

Code: 1511 Sampling Techniques**Degree:** 2nd cycle – Mathematics Applied to Biological Sciences**Curricular Year:** 1st/2nd**Semester Course:** 2nd/1st**Credits:** 3 ECTS**Optional****Language:** Portuguese/English**Responsible:** Maria Manuela Costa Neves Figueiredo**Other lecturer(s):** -**Web Site:** <http://www.isa.utl.pt/home/node/3897>**1. Contact hours:****Lecture/Practicals 35 Others 7 Total 42****2. Objectives:**

To learn the main probabilistic sampling techniques

To learn the usual procedures for sampling animal and vegetable populations

3. Programme:

Sampling principles. Selecting the sampling method

Simple random sampling

Stratified simple random sampling

Cluster and multistage sampling

Sequential sampling

Estimating abundance in animal and plant populations

Quadrat counts, line transects, mark and recapture techniques and distance methods

4. Bibliography:**Main Bibliography**

Barnett, V. (1991) -- Sample Survey. Principles and Methods. Edward Arnold

Krebs, C. J. (1989) -- Ecological Methodology. Harper Collins

Seber (1982) - The estimation of animal abundance and related parameters. Griffin, London

Other Bibliography

Cochran, W. G. (1977) -- Sampling Techniques. John Wiley

Thompson, S. K. (1992) - Sampling. John Wiley and Sons

5. Assessment:

Final exam

6. Estimated Workload:

84 Hours

7. Last Update:

15/7/2010