

03-125 EVOLUTION

- Elective for All Majors
- 9 Units (3 hours lecture/week)
- Pre-requisites: none

Learning Goals

The evolutionary theory is the unifying principle of biology. Through different examples and case studies such as the **corona virus**, **bacteria**, **maize**, **flat fish** and **humans** we will come to :

- (1) Examine the history, development and applications of evolutionary theory
- (2) Introduce and apply the concepts of phylogenetic
- (3) Understand the basis of **molecular biology**, **heredity** and **genetic mutations**
- (4) Understand how genetic variation and natural selection lead to the diversity and origins of the groups of life
- (5) Introduce **population genetic theory**

Instructor: Prof. Mohamed Bouaouina

Student evaluation: (tentative) 3 exams & one final, 3 problem sets, weekly quizzes, in-class discussion and group presentation.

