

1st year Bachelor 2021-2022 - Prof. François Bochud, year coordinator

Modules and domains	Components	Nb hours	Coordinator	Credits
<b>BMed1.1 Matter (8 weeks)</b>			<b>Bochud François</b>	<b>15</b>
B1.1 Matter - Physics - Introduction to physics	Course	3		
B1.1 Matter - Physics - Matter, energy, wave and force	Course	6		
B1.1 Matter - Physics - Mechanics	Course	6		
B1.1 Matter - Physics - Electromagnetism	Course	4		
B1.1 Matter - Physics - Non-ionizing radiation	Course	6		
B1.1 Matter - Physics - Ionizing radiation	Course	7		
B1.1 Matter - Physics - Thermodynamics	Course	4		
B1.1 Matter - General chemistry - Introduction to general chemistry	Course	2		
B1.1 Matter - General chemistry - Atomic structure and chemical bond	Course	6		
B1.1 Matter - General chemistry - Stoichiometry of chemical reactions	Course	3		
B1.1 Matter - General chemistry - Thermodynamics of chemical reactions	Course	5		
B1.1 Matter - General chemistry - Ligand fixation reaction	Course	3		
B1.1 Matter - General chemistry - Proton transfer reaction	Course	4		
B1.1 Matter - General chemistry - Electron transfer reaction	Course	4		
B1.1 Matter - General chemistry - Aqueous solutions	Course	3		
B1.1 Matter - General chemistry - Chemical kinetics	Course	4		
B1.1 Matter - General chemistry - Analytical chemistry	Course	2		
B1.1 Matter - General chemistry - Exercises	Exercises	14		
B1.1 Matter - Organic chemistry - General principles of organic chemistry	Course	5		
B1.1 Matter - Organic chemistry - Functional groups in organic chemistry	Course	20		
B1.1 Matter - Organic chemistry - Main classes of biological substances	Course	11		
B1.1 Matter - Organic chemistry - Some important classes of drugs	Course	1		
B1.1 Matter - Organic chemistry - Exercises	Exercises	9		
B1.1 Matter - Repetitory	Repetitory	6		
	<b>Total</b>	<b>138</b>		
<b>BMed1.2 Cell and tissues (6 weeks)</b>			<b>Broz Petr</b>	<b>12</b>
B1.2 Cell and tissues - Cell biology - Genes and genetic information	Course	16		
B1.2 Cell and tissues - Cell biology - Protein structure and function	Course	10		
B1.2 Cell and tissues - Cell biology - Cell membranes and intracellular trafficking	Course	10		
B1.2 Cell and tissues - Cell biology - Cell cycle and cell differentiation	Course	8		
B1.2 Cell and tissues - Cell biology - Signal transduction	Course	8		
B1.2 Cell and tissues - Tissue biologie - Connective tissue	Course	6		
B1.2 Cell and tissues - Tissue biologie - Connective tissue	Practical work	3		
B1.2 Cell and tissues - Tissue biologie - Bones and cartilage	Course	6		
B1.2 Cell and tissues - Tissue biologie - Blood and hematopoiesis	Course	6		
B1.2 Cell and tissues - Tissue biologie - Blood and hematopoiesis	Practical work	3		
B1.2 Cell and tissues - Tissue biologie - Epithelia	Course	6		
B1.2 Cell and tissues - Tissue biologie - Epithelia	Practical work	3		
B1.2 Cell and tissues - Tissue biologie - Muscles	Course	6		
B1.2 Cell and tissues - Tissue biologie - Muscles	Practical work	3		
B1.2 Cell and tissues - Tissue biologie - Nervous tissue	Course	8		
B1.2 Cell and tissues - Tissue biologie - Nervous tissue	Practical work	3		
	<b>Total</b>	<b>105</b>		

<b>BMed1.3 The development (4 weeks)</b>		<b>Cadas Hugues</b>	<b>11</b>
B1.3 Developpement	Course	1	
B1.3 Developpement - Developpement - Human embryology	Course	18	
B1.3 Developpement - Developpement - Human embryology	Practical work	10	
B1.3 Developpement - Developpement - Animal embryology	Course	10	
B1.3 Developpement - Genetics - Molecular genetics	Course	8	
B1.3 Developpement - Genetics - General genetics	Course	12	
B1.3 Developpement amd genetics - Physiology - Cellular physiology	Course	13	
	<b>Total</b>	<b>72</b>	
<b>BMed1.4 The locomotor system (5 weeks)</b>		<b>Puyal Julien</b>	<b>11</b>
B1.4 Locomotor system - Anatomy of the locomotor system - Organization of the locomotor system	Course	2	
B1.4 Locomotor system - Anatomy of the locomotor system - Anatomy of the upper limb	Course	11	
B1.4 Locomotor system - Anatomy of the locomotor system - Anatomy of the spine and spinal cord	Course	2	
B1.4 Locomotor system - Anatomy of the locomotor system - Anatomy of the lower limb	Course	13	
B1.4 Locomotor system - Anatomy of the locomotor system - Motor system	Course	6	
B1.4 Locomotor system - Anatomy of the locomotor system - Biomechanics	Course	10	
B1.4 Locomotor system - Anatomy of the locomotor system - Practical work	Practical work	15	
B1.4 Locomotor system - Physiology of the locomotor system - Neuronal physiology	Course	8	
B1.4 Locomotor system - Physiology of the locomotor system - Muscle physiology	Course	6	
B1.4 Locomotor system - Physiology of the locomotor system - Physiopathology	Course	2	
	<b>Total</b>	<b>75</b>	
<b>BMed1.5 MSC - Public health and social studies of medicine (5 weeks)</b>		<b>Barras Vincent Saraga Michaël</b>	<b>11</b>
B1.5 Medical humanities - The module in perspective	Course	3	
B1.5 Epidemiology and statistics - Statistics	Course	10	
B1.5 Medical humanities - Social studies of biomedicine	Course	8	
B1.5 Medical humanities - Historical foundations of medicine	Course	8	
B1.5 Medical humanities - Patient-caregiver interaction	Course	8	
B1.5 Medical humanities - Introduction to the basics of medical ethics	Course	8	
B1.5 Medical humanities - Introduction to human sciences in medicine	Course	8	
B1.5 Medical humanities - Medical practice in a healthcare system	Course	8	
B1.5 Medical humanities - Patients, rights, obligations, stakes	Course	8	
B1.5 Medical humanities - Anthropological aspects of health and medicine	Course	8	
B1.5 Epidemiology and statistics - Exercises	Exercises	4	
B1.5 Epidemiology and statistics - Epidemiology	Course	6	
B1.5 Elective seminar	Seminar	12	
	<b>Total</b>	<b>99</b>	