

# School of Sport, Equine and Animal Sciences





## Equine Studies and Science

- BSc (Hons) Equine Studies (with Award)
- BSc (Hons) Equine Studies and Business Management
- BSc (Hons) Equine Science (with Award)
- BSc (Hons) Equine Breeding and Stud Management
- BSc (Hons) Equine Sports Therapy
- BSc (Hons) Human and Equine Sports Performance
- Certificate of Continuing Education in Equine

## Animal Science and Management

- BSc (Hons) Animal Management
- BSc (Hons) Animal Management (with Award)
- BSc (Hons) Animal Science
- BSc (Hons) Animal Science (with Award)
- FdSc Animal Management
- FdSc Animal Science
- Diploma of Higher Education in Animal Management
- Higher Certificate Animal Studies

## Sports and Exercise Performance

- BSc (Hons) Sports and Exercise Performance
- BSc (Hons) Sports and Exercise Performance (with Award)





The equine and animal industries are very diverse and offer a wide range of careers in a large number of ancillary organisations including government agencies and nutrition and pharmaceutical companies, as well as in marketing, retailing and journalism.

## Equine and Animal Science

Employers today are seeking well-trained, professionally qualified staff who are able to relate scientific theory to practical situations.

Writtle's graduates have a proven track record in securing exciting and challenging positions in all sectors of the equine and animal industry, both at home and abroad, in vocational and commercial situations. Employers clearly recognise the benefits of courses which combine the development of practical competence with commercial awareness and academic ability.





College teaching staff are highly regarded within the industry, with several members of the team involved with research and consultancy activities for key organisations such as the British Equestrian Federation and all associated disciplines, British Breeding, the British Horse Society, the Animal Health Trust, the Royal Veterinary College, Natural England, Dairy Co, the Animal Medicines Training Regulatory Authority (AMTRA) and the Department for Environment, Food and Rural Affairs (Defra). This results in students obtaining excellent contacts within the industry, with key figures regularly contributing to lecture programmes.

The College is also a member of the British Equine Trade Association. International exchanges are currently available with universities in the USA, Canada and Finland as part of the Honours and Foundation degree programmes. Writtle College works with a number of organisations to give students the best possible opportunities for employment and research, including Dengie Feeds, Ingatestone Saddlery Centre, Natural England, British Eventing, British Breeding, the British Equestrian Federation, the British Society of Animal Science, the British and Irish Association of Zoos and Aquariums, and the British Pig Executive. The College's proximity to Newmarket, and Colchester Zoo, as well as other notable international horse venues and animal collections, is maximised for the students' benefit.

It is likely that the 2012 Olympics being held in London will increase demand for graduates in the equine area. The College is an official training camp for equestrian teams for the London 2012 Olympics.

## Industrial placements

All students are offered the opportunity to complete an industrial placement. For Foundation degree courses, this is compulsory. Students may either complete a one-year placement in paid employment or a summer placement of at least 10 weeks between years 1 and 2 of a Foundation degree or at any stage of an Honours degree. Individual arrangements may be made as appropriate for those with existing employment experience.

## Equine & Animal course Open Days 2010 – 2011

For those students interested in the equine and animal courses who are not able to attend on one of the dates shown on page 7 and would like to make alternative arrangements to visit the College, please contact the Equine and Animal course Admissions Tutor.

Taster days for sixth form or college students can be arranged on request. For further details, please contact the Equine and Animal course Admissions Tutor.

**Jane Hart, Equine and Animal course  
Admissions Tutor**

Tel: +44 (0)1245 424200

Email: [equine@writtle.ac.uk](mailto:equine@writtle.ac.uk)

College Open Days are also held once a month from October to July.  
See page 7 for details.



Writtle College Equine Training & Development Centre provides an excellent teaching resource for practical stable management, equitation teaching, training and equine sports therapy.





## Equine resources

Writtle College Equine Training & Development Centre provides stabling for seventy horses and incorporates a range of stable design features. From April 2010, in addition to its existing 24 x 55 m indoor arena, the centre will have a second Olympic-size indoor school and a therapy barn to include solarium, equine hydrotherapy spa and various therapeutic modalities. The centre also has an outdoor all-weather arena, jumping paddock and cross-country course. These facilities provide an excellent teaching resource for practical stable management, equitation teaching, training and equine sports therapy. The centre is also equipped with a weighbridge, horsewalker and a mechanical horse, all used within the teaching of applied Equine Science modules.

The Equine Training and Development Centre also provides a 20-box student DIY livery yard. Students taking advantage of Writtle's DIY livery have use of all College facilities and the opportunity to compete in Riding Club and College-run events. The College runs BHS training courses, while Writtle Riding and Equestrian Club provides extra-curricular riding tuition, lectures, demonstrations, trips to major events and the chance to compete in BUSA equestrian team competitions.

Please note – due to the nature of horses at the College, students should weigh no more than 13 stone (82.5 kilos); non-riding stud options are available.

## The Lordships Stud

The well-established Lordships Stud is set on a picturesque 20-hectare site. The stud currently stands a Fell pony stallion on a permanent basis. During the course of the breeding season, the stud has a variety of competition stallions visiting on a regular basis. The yard houses approximately 40 animals at any one time. This includes a range of mares from native pony breeds to German- and Dutch-bred competition horses and eventers, with an equally diverse population of youngstock which are produced by students before being sold.

Its modern facilities provide an excellent backdrop for student training and the production of quality competition horses. Students are involved in all aspects of stud management and young horse production, from conception to sale. Specialist facilities at the stud include modern veterinary examination and semen collection areas, a semen analysis laboratory, ménage, an indoor school and foaling boxes with CCTV which can be accessed by students via a website. The stud's latest addition to its facilities is a brand-new Computer-Aided Sperm Analysis system, which is the first of its type in the country.

Both enterprises are used as an integral part of the teaching at Writtle. They provide valuable practical training for students on all Equine courses and facilities for grassland management teaching, youngstock training and production. The sites also record a wide range of realistic enterprise management data used by students studying Business Management modules via Stablemate database systems. The equine units are well resourced and are regularly used for the purpose of research into a wide range of areas, both by undergraduate/postgraduate students and outside commercial organisations such as pharmaceutical and feed companies, bedding manufacturers and stable equipment suppliers.

The College also has its own resident Equine Veterinary Surgeon who is actively involved in the management of horses, teaching of student practical classes and various research projects.

# Animal resources

## Lordship Science Centre

All the Animal Science and Animal Management courses involve significant study of anatomy, physiology, nutrition, health and breeding, which means that many classes take place in one of the specialised laboratories at the Lordship Science Centre. Studies are carried out using a variety of different examination and investigative methods, ranging from the use of fresh or preserved slide material to more specialised analysis techniques, especially in the case of degree students carrying out research for their dissertations.

## Animal Care Unit

The Animal Care Unit houses traditional companion species such as rabbits, guinea pigs and rodents, as well as more exotic animals including snakes, water dragons and geckos. The unit also accommodates yard animals such as goats, sheep, geese and ducks, making it an ideal facility for learning how to handle important husbandry management approaches and handle the challenges of different animal species. Once students are confident in their animal husbandry abilities, study at the unit becomes more specialised, focusing on the applied aspects of animal management – for example, housing and nutrition.



All the Animal Science and Animal Management courses involve significant study of anatomy, physiology, nutrition, health and breeding.





## The College farm

Farm livestock constitute a major sector within the animal industry. Practical classes at the College farm give students first-hand experience of cattle, sheep and pigs, while those interested in poultry will have access to a commercial unit off site. The farm animals are also used extensively for undergraduate research projects on topics such as health and welfare and animal behaviour.

## Conservation areas

The interaction of the animal (both wild and domestic) with its environment and species conservation are important components of all the Animal Science/Animal Management courses at Writtle College. Specific modules make good practical use of the many conservation areas found across the College estate, where students can observe examples of good practice and have the opportunity to study wild animals in their natural habitat.

To find out more about the undergraduate Animal courses at Writtle College, please contact:

**Jane Hart,**  
**Animal & Equine Admissions Tutor**  
Tel: +44 (0)1245 424200  
Email: [animal@writtle.ac.uk](mailto:animal@writtle.ac.uk)

## Centre for Equine and Animal Science (CEQAS)

One of the Centres of Innovation at Writtle College, CEQAS is developing a research and consultancy portfolio to capitalise on the expertise of academic staff and enrich the learning environment of students. The activities of CEQAS feed directly

into the curriculum and have provided numerous opportunities for students to complete assignments, case studies and dissertations based on ongoing work.

The work of CEQAS focuses around six themes: Fertility and Reproductive Performance, Animal Health and Nutrition, Behaviour and Welfare, Industry and Enterprise Development, Complementary Therapies and Ethnoveterinary Medicine, and Equestrian Sports Performance.

Current research and consultancy work includes the causes, detection and prevention of lameness in dairy cows, evaluation of semen quality, biomechanical dysfunction and treatment in horses and evaluation of equine sports performance.

CEQAS staff have presented papers and keynote addresses at numerous national and international conferences.



## Postgraduate

This School offers a number of postgraduate taught and research opportunities. The following courses are available at postgraduate level:

- MSc Equine Science
- MSc Animal Biology and Welfare
- MSc Animal Production and Nutrition
- MSc by Dissertation

For further information, visit:  
[www.writtle.ac.uk](http://www.writtle.ac.uk)



# Equine Studies and Science

## BSc (Hons) Equine Studies (with Award\*)

\*Please choose your specialist minor award from the next page



This course is designed to equip students with the knowledge, understanding and practical skills required to succeed in equine enterprises. It focuses on producing practical employees who can handle a variety of horses and understand the application of scientific theory relating to their safe, efficient and cost-effective production and use.

This programme covers all aspects of equine management. In year 1, students study husbandry skills at both the equitation and stud sites, to receive a good grounding in the essentials. In years 2 and 3, they must select either an equitation or a stud specialist strand.

Inclusion of current computer-based record management, data handling and design applications ensures that graduates are ready to enter a variety of roles in the equine industry, both in 'primary' situations and the ancillary trades, while three minor choices allow a specialist focus in Breeding and Reproduction, Behaviour and Nutrition, or Sports Horse Performance.

The minors follow a common first-year content of Mammalian Anatomy and Physiology and Equine Nutrition, with four subsequent modules specific to the selected specialism. Some modules are based on animals (rather than specifically horses) to enable wider comparison and debate.

The course is one of few equine degree courses which fully integrates practical work and students are encouraged to undertake additional external qualifications, such as BHS exams.

### Career prospects

Opportunities for those who complete the courses include groom, instructor or management roles in any equine practical situation including livery, competition and stud yards, and veterinary and rehab yards, as well as numerous 'secondary sector' jobs such as event, racecourse and competition venue managers; feed, tack and pharmaceuticals reps; equine goods manufacturing and distribution roles and positions in equine and animal welfare and charitable organisations.

### Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14-19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Equine Industry		Academic & Professional Development		Dissertation	
Husbandry Skills		Equitation & Coaching*	Training & Equestrian Enterprise Management*	Rider Fitness & Performance	Advanced Equitation
		or	or	or	or
Applied Equine Management		Youngstock Production*	Applied Stud Management*	Complementary Therapies	Equine Structural Development
		Applied Equine Technology	Grassland Science & Production	Current Issues in the Equine Industry	
Mammalian Anatomy & Physiology	Equine Nutrition	Choose award line below			

\*Any students taking husbandry skills will be expected to do yard duties.

### BSc (Hons) Equine Studies (Breeding and Reproduction)

Reproduction & Genetics	Equine Health Management	Equine Breeding Systems	Issues Facing the Stud Industry
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UCAS Code: D334 BRE

### BSc (Hons) Equine Studies (Behaviour and Nutrition)

Behaviour	Equine Performance Nutrition	Equine Feed Technology	Applied Behaviour & Animal Welfare
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UCAS Code: D334 BEH

### BSc (Hons) Equine Studies (Sports Horse Performance)

Exercise Physiology	Equine Health Management	Biomechanics	Equine Sports Medicine
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UCAS Code: D334 SPO

# BSc (Hons) Equine Studies and Business Management

This course aims to prepare students for a wide range of management careers within equine-based business and service organisations and the ancillary industry. On successful completion of the course, graduates will have a sound grasp of management issues, an understanding of the constraints within which decision making occurs and the problem-solving skills to identify solutions, contextualised to situations and enterprises related to horses. Additionally, they will be able to apply theoretical knowledge of anatomy, physiology, nutrition and response to training to a variety of practical husbandry situations. Inclusion of current issues and computer-based record management, data handling applications ensures that graduates are ready to enter a variety of roles in the equine industry.

Students will gain the fundamental theoretical knowledge required to build a successful career in equine business. The course includes essential and applied business modules (covering

human resource management, finance, marketing, operations management, ethics and strategic management), which take up one quarter of the degree, alongside equine specialist subjects including grassland and applied equine technology; and anatomy, physiology and nutrition.

This programme covers all aspects of business and equine management. In year 1, students study husbandry skills at both the equitation and stud sites, to receive a good grounding in the essentials. In years 2 and 3, they must select either an equitation or a stud specialist strand.

## Career prospects

Equine Studies and Business Management students go on to work in a variety of primary equine businesses, such as riding schools, competition yards, breeding enterprises and livery yards. Event and facility management is also popular, with ex-students managing racecourses, international competition venues and corporate

entertainment businesses. The business orientation also prepares graduates for non-equine business careers in commercial organisations, as well as accounting, banking and finance (subject to further specialist accredited training). Job prospects are excellent for Equine Studies and Business Management graduates and many of our students progress quickly to senior positions both in the UK and abroad.

## Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14-19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Equine Industry		Academic & Professional Development		Dissertation	
Mammalian Anatomy & Physiology	Equine Nutrition	Equitation & Coaching	Training & Equestrian Enterprise Management	Current Issues in the Equine Industry	
		or	or		
		Young Stock Production	Applied Stud Management		
Husbandry Skills		Applied Equine Technology	Grassland Science & Production	Equine Computer Applications	
Essential Business		Management Concepts & Practice		Applied Business	

\*Any students taking husbandry skills will be expected to do yard duties.

UCAS Code: D323



# BSc (Hons) Equine Science (with Award\*)

\*Please choose your specialist minor award from the next page

This course is designed to equip students with the knowledge, understanding and skills required to succeed in equine scientific organisations and businesses. It focuses on producing employees who understand the application of scientific theory to the production and management of horses as athletes.

This programme covers all aspects of equine science, from equine development, anatomy, physiology and nutrition, to health management, exercise physiology and use of biomechanics technology to enhance performance. Inclusion of physical therapy, equine sports medicine and structural development of horses enhances the ability of students to understand how to get the most from a horse whilst minimising risk of injury. The three minor choices, with each representing one quarter of the selected course, allow a specialist focus on Behaviour and Welfare, Equitation and Coaching or Health and Exercise.

The Health and Exercise minor includes human performance and manipulation of the factors which influence it, recognising the importance of the rider as part of the equine athletic performance team. Equitation and Coaching focuses on the rider, and includes practical modules involving the training of horses and riders at the Equine Training and Development Centre. Behaviour and Welfare students are exposed to other animal species to broaden and develop the application of theory. This science course includes a large proportion of laboratory-based work and practical applications of technology to the production, maintenance and use of equine athletes.

## Career prospects

Opportunities for those who complete the Equine Science courses include

work in a variety of primary equine businesses – such as riding schools, competition yards, breeding enterprises and livery yards – and technical positions involving equine reproductive technologies, nutrition, pharmaceuticals, sports technologies and equine research. Job prospects are excellent for Equine Science graduates and many of our students progress quickly to senior positions both in the UK and abroad.

## Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14–19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Equine Industry		Academic & Professional Development		Dissertation	
Mammalian Anatomy & Physiology	Introduction to Biomechanics	Exercise Physiology	Equine Health Management	Biomechanics	Equine Structural Development
Biological Processes	Equine Nutrition	Physical Therapy	Equine Performance Nutrition	Equine Feed Technology	Equine Sports Medicine

Choose from award options listed on next page

## BSc (Hons) Equine Science (Behaviour and Welfare)

Equine Practical Skills	Behaviour	Animal Health & Welfare	Complementary Therapies	Applied Behaviour & Animal Welfare
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UCAS Code: D322 BEH

## BSc (Hons) Equine Science (Equitation and Coaching)

Equine Practical Skills	Equitation & Equestrian Coaching*	Reflective Coaching	Rider Fitness & Performance	Advanced Equitation
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UCAS Code: D322 EQUC

\*Equitation & Equestrian Coaching involves yard duties

## BSc (Hons) Equine Science (Health and Exercise)

Contemporary Issues in Sport and Exercise	Special Populations	Fitness & Performance Testing	Principles of Training	Disability in Sport & Recreation	Exercise Prescription
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UCAS Code: D322 HEA



## Graduate Profile

### Carly Tyler, BSc (Hons) Equine Studies

*"I chose to study at Writtle for the impressive stud facilities and the opportunity to be so practically involved at the stud.*

*With the combination of the supportive teaching staff and good facilities, Writtle enabled me to learn to my full potential, whilst enjoying a fantastic social life and meeting the best friends I've ever had.*

*I am currently a trainee equine veterinary nurse at the Royal Veterinary College. In this job, I will complete my Veterinary Nursing qualifications. The course at Writtle has provided me with an excellent understanding of anatomy and physiology, diagnostic techniques and veterinary procedures. Without this prior knowledge, I feel it would have taken me longer to get to grips with the job."*

# BSc (Hons) Equine Breeding and Stud Management



This course is designed to equip students with the knowledge, understanding and skills required to succeed in the breeding and production of horses and the management of breeding enterprises. It focuses on producing practical employees who can handle breeding horses and understand the application of scientific theory to their safe, efficient and cost-effective production.

This programme covers all aspects of equine management. Throughout

years 1 and 2, students must undertake stud practical modules, to ensure that they have vocational competence upon which to build their theoretical knowledge and compete more effectively in the job market. Anatomy, physiology and nutrition, health management, reproduction and genetics, and the strategies used by the industry to enhance genetic progress and performance are included. Study of current issues in the stud industry, computer-based record management and applications ensure that graduates are ready to enter a variety of roles in equine breeding, both in 'primary' stud situations and their ancillary trades.

This 'stud degree' includes the scientific approach to how horses function and move, alongside compulsory practical skills with mares, foals, stallions and youngstock. Reproductive technologies and strategies, health and exercise, management of stud facilities (including the grazing) and sports medicine are some of the specialist features. Students are involved

with teasing, covering, foaling and youngstock training at Lordships Stud, and have the opportunity to prepare and show the College horses.

## Career prospects

Opportunities for those who complete the course include management and practical roles in TB, sports horse and other studs, as well as technical positions involving reproductive technologies, breeding programme management and data recording, and work in sales and auction venues.

## Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14–19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Equine Industry		Academic & Professional Development		Dissertation	
Biological Processes	Functional Anatomy	Exercise Physiology	Equine Health Management	Complementary Therapies	Equine Sports Medicine
Mammalian Anatomy & Physiology	Equine Nutrition	Reproduction & Genetics	Applied Stud Management*	Equine Breeding Systems	Issues Facing the Stud Industry
Stud Husbandry Skills		Youngstock Production*	Grassland Science & Production	Biomechanics	Equine Structural Development

UCAS Code: D426

\*Any students taking practical skills will be expected to do yard duties.



# BSc (Hons) Human and Equine Sports Performance

This course is designed to equip students with the knowledge, understanding and skills required to succeed in equine or human sport-related organisations and businesses. It focuses on the application of scientific theory relating to the athletic combination of horse and rider. The modules studied will give the student a good understanding of how to optimise performance and minimise the risk of injury across a wide range of equestrian sports.

This programme integrates aspects of equine and human sports science. The physiological and psychological principles and adaptations to training in both horse and rider feature strongly in the course. All modules have a theoretical and practical component including fitness and performance testing, anatomical dissection and performance and biomechanical analysis.

Coaching science in both human sports and equestrian sports is studied alongside psychology reflecting the UK Coaching Certificate knowledge required by the industry. The knowledge required for Fitness professional qualifications is integrated into the course and students are encouraged to gain additional industry qualifications.

## Career Prospects

Opportunities for those who complete the course include employment in both human and equine athlete development. Areas could include rider performance, performance analysis, sports development, nutrition, exercise physiology and biomechanics some of which may require further specialist accreditation. Postgraduate education is a popular progression route for Writtle sports students.

## Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14-19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Equine Industry		Academic & Professional Development		Dissertation	
Mammalian Anatomy & Physiology	Equine Nutrition	Sports Nutrition	Equine Performance Nutrition	Rider Fitness & Performance	Equine Sports Medicine
Saddle Fitting & Farriery	Introduction to Biomechanics	Equitation & Equestrian Coaching*	Training & Equestrian Enterprise Management*	Biomechanics	Exercise Prescription
Introduction to Psychology	Coaching in Practice	Exercise Physiology	Reflective Coaching	Applied Sports & Exercise Psychology	Complementary Therapies

**UCAS Code: CD64**

\*Equitation and Equestrian Coaching, and Training and Equestrian Enterprise Management involve yard duties.

# BSc (Hons) Equine Sports Therapy

This unique course is designed to equip students with the knowledge, understanding and skills required to specialise their career in the relationship between structure and function and the optimisation of equine performance. It focuses on the application of scientific theory to the management of horses as athletes and students who elect to undertake the embedded external qualification Equine Bodyworker will be able to practise as equine sports massage therapists.

This programme covers all aspects of equine science including anatomy, physiology and nutrition, with therapy-focused modules such as Saddle Fitting and Farriery, Physical Therapy, Rehabilitation and Performance, and Equine Sports Medicine. It also covers exercise physiology, health management and biomechanics. The Equine Bodyworker course (delivered and assessed by Equine Energy) is optional, and incurs a

small fee (which the College partly subsidises). It requires two weeks' attendance in the summer holiday after year 2, with the externship module in year 3 enabling students to complete their portfolio of treated horses under expert supervision.

## Career prospects

Opportunities for those who complete the courses include working within the performance horse industry with, for example, sports horses or racing and endurance horses, or in the rehabilitation of horses (working alongside veterinary professionals) and in (self-) employment as massage therapists. Graduates will also have the necessary skills to undertake postgraduate courses such as MSc McTimoney Animal Manipulation or further specialist study in specific equine therapies including myofascial release, trigger point therapy, acupuncture and craniosacral therapy.

## Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14-19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Equine Industry		Academic & Professional Development		Dissertation	
Mammalian Anatomy & Physiology	Functional Anatomy	Physical Therapy	Equine Health Management	Equine Massage Externship	Complementary Therapies
Saddle Fitting & Farriery	Equine Nutrition	Exercise Physiology	Rehabilitation & Performance	Biomechanics	Equine Sports Medicine
Equine Practical Skills		Behaviour	Equine Performance Nutrition	Equine Feed Technology	Applied Behaviour and Animal Welfare

UCAS Code: DD4H

# Certificate of Continuing Education in Equine\*

\* Subject to validation

The Certificate in Continuing Education in Equine is a brand-new, two-year part-time programme designed for those wishing to study equine management at higher education level but who may not be in a position to commit themselves to full-time study. A total of 60 credits will be studied, giving an essential introduction to higher-level study via delivery of the key elements of horse anatomy, physiology and nutrition, along with two further optional modules.

All students study Equine Nutrition and Mammalian Anatomy and Physiology. The four named awards are CCE Equine Studies and Business Management (which has a double module covering marketing, personnel, finance and business operations), Equine Science (including Biological Processes and an Introduction to Biomechanics), Equine Breeding and Stud Management (involving Stud Husbandry\* Skills based at Lordships Stud) and Equine Studies (including Husbandry Skills\* or learning through work).

## Career prospects

CCE will provide students with the confidence to commit to extending their education, or it would equally suit those already working in the equine industry or keeping horses for leisure who wish to update their knowledge or extend their specialist knowledge. The course content is the same as half of the first year of the parent degree programme, so progression to a more advanced qualification (such as Foundation degree or Honours degree) is therefore straightforward.

\*Husbandry skills and Stud Husbandry Skills involve yard duties.

## ESSENTIAL MODULES

Mammalian Anatomy  
& Physiology

Equine Nutrition

## OPTIONAL MODULES

### Certificate of Continuing Education in Equine Studies

Husbandry Skills  
OR Learning through Work

### Certificate of Continuing Education in Equine Studies and Business Management

Essential Business

### Certificate of Continuing Education in Equine Science

Biological  
Processes

Introduction to  
Biomechanics

### Certificate of Continuing Education in Equine Breeding and Stud Management

Stud Husbandry Skills



# Animal Management and Science

## BSc (Hons) Animal Management

These husbandry-based degree programmes are designed to equip students with the knowledge, understanding and skills required to meet the diverse needs of the animal industry. They allow students to develop a sound understanding and in-depth knowledge of the essential principles of animal management, combining theoretical knowledge with practical application.

Animal Management students take a more holistic view of the animal. They have the opportunity to study animals with less emphasis on 'pure' science and more on the application of science in the day-to-day management of animals.

Writtle College Animal Management degrees have developed to be more applied in focus, enabling students to study equine, zoo, companion or farm animals, wildlife management and conservation, as well as business management.

Students also have the opportunity to combine theoretical and scientific aspects with practical husbandry skills. Specialist laboratories enable demonstration of, and practical involvement in, a range of procedures

including analytical chemistry, feed analysis, microbiology and dissection of fresh anatomical specimens.

Honours students are also encouraged to undertake industrial placements as these can enhance their knowledge, as well as their practical and employment skills and competencies.

The flexibility of the course comes from the combination of the core subjects with a variety of award options.

### Career prospects

The animal industry is very diverse and offers a wide range of careers for those who complete the Animal Management courses. Graduates are successful in finding employment within the animal sector and related ancillary organisations, including government agencies and nutrition and pharmaceutical companies, as well as in marketing, retailing and journalism.

Examples of employment according to First Destination Surveys include the following roles: animal welfare officer, farm manager, pet superstore manager, animal collections manager, veterinary nurse, breeding technician, environment officer, technician, insurance adviser, lecturer, teacher

and industry liaison officer. A number of students also decide to progress to further studies, such as MSc and PhD.

### Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14–19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Animal Industry		Academic & Professional Development		Dissertation	
Mammalian Anatomy & Physiology	Comparative Anatomy & Physiology	Reproduction & Breeding	Principles of Nutrition	Animal Management Case Study	
Biological Processes	Animals in Society	Behaviour	Animal Health & Welfare	Applied Health Management	Applied Behaviour & Animal Welfare
Animal Management		Bioethics	Animal Trade	Applied Nutrition & Feeding	Animal Breeding Strategies
				Consultancy Project	

UCAS Code: D301

### BSc (Hons) Animal Management (Companion and Zoo Animals)

Animal Management	Applied Animal Management	Animal Trade	Companion & Zoo Animal Nutrition and Feeding	Current Issues in Companion & Zoo Animals
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UCAS Code: D301 COM

### BSc (Hons) Animal Management (Equine Studies)

Animal Management	Exercise Physiology	Equine Health Management	Equine Feed Technology	Equine Structural Development
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UCAS Code: D301 EQUUS

### BSc (Hons) Animal Management with Business Management

Essential Business	Management Concepts & Practice	Applied Business
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UCAS Code: D301 BUS

### BSc (Hons) Animal Management with Wildlife Conservation

Principles & Practice of Ecology	Principles of Habitat Management	Biodiversity & Conservation
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UCAS Code: D301 WIL

### BSc (Hons) Animal Management with Farm Livestock Production

Introduction to Livestock Production	Farm Livestock Production	Integrated Livestock Production
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UCAS Code: D301 FAR

# BSc (Hons) Animal Science

These science-based degree programmes allow students to develop a sound understanding and in-depth knowledge of the essential principles of Animal Science relevant to the animal sector. In comparison with the long-established Animal Science courses offered by the university sector, where the emphasis has been very much on the acquisition of scientific knowledge in the traditional areas of Animal Science, Writtle College Animal Science degrees have developed to be more applied in focus, enabling students to study equine, zoo, companion or farm animals, as well as conservation and ecology.

By concentrating on subject areas such as nutrition, health, behaviour and reproduction, and by incorporating the study of particular species (or groups of species) of their choice, students learn the application of scientific principles and theoretical concepts in a vocational context. As a result, the courses have appealed to a wider group of students than

those attracted to traditional university science degrees.

Students also have the opportunity to combine theoretical and scientific aspects with practical husbandry skills. Specialist laboratories enable demonstration of, and practical involvement in, a range of procedures including analytical chemistry, feed analysis, microbiology molecular biology, genetic engineering and dissection of fresh anatomical specimens.

Students are also encouraged to undertake industrial placements, as these can enhance their knowledge, as well as their practical and employment skills and competencies.

## Career prospects

The animal industry is very diverse and offers a wide range of careers in a large number of ancillary organisations, including government agencies and nutrition and pharmaceutical companies. A number of students

pursue further studies such as MSc, PhD and Veterinary Science courses.

Examples of employment according to First Destination Surveys include the following roles: animal welfare officer, senior breeding technician, environment officer, research technician, lecturer and teacher.

Job prospects are excellent for Animal Science graduates and many of our students progress quickly to more senior positions.

## Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14–19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Animal Industry		Academic & Professional Development		Dissertation	
Mammalian Anatomy & Physiology	Comparative Anatomy & Physiology	Reproduction & Genetics	Principles of Nutrition	Animal Growth & Development	Biotechnology & Genetic Engineering
Biological Processes	Introduction to Biochemistry	Behaviour	Animal Health Science	Recent Advances in Animal Science	
Animal Management		Bioethics	Animal Trade	Applied Nutrition & Feeding	Applied Behaviour & Animal Welfare

UCAS Code: D321

Alternatively students can study the BSc (Hons) Animal Science course with one of the award options below:

## BSc (Hons) Animal Science (Companion and Zoo Animals)

Animal Management	Applied Animal Management	Animal Trade	Companion & Zoo Animal Nutrition & Feeding	Current Issues in Companion & Zoo Animals
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UCAS Code: D321 COM

## BSc (Hons) Animal Science (Equine Studies)

Animal Management	Exercise Physiology	Equine Health Management	Equine Feed Technology	Equine Structural Development
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UCAS Code: D321 EQUUS

## BSc (Hons) Animal Science with Wildlife Conservation

Principles & Practice of Ecology	Principles of Habitat Management	Biodiversity & Conservation
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UCAS Code: D321 WIL

## BSc (Hons) Animal Management with Farm Livestock Production

Introduction to Livestock Production	Farm Livestock Production	Integrated Livestock Production
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UCAS Code: D321 FAR



## Graduate Profile

### Yvonne Owen, BSc (Hons) Animal Science

*"I wanted to study Animal Science and Writtle College was desirable due to its long history of land- and animal-centric studies.*

*Within beautiful surroundings, Writtle is a community of students, staff and lecturers. The people are helpful, supporting a productive atmosphere in which to study and work.*

*I found the course modules to be fascinating and informative and truly enjoyed studying for my degree at Writtle. The structure and content of the lessons were such that we naturally accrued the academic skills required to succeed. I would recommend Writtle to any potential student looking to achieve and be the best that they can be.*

*I am now a PhD student at Writtle. This role includes research and supporting lecture staff."*



# FdSc Animal Management



This programme aims to produce graduates who have developed an interest in and knowledge of aspects such as nutrition, breeding, behaviour, health and the animal's environment. They will also have the legal knowledge and applied management skills necessary to manage animal collections effectively. The College has an extensive employer network to ensure the vocational relevance of its courses. The College's comprehensive resources allow Writtle students the opportunity to undertake practical husbandry modules as part of the course.

## Career prospects

Opportunities for those who complete the course include working in industry with organisations such as Defra and other enforcement agencies, or in animal sanctuaries and rescue centres, or even in animal units. The opportunity also exists for students to progress to the BSc (Hons) Animal Management course.

## Entry requirements:

UCAS Tariff points	120
BTEC National Diploma/Certificate	PPP/MP
OCR National Extended	P3
Irish Leaving Certificate	2 X C1 Higher
Scottish Highers	2 X C Higher
International Baccalaureate	24 points
14-19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO	
Semester 1	Semester 2	Semester 3	Semester 4
Sector Studies for the Animal Industry		Foundation Degree Academic & Professional Development	
Mammalian Anatomy & Physiology	Comparative Anatomy & Physiology	Reproduction & Genetics	Principles of Nutrition
Biological Processes	Animals in Society	Behaviour	Animal Health & Welfare
Learning Through Work		Learning From Work	

UCAS Code: D391

# Diploma of Higher Education in Animal Management

For those students who already have a wealth of practical experience, it is now possible to study a two-year, full-time programme that results in the award of a Diploma of Higher Education.

This award is effectively the first two full years of the Honours degree programme, so it is possible to progress directly to the third year of the Honours programme following successful completion of this award. As with the Honours programmes, this award prepares students for a wide range of careers within animal management and its ancillary industries. For more details, please email: [admissions@writtle.ac.uk](mailto:admissions@writtle.ac.uk)

STAGE ONE		STAGE TWO	
Semester 1	Semester 2	Semester 3	Semester 4
Sector Studies for the Animal Industry		Academic and Professional Development	
Mammalian Anatomy and Physiology	Comparative Anatomy and Physiology	Reproduction and Genetics	Principles of Nutrition
Biological Processes	Animals in Society	Behaviour	Animal Health and Welfare
Animal Management		Bioethics	Animal Trade



# FdSc Animal Science

This programme aims to produce graduates who have a developed interest in and knowledge of aspects of Animal Science including biochemistry, genetics, behaviour and disease. They will also have an ability to apply scientific principles and concepts in the context of animal management and production. The College has an extensive employer network to ensure the vocational relevance of its courses. The College's comprehensive resources allow Writtle students the opportunity to undertake practical husbandry modules as part of the course.

## Career prospects

Opportunities for those who complete the course include working in industry with organisations that prepare research into areas relevant to human and animal behaviour, or research into nutrition. Options are also available for students to go into teaching or journalism. There is also the opportunity for students to progress to the BSc (Hons) Animal Science or the BSc (Hons) Animal Management programmes.

## Entry requirements:

UCAS Tariff points	120
BTEC National Diploma/Certificate	PPP/MP
OCR National Extended	P3
Irish Leaving Certificate	2 X C1 Higher
Scottish Highers	2 X C Higher
International Baccalaureate	24 points
14–19 Advanced Diploma	Completion



STAGE ONE		STAGE TWO	
Semester 1	Semester 2	Semester 3	Semester 4
Sector Studies for the Animal Industry		Foundation Degree Academic & Professional Development	
Mammalian Anatomy & Physiology	Comparative Anatomy & Physiology	Reproduction & Genetics	Principles of Nutrition
Biological Processes	Introduction to Biochemistry	Behaviour	Animal Health & Disease
Learning Through Work		Learning From Work	

UCAS Code: D300

# Higher Certificate Animal Studies

This course offers a vocational approach to the study of animals at higher education level. By incorporating practical animal husbandry skills into a broad programme of academic study, students will develop a sound understanding of scientific principles whilst also developing practical competence with a wide range of species.

The Higher Certificate year encourages development of practical husbandry skills within each of the three major animal groups (companion animals, farm animals and horses). Coupled with this practical



competence is a basic grounding in biological science, anatomy and physiology and an appreciation of the animal's environment and simple business techniques.

The Higher Certificate is a one-year programme. The course content is exactly the same as the first year of the BSc (Hons) Animal Science and Animal Management programmes, as well as the corresponding Foundation degrees. Progression to a further qualification is therefore very straightforward. This allows students enhanced flexibility in their choice of career direction.

The course is supported by excellent practical facilities in the form of science laboratories and animal units. It aims to develop an awareness of the principles of the science of animals and their application. The College is currently involved in a number of research projects to support teaching, and has an extensive employer network to ensure the vocational relevance of its courses.

## Career prospects

The Higher Certificate has been designed as a 'taster' course for those wishing to study animals at higher education level who may not be in a position to commit themselves to more than one year of study. It is intended as a feeder course to the Honours or Foundation degree programmes, although it does give students sufficient knowledge to be able to enter the job market confidently within the animal sector. Students will be equipped with the technical understanding and skills required for a huge range of

career opportunities. Posts such as laboratory officers, research support technicians, nutritional advisers, conservation officers, pet trade advisers, behaviourists, veterinary sales representatives, journalists and a whole host of other opportunities will be available to those achieving a Higher Certificate qualification.

## MODULES

Semester 1	Semester 2
Sector Studies for the Animal Industry	
Mammalian Anatomy & Physiology	Comparative Anatomy & Physiology
Biological Processes	Animals in Society
Animal Management	

**UCAS Code: D303**



# Sports and Exercise Performance

## Resources

The sports facilities at the College include a recreation centre and gym, tennis courts, outdoor pitches for a range of sports including 5-a-side and netball, horse riding trails and a climbing wall. Sports Science facilities at the Lordships Science Centre and Centre for Exercise & Health (CEH) include video analysis equipment and

software, a range of physiological and biomechanical performance testing equipment, health screening tools, heart rate monitors and gas analysis equipment.

The campus is a short bus ride from the centre of Chelmsford, which has an active leisure programme and first-rate facilities including Melbourne Athletics Centre, Riverside Ice and Leisure Centre and Essex County Cricket Club.



## Centre for Exercise & Health (CEH)

One of the Centres of Innovation at Writtle College, CEH is developing a research and consultancy portfolio to capitalise on the expertise of the academic staff and enrich the learning environment of the students. The activities of the CEH lead directly into the curriculum and provide numerous opportunities for students to complete assignments, case studies and dissertations based on active research. The work of the CEH focuses around the themes of physiology of the athlete, notational analysis, biomechanical analysis and psychological preparation for sport. Current research concerns the pacing strategy of elite cyclists, the central governor theory of performance and coaching behaviours in elite field hockey.

CEH staff have presented papers at numerous national and international conferences.

Students of the course have presented their research at the British Association of Sport and Exercise Science student conference.

# BSc (Hons) Sports and Exercise Performance

The Sports and Exercise Performance degrees at Writtle College combine essential sports science theory with practical experience in coaching and participation.

Sports and Exercise Performance programmes are aimed at those who wish to pursue a more directed approach to the study of sport and exercise and the science involved in participation at all levels – from recreational through to elite performers and from those in good health through to those with specific medical conditions. It combines academic theory with a strong practical approach to the science of coaching and performing.

The field of Sports and Exercise Performance is a rapidly growing area, with organisations looking for candidates with a high level of academic qualification, as well as valid practical experience. The course

provides students with the opportunity to complete National Governing Body coaching qualifications and Sports Coach UK awards. Students are also encouraged to gain experience in the workplace, with many undertaking voluntary work in schools, sports clubs and teams.

The course develops knowledge of the principles of Sports and Exercise Performance and the science underpinning coaching. Students gain the associated practical experience and skills required for work within the sports and exercise industry.

## Career prospects

Graduates of the Sports and Exercise Performance course go on to work in several varied areas of sports science, education and sports development. These include the sport and leisure industry, such as in health and fitness

clubs and local authority sports development. Many of our graduates go on to train as physical education teachers or physiotherapists. With the 2012 Olympics being held in London, it is expected that there will be an increase in demand for graduates in this area.

## Entry requirements:

UCAS Tariff points	200
BTEC National Diploma/Certificate	MMP/DM
OCR National Extended	P1
Irish Leaving Certificate	4 X C1 Higher
Scottish Highers	4 X C Higher
International Baccalaureate	24 points
14–19 Advanced Diploma	Completion

STAGE ONE		STAGE TWO		STAGE THREE	
Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Sector Studies for the Sports Industry		Academic & Professional Development		Dissertation	
Mammalian Anatomy & Physiology	Introduction to Biomechanics	Sports Nutrition	Sports Injury	Applied Exercise Physiology	Sports Medicine & Rehabilitation
Introduction to Psychology	Coaching in Practice	Introduction to Exercise Physiology	Reflective Coaching	Applied Sports & Exercise Psychology	Analysis of the Performer
Contemporary Issues in Sport & Exercise	Special Populations	Fitness & Performance Testing	Principles of Training	Disability in Sport & Recreation	Exercise Prescription

UCAS Code: C600

continued >>

## BSc (Hons) Sports and Exercise Performance with Business Management

Essential Business

Management Concepts & Practice

Applied Business

UCAS Code: C600 BUS

## BSc (Hons) Sports and Exercise Performance with Event Management

History, Development & Principles of Event Management

Planning & Running an Event

Types of Events & Contemporary Issues within the Events Industry

UCAS Code: C600 EVE



## Graduate Profile

### Josh Congdon, BSc (Hons) Sport and Exercise Performance

*"I always felt comfortable and welcome at Writtle; everybody is friendly and Writtle seemed to promote a learning environment where everybody was there to help each other – I felt part of a team on my course."*

*I am now a postgraduate student at the University of Essex, studying on their accelerated MSc Physiotherapy course. Studying at Writtle gave me the personal and academic skills to progress further, opened up many more opportunities to me, and helped me to get onto a highly regarded Masters programme. Writtle installed a good attitude to learning, which has been invaluable to me on this course so far. In under two years' time I will have finished my Masters and be qualified as a chartered physiotherapist."*