

## *Description of curricular units*

1. **Curricular Unit:** Bioentrepreneurship
2. **Curricular Unit code:** BE
3. **Faculty:** Instituto de Tecnologia Química e Biológica
4. **Department:** not applicable
5. **Course:** PhD in Biological and Chemical Sciences and Engineering
6. **Course level:** PhD
7. **Type of Curricular Unit:** Compulsory
8. **Year of study plan:** Second year
9. **Semester:** First Semester
10. **Number of credits:** 3 ECTS
11. **Coordinators:** Luis Filipe Lages (FE-UNL)
12. **Number of hours/week :** 60h of total contact in semester

### **13. Objectives of the Curricular Unit**

Bioentrepreneurship is a course directed to people wishing to develop entrepreneurial skills or have innovative solutions or products whose market potential they would like to explore. The course covers the essential topics on entrepreneurship, including creativity, technology transfer, market analysis, marketing of innovation, creating and managing entrepreneurial teams, managing growth, intellectual property and licensing, business plans, new venture financing and venture capital funding.

### **14. Background requirements**

None

### **15. Contents of the Curricular Unit**

The course is organized in a series of thematic sessions:

Innovation Concept (2h); Key Ingredients of Successful New Ventures (2h); Technology-Market Transfer (4h); Creativity and ideation for entrepreneurship and innovation (4h); Market Selection in Practice: Segmentation, Targeting and Positioning (4h); Value Innovation and Market Creation (4h); Using Market Planning for Technological Success (2h); Defining the Business Model (2h); Creative Business Modeling (4h); Product Design, Development and Manufacturing (4h); Designing Services Processes (2h); Technology Transfer (2h); IP & Licensing Strategy (4h); IP & Patents Protection (4 h); Entrepreneurial Teams (2h); Entrepreneurial Process (2h); What do investors look for in a new venture? (4h); Managing Growth (4h); and New Venture Financing (4h).

## 16. Bibliography

*Technology Ventures: From Idea to Enterprise with Student DVD*

by Richard C. Dorf , Thomas H. Byers

McGraw-Hill Science/Engineering/Math; 2 edition (2007) 658 pages **ISBN-13:** 978-0073365046

*The Entrepreneurial Venture (The Practice of Management Series)*

by Howard H. Stevenson, Michael J. Roberts , Amar Bhide, William A. Sahlman (Editor)

Harvard Business School Press; 2 ed. (1999) 609 pages **ISBN-10:** 0875848923

*Entrepreneurship* (Hardcover)

by Robert D Hisrich, Michael P Peters , Dean A. Shepherd

McGraw-Hill/Irwin; 7 edition (October 6, 2006) 672 pages **ISBN-10:** 0073210560.

## 17. Teaching methods

Teaching will include lectures and tutorials with analysis of case studies.

## 18. Evaluation

The evaluation will have a written component (50%) and an oral component (50%).

## 19. Language

English