



In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

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| 2 credits | 20.0 h | Q1 |
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|-----------------------------|---|
| Teacher(s)                  | De Smet Charles ;Demoulin Jean Baptiste (coordinator) ;Havelange Violaine ;   |
| Language :                  | French  |
| Place of the course         | Bruxelles Woluwe  |
| Main themes                 | <ol style="list-style-type: none"> <li>1. 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.</li> <li>2. Cancer epigenetics: this chapter focuses on the epigenetic alterations of cancer cells, including challenges and therapeutic opportunities.</li> <li>3. Cancer genomics: this chapter focuses on novel technologies to study and diagnose cancer, in particular genome and transcriptome sequencing.</li> </ol>   |
| Aims                        | <p>After this course, students should:</p> <ul style="list-style-type: none"> <li>- Understand the genetic and epigenetic mechanisms of tumorigenesis.</li> <li>1 - Know the various types of DNA alterations and the methods that are available to study them.</li> <li>- Link cancer genetics with diagnosis, prognosis and treatment.</li> </ul> <p>Understand scientific literature on this topic (books, articles, publications, methods)</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> |
| Bibliography                | "The biology of Cancer", 2d edition, Robert Weinberg, Ed Garland Science.   |
| Faculty or entity in charge | FASB  |

| <b>Programmes containing this learning unit (UE)</b> |                         |         |              |   |
|--|-------------------------|---------|--------------|---|
| Program title  | Acronym                 | Credits | Prerequisite | Aims  |
| Master [60] in Biomedicine                           | <a href="#">SBIM2M1</a> | 2       |              |  |
| Master [120] in Biomedicine                          | <a href="#">SBIM2M</a>  | 2       |              |  |