SBIM1BA

2015 - 2016

Bachelor in Biomedicine

At Bruxelles Woluwe - 180 credits - 3 years - Day schedule - In french
Dissertation/Graduation Project : **NO** - Internship : **YES**
Activities in English: **NO** - Activities in other languages : **NO**
Activities on other sites : **NO**
Main study domain : **Sciences biomédicales et pharmaceutiques**
Organized by: **Faculté de pharmacie et des sciences biomédicales (FASB)**
Programme code: **sbim1ba** - Francophone Certification Framework: 6

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SBIM1BA - Introduction

Introduction

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Learning outcomes

Bachelor in Biomedicine students must endeavour to prepare themselves for the training offered in the various Master's programmes taught by the School of Biomedical Sciences. To this end, students will apply themselves to acquiring the knowledge and skills that will enable them to become specialists in a field of biomedicine and play an integral part in a scientific project.

As part of the Bachelor in Biomedicine programme, students will study in detail the basic scientific foundations required to practise biomedicine and will discover a variety of specific areas of biomedical research. These activities will enable them to decide on their training projects for the Master's programme. In addition, practical lab work will enable Bachelor students to acquire the professional skills that they will develop during the Master's programme with increasing robustness and independence.

The objective of the School of Biomedical Sciences is to produce health sector professionals capable of conducting and interpreting scientific projects intended to improve the understanding, diagnosis and treatment of human diseases. In particular, the training is aimed at developing the skills required for the acquisition and analysis of observations and experiments in biomedicine, while at the same time cultivating scientific robustness and integrity.

On successful completion of this programme, each student is able to :

1. Use the tools required to acquire integrated knowledge in biomedicine

1a. Incorporate the general knowledge and methodologies in experimental biomedicine: biochemistry and molecular biology; cellular biology, general and special histology, general anatomy; general and special physiology; principal pathologies and their multifactorial pathogenesis, genetic diseases as experiments by nature; the major principles of pharmacology.

1b. Describe the experimental approaches and observation methods that resulted in this knowledge base.

1c. Use modern knowledge sources to effectively research pertinent, new and specific information.

2. Master the culture of numbers and representations

2a. Understand units and deal with orders of magnitude; use the standardisations and tests limiting the dispersion of experimental measurements; use reasoning and statistical tools; use forms of graphical representation.

2b. Understand the functions and rules of modern mathematical modelling; understand the mathematical translation of the major laws of physics, chemistry and biology (speed and constants, flux, interactions and affinity); identify the crucial limiting parameters.

2c. Display command of the IT tools that assist analysis and calculation.

3. Conduct biomedical experiments

3a. Formulate a biomedical problem, translate it into a scientific question and determine an experimental strategy to deal with it.

3b. Execute the successive steps of an experimental protocol:

i.e.:

- understand and accurately describe them, so that they may be reproduced by another scientist.

3c. Conduct experiments:

i.e.:

- manipulate biological and chemical equipment, demonstrating manual dexterity and observing laboratory best practices, including safety and waste management standards;
- use measuring and imaging instruments appropriately, as well as the IT tools associated with them;
- ensure effective reproducibility through accurate and thorough know-how.

4. Analyse, write and evaluate data from biomedical experiments

4a. Robustly analyse the observations in order to draw interpretations from them; identify analogical and deductive reasonings; identify correlation and causality.

4b. On the basis of the above reasonings, present a detailed argument of the results by comparing them with the bibliographical data (critical analysis).

4c. Recognise the failures and identify their causes.

5. Present scientific observations clearly, verbally and in writing

5a. Understand and employ a precise and specific biomedical vocabulary adapted to the applications of biomedicine.

5b. Draft a precise protocol, note the observations in detail in a laboratory notebook, write a clear, informative and exhaustive report on a series of observations or experiments.

5c. Use the rules enabling effective verbal communication of projects, published data or the results of experiments.

5d. Demonstrate the internal consistency of the results and incorporate them into the published knowledge bases.

Programme structure

Erreur de transformation xhtml vers fo pour 'structure' erreur=org.xml.sax.SAXParseException; lineNumber: 278; columnNumber: 13; Des guillemets ouvrants sont attendus pour l'attribut "{1}" associé à un type d'élément "class".

SBIM1BA Detailled programme

Programme by subject

					Year 1	2	3
Majeure (150 credits)							
Des atomes, des molécules et des systèmes qui les régissent							
WMD1102	Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)	Eduardo Cortina Gil, Bernard Piraux (coord.)	60h+21h	8 Credits	1q	x		
WMD1104	Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)	Fabio Maltoni	30h+21h	5 Credits	2q	x		
WSBIM1001	MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES	Julien Federinov, André Nauts, Annie Robert	45h+20h	5 Credits	2q	x		
WMD1105	Chimie générale et minérale	Jacques Poupaert, Mark Rider (coord.)	60h+30h	9 Credits	1q	x		
WMD1106	ORGANIC CHEMISTRY	Mohamed Ayadim, Olivier Riant (coord.), Michael Singleton	60h+30h	9 Credits	2q	x		
WPHAR1300	Pharmacologie 1re partie	Emmanuel Hermans, Marie-Paule Mingeot	30h+7.5h	3 Credits	1q			x
WFARM1300P	Pharmacocinétique et métabolisme des xénobiotiques (partim pharmacocinétique 20h + 10h)	N.	20h+10h	3 Credits	1q			x
WFARM1221S	Biochimie et biologie moléculaire (partim biochimie)	N.	50h+10h	6 Credits	1q		x	
De la cellule à l'être humain								
WMD1120	Biologie générale et approche expérimentale de la biologie	Jean Baptiste Demoulin, Pascal Kienlen-Campard, Marie-Christine Many	75h+25h	10 Credits	1q	x		
WMD1006	Cytology and general histology	Jean-François Denef, Marie-Christine Many (coord.)	10h+40h	5 Credits	2q	x		

						Year 1	2	3
WFARM1009	Elements of general and functional anatomy	Catherine Behets Wydemans (coord.), Christine Galant, Christine Galant (compensates Catherine Behets Wydemans), Pierre Gianello (compensates Catherine Behets Wydemans), Jean Rubay	30h	3 Credits	2q	x		
WSBIM1226	Biologie moléculaire (dont l'épigénétique) et travaux dirigés	Charles De Smet, Frédéric Lemaigre, Thomas Michiels (coord.)	30h+10h	3 Credits	1q		x	
WSBIM1227	Biologie moléculaire et biochimie intégrée	Etienne De Plaen, Jean-Noël Octave (coord.)	20h+30h	3 Credits	2q		x	
WMDS1211	Biologie cellulaire, médicale et expérimentale	Stefan Constantinescu (coord.), Christophe Pierreux, Donatienne Tyteca	30h+20h	4 Credits	1q		x	
WANAT1110	Human embryology	Frédéric Clotman, Charles De Smet (coord.), Christophe Pierreux	30h	3 Credits	2q		x	
WSBIM1201T	Physiologie générale (partim théorie, 40h)	N.	40h	4 Credits	1q		x	
WSBIM1201P	Physiologie générale (partie travaux pratiques, 25h)	N.	0h+25h	2 Credits	1q		x	
WSBIM1203	Histologie spéciale	Marie-Christine Many (coord.), Etienne Marbaix	15h+15h	3 Credits	1q		x	
WSBIM1204	Atelier d'histologie	Yves Guiot, Marie-Christine Many, Etienne Marbaix (coord.)	30h	2 Credits	2q		x	
WFARM1282	General microbiology	Thomas Michiels	20h+15h	3 Credits	1q		x	
WSBIM1200	Introduction à l'analyse instrumentale biomédicale	Bernard Gallez, Giulio Muccioli (coord.)	30h+30h	4 Credits	1q		x	
WFARM1213	Human physiology and basics of physiopathology	Olivier Feron, Emmanuel Hermans, Jean-Christophe Jonas	60h	5 Credits	2q			x
WSBIM1303	Workshop on experimental strategy in cellular and molecular biology	Luc Bertrand, Anabelle Decottignies, Pascal Kienlen-Campard (coord.)	60h	6 Credits	2q			x
WMDS1222	Biochimie humaine pathologique	Frédéric Lemaigre (coord.), Emile Van Schaftingen	50h	5 Credits	2q			x
WMDS1312	Génétique humaine	Miikka Vikkula	20h	2 Credits	1q			x
WSBIM1334	Immunologie générale	Pierre Coulie (coord.), Sophie Lucas (compensates Jean-Christophe Renauld), Jean-Christophe Renauld, Benoît Van den Eynde	65h	5 Credits	1q			x
WFARM1382	Molecular genetics and drugs	Etienne De Plaen, Jean-Noël Octave (coord.)	30h	3 Credits	1q			x
WSBIM1302	Molecular Virology	Thomas Michiels	15h	2 Credits	1q			x
WFARM1305	Elements of General Pathology	Olivier Feron, Stéphane Moniotte (coord.)	30h	3 Credits	2q			x

						Year 1	2	3
WSBIM1293	Training course in cell biology	Laure Dumoutier, Laure Dumoutier (compensates Jean-Christophe Renauld), Pascal Kienlen-Campard (coord.), Jean-Christophe Renauld	30h	2 Credits	2q		x	

L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours FSP2238.

WFARM1247	Traitement statistique des données	Céline Bugli (compensates Catherine Legrand), Catherine Legrand	15h+15h	3 Credits	2q		x	
WFSP2238	Epidémiologie avancée	Niko Speybroeck	20h+20h	3 Credits	2q			x
WFARM2177	Biostatistics	Laure Elens	20h+10h	3 Credits	2q			x
LANGL1854	Medical English	Timothy Byrne, Carlo Lefevre (coord.), Nevin Serbest, Shaïma Wasfy (compensates Timothy Byrne)	30h	3 Credits	2q	x		
LANGL1855	Medical English	Timothy Byrne (coord.), Carlo Lefevre (coord.)	30h	3 Credits	2q		x	
LANGL2454	English for biomedical students	Nevin Serbest	30h	2 Credits	2q			x
WFARM1160	Philosophy	Mylene Botbol	30h	3 Credits	1q	x		

Mineure (30 credits)

En complément de la majeure, l'étudiant choisit soit une mineure d'approndissement en sciences biomédicales soit une mineure d'ouverture proposée par d'autres programmes, à raison de 15 crédits en BAC2 et 15 crédits en BAC3.

Additionnal module in Biomedical Sciences (30 credits)

Deuxième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

WSBIM1205	Introduction à la toxicologie	Nathalie Delzenne, Philippe Hantson, Vincent Haufroid, Perrine Hoet, François Huaux, Dominique Lison (coord.), Pierre Wallemacq	30h	3 Credits	2q		x	
WMD1200	Eléments d'épidémiologie	Jean-Marie Degryse, Niko Speybroeck (coord.)	20h+20h	3 Credits	2q		x	
WSBIM1211	Methodolgy of cell and molecular biology	Guido Bommer, Jean-François Collet (coord.), Christophe Pierreux	22.5h	3 Credits	2q		x	
WSBIM1206	Du nutriment à l'aliment	Sonia Brichard, Jean-Paul Thissen	30h	3 Credits	1q		x	
WSBIM1220	Eléments de neurosciences	Emmanuel Hermans (coord.), Marcus Missal, Marcus Missal (compensates Etienne Olivier), Etienne Olivier	30h	3 Credits	2q		x	

Troisième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

WFARM2139T	Pharmacogénomique et toxicologie (partim toxicologie, 30h)	N.	30h	3 Credits	1q			x

						Year 1	2	3
WSBIM1320	Introduction aux approches expérimentales de la biologie cellulaire et moléculaire	Ilse Dewachter (coord.), Sandrine Horman, Donatienne Tyteca	30h	3 Credits	2q			x
WSBIM1305	Introduction à la nutrition humaine	Véronique Beauloye, Sonia Brichard (coord.)	30h	3 Credits	2q			x
WSBIM1393	Stage en laboratoire	Pascal Kienlen-Campard	30h	3 Credits	2q			x
WSBIM1321	Eléments de neurosciences, 2e partie	Frédéric Clotman, Philippe Gailly, Pascal Kienlen-Campard (coord.)	30h	3 Credits	2q			x

⊠ Mineure d'ouverture (30 credits)

En alternative à la mineure d'approfondissement, l'étudiant peut choisir une mineure d'ouverture à d'autres disciplines parmi la liste ci-dessous ou dans la rubrique Mineure.

	Mineure d'ouverture *Voir la liste ci-dessous.*	N.		15 Credits			x	
	Mineure d'ouverture *L'étudiant poursuit la mineure d'ouverture choisie en 2e année dans la liste ci-dessous.*	N.		15 Credits				x

List of available minors

During the bachelor's of Biomedical Sciences, personally selected options will give the student the opportunity to become more familiar with the different branches available at master's level.

Instead of the options, the bachelor's may also include a "minor" which will enable the student to open up new horizons.

> Additionnal module in Biomedical Sciences *[https://www.uclouvain.be/en-prog-2015-app-wsbim100p]*
> Mineure en Antiquité : Égypte, Orient, Grèce, Rome *[https://www.uclouvain.be/en-prog-2015-min-lanti100i]*
> Mineure en droit (accès) *[https://www.uclouvain.be/en-prog-2015-min-ladrt100i]*
> Mineure en droit (ouverture) *[https://www.uclouvain.be/en-prog-2015-min-lodrt100i]*
> Minor in Arabic language and Islamic civilization *[https://www.uclouvain.be/en-prog-2015-min-lisla100i]*
> Minor in Chinese studies *[https://www.uclouvain.be/en-prog-2015-min-lchin100i]*
> Minor in Criminology *[https://www.uclouvain.be/en-prog-2015-min-lcrim100i]*
> Minor in Culture and Creation *[https://www.uclouvain.be/en-prog-2015-min-lcucr100i]*
> Minor in Development and Environment *[https://www.uclouvain.be/en-prog-2015-min-ldenv100i]*
> Minor in Economics *[https://www.uclouvain.be/en-prog-2015-min-lecon100i]*
> Minor in Economics (open) *[https://www.uclouvain.be/en-prog-2015-min-loeco100i]*
> Minor in Education (*) *[https://www.uclouvain.be/en-prog-2015-min-lfopa100i]*
> Minor in European Studies *[https://www.uclouvain.be/en-prog-2015-min-leuro100i]*
> Minor in French Studies (*) *[https://www.uclouvain.be/en-prog-2015-min-lfran100i]*
> Minor in Gender Studies *[https://www.uclouvain.be/en-prog-2015-min-lgenr100i]*
> Minor in Geography (*) *[https://www.uclouvain.be/en-prog-2015-min-lgeog100i]*
> Minor in History *[https://www.uclouvain.be/en-prog-2015-min-lhist100i]*
> Minor in History of Art and Archeology *[https://www.uclouvain.be/en-prog-2015-min-larke100i]*
> Minor in Human and Social Sciences *[https://www.uclouvain.be/en-prog-2015-min-lhuso100i]*
> Minor in Information and Communication (*) *[https://www.uclouvain.be/en-prog-2015-min-lcomu100i]*
> Minor in Linguistics *[https://www.uclouvain.be/en-prog-2015-min-lling100i]*
> Minor in Literary Studies *[https://www.uclouvain.be/en-prog-2015-min-llitt100i]*
> Minor in Mangement (basic knowledge) *[https://www.uclouvain.be/en-prog-2015-min-lgesa100i]*
> Minor in Medication Sciences (*) *[https://www.uclouvain.be/en-prog-2015-min-wfarm100i]*
> Minor in Medieval Studies *[https://www.uclouvain.be/en-prog-2015-min-lmedi100i]*
> Minor in Musicology *[https://www.uclouvain.be/en-prog-2015-min-lmusi100i]*
> Minor in Oriental Studies *[https://www.uclouvain.be/en-prog-2015-min-lori100i]*
> Minor in Philosophy *[https://www.uclouvain.be/en-prog-2015-min-lisp100i]*
> Minor in Political Sciences *[https://www.uclouvain.be/en-prog-2015-min-lspol100i]*
> Minor in Population and Development Studies *[https://www.uclouvain.be/en-prog-2015-min-lsped100i]*
> Minor in Scientific Culture *[https://www.uclouvain.be/en-prog-2015-min-lcusc100i]*
> Minor in Sociology and Anthropology *[https://www.uclouvain.be/en-prog-2015-min-lsoca100i]*
> Minor in Statistics *[https://www.uclouvain.be/en-prog-2015-min-lstat100i]*
> Minor in Theology *[https://www.uclouvain.be/en-prog-2015-min-ltheo100i]*

(*) This program is the subject of access criteria

Course prerequisites

A document entitled en-prerequis-2015-sbim1ba.pdf specifies the activities (course units - CU) with one or more pre-requisite(s) within the study programme, that is the CU whose learning outcomes must have been certified and for which the credits must have been granted by the jury before the student is authorised to sign up for that activity.

These activities are identified in the study programme: their title is followed by a yellow square.

As the prerequisites are a requirement of enrolment, there are none within a year of a course.

The prerequisites are defined for the CUs for different years and therefore influence the order in which the student can enrol in the programme's CUs.

In addition, when the panel validates a student's individual programme at the beginning of the year, it ensures the consistency of the individual programme:

- It can change a prerequisite into a corequisite within a single year (to allow studies to be continued with an adequate annual load);
- It can require the student to combine enrolment in two separate CUs it considers necessary for educational purposes.

For more information, please consult regulation of studies and exams.

The programme's courses and learning outcomes

For each UCL training programme, a reference framework of learning outcomes specifies the competences expected of every graduate on completion of the programme. You can see the contribution of each teaching unit to the programme's reference framework of learning outcomes in the document "In which teaching units are the competences and learning outcomes in the programme's reference framework developed and mastered by the student?"

The document is available by clicking this link after being authenticated with UCL account.

Programme type

SBIM1BA - 1ST ANNUAL UNIT

O Mandatory	⊠ Optional
△ Courses not taught during 2015-2016	⊘ Periodic courses not taught during 2015-2016
⊕ Periodic courses taught during 2015-2016	Activity with requisites

Click on the course title to see detailed informations (objectives, methods, evaluation...)

O *Majeure*

O Des atomes, des molécules et des systèmes qui les régissent

O WMD1102	Physique expérimentale et introduction mathématique aux sciences expérimentales (1e partie)	Eduardo Cortina Gil, Bernard Piraux (coord.)	60h+21h	8 Credits	1q
O WMD1104	Physique expérimentale et introduction mathématique aux sciences expérimentales (2e partie)	Fabio Maltoni	30h+21h	5 Credits	2q
O WSBIM1001	MATHEMATICAL METHODS IN BIOMEDICAL SCIENCES	Julien Federinov, André Nauts, Annie Robert	45h+20h	5 Credits	2q
O WMD1105	Chimie générale et minérale	Jacques Poupaert, Mark Rider (coord.)	60h+30h	9 Credits	1q
O WMD1106	ORGANIC CHEMISTRY	Mohamed Ayadim, Olivier Riant (coord.), Michael Singleton	60h+30h	9 Credits	2q

O De la cellule à l'être humain

O WMD1120	Biologie générale et approche expérimentale de la biologie	Jean Baptiste Demoulin, Pascal Kienlen-Campard, Marie-Christine Many	75h+25h	10 Credits	1q
O WMD1006	Cytology and general histology	Jean-François Denef, Marie-Christine Many (coord.)	10h+40h	5 Credits	2q

WFARM1009	Elements of general and functional anatomy	Catherine Behets Wydemans (coord.), Christine Galant, Christine Galant (compensates Catherine Behets Wydemans), Pierre Gianello (compensates Catherine Behets Wydemans), Jean Rubay	30h	3 Credits	2q

L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours FSP2238.

LANGL1854	Medical English	Timothy Byrne, Carlo Lefevre (coord.), Nevin Serbest, Shaïma Wasfy (compensates Timothy Byrne)	30h	3 Credits	2q
WFARM1160	Philosophy	Mylene Botbol	30h	3 Credits	1q

SBIM1BA - 2ND ANNUAL UNIT

O Mandatory	⊠ Optional
△ Courses not taught during 2015-2016	⊘ Periodic courses not taught during 2015-2016
⊕ Periodic courses taught during 2015-2016	Activity with requisites

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Majeure

Des atomes, des molécules et des systèmes qui les régissent

O WFARM1221S	Biochimie et biologie moléculaire (partim biochimie)	N.	50h+10h	6 Credits	1q

De la cellule à l'être humain

O WSBIM1226	Biologie moléculaire (dont l'épigénétique) et travaux dirigés	Charles De Smet, Frédéric Lemaigre, Thomas Michiels (coord.)	30h+10h	3 Credits	1q
O WSBIM1227	Biologie moléculaire et biochimie intégrée	Etienne De Plaen, Jean-Noël Octave (coord.)	20h+30h	3 Credits	2q
O WMDS1211	Biologie cellulaire, médicale et expérimentale	Stefan Constantinescu (coord.), Christophe Pierreux, Donatienne Tyteca	30h+20h	4 Credits	1q
O WANAT1110	Human embryology	Frédéric Clotman, Charles De Smet (coord.), Christophe Pierreux	30h	3 Credits	2q
O WSBIM1201T	Physiologie générale (partim théorie, 40h)	N.	40h	4 Credits	1q
O WSBIM1201P	Physiologie générale (partie travaux pratiques, 25h)	N.	0h+25h	2 Credits	1q
O WSBIM1203	Histologie spéciale	Marie-Christine Many (coord.), Etienne Marbaix	15h+15h	3 Credits	1q
O WSBIM1204	Atelier d'histologie	Yves Guiot, Marie-Christine Many, Etienne Marbaix (coord.)	30h	2 Credits	2q
O WFARM1282	General microbiology	Thomas Michiels	20h+15h	3 Credits	1q
O WSBIM1200	Introduction à l'analyse instrumentale biomédicale	Bernard Gallez, Giulio Muccioli (coord.)	30h+30h	4 Credits	1q
O WSBIM1293	Training course in cell biology	Laure Dumoutier, Laure Dumoutier (compensates Jean-Christophe Renauld), Pascal Kienlen-Campard (coord.), Jean-Christophe Renauld	30h	2 Credits	2q

L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours FSP2238.

O WFARM1247	Traitement statistique des données	Céline Bugli (compensates Catherine Legrand), Catherine Legrand	15h+15h	3 Credits	2q
O LANGL1855	Medical English	Timothy Byrne (coord.), Carlo Lefevre (coord.)	30h	3 Credits	2q

Mineure

En complément de la majeure, l'étudiant choisit soit une mineure d'approndissement en sciences biomédicales soit une mineure d'ouverture proposée par d'autres programmes, à raison de 15 crédits en BAC2 et 15 crédits en BAC3.

⊠ Additionnal module in Biomedical Sciences

○ Deuxième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

○ WSBIM1205	Introduction à la toxicologie	Nathalie Delzenne, Philippe Hantson, Vincent Haufroid, Perrine Hoet, François Huaux, Dominique Lison (coord.), Pierre Wallemacq	30h	3 Credits	2q
○ WMD1200	Eléments d'épidémiologie	Jean-Marie Degryse, Niko Speybroeck (coord.)	20h+20h	3 Credits	2q
○ WSBIM1211	Methodolgy of cell and molecular biology	Guido Bommer, Jean-François Collet (coord.), Christophe Pierreux	22.5h	3 Credits	2q
○ WSBIM1206	Du nutriment à l'aliment	Sonia Brichard, Jean-Paul Thissen	30h	3 Credits	1q
○ WSBIM1220	Eléments de neurosciences	Emmanuel Hermans (coord.), Marcus Missal, Marcus Missal (compensates Etienne Olivier), Etienne Olivier	30h	3 Credits	2q

⊠ Mineure d'ouverture

En alternative à la mineure d'approfondissement, l'étudiant peut choisir une mineure d'ouverture à d'autres disciplines parmi la liste ci-dessous ou dans la rubrique Mineure.

○	Mineure d'ouverture *Voir la liste ci-dessous.*	N.		15 Credits	

SBIM1BA - 3RD ANNUAL UNIT

O Mandatory	⊠ Optional
△ Courses not taught during 2015-2016	⊘ Periodic courses not taught during 2015-2016
⊕ Periodic courses taught during 2015-2016	Activity with requisites

Click on the course title to see detailed informations (objectives, methods, evaluation...)

O Majeure

O Des atomes, des molécules et des systèmes qui les régissent

O WPHAR1300	Pharmacologie 1re partie	Emmanuel Hermans, Marie-Paule Mingeot	30h+7.5h	3 Credits	1q
O WFARM1300P	Pharmacocinétique et métabolisme des xénobiotiques (partim pharmacocinétique 20h + 10h)	N.	20h+10h	3 Credits	1q

O De la cellule à l'être humain

O WFARM1213	Human physiology and basics of physiopathology	Olivier Feron, Emmanuel Hermans, Jean-Christophe Jonas	60h	5 Credits	2q
O WSBIM1303	Workshop on experimental strategy in cellular and molecular biology	Luc Bertrand, Anabelle Decottignies, Pascal Kienlen-Campard (coord.)	60h	6 Credits	2q
O WMDS1222	Biochimie humaine pathologique	Frédéric Lemaigre (coord.), Emile Van Schaftingen	50h	5 Credits	2q
O WMDS1312	Génétique humaine	Miikka Vikkula	20h	2 Credits	1q
O WSBIM1334	Immunologie générale	Pierre Coulie (coord.), Sophie Lucas (compensates Jean-Christophe Renauld), Jean-Christophe Renauld, Benoît Van den Eynde	65h	5 Credits	1q
O WFARM1382	Molecular genetics and drugs	Etienne De Plaen, Jean-Noël Octave (coord.)	30h	3 Credits	1q
O WSBIM1302	Molecular Virology	Thomas Michiels	15h	2 Credits	1q
O WFARM1305	Elements of General Pathology	Olivier Feron, Stéphane Moniotte (coord.)	30h	3 Credits	2q

O L'homme et la société : approche contextuelle

Les étudiants qui choisissent une mineure d'ouverture dans leur programme de 2e année doivent, en 3e année, suivre le cours SDEV2102 Epidémiologie (20h + 20h, 3c) à la place du cours FSP2238.

O WFSP2238	Epidémiologie avancée	Niko Speybroeck	20h+20h	3 Credits	2q
O WFARM2177	Biostatistics	Laure Elens	20h+10h	3 Credits	2q
O LANGL2454	English for biomedical students	Nevin Serbest	30h	2 Credits	2q

O Mineure

En complément de la majeure, l'étudiant choisit soit une mineure d'approndissement en sciences biomédicales soit une mineure d'ouverture proposée par d'autres programmes, à raison de 15 crédits en BAC2 et 15 crédits en BAC3.

⊠ Additionnal module in Biomedical Sciences

O Troisième année de bachelier

L'étudiant est tenu de suivre les cours suivants :

O WFARM2139T	Pharmacogénomique et toxicologie (partim toxicologie, 30h)	N.	30h	3 Credits	1q
O WSBIM1320	Introduction aux approches expérimentales de la biologie cellulaire et moléculaire	Ilse Dewachter (coord.), Sandrine Horman, Donatienne Tyteca	30h	3 Credits	2q

WSBIM1305	Introduction à la nutrition humaine	Véronique Beauloye, Sonia Brichard (coord.)	30h	3 Credits	2q
WSBIM1393	Stage en laboratoire	Pascal Kienlen-Campard	30h	3 Credits	2q
WSBIM1321	Eléments de neurosciences, 2e partie	Frédéric Clotman, Philippe Gailly, Pascal Kienlen-Campard (coord.)	30h	3 Credits	2q

⊠ Mineure d'ouverture

En alternative à la mineure d'approfondissement, l'étudiant peut choisir une mineure d'ouverture à d'autres disciplines parmi la liste ci-dessous ou dans la rubrique Mineure.

	Mineure d'ouverture *L'étudiant poursuit la mineure d'ouverture choisie en 2e année dans la liste ci-dessous.*	N.		15 Credits	

SBIM1BA - Information

Admission

Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.
The admission requirements must be met prior to enrolment in the University.

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail

> General requirements
> Specific requirements
> Knowledge of the French language exam
> Special requirements

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General requirements

Except as otherwise provided by other specific legal provisions, admission to undergraduate courses leading to the award of a Bachelor's degree will be granted to students with one of the following qualifications :

1. A Certificate of Upper Secondary Education issued during or after the 1993-1994 academic year by an establishment offering full-time secondary education or an adult education centre in the French Community of Belgium and, as the case may be, approved if it was issued by an educational institution before 1 January 2008 or affixed with the seal of the French Community if it was issued after this date, or an equivalent certificate awarded by the Examination Board of the French Community during or after 1994;

2. A Certificate of Upper Secondary Education issued no later than the end of the 1992-1993 academic year, along with official documentation attesting to the student's ability to pursue higher education for students applying for a full-length undergraduate degree programme;

3. A diploma awarded by a higher education institution within the French Community that confers an academic degree issued under the above-mentioned Decree, or a diploma awarded by a university or institution dispensing full-time higher education in accordance with earlier legislation;

4. A higher education certificate or diploma awarded by an adult education centre;

5. A pass certificate for one of the entrance examinations organized by higher education institutions or by an examination board of the French Community; this document gives admission to studies in the sectors, fields or programmes indicated therein;

6. A diploma, certificate of studies or other qualification similar to those mentioned above, issued by the Flemish Community of Belgium (this qualification does not grant exemption from the French language proficiency examination), the German Community of Belgium or the Royal Military Academy;

7. A diploma, certificate of studies or other qualification obtained abroad and deemed equivalent to the first four mentioned above by virtue of a law, decree, European directive or international convention;

Note:

Requests for equivalence must be submitted no later than 14 July 2015 to the Equivalence department (Service des équivalences) of the Ministry of Higher Education and Scientific Research of the French Community of Belgium.

The following two qualifications are automatically deemed equivalent to the Certificate of Upper Secondary Education (Certificat d'enseignement secondaire supérieur – CESS):

- European Baccalaureate issued by the Board of Governors of a European School,

- International Baccalaureate issued by the International Baccalaureate Office in Geneva.

These two qualifications do not, however, provide automatic exemption from the French language proficiency examination.

8. Official documentation attesting to a student's ability to pursue higher education (diplôme d'aptitude à accéder à l'enseignement supérieur - DAES), issued by the Examination Board of the French Community.

Specific requirements

Admission to undergraduate studies on the basis of accreditation of knowledge and skills obtained through professional or personal experience (Accreditation of Prior Experience)

Subject to the general requirements laid down by the authorities of the higher education institution, with the aim of admission to the undergraduate programme, the examination boards accredit the knowledge and skills that students have obtained through their professional or personal experience.

This experience must correspond to at least five years of documented activity, with years spent in higher education being partially taken into account: 60 credits are deemed equivalent to one year of experience, with a maximum of two years being counted. At the end of an assessment procedure organized by the authorities of the higher education institution, the Examination Board will decide whether a student has sufficient skills and knowledge to successfully pursue undergraduate studies.

After this assessment, the Examination Board will determine the additional courses and possible exemptions constituting the supplementary requirements for the student's admission.

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Exam of knowledge of the French language

Anyone not demonstrating sufficient French language proficiency will not be admitted to the first-year undergraduate examinations.

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Special requirements

- Admission to **undergraduate studies in engineering: civil engineering and architect**

  Pass certificate for the special entrance examination for undergraduate studies in engineering: civil engineering and architect.

  Admission to these courses is always subject to students passing the special entrance examination. Contact the faculty office for the programme content and the examination arrangements.
- Admission to **undergraduate studies in veterinary medicine**

  Admission to undergraduate studies in veterinary medicine is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).
- Admission to **undergraduate studies in physiotherapy and rehabilitation**

  Admission to undergraduate studies in physiotherapy and rehabilitation is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).
- Admission to **undergraduate studies in psychology and education: speech and language therapy**

  Admission to undergraduate studies in psychology and education: speech and language therapy is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).
- Admission to **undergraduate studies in medicine and dental science**

  Admission to undergraduate studies in medecine and dental science is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).

  Note: students wishing to enrol for a Bachelor's degree in Medicine must first sit an aptitude test.

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Teaching method

Throughout the Bachelor in Biomedicine programme, students encounter a variety of teaching methods: classroom lectures, tutoring, mentoring and practical laboratory work.

The substantial amount of laboratory work was introduced to enable learning in research through experimentation. It is also identified in the programme in relation to classroom lectures.

Evaluation

The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

The educational activities are evaluated by written or oral exams, according to the rules in force at the University (see Exam Regulations). Examination sessions are organised on completion of training periods (January, June) and in September. The practical work is subject to ongoing assessment.

Mobility and/or Internationalisation outlook

Aucune mobilité dâ€™étudiant nâ€™est prévue au cours du 1er cycle des études de sciences biomédicales.

Possible trainings at the end of the programme

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Contacts

Curriculum Managment

Entite de la structure SBIM

Acronyme	**SBIM**
Dénomination	Ecole des sciences biomédicales
Adresse	Avenue Mounier 73 bte B1.73.04
	1200 Woluwe-Saint-Lambert
	Tél 02 764 73 62 - Fax 02 764 73 63
Secteur	Secteur des sciences de la santé (SSS)
Faculté	Faculté de pharmacie et des sciences biomédicales (FASB)
Commission de programme	Ecole des sciences biomédicales (SBIM)

Academic Supervisor : Pascal Kienlen-Campard

Jury:

Secrétaire de jury de la 3e année : Pascal Kienlen-Campard

Président de jury de 1re année de bachelier : Jean-Baptiste Demoulin

Usefull Contacts

Personne de contact de la 1re année de bachelier : Fabienne Titeux

Personne de contact des 2e et 3e années de bachelier : Guillaume Arnould

Président de la commission d'enseignement de l'école de sciences biomédicales : Jean-Noël Octave

Conseiller aux études : Charles De Smet

Responsable administrative de la faculté de pharmacie et de sciences biomédicales : Stéphanie Lozes