

**Postgraduate Diploma Course in Condensed Matter Physics  
2014-15**

**Biological Physics (CMP - BIO)  
(12 lectures = 18 hrs)**

- Introduction to physical biology
- Biology by the numbers
- The "stuff of life": nucleic acids, proteins, lipids, etc
- A primer on polymer physics
- Receptors and ligands
- Ion channels
- Cooperativity and allostery
- Equilibrium and out-of-equilibrium