



**Higher Education Academic Handbook
2019-2020**

**HND in Animal Biology and Wildlife Conservation /
HND in Applied Animal Science
Year 1**

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*Please take the time to read this information **before** you commence your studies, and retain the handbook to refer to as necessary throughout the programme of study. The handbook is also available on the College VLE.*

Introduction

Welcome to the *HND Applied Animal Science* or *HND Animal Biology & Wildlife Conservation* programmes. We hope your time will be both rewarding and successful.

This is your programme handbook for both years of the HND and it provides details relating to the delivery and assessment of the modules for the year. It should be used in conjunction with the HE Student Handbook that details all the support and resources offered to you during your learning experience here at Canterbury College. During your Induction week we will discuss these with you and you will need to refer to these with you throughout your study.

We hope above all, that you will enjoy your time here at Canterbury College and will make the most of all the academic activities and social opportunities made available to you.

Contact Information

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Term Dates for Higher Education 2019-20

Enrolment & Induction **Monday 9th September – Friday 13th September 2020**

Term 1 (5 weeks)	Monday 16 th September – Friday 18 th October 2019
<i>October Break (self-study)</i>	<i>Monday 21st October – Friday 25th October 2019</i>
Term 2 (8 weeks)	Monday 28 th October – Friday 20 th December 2019
<i>December Break</i>	<i>Monday 23rd December – Friday 3rd January 2020</i>
Term 3 (6 weeks)	Monday 6 th January – Friday 14 th February 2020
<i>February Break (self-study)</i>	<i>Monday 17th February – Friday 21st February 2020</i>
<i>and February (self-study)</i>	<i>Monday 24th February – Friday 28th February 2020</i>
Term 4 (4 weeks)	Monday 2 nd March – Friday 27 th March 2020
<i>April (self-study)</i>	<i>Monday 30th March – Wednesday 1st April 2020</i>
<i>April Break</i>	<i>Thursday 2nd April – Wednesday 15th April 2020</i>
<i>and April (self-study)</i>	<i>Thursday 16th April – Friday 17th April 2020</i>
Term 5 (5 weeks)	Monday 20 th April – Friday 22 nd May 2020
<i>May Break (self-study)</i>	<i>Monday 25th May – Friday 29th May 2020</i>
Term 6 (2 weeks)	Monday 1 st June – Friday 12 th June 2020

(Total 30 weeks delivery)

Additional 2 weeks
(contact time but no
new teaching) **Monday 15th June – Friday 26th June 2020**

Those on semesters:

Semester One	Monday 16 th September – Friday 17 th January 2020 (15 weeks)
Semester Two	Monday 20 th January – Friday 12 th June 2020 (15 weeks)

Public Holidays:

Summer Bank Holiday	Monday 26 th August 2019
Christmas	Wednesday 25 th December 2019
Boxing Day	Thursday 26 th December 2019
New Year's Day	Wednesday 1 st January 2020
Good Friday	Friday 10 th April 2020
Easter Monday	Monday 13 th April 2020
May Day holiday	Friday 8 th May 2020 (changed for Anniversary of VE Day)
Spring Bank holiday	Monday 25 th May 2020

Group Days:

Development Days	Monday 28 th October 2019* Wednesday 12 th February 2020*
Improvement Days	Friday 20 th December 2019* Wednesday 1 st April 2020
Community Weeks	w/c Monday 18 th November 2019 w/c Monday 30 th March 2020

Programme Information

Your Programme of Study

Your programme of study is a validated award run in partnership with University of Kent and monitored for quality by the Qualification Assurance Agency (QAA). You can find the full programme specification on the Kent website.

<https://www.kent.ac.uk/stms/studying/modules/2019-2020/associate/index.html?tab=hndhnc-modules>

The HND in Animal Biology and Wildlife Conservation / Applied Animal Science is offered as a validated provision. Details of what this means can be found here:

<https://www.kent.ac.uk/gettingstarted/partner-college/index.html>

The programme sits under the Faculty of Sciences at Kent. Delivery takes place at Canterbury College, but Kent has interest in the quality of the provision, and you will be asked to participate in feedback on your course such as induction, end-of-module, experience and via the National Student Survey.

You will be enrolled as a member of the East Kent Group. The programme and assessment regulations of both the College and University of Kent will apply.

This is 2 year full time programme. Each year of study will be delivered over 30 weeks, divided into two semesters. Your study will consist of 450 hours of guided learning, which include lectures, seminars, tutorials and other learning opportunities. You are expected to complete a further 750 hours of self-directed study.

In order to achieve the qualification you are required to successfully complete 8 units, obtaining 120 credits per year of study.

Where your programme offers optional units these are identified in the list below.

HND Applied Animal Science					
Code	Module title	Level	Credits	Semester	Core/ Optional
BI310	Ethology	4	15	1 & 2	CORE
BI311	Animal Husbandry	4	15	1 & 2	CORE
BI312	Anatomy and Histology	4	15	1 & 2	CORE
BI524	Introduction to Conservation and Ecology	5	15	1 & 2	CORE
BI314	Animal Health and Disease	4	15	1 & 2	CORE
BI315	Principles of Cell Biology	4	15	1 & 2	CORE
BI316	Animal Nutrition	4	15	1 & 2	CORE
BI317	Applications of Animal Science	4	15	1	CORE

HND Animal Biology and Wildlife Conservation					
Code	Module title	Level	Credits	Semester	Core/ Optional
BI310	Ethology	4	15	1 & 2	CORE
BI311	Animal Husbandry	4	15	1 & 2	CORE
BI312	Anatomy and Histology	4	15	1 & 2	CORE
BI524	Introduction to Conservation and Ecology	5	15	1 & 2	CORE
BI314	Animal Health and Disease	4	15	1 & 2	CORE
BI331	The Conservation of Global Biodiversity	5	15	2	CORE
BI316	Animal Nutrition	4	15	1 & 2	CORE
BI317	Applications of Animal Science	4	15	1	CORE

The full programme and module specifications are available to view on the [University of Kent](#) website.

Grading Criteria for your Programme

Assignments are assessed against their assignment criteria as detailed for each module (see above). You must pass each criteria to pass an assignment.

Individual modules are graded as a percentage only, in accordance with the categorical marking scheme. In general Canterbury College requires that all elements of assessment for a module must be passed in order for the module as a whole to be passed.

Classification	Numerical Scale	The student will
Fail	0 10 20 32 35 38	<ul style="list-style-type: none"> Show evidence of no or minimal research, with extremely limited knowledge of relevant principles or techniques Demonstrate very poor or poor awareness of the issues or their wider significance Show evidence of no or very limited thought or evaluation Show little effort at organising and presenting the material, and style is not academic or of poor academic quality Show many errors in English, with poor or no use of referencing

Pass	42 45 48	<ul style="list-style-type: none"> • Show evidence of limited research, and incomplete knowledge of relevant principles or techniques • Demonstrate limited awareness of the issues or their wider significance • Show evidence of limited thought and evaluation • Show limited effort at organising and presenting the material, and show limited effort to use academic style • Show generally satisfactory use of English, but with some errors and limited use of referencing
	52 55 58	<ul style="list-style-type: none"> • Show evidence of a fair degree of research, with reasonable knowledge of relevant principles or techniques • Demonstrate adequate awareness of the issues and their wider significance • Show some evidence of thought and make a serious attempt at evaluation • Show adequate effort at organising and presenting the material, and adequate use of academic style • Show satisfactory use of English, with only minor errors and reasonable use of referencing
Merit	62 65 68	<ul style="list-style-type: none"> • Show evidence of a good degree of research, with good knowledge of relevant principles or techniques • Demonstrate good awareness of the issues and an understanding of their wider significance • Show clear evidence of thought and evaluation • Show good organisation and presentation of the material, with good academic style • Show good use of English, and good use of referencing
Distinction	72 75 78 85 95 100	<ul style="list-style-type: none"> • Show evidence of a wide-ranging research, with comprehensive knowledge of relevant principles and techniques which may exceed the general requirement • Demonstrate to full and perceptive awareness of the issues and a clear understanding of their wider significance • Show clear evidence of independent thought and evaluation • Show evidence of clearly and carefully planned, organised and presented material written in excellent academic style. • Show excellent use of English, and with excellent use of referencing

Your individual modules are graded as a percentage only for your programme. The conversion of percentage grade to P/M/D scale are as follows:

Fail = 39% and under

Pass = 40 – 59%

Merit = 60 – 69%

Distinction = 70% and over

HND programmes will be classified overall according to the following:

- Qualify for HND at Pass** Achieve credit for all 16 units at **pass**
- Qualify for HND with Merit** Achieve credit for all 16 units with at least 55% or more of the credits [normally 9 units] obtained at **merit** or **distinction** grade with at least **5** units at **Stage 2**
- Qualify for HND with Distinction** Achieve credit for all units [normally 16] with at least 50% or more of the credits [normally 8 units] obtained at **distinction** grade of which at least **5** must be at **Stage 2** and at least 50% or more of the remaining credits [normally 4 units] obtained at either merit or distinction grade

For more details on how your credits are awarded for your programme view the [Credit Framework](#) on the University of Kent website.

Assessment Calendars Animal Science

Assessment Calendar

Programme Title: **HND Applied Animal Science (2019/20)**

Year 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
<i>Ethology</i>	D															A 1															A 1	
Animal Husbandry	D																															A 1
Cell Biology	D																			A 1						A 2					A 3	
Animal Nutrition	D											A 1																		A 2		
Introduction to conservation	D															A 1											A 2					
Application of Animal Science	D													A 1																		
Health and Disease	D																					A 1									A 2	
Anatomy and Histology	D															A 1															A 3	
D	= Delivery					A	Assessments										No Delivery															

Assessment Calendars
Animal Biology and Wildlife Conservation

Assessment Calendar

Programme Title: **HND Animal Biology and Wildlife Conservation (2019/20)**

Year 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
<i>Ethology</i>	D															A 1														A 2				
Animal Husbandry	D																															A 1		
Global Biodiversity																D										A 1				A 2				
Animal Nutrition	D															A 1														A 2				
Introduction to conservation	D																A 1													A 2				
Application of Animal Science	D															A 1																		
Health and Disease	D																														A 2			
Anatomy and Histology	D																A 1														A 2			A 3
D	= Delivery					A	Assessments										No Delivery																	

Cheating and Plagiarism

The University of Kent and Canterbury College view cheating and plagiarism as serious academic misconduct and will penalise students who are found to have attempted such deception.

Plagiarism is when a student submits any part of another person's work and tries to pass it off as their own. This applies to all work submitted for assessment (e.g. essays, reports, projects, diagrams, music, examination answers).

Examples of plagiarism:

- directly copying a sentence, phrase or paragraph from another source, whether published or unpublished, without quotation marks and referencing
- paraphrasing another source by simply changing a few words without referencing it
- copying other students
- submitting the work of others
- using another person's ideas and claiming them as your own.

This includes:

- another student's assignment
- textbooks
- material purchased from essay banks etc
- a newspaper or magazine article
- an extract from a television or radio programme, a piece of music or other type of media
- web pages
- your own work, which has previously been submitted for assessment, either at Canterbury College or elsewhere, without acknowledging that the work has been so submitted.

If you quote from any source, it must be referenced in your work and in the bibliography.

The University of Kent provides information on the avoidance of plagiarism at <http://www.kent.ac.uk/uelt/ai/students/avoidingplagiarism.html>

The rules of the University of Kent are contained in the Credit Framework/Annex 10 – Academic Discipline Procedures which can be found at: <http://www.kent.ac.uk/uelt/quality/credit/creditinfoannex10.html>.

The Procedures identify that: "It should be noted that the University regards plagiarism a strict liability offence and so does not require evidence of intent to commit plagiarism in order to determine that an offence has occurred.

The University makes information about the definition and seriousness of plagiarism offences available to students and it is the responsibility of the student to consider this carefully. Lack of understanding on behalf of the student will not be considered acceptable grounds in response to an allegation of plagiarism or when appealing a penalty imposed under the academic discipline procedures.

The identification of plagiarism is an academic judgement, based on a comparison across the student's work in general, and/or on knowledge of the sources, of practice in the discipline and of expectations for

professional conduct. The Chair of the School Disciplinary Committee, or the Committee itself, may therefore determine that plagiarism has taken place even if the source has not been identified.”

The University policy on the penalties to be imposed are contained in Section 2 of the Academic Discipline Procedures. “Where a student is considered to be in breach of Regulation V.3, the penalties to be imposed should be in accordance with the following guidelines.

Plagiarism/Duplication of Material

Where the work contains a component of plagiarised or duplicated material, but also contains sufficient evidence that the student has satisfied the requirements to Pass, either:

- Cap the mark for the piece of work at a minimum Pass; or
- Allocate a reduced final mark for the module overall proportionate to the offence, subject to a minimum mark of a minimum Pass, and return a mark for the piece of work based on the portion which is not plagiarised or duplicated.

Where the work contains a component of plagiarised or duplicated material which casts doubt on whether the student has satisfied the requirements to Pass, return the appropriate fail mark for that portion of the coursework that is un-plagiarised.

The maximum penalty that may be applied by a Chair for an uncontested minor offence will be a mark of zero for the piece of work in question.

Where the application of a penalty for a minor offence results in the failure of a module, students will be permitted to resubmit at the next available opportunity (and no sooner) as per normal resit rules. For serious, substantial or repeat offences: termination of registration/ineligible for award or to resit examinations. (More information can be found at:

<http://www.kent.ac.uk/uelt/quality/credit/creditinfoannex10.html>)

Cheating includes the following:

- using unauthorised notes or devices in an examination
- obtaining an unauthorised copy of an examination paper
- communicating, or trying to communicate, with another student during an examination
- being party to an impersonation in relation to an assignment or examination
- copying from other students
- soliciting work from others (e.g. individuals, essay banks etc)
- fabrication or falsification of information, data, sources, analysis etc
- submitting work previously assessed on a different module or programme.

Section 2 of the University of Kent Academic Discipline Procedures contain the details of the penalties that may be imposed where a student is found to have cheated.

The University of Kent has produced a guide to Academic Integrity to assist students and this is available on the University website (<http://www.kent.ac.uk/uelt/ai/>) You are recommended to familiarise yourself with it.

Referencing and the Harvard System

Referencing is a fundamental part of the academic process. You will be expected to use each module's reading list to focus your research for essays and assignments. You will gather information, evidence and authors' views and use this to support your written work. Everything that you use that is taken from another authors work should be referenced, whether the work is directly quoted, disambiguated, paraphrased or summarised.

The Harvard System is a way of acknowledging the writings, ideas and data of another person. The System requires absolute compliance with the rules of referencing, every reference should comply precisely with the form specified for each type of information. Although most Universities and Colleges use the Harvard Reference System the exact details of how the references should be written vary with every institution. You must ensure you follow the Canterbury College rules (below) in respect of your references.

A Harvard System reference should contain sufficient detail to identify the source and exact location of the information used. Learning to research, evaluate and use a number of varying sources of information is an extremely important aspect of studying at Higher level. Using references shows that you have undertaken research into your subject and considered the theory relevant to your area of study. Perhaps most importantly it gives credit to others for their work, which if it were not given would amount to plagiarism.

It is essential that you properly reference all your work:

- To avoid plagiarism
- To support arguments and give justification
- To demonstrate depth and breadth of your reading, knowledge and understanding
- To allow tracing of original work

Referencing is a very important skill for you to learn. Not only does it make your work look professional, but it also gives it credibility. It is considered when the work is assessed.

The Harvard System

The Harvard System requires you to reference each item of information in two places. Once in the text itself and once at the end of the work in a reference list. The information contained at each location must be consistent and written exactly as the examples below. This includes exact reproduction of capital letters, italics, brackets, spaces and (text) case.

A reference list must be added to your essays and written work. The list should be titled References. Some students like to add a list of all the sources they have referred to whilst studying but not used in the work. This is called a Bibliography. The two should not be confused, a reference list is mandatory, a bibliography optional. Even if you complete a bibliography this must be preceded by a reference list.

Remember the Harvard System requires you to reference twice, once in the text and once in the reference list. The next section is split into citing in the text and citing in the reference list to help you to identify what information should be included for each type of reference and to show you the way that information must be presented.

Citing in the text

a) Direct quotation

If you are using a direct quotation you must identify the page number/s after the date within brackets. Abbreviations are page (p.), pages (pp.).

Example

"These resting times provide periods for reflection and permit time for new things to be learned, mastered and brought to fruition" (Jones, 1999 pp.122-3).

b) General ideas and issues

When referring to the ideas, evidence or issues of another you must show in the text the author and date of publication. If the name is a part of your sentence, then the date in brackets follows the name:

The work of Preece (1998) was concerned to emphasise the importance of quality in social research.

If the name is not a part of your sentence, then the name and date go into the brackets:

There is some evidence this is true (Preece, 1998).

This must be done at each point in your work that you refer to a particular idea or view or issue.

If more than one author is involved: In the book by Smith and Jones (2010) Mexico is found to be a prime example of.....

If in one piece of work you are referring to more than one document was published in the same year by the same author, use a lower-case letter after the date.

Example: The CBI (1999a) which has been very influential in raising the public profile of guidance, has itself adopted three very different positions on this matter. It is significant that the CBI (1999b) generally argued the classic liberal case for individual choice in the education training market in its report Towards a Skills Revolution.

c) Multiple authors

In the case of four or more authors of a text, state the first author followed by 'et al'.

Example

Matlock J et al. (2001)

If more than one source identifies the same information then all the sources can be identified in brackets: This is strong evidence that sugar leads to tooth decay (Smith, 1999; Pearce, 2001; Davies, 2006).

d) Secondary Referencing

Secondary referencing is not good research, you should always try to read from the original source. However, if you use a reference where an author is quoting or using information from another then you should show the original author as well as the location you are referencing: (Piaget, 2003 cited in Armitage et al. 2009 p.21).

e) Online sources

If you are using a web page or other electronic source then the author and year should be shown in the brackets, not the web page address. For example: The Home Office (2010) identify that...

f) Omitting some of the text

When using a direct quote you may want to omit a part of a sentence. You can do this using three dots ... For example: "This can be caused by processes, theory development ... and over use." (Jones, 1999 p.5).

g) Placing quotes in the text

Your quotations should be concise and used sparingly. Short quotations (no more than 2 lines) can be added to your text directly in speech marks. Longer quotations should be entered in a separate paragraph, indented with increased margins on the left and right of the page.

Smith (1999 p.79) Makes it clear that the management are "in control of aspects of the programme."

“The evidence is quite clear, all the indicators identify the same general message that the management of the initiative are very much in control of aspects of the programme. They may be successful in delivering all the planned benefits and outcomes.” (Smith, 1999 p.79)

Citing in the Reference List (at the end of your text)

When completing your reference list, you should follow these rules:

List in alphabetical order by author's surname

Show the year of publication, not the first published date

Show the title in italics

Enter the place of publication as well as the publishers

Do not enter page numbers for books by one author

Do enter page numbers for sections in journals or books containing multiple chapters by different authors

You will find these details on the title page and publisher page (on the reverse of the title page) in the book

Examples

a) Book with one author

Hughes, R. (2000) *The Shock of the New*. London: Thames & Hudson

b) Book with two authors

Hughes, R. and Smith, J. (2001) *The Shock of the New Revisited*. London: Thames & Hudson

c) An edited book

Mundy, J. ed (2002) *Surrealism Desire Unbound*. London: Tate Publishing

d) Book with several editors

Harrison, C. and Wood, P. eds (2002), *Art in Theory 1900-2000: An Anthology of Changing Ideas*. London: Blackwell Publishers

e) Journal article where the author(s) is known

Bennett, H. Williams, H. & Reid, S. (2000) *Through a glass darkly: images of appraisal*, *Journal of Teacher Development*, 4 (3) October, pp.39-46

f) Journal article where the author(s) is unknown

How dangerous is obesity?, (1997), *British Medical Journal*, No 7069, 28 April, p.1115

g) An Online Source

Many Web documents give an author, if so then the author's name should be used. If not, use the title as the main reference point as you would with any anonymous work.

Cite the date when you accessed the information. Internet based material might only be available for a short time and hence it is advisable to keep a personal copy as evidence that the information existed.

Smith, P. (2010) available at: <http://www.homeoffice.gov.uk/crime/alcohol-licensing/> (Accessed 24 July 2010).

Home Office (2010) available at: <http://www.homeoffice.gov.uk/crime/alcohol-licensing/> (Accessed 24 July 2010).

h) A Computer Database

Peter, J. M. & Courtenay, G. (1998) Youth cohort study [computer file], ESRC Data Archive

i) A Television Programme

Eastenders. (2010). BBC 1, 28 July 2010.

j) Film & Video

Now Voyager, (1942), Directed by Irving Rapper, New York, Warner [Film: 35mm]

Panorama, (2003), All work and no play, BBC, 21 January [video: VHS]

It is important to bear in mind the needs of those reading your work. In the case of audio-visual sources, they are not only going to need as much information as possible to trace the recording but they may also need to know the format if they are actually going to be able to play it back.

Where possible quote the format, such as VHS video; 85mm film etc.

For video it is important to include the transmission date, especially for series which are transmitted throughout the year.

Extenuating Circumstances

If you think your performance in an assignment has been affected by illness or by circumstances such as bereavement, you must put the information in writing along with any medical evidence from a GP or consultant, including independent evidence of the circumstances, as soon as possible. Forms should be obtained from Moodle and sent to your tutor 24hrs before assessment submission date, who will pass your claim to the Programme Leader for initial approval. It will then be presented to the Board of Examiners for final verification.

You should initially follow the normal rules of the college on late submission or extension if you have been unable to submit an assignment, before using the procedures for extenuating circumstances.

Please note it is your responsibility to supply the information 24hrs before assessment submission date. If you wait until after this date, your circumstances will not be considered unless there is an exceptional reason why you could not disclose them earlier. Unwillingness to make personal circumstances known is not a valid reason, unless the circumstances are quite exceptional. There is no stigma attached to having problems or illness. Do not be afraid to make these circumstances known; the information will only be shared with those people who need to know in order to make a decision on your case.

If you need advice or help with reporting your extenuating circumstances, you can contact the College Student Services.

(BI310) Ethology

1. **Title of the module**
BICC3100 (BI310) Ethology
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 4
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Investigate scientific principles in the study of animal behaviour
 2. Discuss the significance of adaptive behaviour
 3. Explain theories and concepts of social behaviour of animals
 4. Review key biological aspects of behaviour in animals
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate critical thinking skills
 2. Work with complex material
 3. Demonstrate communication and report writing skills
 4. Scan and organise data, abstract meaning from information and share knowledge with others
 5. Demonstrate effective self-management skills
10. **A synopsis of the curriculum**
This module introduces fundamental concepts in the study of animal behaviour, focusing on the behaviour of animals in natural situations. It will encourage the student to look beyond what they see animals doing, to consider the reasons for that behaviour through the use of the scientific principle. The module provides the foundation for an understanding of animal behaviour which is essential to anyone working within animal-related industry and forms the

basis for further study, not only of animal behaviour but of many other aspects of animal science and management.

The module principally examines natural animal behaviours that have helped the animal survive and have thereby evolved. A variety of aspects of the behavioural repertoire are explored, building an appreciation of the behaviour of animals in the wild, captive and domesticated states.

11. Reading list (Indicative list, current at time of publication. Reading lists will be published annually)

Clutton-Brock J (1999), *A Natural History of Domesticated Mammals*, 2nd ed, Cambridge University Press

Jensen P (2002), *The Ethology of Domestic Animals: an introductory text*, CABI

Grier J.W and Burke T (1994), *Biology of Animal Behaviour*, 2nd ed, McGraw-Hill Educational

McFarland D (1999), *Animal Behaviour*, 2nd ed, Longman Scientific and Professional

McGreevy P (2004), *Equine Behaviour: a guide for veterinarians and equine scientists*, Saunders

Mills D and Nankervis K (1999), *Equine Behaviour: Principles and Practice*, Blackwell Science

Serpell J (ed) (1995), *The Domestic Dog: its evolution, behaviour and interactions with people*, Cambridge University Press

Turner D.C. and Bateson P (eds) (2000), *The Domestic Cat: the biology of its behaviour*, 2nd ed, Cambridge University Press

12. Learning and teaching methods

Total contact hours: 45

Private study hours: 105

Total study hours: 150

13. Assessment methods

12.1 Main assessment methods

Report (2,500 words) - 50%

Written assignment (2,500 words) - 50%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	9 1	9 2	9 3	9 4	9 5
Learning/teaching method									
Private Study	x	x	x	x	x	x		x	x
<i>Lectures</i>	x	x	x	x	x	x			
<i>Seminars</i>		x	x		x	x		x	
<i>Workshops</i>	x			x	x	x		x	
Assessment method									
<i>Report</i>	x	x	x	x	x	x	x	x	x
<i>Assignment</i>	x	x	x	x	x	x	x	x	x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Ethology is practised globally. Students are encouraged to consider these issues in a range of animals across continents with an international perspective.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**

School of Bioscience

(BI311) Animal Husbandry

1. **Title of the module**
BICC3110 (BI311) Animal Husbandry
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 4
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Discuss the importance of practical competence in handling and restraining animals
 2. Differentiate between good and poor facilities for accommodating and transporting animals
 3. Explain the need for careful management of feeding
 4. Recognise and implement effective animal health management systems
 5. Assess care of animals to determine efficacy of husbandry and standards of animal management in practice
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate critical thinking skills
 2. Work with complex material
 3. Analyse problems and identify appropriate solutions
 4. Demonstrate communication and report writing skills
 5. Scan and organise data, abstract meaning from information and share knowledge with others
 6. Demonstrate effective self-management skills
 7. Use ICT effectively for presentations
10. **A synopsis of the curriculum**

Definitions of 'animal husbandry' vary but this module is essentially about the application of scientific principles in the care, welfare and management of a range of different animals. It is a highly practical module, since different methods and techniques in animal husbandry can only be effectively assessed through direct experience of them. Therefore this module will necessitate practical work to gain experience in handling and caring for a variety of species to achieve the learning outcomes. Companion, production, working, and captive animals, along with exotic species, will be studied. Health and safety is obviously an important consideration in this module, and should any student not meet the health and safety requirements for practical work in relation to particular animals or tasks, alternative means of achievement of learning outcomes will be provided.

11. Reading list (Indicative list, current at time of publication. Reading lists will be published annually)

Brooman S and Legge D, *Law Relating to Animals*, British Small Veterinary Association (1996)
 Biotechnology and Biological Sciences Research Council, *Science and Animal Welfare* (2002)
 Campbell J et al, *Animal Sciences – The Biology, Care and Production of Domestic Animals*, 4th edition, McGraw-Hill (2002)
 Clough C and Kew B, *The Animal Welfare Handbook*, Fourth Estate (1993)
 Enbank R et al, *Management and Welfare of Farm Livestock*, UFAW Farm Handbook (2011)
 Fraser A F and Broom D M, *Farm Animal Welfare & Behaviour*, CAB International (1997)
 Mahanta K C, *Handbook of Animal Husbandry*, Ormsons Publications (1998)
 Meredith A and Redrobe S, *BSAVA Manual of Exotic Pets*, BSAVA, (2002)
 Parvord M and Pavord T, *Handling and Understanding the Horse*, Swan Hill (1999)
 Rollin B E, *Farm Animal Welfare*, Blackwell Publishing (1999)
 Waran N, *The Welfare of Horses*, Kluwer Academic (2002)
 West G (ed), *Blacks Veterinary Dictionary*, A & C Black (1995)

12. Learning and teaching methods

Total contact hours: 60

Private study hours: 90

Total study hours: 150

13. Assessment methods

12.1 Main assessment methods

Written assignment/practical (3,000 words) - 100%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	8 5	9 1	9 2	9 3	9 4	9 5	9 6	9 7
Learning/teaching method												
Private Study	x	x	x				x	x		x	x	
Lectures	x	x	x	x	x		x	x		x		
Seminars	x					x	x	x	x	x		
Workshops	x	x		x	x	x	x	x	x	x		
Assessment method												
Assignment	X	X	X	X	X	X	x	x	x	x	x	x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Students are encouraged to take other global viewpoints on animal husbandry and interact with other international and intergovernmental organisations to utilise or influence international connections, networks and agreements where animals are kept in captivity.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**

School of Biosciences

(BI312) Anatomy and Histology

1. **Title of the module**
BICC3120 (BI312) Anatomy and Histology
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 4
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Describe the structure of the locomotor system and the means by which movement is achieved in animals
 2. Explain the components and structure of the cardiovascular and lymphatic systems
 3. Describe and compare the anatomy and histology of the respiratory, digestive and urinary systems in a range of animal species
 4. Discuss neuroanatomy and aesthesiology in a range of animal species
 5. Describe the anatomy of the male and female reproductive systems
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate critical thinking skills
 2. Work with complex material
 3. Analyse problems and identify appropriate solutions
 4. Demonstrate communication and report writing skills
 5. Scan and organise data, abstract meaning from information and share knowledge with others
 6. Demonstrate effective self-management skills

10. **A synopsis of the curriculum**

This module introduces the anatomy of various animal species at the gross and microscopic (histological) level. The student will investigate the general arrangement of the body's organ systems, in particular the locomotor, cardiovascular, lymphatic, respiratory, digestive, urinary, nervous, sensory and reproductive.

11. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Budvas K-D, *Anatomy of the Dog: an illustrated text*, Maron Publishing (2003)

DeLaHunta A., *Guide to the Dissection of the Dog*, W B Saunders Co (2004)

Goody P, (2000) *Horse Anatomy: A Pictorial Approach to Equine Structure*, J.A. Allen & Co Ltd

Kent G, *Comparative Anatomy of Vertebrates*, McGraw Hill Education (2000)

Loving NS, Wagoner DM (eds), (1993) *Veterinary Manual for the Performance Horse*, Equine Research Publications

McCracken T O (ed.), *Spurgeon's Color Atlas of Large Animal Anatomy: The Essentials*, Lipponcott Williams and Wilkins (1999)

Sack W, Wensing CJG, Dyce K M, *Textbook of Veterinary Anatomy* (2nd edition preferred), W B Saunders Co

Sack W., *Textbook of Vet Anatomy*, W B Saunders Co (2002)

12. **Learning and teaching methods**

Total contact hours: 60

Private study hours: 90

Total study hours: 150

13. **Assessment methods**

12.1 Main assessment methods

Time constrained assessment – 33%

Time constrained assessment – 33%

Time constrained assessment – 34%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	8 5	9 1	9 2	9 3	9 4	9 5	9 6
Learning / teaching method											
Private Study	x	x	x	x	x	x	x	x		x	x
Lectures	x	x	x	x	x	x	x	x			
Seminars	x	x		x		x	x	x	x	x	
Workshops			x		x	x	x	x	x		
Assessment method											
TCA x 3	x	x	x	x	x	x	x	x	x	x	x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Anatomy and Histology is practised globally within many different programmes, both human and animal. Latin terminology is used in science globally to identify anatomical structures allowing ease of recognition and networking. Many different species across the world are discussed within this module.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**

School of Biosciences

(BI524) Introduction to Conservation

1. **Title of the module**
BICC5240 (BI524) Introduction to Conservation
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 5
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Evaluate relationships between living organisms and their environments, and discuss concepts of genetic diversity
 2. Demonstrate critical understanding of the principal threats currently facing wildlife and the environment
 3. Critically evaluate the main strategies utilised to try to avert these threats and the extent to which they are successful.
 4. Identify key UK conservation organisations and evaluate their roles and how they achieve their goals.
 5. Explain the role of legislation and discuss sustainable development in conservation.
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate critical thinking skills
 2. Analyse problems and identify appropriate solutions
 3. Utilise resources effectively
 4. Demonstrate communication and report writing skills
 5. Demonstrate effective self-management skills

10. **A synopsis of the curriculum**

This module aims to provide students with the key knowledge and understanding of conservation concepts and strategies that need to be applied to endangered species and environments. Specific examples will be assessed.

It considers the major factors affecting loss of habitats and species extinction nationally and internationally and evaluates the steps that are being taken to try and limit the losses.

The module will include:

- ◆ Relationships between living organisms and their environments, concepts of genetic diversity
- ◆ Species habitat requirements and habitat loss, locally and globally
- ◆ Extinction and rarity, endangered species, invasive and introduced species
- ◆ Over-exploitation of natural resources
- ◆ Ethical and legal issues and considerations, policies and legislation
- ◆ Governmental and non-governmental conservation organisation and bodies, examine current species conservation action plans and programmes
- ◆ Measure to promote conservation, including protected areas, captive breeding, species reintroduction and conservation education
- ◆ Guest speakers and field visits such as to local nature reserves for examples of practical conservation management techniques.

11. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Biodiversity Group Report, *Sustaining the Variety of Life - Five Years of the UK Biodiversity Action Plan*, DEFRA (2002)

Meffe G K and Carroll C R, *Principals of Conservation Biology*, 2nd edition, Sinauer (1997)

McKee J K, *Sparing Nature - The Conflict between Human Population Growth and Earth's Biodiversity*, Rutgers University Press (2003)

McNeely J A and Scherr S J, *Ecoagriculture - Strategies to Feed the World and Save Wild Biodiversity*, Island Press (2002)

Oldfield, S (ed), *The Trade in Wildlife – Regulations for Conservation*, Earthscan (2003)

Pullins A S, *Conservation Biology*, Cambridge University Press (2002)

Williams B et al, *Analysis and Management of Animal Populations*, Academic Press (2002)

12. **Learning and teaching methods**

Total contact hours: 45

Private study hours: 105

Total study hours: 150

13. **Assessment methods**

12.1 Main assessment methods

Assignment (2,500 words) - 50%

Time constrained assignment - 50%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	8 5	9 1	9 2	9 3	9 4	9 5
Learning/teaching method										
Private Study	x	x	x	X	x	x	x	x	x	x
Lectures	x	x	x	X	X	x	x	x		
Seminars		x			X	x	x	x	x	
Workshops	x				X	x	x	x	x	
Assessment method										
Essay	x	x	x	x	x	x	x	x	x	x
TCA	x	x	x	x	x	x	x			x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Conservation and ecology engages individuals, local communities, state governments, nongovernmental organisations, and international organisations. There has been tremendous, accelerating increase in interaction among all participants across the international arena, significant consideration has been paid to how to conceptualise cultural heritage. This is debated throughout the module.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**

School of Biosciences

(BI314) Animal Health and Disease

1. **Title of the module**
BICC3140 (BI314) Animal Health and Disease
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 4
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Recognise signs of animal health and disease and be able to employ appropriate clinical terminology
 2. Describe the transmission and clinical presentation for a number of diseases important in animal health
 3. Discuss methods used in the diagnosis, treatment, prevention and control of a range of animal diseases
 4. Explain the importance of chemotherapy and pharmacology in animal health
 5. Discuss legislation and corresponding measures pertinent to animal health and disease
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate critical thinking skills
 2. Work with complex material
 3. Analyse problems and identify appropriate solutions
 4. Demonstrate communication and report writing skills
 5. Scan and organise data, abstract meaning from information and share knowledge with others
 6. Demonstrate effective self-management skills

10. **A synopsis of the curriculum**

This module develops the student's understanding of animal health and those factors and agents that lead to disease. The module begins with a consideration of what animal health is and then reviews the terminology used in describing animal health and disease. The causal agents of disease, disease transmission, clinical signs and diagnosis are then reviewed. Methods used in the control and prevention of disease and the importance of chemotherapy and pharmacology are explored. Current legislation in animal health and the roles and responsibilities of the practitioner are reviewed in the final part of the module, with consideration of relevant ethical and animal welfare issues.

11. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Brander, Pugh et al, *Veterinary Applied Pharmacology and Therapeutics* (1991), Bailliere Tindall

Boden (ed), *Black's Veterinary Dictionary* (2001), A & C Black

Line & Kahn (eds), *The Merck Veterinary Manual* (2005), Merck Publications

12. **Learning and teaching methods**

Total contact hours: 60

Private study hours: 90

Total study hours: 150

13. **Assessment methods**

12.1 Main assessment methods

Presentation and written assignment - 50%

Written assessment (3,000 words) - 50%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	8 5	9 1	9 2	9 3	9 4	9 5	9 6
Learning/teaching method											
Private Study	x	x	x	x	x	x	x	X		x	x
<i>Lectures</i>	x	x			x	x	x			x	
<i>Seminars</i>	x	x	x	x	x	x	x		x	x	
<i>Workshops</i>	x		x			x	x		x	x	
Assessment method											
<i>Presentation and written assignment</i>	x	x	x	x	x	x	x	x	x	x	x
<i>assignment</i>	x	x	x	x	x	x	x	x	x		x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Health and Disease in animals is a global issue. Analysing of the causes and processes of infectious conditions is very important health issue across the world. Students are encouraged to consider these issues in a range of international perspectives including welfare, ethics relating to different cultures, laws and religions. Students will be expected to understand that global zoonotic diseases is a huge cause of decline of both animals and people from different communities worldwide. Important research carried out globally will be considered throughout the delivery.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**
School of Biosciences

(BI315) Principles of Cell Biology

1. **Title of the module**
BICC3150 (BI315) Principles of Cell Biology
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 4
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Identify the fundamental scientific principles important to living organisms and describe how they can be demonstrated through practical investigation
 2. Investigate the structure and function of cells
 3. Describe the processes of cell reproduction
 4. Discuss the levels of cellular organisation in animals
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 6. Demonstrate critical thinking skills
 7. Work with complex material
 8. Work and study independently and utilise resources effectively
 9. Demonstrate communication and report writing skills
 10. Scan and organise data, abstract meaning from information and share knowledge with others
 11. Demonstrate effective self-management skills

10. **A synopsis of the curriculum**

This module is designed to provide the fundamental principles that will enable the student to develop his or her understanding of other scientific disciplines related to Animal Science. The module explores the importance of the basic principles of chemistry and biology to living organisms, and develops the theme through understanding the structure and function of cells, the mechanisms by which cells reproduce, and how cells are organised into tissues, organs and organ systems.

11. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Alberts B *et al*, *Molecular Biology of the Cell*, Garland (1994)

Enger E D and Ross F C, *Concepts in Biology*, 10th edition, McGraw-Hill (2003)

Grabowski K M and Tortora, G J, *Principles of Anatomy and Physiology*, Harper Collins (1996)

Hickman C P and Roberts, L S, *Integrated Principles of Zoology*, 11th edition, McGraw-Hill, (2000)

Johnson G B, *The Living World*, McGraw-Hill (2003)

Lodish H *et al*, *Molecular Cell Biology*, Freeman (1999)

Pullin A S, *Conservation Biology*, Cambridge University Press (2002)

Purves W K (ed), *Life, The Science of Biology*, 6th edition, W H Freeman (2001)

Reece W O, *Physiology of Domestic Animals*, Lea and Febiger (1997)

Senior K, *Biology*, 2nd edition, Harper Collins (2002)

12. **Learning and teaching methods**

Total contact hours: 60

Private study hours: 90

Total study hours: 150

13. **Assessment methods**

12.1 Main assessment methods

Assignment (2,000 words) - 25%

Assignment (3,000 words) - 50%

Time Constrained Assignment - 25%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	9 1	9 2	9 3	9 4	9 5	9 6
Learning/teaching method										
Private Study	x	x	x	x	x	x	x		x	x
Lectures	x	x	x	x	x	x			x	
Seminars			x	x	x	x		x	x	
Workshops	x	x			x	x		x	x	
Assessment method										
Assignment x 2	x	x			x	x	x	x		x
Examination			x	x	x	x	x		x	x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Cell biology is practised globally within many different programmes, both human and animal. Latin terminology is used internationally to identify anatomical structures of the cell, allowing ease of recognition and networking with other international science departments and organisations.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**

School of Biosciences

(BI316) Animal Nutrition

1. **Title of the module**
BICC3160 (BI316) Animal Nutrition
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 4
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Explain the chemical composition and roles of macro and micronutrients
 2. Examine the principles of food analysis
 3. Determine and meet the nutritional requirements of a range of animals
 4. Explain the role of nutrition in health and diet-related diseases
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate decision making skills
 2. Demonstrate critical thinking skills
 3. Work with complex material
 4. Demonstrate communication and report writing skills
 5. Scan and organise data, abstract meaning from information and share knowledge with others
 6. Demonstrate effective self-management skills
10. **A synopsis of the curriculum**
A sound knowledge of theoretical as well as practical aspects of nutrition is essential to ensure the health and welfare of animals. This module is concerned with the nutrition of companion, collection and commercial animals. It focuses upon the physical and chemical properties of dietary constituents and the application of this information to ration formulation. The methods

commonly used for the analysis of foodstuffs and their limitations to the nutritionist will be examined. It will promote an awareness of the dietary needs of a variety of species and of the range of factors that are important in designing a feeding regime. Factors affecting the nutritional requirements of a range of animals will be investigated and the effects of not meeting an animal's requirements, in terms of health, will be discussed.

11. Reading list (Indicative list, current at time of publication. Reading lists will be published annually)

Adams C A, *Total Nutrition – Feeding Animals for Health and Growth*, Nottingham University Press (2002)

Agar S, *Small Animal Nutrition*, Butterworth-Heinemann (2001)

Cheeke P R, *Applied Animal Nutrition – Feeds and Feeding*, 2nd edition, Prentice Hall (1998)

D'Mello J P F (ed), *Farm Animal Metabolism and Nutrition*, CABI (2000)

D'Mello J P F (ed), *Amino Acids in Animal Nutrition*, CABI (2003)

Edney A T B, *The Waltham Book of Dog and Cat Nutrition*, Pergamon (1998)

Kellems R O and Church D C, *Livestock Feeds and Feeding*, 5th edition, Prentice Hall (2001)

Perry T W, Cullison A E and Lowrey R S, *Feeds and Feeding*, 6th edition, Prentice Hall (2002)

Pond W G, Church D C and Pond K R, *Basic Animal Feeding and Nutrition*, Wiley (1995)

McDonald P, Edwards R A, Greenhalgh J F D and Morgan C A, *Animal Nutrition*, 5th ed, Longman (1998)

Ministry of Agriculture Fisheries and Food, *Feed Composition - UK Tables of Feed Composition and Nutritional Value for Ruminants*, HMSO

Ministry of Agriculture Fisheries and Food, *Feeding Stuffs Regulations*, HMSO

Wills J M and Simpson K W, *The Waltham Book of Clinical Nutrition of the Cat and Dog*, Pergamon (1994)

12. Learning and teaching methods

Total contact hours: 60

Private study hours: 90

Total study hours: 150

13. Assessment methods

12.1 Main assessment methods

Written report (1,500 words) - 50%

Participation in Debate - 25%

Time Constrained Assignment - 25%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	9 1	9 2	9 3	9 4	9 5	9 6
Learning/teaching method										
Private Study	x			x		x	x		x	x
Lectures	x	x		x		x	x			
Seminars	x			x	x	x	x	x	x	
Workshops		x	x		x	x	x	x	x	
Assessment method										
Debate					x		x	x	x	x
Report	x	x	x	x	x	x	x	x	x	x
TCA	x	x	x	x	x	x	x		x	x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Globalisation and changes in socio-economic and cultural patterns in most countries of the world have made animal welfare an international issue. Increase in trade, concerns about disease and feeding have considerable influences on animal nutrition. Students are encouraged to research this subject area closely with internationalism in mind.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**

School of Biosciences

(BI317) Applications of Animal Science

1. **Title of the module**
BICC3170 (BI317) Applications of Animal Science
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 4
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND/C Applied Animal Science
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Describe key scientific principles as they relate to animals
 2. Discuss how scientific principles can be applied in animal industries
 3. Investigate the extent to which science is applied in animal industries
 4. Examine the key criteria for commercial effectiveness in a range of animal related industries and organisations
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate critical thinking skills
 2. Work with complex material
 3. Work and study independently and utilise resources effectively
 4. Demonstrate communication and report writing skills
 5. Demonstrate effective self-management skills
10. **A synopsis of the curriculum**
This module is designed to promote students' understanding of the broad principles of science, and how the application of scientific knowledge and understanding to animal related organisations can improve the care and management of animals. Progression through the module will encourage students to appreciate what science is in its widest context, and investigate through practical assessment of a range of different organisations the differences

between practices that have been developed through tradition or trial and error and those that are based on scientific understanding. Ultimately students will develop this understanding to assess the effect of the application of science on the commercial viability of animal organisations.

11. Reading list (Indicative list, current at time of publication. Reading lists will be published annually)

Agar S (2001), *Small Animal Nutrition*, Butterworth-Heineman
 Andrews C et al (2003), *Interpet Manual of Fish Health*, Interpet Publishing
 Appleby M (1999), *What should we do about animal welfare?* Blackwell Science
 Chaston I and Mangles T (2002), *Small Business Marketing Management*, Palgrave
 Hughes V and Weller D (2003), *Setting Up a Small Business*, Teach Yourself
 Mahanta K C (1998), *Handbook of Animal Husbandry*, Ormsons Publications
 Moore M (1999), *BSAVA Manual of Veterinary Nursing*, BSAVA
 Reuid J and Millar R (2003), *Start Up and Run Your Own Business*, Kogan Page
 Rollin B E (1999), *Farm Animal Welfare*, Blackwell Publishing
 Sainsbury D (1998), *Animal Health*, Blackwell Science
 Stokes D (2002), *Small Business Management*, Continuum
 UFAW (1998), *Selection and use of replacement methods in animal experimentation*, UFAW
 UFAW (1990), *Guidelines on the care of laboratory animals and their use for scientific purpose; planning and design of experiments*, UFAW
 Waran N (2002), *The Welfare of Horses*, Kluwer Academic
 Williams S (2002), *Lloyds TSB Small Business Guide*, Press Vitesse

12. Learning and teaching methods

Total contact hours: 45
 Private study hours: 105
 Total study hours: 150

13. Assessment methods

12.1 Main assessment methods

Assignment/Poster (1,500 words) - 50%
 Assignment (1,500 words) - 50%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	9 1	9 2	9 3	9 4	9 5
Learning/teaching method									
Private Study	x	x	x	x	x	x	x	x	x
Lectures	x	x		x	x	x			
Seminars	x	x			x	x		x	
Workshops			x		x	x		x	
Assessment method									
Assignment x 2	x	x	x	x	x	x	x	x	x

15. **Inclusive module design**

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The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- Accessible resources and curriculum
- Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Globalisation and changes in socio-economic and cultural patterns in most countries of the world have made animal welfare and research an international issue. Increase in trade, concerns about disease, transportation, use of laboratory animals, husbandry and feeding have considerable influences on animal sciences. Students are encouraged to consider these issues in a range of international perspectives including welfare, ethics relating to different cultures, laws and religions.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**

School of Biosciences

(BI331) The Conservation of Global Biodiversity

1. **Title of the module**
BICC3310 (BI331) The Conservation of Global Biodiversity
2. **School or partner institution which will be responsible for management of the module**
School of Biosciences/East Kent College Group
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 5
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn & Spring & Summer
6. **Prerequisite and co-requisite modules**
None
7. **The programmes of study to which the module contributes**
HND Animal Biology and Wildlife Conservation
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 1. Demonstrate a critical understanding of the principles of the conservation of global biodiversity
 2. Demonstrate understanding of the value of global biodiversity as a resource
 3. Demonstrate understanding of the impact of production, trade and biotechnology and factors that may threaten global biodiversity
 4. Demonstrate understanding of the efficacy of legal and practical measures to conserve global biodiversity.
9. **The intended generic learning outcomes.**
On successfully completing the module students will be able to:
 1. Critically analyse information and utilise the results of that analysis
 2. Apply underlying concepts and principles in a different context from which they were first studied
 3. Demonstrate numeracy and quantitative skills
 4. Use established techniques to undertake critical analysis and propose solutions to problems
 5. Exercise sound judgement

10. **A synopsis of the curriculum**

Indicative Content:

- Mechanisms by which biotic diversity is generated and benefits that are associated with increased biodiversity
- Appreciation of the value of biodiversity as a resource in different environments including marine and island biodiversity
- Understanding of the phenomenon of biodiversity and the factors that promote and threaten it.
- Understanding of theoretical frameworks from which to assess the significance of local, national and international developments on the world's biodiversity law and the ethical and moral constraints that potentially impact on animal management
- Historical overview of principles and practices which have contributed to our contemporary viewpoint
- Global practical conservation schemes

11. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Biodiversity Group Report, (2002) *Sustaining the Variety of Life - Five Years of the UK Biodiversity Action Plan*, DEFRA

Jepson (2010) *Conservation a Beginners Guide* Oneworld Publications

Groom M J, Meffe G K and Carroll C R, (2012) *Principals of Conservation Biology*, 3rd Revised Edition Sinauer

McKee J K, (2003) *Sparing Nature - The Conflict between Human Population Growth and Earth's Biodiversity*, Rutgers University Press

McNeely J A and Scherr S J, (2002) *Ecoagriculture - Strategies to Feed the World and Save Wild Biodiversity*, Island Press

Oldfield, S (ed) (2013) *The Trade in Wildlife – Regulations for Conservation*, Routledge

Pullins A S, (2002) *Conservation Biology*, Cambridge University Press

Spicer J (2006) *Biodiversity* Oneworld Publications

Williams B et al, (2002) *Analysis and Management of Animal Populations*, Academic Press

12. **Learning and teaching methods**

Total contact hours: 45

Private study hours: 105

Total study hours: 150

13. **Assessment methods**

12.1 Main assessment methods

Essay (3,000 words) - 50%

Time constraint assessment - 50%

13.2 Reassessment methods

Like for like

14. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)**

Module learning outcome	8 1	8 2	8 3	8 4	9 1	9 2	9 3	9 4	9 5
Learning/teaching method									
Private Study	x	x	x	x	x	x	x	x	x
Lectures	x	x	x	x	x	x	x	x	x
Seminars	x	x	x	x	x	x	x	x	x
Workshops					x	x	x	x	x
Assessment method									
Essay	x	x	x	x	x	x	x	x	x
TCA	x	x	x	x	x	x	x	x	x

15. **Inclusive module design**

The Partner Institution recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

- a) Accessible resources and curriculum
- b) Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury College

17. **Internationalisation**

Conservation of global biodiversity is practised globally, including welfare, ethics relating to different cultures, laws and religions. Important factors include: non-native wildlife species, invasive species, climate change and its effects on the environment, local communities and wildlife. These areas are delivered and debated on throughout the module. Students are encouraged to consider these issues in a range of international perspectives. The module establishes and encourages respect for global biodiversity related to national and international concerns and facilitates the enhancement of knowledge of global legislation and its application, enforcement and effectiveness internationally.

18. **Partner College/Validated Institution**

East Kent College Group

19. **University School responsible for the programme**
School of Biosciences

Disclaimer:

Module Information is correct at time of press but may be liable to change. If this happens you will be notified in class and on the VLE at the earliest opportunity.

Additional Information:

College Policies:

Information on College policies is available on the EKC Group website (<http://www.ekcgroup.ac.uk/index.php/policies>) with further details provided in the Student Handbook. Please speak to your Programme Leader as well if you have any particular questions about the assessment board process (where your marks are agreed), late submission of work, referrals and resubmissions, extenuating circumstances, complaints and appeals.

Those relevant to our awarding body, the [University of Kent](http://www.uk.ac.uk), are available on their website.