pathological approach and integrating content from several disciplines and systems. Seminars (TDs) explain the experimental approach in key topics of the discipline, with students taking turns to read the primary results as presented in publications.</p> <p>The practical part of the course (seminars) is based on PowerPoint presentations illustrating specific topics that support or illustrate the theoretical aspects of the course. Students will be encouraged to interpret primary data.</p>
Content	<p>The theoretical training aims to (1) demonstrate the benefits of different forms of subcellular compartmentalization; (2) integrate molecules into this compartmentalized context (cellular biochemistry); (3) explain, based on elementary cellular reactions, the physiological translations at the organism level (cellular physiology); (4) highlight the temporal dimension of life by presenting cell biology as a series of responses to challenges that lead to constraints (cell evolution); (5) introduce some exemplary pathologies that are best explained by cell biology (cell pathology). Practical training aims to (1) identify the forms of organization of living matter at the ultrastructural level, emphasizing topological and scale relationships; (2) understand and evaluate methods of analysis in cell biology.</p>
Inline resources	Presentations and texts will be available on Moodle.
Bibliography	Des ouvrages de référence en anglais et en français sont recommandés en début d'année et accessibles à la Bibliothèque du Secteur.
Other infos	<p>Participation in tutorials is mandatory and essential for successful completion of the course. Student attendance is checked during tutorial sessions. Students must notify one of the teaching assistants of any known scheduling conflicts (after publication of the schedule and allocation of the different groups) no later than one week before the first tutorial session. After this date, no further changes to groups will be permitted. In the event of absence from tutorials, the absence must be justified by a medical certificate or any other valid supporting document (certificate of transport delay, death certificate, etc.) and must be sent to the secretariat via the 'Smartsheet' form no later than the day after the end of the incapacity (see Article 103 of the RGEE). After this deadline, the absence will be considered unjustified. After two unjustified absences, the exam grade for the tutorial part will be canceled for all sessions of the current academic year (January and September).</p> <p>Students who have passed the tutorial part of the WMDS1230 exam, in all sessions and academic years combined, will be exempt from tutorial sessions and related exam questions. The previously obtained grade will therefore be carried over and included in the overall exam grade.</p> <p>Students who wish to waive this exemption in order to attend the tutorial component of this course must contact one of the teaching assistants no later than one week before the tutorials begin.</p>

Faculty or entity in charge	MED
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Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor in Biomedicine	SBIM1BA	4	WFASB1102 AND WSBIM1103	