

Evaluating Ecological Models

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About Ecological Modelling

- Discipline: Ecology, of course!
(general / coastal /freshwater, all of these, with main focus on marine)
- Topic: How to understand, evaluate and use ecological models



Introduction – Dealing with:

1. Calendar and timetable:
This week, 11:00-13:00, every day
2. Assessment
Exercises and classroom performance
3. Bibliography & web links
<http://www.silvert.org/mestrado>



Grading (sorry!)

- This module is worth 2 ECTS credits out of an annual total of 60 ECTS.
- The assessment will be graded in two ways:
 - using a 0-20 scale, 10 is the pass mark
 - using the ECTS A-F scale, where F is a fail



Assessment

- An examination seems like a poor way to evaluate performance in this course. I will distribute exercises at every session and grades will be based both on these exercises and on classroom performance.
- Exercises can be brought to class or e-mailed to bill@silvert.org. All work must be done **on time**, since the solutions will be discussed in class so late submissions are irrelevant.



Bibliography

- 1 References, books and reports:
 - A. M. Starfield and A. L. Bleloch. 1991. Building models for conservation and wildlife management. Burgess International Group, Inc.
- 2 Web
 - I have a couple of relevant websites:
<http://bill.silvert.org> (my papers)
<http://ciencia.silvert.org/models>
(modelling website which includes ecological modelling).



Objectives

- Ecological Modelling is relevant to any activity which affects the natural environment, including both integrated river basin management and integrated coastal zone management
- This module is intended to help you understand and evaluate ecological models so that you can use them effectively in aquatic management.



Requirements

- *Explain if students doing this module require certain skills, for example if the module is very mathematical – you may think that you have to be a skilled mathematician, but I will try to convince you that the opposite may be true!*
- *Make clear what level is required, for example a good grasp of calculus – it's not that easy – you need common sense.*



Learning outcomes

- *After completing this module you should know:* What ecological models are and how they are constructed, and what may be wrong with them.
- *After completing this module you should be able to:* Guide the development of ecosystem models, evaluate their outputs, and use them in river and coastal zone management.

