

---

**COURSE: INFORMATIC SKILLS**

---

**ACADEMIC YEAR: 2018-2019**

---

**TYPE OF EDUCATIONAL ACTIVITY: Other Activities**

---

**TEACHER: VINCENZO TROTTA**

---

e-mail: **vincenzo.trotta@unibas.it**

website:

phone:

mobile (optional):

---

Language: **ITALIAN**

---

ECTS: 3  
(3 lessons e 0  
tutorials/practice)n. of hours: 24 (lessons e  
tutorials/practice)Campus: **Potenza**  
Dept./School: **Dipartimento di  
Scienze**  
Program:Semester: II  
(FROM 1/03/2019 TO  
31/05/2019-  
20/06/2019)

---

**EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES**

- *This course introduces the student to Informatics, using computer databases to store, retrieve and assist in understanding biological information.*
  - *Students will be introduced to the basic concepts behind Bioinformatics and data analysis. Hands-on sessions will familiarize students with the details and use of the most commonly used online tools and resources.*
- 

**PRE-REQUIREMENTS**

- *basic concepts of informatics and statistics;*
  - *basic concepts of biology;*
  - *basic concepts of genetics.*
- 

**SYLLABUS**

- *Introduction to bioinformatics: to analyze, organize and visualize biological data in ways that increase understanding of this data.*
  - *Data distribution: internet and the World Wide Web*
  - *Biological databases: Entrez and SRS*
  - *Find region of similarity between a given sequence and other sequences (Basic Local Alignment Search)*
  - *Introduction to Microsoft Office: Word, Excel, Power Point.*
  - *Electronic sheet: to insert, organize and analyze data.*
  - *Data presentation: figures and tables*
  - *Basic statistics in Calc: mean, variance and statistic inference.*
  - *Data analysis: chi-square, F-test and t-Student test.*
  - *Use of the computer for Database searching (SRS, Entrez, FASTA and BLAST).*
  - *Use of the computer for Data analysis.*
- 

**TEACHING METHODS***24 hour of theoretical lessons and laboratory tutorials*

---

**EVALUATION METHODS***Oral examination*

---

**TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL**

- *TEXTBOOK: PASCARELLA S., PAIARDINI A. – BIOINFORMATICA – EDS. ZANICHELLI*
- 

**INTERACTION WITH STUDENTS***Office hours: all days after contact via email*

---

**EXAMINATION SESSIONS (FORECAST)<sup>1</sup>***18/06/2019, 22/07/2019, 16/09/2019, 21/10/2019, 18/11/2019, 16/12/2019.*

---

**SEMINARS BY EXTERNAL EXPERTS** YES  NO 

---

<sup>1</sup>Subject to possible changes: check the web site of the Teacher or the Department/School for updates.

FURTHER INFORMATION

---