ENVR S7011: Wildlife and Habitat Ecology

Full Title:	Wildlife and Habitat Ecology
Module Code:	ENVR S7011
Credits:	7.5
Valid From:	Semester 1 - 2013/14 (September 2013)
Module Delivered in	1 programme(s)
Module Description:	The course introduces basic concepts in the ecology of individual organisms, their populations, and the biological communities in which they live and how they interact with their environment. The factors that affect the distribution, growth and survival of plant and animal communities are examined. The course introduces wildlife biology, both globally and regionally and how ecology can be applied to wildlife management and conservation.

Learning Outcomes:

On successful completion of this module the learner should be able to

1. Critically synthesise the structure and function of populations, communities and ecosystems and how they interact.
2. Describe how organisms interact with their environment and the role that they have in ecosystem and community structure.
3. Appraise contrasting conservation management techniques and to evaluate how concepts in habitat ecology and population dynamics are applied to restoration of wildlife populations.
4. Design and carry out sampling programmes and procedures for identifying and describing plant and animal communities and analyse their distribution.
5. Conduct basic ecological assessments of specific habitats.

Module Content & Assessment

Indicative Content
Fundamentals of Ecology Diversity of life, evolution, patterns in community structure, global biomes, geographic patterns of life and island biogeography, ecological energy flow and biological production, match between organism and its environment, niche theory and how species co-exist, population dynamics and diversity, intra and interspecific competition, predation, parasitism, herbivory , community development and succession.
Wildlife Biology Habitat selection, dispersion, population dynamics and regulation, status and origin of Irish vertebrate fauna, sustainable wildlife management, conservation and management of scarce or endangered species, biosecurity and the role of invasive species, restoring damaged ecosystems, the role of reintroductions in biodiversity conservation, wildlife survey and census techniques.
Habitat Ecology Overview of major Irish habitat types: Woodland; Grassland; Forests; Hedgerows; Boglands. Habitat management and conservation, legislation and governance surrounding habitat and wildlife conservation and management. Introduction to field techniques used for the study of terrestrial ecosystems and sampling methods for enumerating and classifying fauna.

Assessment Breakdown	%
Course Work	50.00%
End of Module Formal Examination	50.00%

Full Time

Course Work

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Marks Out Of*	*Pass Marks*	*Assessment Date*	*Duration*
Practical/Skills Evaluation	Practicals	1,2,4,5	30.00	0	0	Every Week	0
Essay	An essay on a topic related to habitat and wildlife ecology and conservation.	1,2,3	10.00	0	0	Week 6	0
Presentation	Project on a topical issue related to wildlife management and habitat conservation.	3	10.00	0	0	Week 11	0

No Project

No Practical

End of Module Formal Examination

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Marks Out Of*	*Pass Marks*	*Assessment Date*	*Duration*
Formal Exam	End-of-Semester Final Examination	1,2,3	50.00	0	0	End-of-Semester	0

DKIT reserves the right to alter the nature and timings of assessment

Module Workload & Resources

Workload: Full Time

Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecture	No Description	3.00	Every Week	3.00
Practical	No Description	3.00	Every Week	3.00
Independent Study	No Description	4.00	Every Week	4.00
Directed Reading	No Description	3.00	Every Week	3.00
			Total Weekly Learner Workload	13.00
			Total Weekly Contact Hours	6.00

This course has no Part Time workload.

Resources

Recommended Book Resources

Alan Sitkin 2011, *Principles of ecology and management: international challenges for future practitioners*, Goodfellow Pub Woodeaton, Oxford [ISBN: 9781906884239]

Michael Begon, Colin R. Townsend, John L. Harper 2006, *Ecology : from individuals to ecosystems*, 4th Ed., Blackwell Pub Malden, MA [ISBN: 1405151986]

Supplementary Book Resources

Read, H.J., Frater, M. 1999, *Woodland Habitats*, Routledge London [ISBN: 0415180902]

Ambasht, R.S., Navin, K. 2002, *Modern trends in Applied Terrestrial Ecology*, Springer [ISBN: 9780306473326]

Robert M. May and Angela R. McLean 1997, *Theoretical ecology : principles and applications*, 3rd Ed., Oxford University Pres Oxford [ISBN: 0199209995]

Jodi A. Hilty, William Z. Lidicker Jr., and Adina M. Merenlender ; foreword by Andrew P. Dobson 2006, *Corridor ecology: the science and practice of linking landscapes for biodiversity conservation*, Island Press Washington, DC [ISBN: 1559630965]

Peter J. Mayhew 2006, *Discovering evolutionary ecology: bringing together ecology and evolution*, Oxford University Press Oxford [ISBN: 9780198525288]

Michael J. Manfredo 2009, *Wildlife and society: the science of human dimensions*, Island Press Washington, D.C. [ISBN: 9781597269346]

This module does not have any article/paper resources

Other Resources

Website: National Biodiversity Data Centre*National Biodiversity Data Centre Home Page*
http://www.biodiversityireland.ie/

Link: *Library Catalogue*
http://tinyurl.com/nrkc45h

Module Delivered in

Programme Code	Programme	Semester	Delivery
DK_SAPBI_7	Bachelor of Science in Applied Bioscience	6	Elective