

2.0 credits

20.0 h

1q

Teacher(s) :	Demoulin Jean Baptiste (coordinator) ; De Smet Charles ; Havelange Violaine ;
Language :	Français
Place of the course	Bruxelles Woluwe
Prerequisites :	Before taking this class, students must have followed molecular biology and genetic courses.
Main themes :	-- Cancer genetics: the goal of this chapter is to give an overview of the mechanism whereby the accumulation of DNA alteration give rise to cancer cells. We will define cancer cell clonality, oncogenes, tumor suppressors and cell selection and give specific examples. -- Cancer epigenetics: this chapter focuses on the epigenetic alterations of cancer cells, including challenges and therapeutic opportunities. -- Cancer genomics: this chapter focuses on novel technologies to study and diagnose cancer, in particular genome and transcriptome sequencing.
Aims :	After this course, students should: <ul style="list-style-type: none"> - Understand the genetic and epigenetic mechanisms of tumorigenesis. - Know the various types of DNA alterations and the methods that are available to study them. - Link cancer genetics with diagnosis, prognosis and treatment. Understand scientific literature on this topic (books, articles, publications, methods) <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>
Other infos :	Presentations are available at http://icampus.uclouvain.be/ .
Cycle and year of study :	> Master [60] in Biomedicine > Master [120] in Biomedicine
Faculty or entity in charge:	FASB