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# University of Pretoria Yearbook 2017

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## BScHons Wildlife Management (02240700)

**Duration of study** 1 year

**Total credits** 135

### Programme information

#### Renewal of registration

- i. Subject to exceptions approved by the Dean, on the recommendation of the head of department, and in the case of distance education where the Dean formulates the stipulations that will apply, a student may not sit for an examination for the honours degree more than twice in the same module.
- ii. A student for an honours degree must complete his or her study, in the case of full-time students, within two years and, in the case of after-hours students, within three years of first registering for the degree and, in the case of distance education students, within the period stipulated by the Dean. Under special circumstances, the Dean, on the recommendation of the head of department, may give approval for a limited extension of this period.

In calculating marks, General Regulation G.12.2 applies.

Apart from the prescribed coursework, a research project is an integral part of the study.

### Admission requirements

All applications for admission should reach the Client Service Centre University of Pretoria Pretoria 0002 or the Director of the Centre for Wildlife Management by 30 October of the preceding year.

To qualify for admission to the BScHons in Wildlife Management, prospective students must have completed a BSc degree with Animal Science, Ecology, Zoology, Plant Science, or a similar relevant biological major subject; or a BScAgric Animal Sciences and/or Plant Production; a BSc Forestry, a BVSc degree, or a similar degree. The candidate must also furnish proof of having passed a relevant module in statistics, otherwise they must register for one separately. A South African equivalent aggregate mark of 60% is usually required for all the modules taken in the final year of undergraduate studies. Determination, attitude and standard of undergraduate projects, where available, will also be taken into consideration. Students are selected on merit.

### Pass with distinction

The BScHons degree is awarded with distinction to a candidate who obtains a weighted average of at least 75% in all the prescribed modules and a minimum of 65% in any one module.



## Curriculum: Year 1

Minimum credits: 135

### Core modules

#### Statistics for biological sciences 780 (BME 780)

<b>Module credits</b>	15.00
<b>Service modules</b>	Faculty of Natural and Agricultural Sciences
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 Block weeks
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Statistics
<b>Period of presentation</b>	Semester 1

#### Module content

The principles of experimental design as required for the selection of an appropriate research design. Identification of the design limitations and the impact thereof on the research hypotheses and the statistical methods. Identification and application of the appropriate statistical methods needed. Interpreting of statistical results and translating these results to the biological context.

#### Practical plant identification 786 (BOT 786)

<b>Module credits</b>	10.00
<b>Prerequisites</b>	BSc with first year Botany/Plant Science
<b>Contact time</b>	2 lectures per week, 2 practicals per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Plant and Soil Sciences
<b>Period of presentation</b>	Semester 1

#### Module content

Principles of identification, classification and nomenclature; identification of plants; family recognition; collection of plant specimens for identification; herbarium as a source of information. Variation in seed plants and breeding systems. Practical work involves an excursion.

#### Wildlife ecology 780 (NLB 780)

<b>Module credits</b>	10.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 lectures per week, 2 practicals per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences



**Period of presentation** Semester 1

### Module content

Research in wildlife management focuses on gaining a better understanding of patterns of animal distribution, abundance, and diversity, and implementation of scientifically sound strategies for sustainable management and conservation of wildlife populations. This module will develop an in-depth understanding of core wildlife management concepts with a focus on population characteristics, the density concept, mortality, natality, life tables, population growth, harvesting quotas, population regulation, population structure, dispersal, dispersion, aggregation, isolation and territoriality, competition and predator-prey relationships. This module will also explore new ideas, and advanced research methods to evaluate ecological data in the context of wildlife ecology.

## Wildlife management principles and techniques 781 (NLB 781)

**Module credits** 5.00

**Prerequisites** No prerequisites.

**Contact time** 1 lecture per week, 1 practical per week

**Language of tuition** Module is presented in English

**Academic organisation** Animal and Wildlife Sciences

**Period of presentation** Semester 1

### Module content

The most important techniques applicable to wildlife management and wildlife research are discussed. The principles, applications and restrictions of the following are discussed amongst others: wildlife counts, age determination, age and sex ratios, translocation of animals, chemical immobilisation, mechanical capture techniques, transport of wildlife, land-use, predator control and predator-prey studies.

## Wildlife nutrition 782 (NLB 782)

**Module credits** 10.00

**Prerequisites** No prerequisites.

**Contact time** 2 practicals per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Academic organisation** Animal and Wildlife Sciences

**Period of presentation** Semester 2

### Module content

The digestive functioning of selected wild ruminant and non-ruminant herbivores is discussed as well as their nutrient requirements and deficiencies that commonly occur. The spatial scaling of nutrients in vegetation is explained, followed by which foraging strategies large African herbivores of varying body sizes use to adapt to spatial and temporal nutrient heterogeneity, including optimal foraging theory.

## Parasites, diseases and the capture of wildlife animals 783 (NLB 783)

**Module credits** 10.00



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<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 lectures per week, 2 practicals per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences
<b>Period of presentation</b>	Semester 1

#### **Module content**

Parasites, diseases and capture of wild animals. An overview of veterinary aspects with reference to important parasites and diseases of wild animals. The capture of wildlife and the stress-related consequences of the capture of wild animals. The module content includes a discussion of all the different chemicals used to immobilise wild animals, darting, and handling of wild animals under sedation. The internal and external parasites, most important contagious wildlife diseases and the prevention of capture related diseases are discussed.

### **Scientific communication 785 (NLB 785)**

<b>Module credits</b>	5.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 practical per week, 1 lecture per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences
<b>Period of presentation</b>	Year

#### **Module content**

This module focuses on elements of science communication, developing practical elements of scientific communication, writing and public presentations.

### **Research project 795 (NLB 795)**

<b>Module credits</b>	50.00
<b>Prerequisites</b>	No prerequisites.
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences
<b>Period of presentation</b>	Year

#### **Module content**

A research protocol, field work and project report based on an ecological or wildlife management topic.

### **Range management in wildlife systems 701 (WDE 701)**

<b>Module credits</b>	10.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	5 discussion classes per week



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**Language of tuition**      Module is presented in English

**Academic organisation**      Plant and Soil Sciences

**Period of presentation**      Semester 1

**Module content**

Range evaluation and utilisation with the emphasis on aspects important in wildlife production, and integrated wildlife/livestock production systems.

**Plant ecology and conservation for wildlife management 790 (BOT 790)**

**Module credits**      10.00

**Contact time**      2 lectures per week, 2 practicals per week

**Language of tuition**      Module is presented in English

**Academic organisation**      Plant and Soil Sciences

**Period of presentation**      Semester 1

**Module content**

Applications of plant ecology principles in plant conservation: species-distribution modelling, alien plant invasions, conservation planning, threatened ecosystems, South African environmental legislation. Discussion of relevant topics in plant ecology.



## Curriculum: Final year

Minimum credits: 135

### Core modules

#### Statistics for biological sciences 780 (BME 780)

<b>Module credits</b>	15.00
<b>Service modules</b>	Faculty of Natural and Agricultural Sciences
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 Block weeks
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Statistics
<b>Period of presentation</b>	Semester 1

#### Module content

The principles of experimental design as required for the selection of an appropriate research design. Identification of the design limitations and the impact thereof on the research hypotheses and the statistical methods. Identification and application of the appropriate statistical methods needed. Interpreting of statistical results and translating these results to the biological context.

#### Practical plant identification 786 (BOT 786)

<b>Module credits</b>	10.00
<b>Prerequisites</b>	BSc with first year Botany/Plant Science
<b>Contact time</b>	2 lectures per week, 2 practicals per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Plant and Soil Sciences
<b>Period of presentation</b>	Semester 1

#### Module content

Principles of identification, classification and nomenclature; identification of plants; family recognition; collection of plant specimens for identification; herbarium as a source of information. Variation in seed plants and breeding systems. Practical work involves an excursion.

#### Wildlife ecology 780 (NLB 780)

<b>Module credits</b>	10.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 lectures per week, 2 practicals per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences



**Period of presentation** Semester 1

### Module content

Research in wildlife management focuses on gaining a better understanding of patterns of animal distribution, abundance, and diversity, and implementation of scientifically sound strategies for sustainable management and conservation of wildlife populations. This module will develop an in-depth understanding of core wildlife management concepts with a focus on population characteristics, the density concept, mortality, natality, life tables, population growth, harvesting quotas, population regulation, population structure, dispersal, dispersion, aggregation, isolation and territoriality, competition and predator-prey relationships. This module will also explore new ideas, and advanced research methods to evaluate ecological data in the context of wildlife ecology.

## Wildlife management principles and techniques 781 (NLB 781)

**Module credits** 5.00

**Prerequisites** No prerequisites.

**Contact time** 1 lecture per week, 1 practical per week

**Language of tuition** Module is presented in English

**Academic organisation** Animal and Wildlife Sciences

**Period of presentation** Semester 1

### Module content

The most important techniques applicable to wildlife management and wildlife research are discussed. The principles, applications and restrictions of the following are discussed amongst others: wildlife counts, age determination, age and sex ratios, translocation of animals, chemical immobilisation, mechanical capture techniques, transport of wildlife, land-use, predator control and predator-prey studies.

## Wildlife nutrition 782 (NLB 782)

**Module credits** 10.00

**Prerequisites** No prerequisites.

**Contact time** 2 practicals per week, 2 lectures per week

**Language of tuition** Module is presented in English

**Academic organisation** Animal and Wildlife Sciences

**Period of presentation** Semester 2

### Module content

The digestive functioning of selected wild ruminant and non-ruminant herbivores is discussed as well as their nutrient requirements and deficiencies that commonly occur. The spatial scaling of nutrients in vegetation is explained, followed by which foraging strategies large African herbivores of varying body sizes use to adapt to spatial and temporal nutrient heterogeneity, including optimal foraging theory.

## Parasites, diseases and the capture of wildlife animals 783 (NLB 783)

**Module credits** 10.00



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<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	2 lectures per week, 2 practicals per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences
<b>Period of presentation</b>	Semester 1

#### Module content

Parasites, diseases and capture of wild animals. An overview of veterinary aspects with reference to important parasites and diseases of wild animals. The capture of wildlife and the stress-related consequences of the capture of wild animals. The module content includes a discussion of all the different chemicals used to immobilise wild animals, darting, and handling of wild animals under sedation. The internal and external parasites, most important contagious wildlife diseases and the prevention of capture related diseases are discussed.

### Scientific communication 785 (NLB 785)

<b>Module credits</b>	5.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	1 practical per week, 1 lecture per week
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences
<b>Period of presentation</b>	Year

#### Module content

This module focuses on elements of science communication, developing practical elements of scientific communication, writing and public presentations.

### Research project 795 (NLB 795)

<b>Module credits</b>	50.00
<b>Prerequisites</b>	No prerequisites.
<b>Language of tuition</b>	Module is presented in English
<b>Academic organisation</b>	Animal and Wildlife Sciences
<b>Period of presentation</b>	Year

#### Module content

A research protocol, field work and project report based on an ecological or wildlife management topic.

### Range management in wildlife systems 701 (WDE 701)

<b>Module credits</b>	10.00
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	5 discussion classes per week





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<b>Language of tuition</b>	Module is presented in English
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<b>Academic organisation</b>	Plant and Soil Sciences
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<b>Period of presentation</b>	Semester 1
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### Module content

Range evaluation and utilisation with the emphasis on aspects important in wildlife production, and integrated wildlife/livestock production systems.

## Plant ecology and conservation for wildlife management 790 (BOT 790)

<b>Module credits</b>	10.00
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<b>Contact time</b>	2 lectures per week, 2 practicals per week
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<b>Language of tuition</b>	Module is presented in English
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<b>Academic organisation</b>	Plant and Soil Sciences
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<b>Period of presentation</b>	Semester 1
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### Module content

Applications of plant ecology principles in plant conservation: species-distribution modelling, alien plant invasions, conservation planning, threatened ecosystems, South African environmental legislation. Discussion of relevant topics in plant ecology.

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The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.