

<b>Module: SE2 Nutritional Biochemistry</b>		
<b>Exam:</b> SE2 Nutritional Biochemistry	<b>LV.-No.:</b>	<b>ECTS-Points:</b> 5 CP
<b>Recommended Semester:</b> 3rd Semester	<b>Module:</b> Mandatory	<b>Language:</b> German
<b>Responsible lecturer:</b> Prof. Dr. Ursula Bordewick-Dell	<b>Cycle:</b> Winter Term	<b>Registration information:</b>
<b>Lecturer in charge:</b> Prof. Dr. Ursula Bordewick-Dell		
<b>Learning outcomes</b>	Students are able to <ul style="list-style-type: none"> <li>• explain the structure, the properties and the nutritional and the physiological significance of different nutrient groups</li> <li>• to describe the primary metabolism and to recognize the relation between different metabolic pathways and describe their regulatory mechanisms</li> <li>• to describe important principles of molecular biology</li> </ul>	
<b>Form of exam</b>	Written exam (90 min); by successfully processing the e-learning module, 10% of the exam points can be acquired	
<b>Form of teaching</b>	<ul style="list-style-type: none"> <li>• Lecture</li> <li>• E-learning (optional)</li> </ul>	
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Structure and properties of proteins, carbohydrates and fats</li> <li>• Digestion, resorption and transport of nutrients;</li> <li>• The principles of signal transduction</li> <li>• Energy metabolism</li> <li>• Amino acid metabolism</li> <li>• Basics of molecular biology</li> </ul>	
<b>Workload</b>	Presence (4 SWS): Preparation and Follow-up: Sum:	60 h 180 h 240 h
<b>Requirements</b>	Performance record of General and Inorganic Chemistry	
<b>Literature</b>	<ul style="list-style-type: none"> <li>• Müller-Esterl W., Biochemie, Spektrum Akademischer Verlag</li> <li>• Berg J.M., Tymoczko J.L., Stryer L., Stryer Biochemie, Spektrum Akademischer Verlag</li> <li>• Löffler G., Petrides P.E., Heinrich P.C., Biochemie und Pathobiochemie, Springer Verlag</li> </ul>	