

Evolution et diversité des arthropodes et des vertébrés

Lecturer

Yves ROISIN (Coordinator)

Course mnemonic

BIOL-F304

ECTS credits

5 credits

Language(s) of instruction

French

Course period

Second term

Course content

- 1 Body plans
- 1 Diplo- and triploblastic organizations and morphofunctional implications
- 2 Ontogenesis of triploblastic organisms – the vertebrate example
- > Diversity and distribution of Life
- > Comparative anatomy
- 1 Circulatory systems
- 2 Respiratory systems
- 3 Excretory systems
- 4 Digestive systems
- 5 Nervous systems and sensory organs
- > Locomotion mechanisms
- > Particular life styles
- 1 Life in symbiosis
- 2 Life in extreme environments 6.
- > Deuterostomians - the echinoderm place
- 1 Echinoid biology
- 2 Asteroid biology

Objectives (and/or specific learning outcomes)

To apprehend the morphofunctional diversity of Animalia through evolution

Pre-requisites and co-requisites

Pre-requisites courses

BIOL-F202 | Evolution et diversité des eucaryotes : métazoaires | 5 crédits

Teaching method and learning activities

Powerpoints

References, bibliography and recommended reading

- > Beaumont A. & P. Cassier 2005: Biologie animale - Les cordés : anatomie comparée des vertébrés. Dunod, 638p.
- > Darribère T. 2002. Introduction à la biologie du développement. Belin Sup Sciences, Paris, 160p.
- > Fox R., Barnes R.D., E.E. Ruppert. 2003. Invertebrate Zoology. Brooks/Cole; 7th Revised edition, 1008p.
- > Gilles R. 2006. Physiologie animale. De Boeck Université, Bruxelles, 673p.
- > Moyes C.D. & P.M. Schulte. 2008. Principles of animal physiology. Pearson Int. Ed., 754 p.
- > Pough F.H., Janis C.M., & J.B. Heiser 1996. Vertebrate Life. Prentice Hall Inc., 733p.
- > Romer A.S. & T.S. Parson 1977 : The vertebrate body. Holt Saunders Int. Ed. 624p.
- > Ruppert E.E., Fox R.S. & R.D. Barnes 2004. Invertebrate Zoology: A Functional Evolutionary Approach. Thompson Brooks/Cole Inc. 963p.
- > Slack J. 2004. Biologie du développement. De Boeck Université, Bruxelles, 482 p.
- > Wehner R. & W. Gerhing 1999. Biologie et physiologie animales. De Boeck Université, 844p.

Other information

Contact(s)

Local: UC5 238 A DE RIDDER CHANTAL Laboratoire de Biologie Marine, CP 160/15 ULB - Tél. 02/6502966 - cridder@ulb.ac.be

Evaluation method(s)

Other

Evaluation method(s) (additional information)

theory : oral exam (in session) ; practical works are regularly evaluated during the semester.

Determination of the mark (including the weighting of partial marks)

Final grade: theory exam accounts for $\frac{3}{4}$ of the points + practicals grade for $\frac{1}{4}$ of the points

NB : the practicals grade is the average of the marks received throughout the semester.

Main language(s) of evaluation

French and English

Programmes

Programmes proposing this course at the faculty of Sciences

BA-BIOL | **Bachelor in Biology** | option Bruxelles/unit 2 and option Bruxelles/unit 3

