

## Faculty of Medicine



### SBIM1201 General physiology

[40h+25h exercises] 6 credits

This course is taught in the 1st semester

**Teacher(s):** Patrick Gilon, Patrick Gilon (supplée N.), Nicole Morel (coord.)  
**Language:** French  
**Level:** First cycle

#### Aims

The objective is to study the basic concepts of cellular physiology and the fundamental properties of eukaryotic cell.

#### Main themes

Cells and living beings are thermodynamic open systems, and exchange matter and energy with their environment. General physiology study cell homeostasis, the mechanisms regulating the exchanges between cells, and the interactions between cells and their environment.

#### Content and teaching methods

Comprehensive outline of cell homeostasis and of the mechanisms regulating the exchanges of substances and information with the environment; intercellular communications (electrical and chemical transmission); contractile properties and excitation-contraction coupling in the different types of muscles; thermoregulation and metabolism. Practical courses are intended to provide students with an initiation into experimentation in physiology.

#### Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Written exam with open questions.

Continuous evaluation of the practical courses.

Pre-requirements : basic knowledge in chemistry, physics, biochemistry.

#### Other credits in programs

<b>SBIM12BA</b>	Deuxième année de bachelier en sciences médicales	(6 credits)	Mandatory
<b>SBIM1PM</b>	Année d'études préparatoires au master en sciences biomédicales	(6 credits)	Mandatory