



[30h+15h exercices] 3.5 credits

This course is not taught in 2004-2005

This course is taught in the 1st semester

**Teacher(s):** Jean Delcour  
**Language:** french  
**Level:** 2nd cycle course

### Aims

To introduce the student to the comprehension of the mechanisms of embryogenesis genetic control. Emphasis is also put on the experimental methodologies having brought the most recent progress in the analysis of the molecular mechanisms that control the development.

### Main themes

We will first look upon the integrity of the genome and to its alterations (deletions, amplifications) during the development. The epigenetic modifications of DNA are highlighted by experimental analysis of imprinting and inactivation of chromosome X. We also describe the gain of studies on polytenic chromosomes and on imaginary discs of insects during the development by the homeogenes in the Drosophile. The homeogenes in the mouse are described in detail. Finally, we study the contribution of transgenic animals in the comprehension of genetic mechanisms implied in the embryonal development.

### Other credits in programs

<b>BIOL22/A</b>	Deuxième licence en sciences biologiques (Biologie moléculaire, cellulaire et humaine)	(3.5 credits)
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