

3 credits

20.0 h + 30.0 h

Q2

Teacher(s)	De Plaen Etienne ;Octave Jean-Noël coordinator ;
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>
Main themes	Cloning of cDNA. Expression of proteins in bacteria. Purification of proteins. Analysis of enzymatic activity.
Aims	<p>1 The objectives are the learning of cloning techniques, expression and purification of recombinant proteins, as well as the analysis of their enzymatic activity.</p> <p>-----</p> <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p>
Evaluation methods	Short written exams before starting the experiments. Evaluation of an individual report describing the manipulations carried out, the results obtained and their interpretation.
Content	Subcloning a cDNA from a TOPO vector to a bacterial expression vector. Transformation of bacteria. Production of a protein by genetic engineering. Purification of this protein by affinity chromatography. Protein detection by Western blotting. Analysis of the enzymatic activity of the purified protein. The teachers explain the tools needed to perform the different experiences before the students supervised by the assistants put them into practice.
Bibliography	<ul style="list-style-type: none"> • Notes de cours et travaux pratiques. • Written notes
Faculty or entity in charge	FASB

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Biomedicine	SBIM1BA	3	WMD1006 AND WSBIM1001 AND WMD1106	