



Student Programme Handbook 2009/10

School of Health and Social Sciences

Student Name:

Students with disabilities: information in alternative formats

Information in this publication can be downloaded from the following website:

<http://www.mdx.ac.uk/24-7/able/>

If you have a disability which makes navigating our website difficult and you would like to receive information in an alternative format, please contact Ambika Kucheria on 020 8411 6761 or email

a.kucheria@mdx.ac.uk

State your disability and details of the specific information you need.

We can supply sections from this publication as:

- A Word document with enlarged type — sent by email or supplied on disc or CD
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- Recorded audio — on CD or cassette tape
- As Braille

We will do our best to respond promptly. To help us, please be as specific as you can and include details of your disability.

Purpose and status of your student handbook

The purpose of this handbook is to provide you with information about your Programme of study and to direct you to other general information about studying at Middlesex University.

This handbook must be read in conjunction with the University Catalogue via MISIS self service at <https://misis.mdx.ac.uk/> and the University Regulations at www.mdx.ac.uk/regulations/

The material in this handbook is as accurate as possible at the date of production. Your comments on any improvements to this handbook are welcome - please put them in writing (with name of handbook) to Dr Neville Hall.

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Maps of University campuses

Maps and directions to Middlesex University campuses can be found at:
<http://www.mdx.ac.uk/campus/campuses/index.asp>

Middlesex University Students' Union

You are represented by the Middlesex University Students Union. To find out more about the services it provides, simply ring MUSU reception on: 020 8411 6450, or go to:
www.musu.mdx.ac.uk

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Middlesex University Calendar: 2009/2010

2009/2010 Academic Calendar - Undergraduate September starters

September 2009

11 (9am)	Summer School and August reassessment module results published
15	Programme Progression Committees
17 (9am)	Progression decisions published
17 – 20	Orientation Programme for new overseas students
18	School Assessment Boards
21	New student induction week commences
28	Teaching starts for autumn term
29 (5pm)	Final qualification results published

October

19-23	Reality Check for Year 1 Students / Students' Current Programme Review week
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26-30 Reading week

November

27	Year 1 Students' Programme Progress Review to be completed (end of week 9)
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December

18	Last day of teaching in the autumn term
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December/January

19-3	University closed for Christmas vacation
21-10	Christmas vacation

January 2010

4	University re-opens after Christmas
8 (4pm)	Winter coursework deadline
5-8	Winter exams
11	Teaching starts for winter term

February

12	Last date for Subject Assessment Boards
15-19	Reading Week
16 (9am)	Publication of module results
18	Programme Progression Committees
19	Year 1 Students' Programme Progress Review to be completed (end of week 18)
22 (5pm)	Publication of progression decisions
24	School Assessment Boards

March

1 (5pm)	Final qualification results published
8-12	Students' programme planning and confirmation week

April
2-6

University premises closed during Easter vacation

2-18 Easter Vacation

April/May

19-11 Spring term examinations

May

3 Bank holiday – University closed

4 (4pm) Final coursework deadline - last coursework deadline to be set no later than this date.

31 Bank holiday – University closed

June

9 Last date for Subject Assessment Boards

14 (12 noon) Publication of module results

16-17 Programme Progression Committees

22 Last date for School Assessment Boards

24 (5pm) Publication of progression decisions

25 Final qualification results published

28 Main Summer School begins

July

5-9 Graduation Ceremonies for 2008/09 graduates

August

6 Summer School ends

16-27 Deferred / reassessment examinations (all students)

23 (4pm) Final deferred/reassessment coursework deadline (all students)

September

7 Last date for Subject Assessment Boards

10 (9am) Publication of module results

14 Programme Progression Committees

16 Publication of progression decisions

17 School Assessment Boards

28 Final qualification results published

Student attendance dates

21 September 2009 – 18 December 2009 (New students)

28 September 2009 – 18 December 2009 (Returning students)

11 January 2010 – 1 April 2010

19 April 2010 – 18 June 2010

Learning Framework Term dates

21 September – 18 December 2009 Autumn term – new students (13 weeks)

28 September – 18 December 2009 Autumn term – continuing students (12 weeks)

11 January – 1 April 2010 Winter term (12 weeks)

19 April – 9 July 2010 Spring term (12 weeks)

12 July – 24 September 2010 Summer term (11 weeks)

Introduction to the School

Welcome to Middlesex University and the School of Health and Social Sciences. We are pleased that you have chosen to study with us and hope that you find your time at Middlesex enjoyable and stimulating.

The School offers a wide range of study opportunities at undergraduate and postgraduate level including diplomas, degrees, short courses and CPD opportunities. Many of the programmes are designed and accredited in conjunction with the relevant professional bodies.

The School of Health and Social Sciences is a leading centre for professional education and research in London. Along with our diverse range of programmes and research opportunities, we offer various approaches to study and delivery to suit you and your commitments. We emphasise a flexible, lifelong learning approach to study - backed up by expertise gained through our pioneering developments in work-based learning.

Middlesex has built a strong reputation as a leading innovator in higher education. Many of our programmes are UK firsts and have set the standard for others to follow. The School is home to some of the UK's leading researchers in health and social sciences, with several leading consultants in their fields, as well as key government advisers.

Education and research in the School has a strong emphasis on interdisciplinary activity. Our aim is to link policy and practice, theory and action through high quality learning and research.

The School is based at the Archway and Enfield campuses with teaching also taking place on our Hospital sites across North London. Middlesex has established strong links with NHS Trusts and government organisations as well with our local communities, in addition to a wide range of UK, EU and international collaborative partnerships.

Further information about the School can be found at: <http://www.mdx.ac.uk/hssc/index.htm>

Leader's welcome

Welcome. We hope you find this Handbook helpful and informative. It was designed to provide you with as much relevant information about the Sports Biomedicine programme as possible so that you can engage fully in your studies. The Handbook contains sections, which summarise the policies and regulations pertaining to the programme, structure of the programme, and the content of each module as well as such information as your code of conduct. If you have any queries about individual modules or the overall programme, do not hesitate to contact a member of the programme team. Please ask.

We hope you will enjoy your time at Middlesex University and we wish you every success in your studies.

Dr. Neville Hall
Programme Leader

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Staff Roles

Module Leader

The module leader is responsible for the smooth running of the module including ensuring that there are adequate facilities for the operation of the module; that module tutors are available; that assessment is conducted appropriately and assessment grades are collated, and that student feedback is conducted and module evaluation undertaken. You are advised to contact the module leader in the first instance if you are having difficulties with the module and for feedback.

Programme Leader

Programme leader is responsible for the general organisation and conduct of the programme, the co-ordination of programme team activities, and issues of quality and consistency as they relate to the programme.

Staff availability

We hope you will feel able to make an appointment to see a member of staff to discuss any issues or problems related to your programme of study. The list above should help you contact the correct person.

Please remember, you can contact the staff members via e-mail. Please note that some members of staff are part-time at the University and will not be as readily available due to practice or other commitments.

- **Learning Resources**
- Information on Learning Resources can be found at www.lr.mdx.ac.uk.

Accessing your own records including your timetable

You can enrol, see timetables, view your module registrations, academic records (including assessment results) and other information using MISIS (Middlesex Integrated Student Information System).

You can access MISIS at <https://misis.mdx.ac.uk> or by clicking the link via student website 24/7 www.mdx.ac.uk/24-7. If you are having problems accessing MISIS, please contact the Computer Helpdesk in the Learning Resources Centre or contact the web helpdesk at <http://webhelpdesk.mdx.ac.uk>.

Timetable

You are allocated to timetabled lectures, labs, seminars, and workshops based upon your module registrations. Once this is done you can view your own personal timetable via MISIS.

If there is a choice of seminars/labs etc. you have the ability to change these via the 'Change My Timetable' function on MISIS. This is available until the end of the second week of the term. If your timetable is incomplete or you are unable to view it, please contact a member of Student Support Staff.

You can view the entire university timetable via MISIS using the 'Search University Timetable' facility.

Letter Requests

Full time enrolled students can request Council Tax exemption, student status and bank letters via MISIS.

Electronic mail

As an enrolled student, you have your own university email address (in the form xxnnn@live.mdx.ac.uk, where xx are your initials, and nnn is a number generated by the system. This code will be found on the reverse of your student card). You will need to run a simple allocation process at a PC to set this up.

Any students experiencing difficulties accessing their account should contact the web helpdesk at <http://webhelpdesk.mdx.ac.uk>

Your Middlesex University email account will be used for a wide range of communications from and to your fellow students, your tutors, the student support team, the Learning Resource Centre, the University administrators and authorities and the rest of the world. Your local computer centre will help you gain access to your account during your Learning Resource Centre induction after enrolment. Please check your University email regularly.

To access your email account see <http://www.outlook.com>

For information on user accounts see www.lr.mdx.ac.uk/comp/recep/accounts.htm

For quick guides on using the network, go to www.lr.mdx.ac.uk/document.htm. If you have continuing difficulty in its use, consult the web helpdesk at <http://webhelpdesk.mdx.ac.uk>

IMPORTANT NOTE ON PRIVACY

You should check your @mdx.ac.uk email account regularly as there will be important messages from students, lecturers and administrative staff.

To ensure security, continuity and privacy, the University discourages the use of private accounts for University business. You should ensure that the MISIS database of personal information about you is accurate and up to date, but you are not required to publicise this private information to other students or individual members of staff.

Communication with Students

While there are countless ways in which Middlesex students and staff communicate, the University's policy is to make all standard information easily available on its student website: www.mdx.ac.uk/24-7.

You are encouraged to check the website regularly. A “virtual advisor” facility will allow you to type in any question and receive a reply immediately.

Email is the University's preferred method for quick communication with students. Middlesex email accounts can be forwarded to your preferred account.

Text messaging is possible to alert you about late changes or remind you of key dates and deadlines

There are student offices on all campuses if you prefer to ask questions face to face.

Financial Issues

The University has a strict policy on fee payment. Students who do not pay their fees when due are liable to find that they have a financial hold automatically placed upon them. This can prevent the student from accessing certain University services and from viewing parts of their MISIS record.

University Services include, but are not restricted to:

- OASISplus
- Library Lending
- Letter Requests, etc

Financial and legal assistance can be gained through the Money and Welfare Advice Service (MWAS) (<http://www.mdx.ac.uk/24%2D7/mwas/index.htm>). They deal with issues such as:

- Student loans
- Fee queries
- Welfare benefits
- Immigration queries
- General issues

Tuition Fee Payment

The annual tuition fee is due upon enrolment. Students are allowed two weeks from the start of the academic year to make payment or provide proof of sponsorship. Failure to do so may result in you being de-registered ie. cancellation of your enrolment.

Programme Specification and Curriculum Map for

BSc(Hons) Sports Biomedicine



**Middlesex
University**

1. Programme title	Sports Biomedicine
2. Awarding institution	Middlesex University
3. Teaching institution	Middlesex University
4. Programme accredited by	
5. Final qualification	BSc (Hons) Sports Biomedicine
6. Academic year	2009/10
7. Language of study	English
8. Mode of study	Full-time or Part-time

9. Criteria for admission to the programme

1. Candidates normally require 200 tariff points for entry.
 - A-levels (including two A2s in at least one science subject, preferably in biology or chemistry at grade C or better)
 - Or Two AVCEs or one double award in Science
 - Or EDEXCEL National Diploma or Certificate in biology, chemistry, forensic science, laboratory and industrial science, medical science or sport and exercise sciences
 - Or Access course in applied science, clinical physiology, human or life sciences, medical or paramedical science, science or sports science.
 - Or high school equivalent, such as International Baccalaureate
 - With GCSE grades A-C in Mathematics and English or their equivalents.
2. Applications from candidates without formal qualifications are welcomed, provided they can demonstrate appropriate levels of relevant ability and experience
3. Additionally, overseas students whose first language is not English will need a qualification that demonstrates competence in English, e.g. IELTS 6.0 or TOEFL 550
4. Exemptions from parts of the programme are possible – students can seek accreditation of prior learning and experience from the University, and may be required to submit a portfolio in support of their claims
5. The programme may not be suitable for individuals with profound physical or visual impairment – decisions will be made on an individual case basis taking into account health and safety issues.

10. Aims of the programme

The programme aims to:

1. Provide an up-to-date and detailed knowledge of the underpinning scientific disciplines
2. Develop an appreciation of multidisciplinary approach to the study of human disease, health and performance.
3. Facilitate development of laboratory skills relevant to the evaluation of human health and performance
4. Provide an appreciation of health and safety and ethical issues related to field of study
5. Develop competence in the scientific methods of enquiry and problem solving skills
6. Instil an awareness of the ever changing nature of knowledge and significance of new developments within the fields of human disease, health and performance
7. Develop communication and interpersonal skills
8. Promote autonomous learning
9. Prepare students for work in relevant fields
10. Prepare students for postgraduate studies

11. Programme outcomes

A. Knowledge and understanding

On completion of this programme the successful student will have knowledge and understanding of:

1. Structure and function of the human body with reference to health, exercise and movement
2. Human pathology
3. Non-nutritional and nutritional approaches to enhancing human performance
4. Techniques for assessing human health and performance
5. The principles of diagnosis and management of human disease and sports injury
6. Research methods
7. Laboratory health & safety procedures

Teaching/learning methods

Students gain knowledge and understanding through lectures, seminars, laboratory classes, peer presentations, debates, visits to working biomedical science laboratories, designing and undertaking a research project, and practical clinical sessions.

Assessment Method

Students' knowledge and understanding is assessed by summative and formative assessment, including peer presentations, laboratory reports, objective structured practical examinations, online quizzes, and unseen theory examinations

<p>B. Cognitive (thinking) skills</p> <p>On completion of this programme the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Develop their own ideas through critical appraisal and integration of appropriate literature, concepts and principles 2. Design a research project, then collect, analyse, interpret and evaluate biomedical data 3. Interpret and critically evaluate laboratory data 4. Assess the risk factors relevant to health and safety associated with working in a laboratory 5. Evaluate human health and performance 	<p>Teaching/learning methods</p> <p>Students learn cognitive skills through lectures, seminars, discussions, peer presentations, a research project and debates.</p> <p>Assessment Method</p> <p>Students' cognitive skills are assessed by formative and summative assessment as written work, examinations, online quizzes, case studies and peer presentation</p>
<p>C. Practical skills</p> <p>On completion of the programme the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Perform a wide range of common laboratory techniques competently, and in accordance with health and safety guidelines 2. Perform quality control and assurance procedures according to protocol 3. Recognise and respond to the moral, ethical and safety guidelines in biomedical science and human performance laboratories 	<p>Teaching/learning methods</p> <p>Students learn practical skills in laboratory classes, clinical skills sessions, and by undertaking a research project.</p> <p>Assessment Method</p> <p>Students' practical skills will be assessed formatively and summatively through written work, case presentations, laboratory reports, online quizzes, and in objective structured practical examinations</p>
<p>D. Graduate Skills</p> <p>On completion of this programme the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Communicate their ideas effectively to non-scientific and scientific audiences 2. Present and analyse their data appropriately 3. Use information technology effectively 4. Demonstrate literacy, numeracy and problem-solving skills 5. Formulate a career development plan 6. Demonstrate an autonomous and reflective approach to lifelong learning 	<p>Teaching/learning methods</p> <p>Students acquire graduate skills through reading, group work, problem-based learning exercises, structured and directed learning, analysis of case studies, and through reflection and development of portfolio material</p> <p>Assessment method</p> <p>Students' graduate skills will be assessed formatively and summatively using written work in the form of portfolios, and also in case studies, presentations, project and research work, and online examinations</p>

12. Programme structure (levels, modules, credits and progression requirements)

12.1 Overall structure of the programme

Year 1				
Autumn Term	BIO1601 Elements of Life	BMS1503 Laboratory Practice and Skills	BMS1515 Human Sciences	SES1200 Applied Anatomy and Biomechanics
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)
Year 2				
Autumn Term	BMS2113 Molecular and Metabolic Biochemistry	BIO2003 Approaches to Experimental Research	SES2513 Clinical Sciences	SES2222 Applied Biomechanics and Physiology
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)
Year 3				
Autumn Term	BMS3113 Clinical Biochemistry	Either BIO3330 Dissertation or HSS3300 Placement Dissertation	SES3113 Ergogenic Aids	SES3188 Sports Nutrition
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)

See also figures 1 to 4 in programme handbook.

12.2 Levels and modules.

Level 1		
COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
Students must take all of the following: BIO1601 BMS1515 BMS1503 SES1200		Successful completion of all Level 1 compulsory modules
Level 2		
COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
Students must take all of the following: BMS2113 BMS2513 BIO2003 SES2222		Successful completion of all Level 2 compulsory modules
Level 3		

COMPULSORY	OPTIONAL	PROGRESSION REQUIREMENTS
Students must take all of the following: BMS3113 SES3113 SES3188	Student must choose one from the list below: BIO3330 HSS3300	Successful completion of all Level 3 modules

12.3 Non-compensatable modules. Modules may additionally be designated non-compensatable.

Module level	Module code
3	BIO3330 or HSS3300

13. A curriculum map relating learning outcomes to modules

See Curriculum Map attached.

14. Information about assessment regulations

The assessment regulations are the general university regulations

15. Placement opportunities, requirements and support (if applicable)

To improve students' employability, they will be given the opportunity to take a placement dissertation. They will be required to identify a suitable placement by the end of their second year and liaise with the Campus Placement Office. An ideal placement includes biochemistry, clinical exercise physiology and human performance laboratories. Suitable students may be placed with the Human Performance Laboratory at Archway Campus. The placement is likely to be one day per week for 24 weeks or 2 days per week for 12 weeks. It will also be organised in collaboration with the Campus Placement Office.

16. Future careers (if applicable)

Students acquire specific and general knowledge and skills relevant for a variety of careers in areas of not only sport and exercise science but also the biomedical science. These could include exercise biochemist, exercise physiologist, and bioscience researcher. Other career opportunities are in management or research and development in the nutritional, pharmaceutical and sports product industries as well as areas of biomedical research at universities or commercial companies. The programme can also provide a foundation for further professional education and training in the area of health care or for teaching in compulsory, further or higher education sector.

17. Particular support for learning (if applicable)

Specialist laboratory facilities available on site to learn and develop practical skills
 Online support for all modules in the programme available on OASISplus. Learning resource facilities at the University including computing suites and internet access
 Access to English Language and Learning Support on campus

18. JACS code (or other relevant coding system)	B900 and C600 (C6B9)
19. Relevant QAA subject benchmark group(s)	Biomedical Science Hospitality, Leisure, Sport and Tourism

20. Reference points

The following reference points were used in designing the Programme.

Internal documentation:

- i. Middlesex University (2006) Learning Framework Document
- ii. Middlesex University (2006) Middlesex University Regulations. London. MU
- iii. Middlesex University (2006) CLQE Procedures Handbook, London, MU
- iv. School of Health and Social Sciences (2002) Learning, Teaching and Assessment Policy and Strategy 2002-2005. HSSC
- v. School of Health and Social Sciences Curriculum Policy and Strategy Framework 2002-2005
- vi. School of Health and Social Sciences: Assuring Academic Quality and Standards. (2004) HSSC
- vii. Human and Healthcare Sciences Academic Group (2005) Learning, Teaching and Assessment Strategy

External Documentation:

- i. Quality Assurance Agency (2000) Framework for Higher Qualifications, London, QAA
- ii. Quality Assurance Agency (2000) QAA Subject Benchmarking Group: Biomedical, London, QAA
- iii. Quality Assurance Agency (2000) QAA Subject Benchmarking Group: Hospitality, Leisure, Sport and Tourism, London, QAA

21. Other information

Erasmus/Socrates/Student Exchange Students will be allowed to spend the whole of the second year on student exchange programme providing the partner institutions will be able to offer modules or a programme that will enable students to attain equivalent learning outcomes to the sports biomedicine year-two learning outcomes.

Please note: this specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information can be found in the student programme handbook and the University Regulations.

Curriculum map for BSc(Hons) Sports Biomedicine

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

Programme outcomes – highest level to be achieved by all graduates																									
A1	A2	A3	A4	A5	A6	A7		B1	B2	B3	B4	B5		C1	C2	C3	C4		D1	D2	D3	D4	D5	D6	
3	3	3	3	3	3			3	3	3	3	3		3	3	3	3		3	3	3	3	3	3	

Module Title	Module Code by Level	Programme outcomes																							
		A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	B5	C1	C2	C3	C4	D1	D2	D3	D4	D5	D6		
Human Sciences	BMS1515	X				X			X	X			X			X		X	X		X				
Elements of Life	BIO1601	X								X															
Laboratory Practice & Skills	BMS1503						X	X	X	X	X		X	X	X	X		X	X	X	X				
Applied Anatomy and Biomechanics	SES1200	X			X						X		X												
Molecular & Metabolic Biochemistry	BMS2113	X									X			X					X						
Clinical Sciences	BMS2513		X			X			X																
Approaches to Experimental Research	BIO2003						X		X		X								X	X	X				
Applied Physiology and Biomechanics	SES2222	X			X		X			X	X	X	X	X	X	X									
Clinical Biochemistry	BMS3113	X	X			X		X			X	X		X	X	X		X							
Placement Dissertation	HSS3300						X		X	X	X							X	X	X	X	X	X	X	
Dissertation	BIO3330						X		X	X	X							X	X	X	X	X	X	X	
Ergogenic Aids	SES3113	X		X					X																
Sports Nutrition	SES3188	X		X	X								X		X	X		X		X	X				

Programme learning outcomes

Knowledge and understanding		Practical skills	
A1	Structure and function of the human body with reference to health, exercise and movement	C1	Perform a wide range of common biomedical laboratory techniques competently, and in accordance with health and safety guidelines
A2	Human pathology	C2	Perform quality control and assurance procedures according to protocol
A3	Non-nutritional and nutritional approaches to enhancing human performance	C3	Recognise and respond to the moral, ethical and safety guidelines in biomedical science laboratories
A4	Techniques for assessing human health and performance		
A5	The principles of diagnosis and management of human disease and sports injury		
A6	Research methods		
A7	Laboratory health & safety procedures		
Cognitive skills		Graduate Skills	
B1	Develop their own ideas through critical appraisal and integration of appropriate literature, concepts and principles	D1	Communicate their ideas effectively to non-scientific and scientific audiences
B2	Design a research project, then collect, analyse, interpret and evaluate biomedical data	D2	Present and analyse their data appropriately
B3	Interpret and critically evaluate clinical laboratory data	D3	Use information technology effectively
B4	Assess the risk factors relevant to health and safety associated with working in a laboratory	D4	Demonstrate literacy, numeracy and problem-solving skills
B5	Evaluate human health and performance	D5	Formulate a career development plan
		D6	Demonstrate an autonomous and reflective approach to lifelong learning

Programme Structure

The full-time programme and examples of part-time programmes are shown diagrammatically below.

Figure 1. Structure of Sports Biomedicine Programme

Year 1				
Autumn Term	BIO1601 Elements of Life	BMS1503 Laboratory Practice and Skills	BMS1515 Human Sciences	SES1200 Applied Anatomy and Biomechanics
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)
Year 2				
Autumn Term	BMS2113 Molecular and Metabolic Biochemistry	BIO2003 Approaches to Experimental Research	SES2513 Clinical Sciences	SES2222 Applied Biomechanics and Physiology
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)
Year 3				
Autumn Term	BMS3113 Clinical Biochemistry	Either BIO3330 Dissertation or HSS3300 Placement Dissertation	SES3113 Ergogenic Aids	SES3188 Sports Nutrition
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)

Figure 2. Structure of Sports Biomedicine Programme with Student Exchange Year

Year 1				
Autumn Term	BIO1601 Elements of Life	BMS1503 Laboratory Practice and Skills	BMS1515 Human Sciences	SES1200 Applied Anatomy and Biomechanics
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)
Year 2				
Autumn Term	Student Exchange Year in EU or USA			
Spring Term				
Year 3				
Autumn Term	BMS3113 Clinical Biochemistry	Either BIO3330 Dissertation or HSS3300 Placement Dissertation	SES3113 Ergogenic Aids	SES3188 Sports Nutrition
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)	(30 Credits)

Figure 3. An Example of a Part-time Programme (3 modules per year)

Year 1			
Autumn Term	BMS1515 Human Sciences	SES1200 Applied Anatomy and Biomechanics	BMS1503 Laboratory Practice and Skills
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)
Year 2			
Autumn Term	SES2513 Clinical Sciences	SES2222 Applied Physiology and Biomechanics	BIO1601 Elements of Life
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)
Year 3			
Autumn Term	BMS2113 Molecular and Metabolic Biochemistry	SES3188 Sports Nutrition	BIO2003 Approaches to Experimental Research
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)
Year 4			
Autumn Term	BMS3113 Clinical Biochemistry	SES3113 Ergogenic Aids	Either BIO3330 Dissertation or HSS3300 Placement Dissertation
Spring Term	(30 Credits)	(30 Credits)	(30 Credits)

Figure 4. An Example of a Part-time Programme (2 modules per year)

Year 1	
Autumn Term	BMS1515 Human Sciences (30 Credits)
Spring Term	BMS1503 Laboratory Practice and Skills (30 Credits)
Year 2	
Autumn Term	BIO1601 Elements of Life (30 Credits)
Spring Term	SES1200 Applied Anatomy and Biomechanics (30 Credits)
Year 3	
Autumn Term	SES2513 Clinical Sciences (30 Credits)
Spring Term	SES2222 Applied Physiology and Biomechanics (30 Credits)
Year 4	
Autumn Term	BMS2113 Molecular and Metabolic Biochemistry (30 Credits)
Spring Term	BIO2003 Approaches to Experimental Research (30 Credits)
Year 5	
Autumn Term	BMS3113 Clinical Biochemistry (30 Credits)
Spring Term	SES3188 Sports Nutrition (30 Credits)
Year 6	
Autumn Term	SES3113 Ergogenic Aids (30 Credits)
Spring Term	Either BIO3330 Dissertation or HSS3300 Placement Dissertation (30 Credits)

Learning, Teaching and Assessment Strategy

The School of Health and Social Sciences (HSSC) aspires to becoming a true learning community based on the principles of collaboration, dialogue, equality, autonomy and responsibility between all stakeholders.

HSSC values learning wherever and whenever it takes place. This is reflected in the School's strong base in using and facilitating learning opportunities in a range of practice and work settings as well as in the University.

At the centre of the learning process is the student who is recognized by the School as a unique individual who will have their own motivation to learn and preferred ways of learning. The School has a strong commitment to helping students to develop as autonomous learners. It expects that students who successfully complete programmes of study will leave not only with subject/discipline knowledge but with skills that will enable them to develop as lifelong learners, to respond positively to challenge and change whilst demonstrating enterprise.

The School acknowledges that a variety of Learning, Teaching and Assessment methods will continue to be necessary in order to meet the needs of a diverse student population within diverse provision.

Formative and Summative Assessment

An assessment task can be either formative or summative, or both.

Formative assessment is primarily developmental in nature, and is designed to give feedback to learners on their performance and how it can be improved. Formative assessment is a key part of the learning process, and has been shown to contribute to enhancement of learning and raising of standards.

Summative assessment is designed to measure the extent to which a learner has achieved the intended learning outcomes of a module. The summative component of an assessment task is designed solely to provide a measure of the achievement of a learning outcome by a learner. Summative assessment should assess achievement of all learning outcomes in a secure, fair and accurate manner.

Feedback to students

All forms of assessment are part of the learning process. You should be provided with either individual or collective feedback on your assessed work.

Feedback on coursework

For each module you will receive written feedback on coursework – for coursework completed during a module, the module leader will generally give out copies of the feedback at a convenient time when he/she sees their students. It can be more difficult for module leaders to get feedback to students who submit coursework after teaching has ended, but if students request their feedback then the module leader will provide it. Please do be proactive in seeing your module leaders and asking for your feedback, as you will gain a lot from seeing how you can improve your coursework. **This is particularly important if you need to resubmit coursework.**

Feedback on examinations

Once the results have been published from exams, module leaders will be available for discussion about your exam performance. You can ask to see your exam script, and go over it with your module tutor to see how you could improve your performance. Again, this is particularly important if you will need to resit the exam.

Comments on examination scripts and marks

Internal and external assessors do not normally write comments on exam scripts.

Viewing scripts

You can view your examination scripts and their marks once results have been published. Please make an appointment with the module leader if you wish to do so, but this should be within six months of the exam.

Proposition modules/dissertations/projects

All dissertations are double-marked. Two internal assessors will mark copies of each dissertation, and once marking is completed they will agree a grade (a third assessor will be called in if they cannot agree!). Both assessors will write feedback comments on your dissertation, and you can collect this from your programme leader after the publication of results.

Other forms of assessment – minimum requirements

For placements and presentations, you should receive written feedback on your performance.

Return of coursework

Students are expected to keep a copy of their own coursework. The marked copy is not normally returned to you, so retention of a copy is important so that you can relate feedback to your work.

Electronic receipt of coursework

Coursework must be submitted on paper unless (i) a different format is specified in the programme handbook or (ii) submission in electronic form is an explicit requirement for the assessment in the module concerned or for electronic detection of plagiarism. Your module leader will give you specific instructions on submission of coursework.

Marking, second marking and marking moderation

Exam scripts and coursework will be marked by one of the module tutors, and then moderated. During moderation, a second member of staff samples the work to ensure that marking has been fair and consistent. A minimum of 10% of all coursework and examinations is moderated. All coursework and examinations that have failed will be moderated. Following moderation, at least 10% of work (including all failed work) is sent to an external examiner, who is an academic at another Higher Education institute. The external examiner comments on the consistency and quality of marking in relation to the stated assessment criteria, and can suggest alterations to marks to be made to the module leader if any problems are identified.

Copies of past examination papers and other forms of assessment

www.mdx.ac.uk/cgi-bin/mdx/exam/searchscreenexam.asp. Multiple choice question papers are not available on this database. In some cases, for example where there

are copyright restrictions, it may not be possible to publish past examination papers. In this case please ask the relevant Module Leader for information.

Sample exam questions will often be given on OASISPlus for each module.

OASISplus is the University's online learning environment where you can find online materials, including lecture notes, to support your studies together with discussion boards, quizzes, module information, announcements and important information.

Most modules now have an online presence delivered through OASISplus. Your tutors will be providing you with more information about how you will be expected to interact online with your peers and your tutors.

Logging onto OASISplus

To access OASISplus take the following steps:

1. Start up your internet browser - either Internet Explorer or Firefox
2. From the 24-7 website click on the 'OASISplus' link or alternatively type <http://oasisplus.mdx.ac.uk/>
3. Click on the 'MIDDLESEX UNIVERSITY' link to take you to the login page.
4. Enter your username. This is the same as your student number and can be found on your student card.
5. Enter your password. If you are logging on for the first time, your default password will be your date of birth (DDMMYY). Once you have successfully logged onto OASISplus you will be forced to change your password to something more personal and secure.
6. You should now be able to see the list of modules for which you are registered. Only those with an online presence will be listed here. Click on the module name to access the materials, discussions, assignments and other activities within the module.

NOTE: OASISplus is case sensitive. The 'M' in your user ID should be typed in capitals. Please also be careful with the figures 1 or 0 – it is easy to mistype these as I or O. Also, your date of birth should be shown in the UK format (DDMMYY) rather than the US format.

If you have difficulties accessing OASISplus please contact the computing helpdesk on your campus or the Web Helpdesk available at <http://webhelpdesk.mdx.ac.uk/>

For more information and troubleshooting advice visit the OASISplus pages on 24-7 at <http://www.mdx.ac.uk/24-7/oasisplus/index.htm>

Personal Development Planning

The Personal Development Profile (PDP) will provide you with an opportunity to assess the value of the skills you are developing and identify future development needs. It offers you a structured way to reflect on what you are good at and what you need to develop further. It has sections that encourage you to rate your current skill levels and areas where you can note down what you have learned from different situations and environments including your studies, part time work, voluntary work and other activities.

This is an important part of your personal development and reflects the working environment where employers encourage new graduates to assess their own continuous professional development (CPD) using a portfolio. You can also use your PDP as a valuable aid for marketing your skills to employers in recruitment and selection processes.

In order to help students reflect on, and record evidence of, these skills, Personal Development Portfolios will be introduced in BMS1503 Laboratory Practice and Skills in the first year. Following this introduction further help can be obtained from the Careers Adviser on your campus. Your Careers Adviser will be able to provide you with advice on how best to use your PDP to help you build up useful documentation of your skills.

Further information about PDPs is available from:

www.mdx.ac.uk/www/careers/studentintro.htm

Information on careers in sport can be obtained from www.bases.org.uk or from Wendy Woolery Ext 2385 in the careers office.

Reviewing your First Year Progress

There are a number of resources and activities built into the first year of your University experience to enable you to focus upon, and understand, your own learning and development, and thus enable your progression and achievement.

Before starting at Middlesex you will have discovered more about your programme through accessing **My Middlesex and My programme** through Oasisplus. You may still be using these resources which are designed to assist your transition into University life.

Induction activities will have provided an initial introduction to study skills, personal development planning, academic standards and student expectation, along with the opportunity to get to know your fellow students and the programme team. During week 4 you will participate in an activity we call 'Reality Check'. This focuses on your initial few weeks at Middlesex and enables students to share these experiences and raise any questions or issues with the programme team. The programme leader will respond to these queries, normally via Oasisplus, within 7 days.

By week 9 you have settled into your programme of study and will have received some assessment feedback. At this point you will have a **Programme Progress Review** which will be a one-to-one discussion with a member of the programme team, to talk about your progress and achievement to date, academic progress and future aims.

A further opportunity for such a one-to-one discussion will be provided in weeks 18 when you will review your progression and achievement to date and identify and plan to meet any specific needs and enable fulfilment of your future aims.

Assessment and Progression

An explanation of the University grading scale can be found in the University Regulations (www.mdx.ac.uk/regulations/).

Further information on the use of the University grading scale can be found on 24-7 (www.mdx.ac.uk/24-7/assess/grading.htm).

Grading Scale

The University grading scale is used in relation to, and in conjunction with, the University grade criteria guide and guidance on the generation and use of module level descriptors (see Regulations "Module Level Descriptors" and "Grade Criteria Guide" www.mdx.ac.uk/regulations/).

Module Grades

Grades 1 to 16, the Y grade and 17C and 18C (compensated fail grades) are all pass grades. If you do not get one of these grades in any of your modules it is very important that you check the exact details of what you need to do in order to pass. Therefore, if you are given any of the following grades, you will need to take action: grades 17 to 20, X, I or U.

A student has the right to be reassessed once only, in any module, with a grade of 17 to 20. Reassessment will be taken at the next available opportunity, unless deferred (see below).

For modules at levels 0/1 the overall grade following reassessment will be the grade achieved at the second attempt. For example:

1st attempt – grade 17

2nd attempt – grade 12

Overall module grade – grade 12

For modules at levels 2 and above, a maximum grade of 16 will be applied to the reassessed component. For example:

	Component A (50%)	Component B (50%)	Overall Module Grade
1 st attempt	8	17	17RC
2 nd attempt	8 (as before)	10 (capped at 16)	12 (17/12)

An example in percentages

	Component A (50%)	Component B (50%)	Overall Module Grade
1 st attempt	55%	22%	39%
2 nd attempt	55% (as before)	60% (but capped at 40%)	48%

It is really important that students complete all assessed work (coursework, presentations, exams etc) that is required to complete each module. Failure to do so will result in failure in the component or the module concerned (grade 20 – failure incorporating failure to undertake all assessment components; compensation not allowed) should the required learning outcomes not be met.

For more information on the X grade (fail – incomplete without good reason: may not be reassessed) see the section on “Attendance Requirements” below.

For more information on the I grade (deferred assessment) see below.

For more information on the U grade (academic misconduct allegation being investigated) see “Plagiarism” below.

Deferral

Students may seek permission to defer all or part of the assessment in a module to the next available opportunity. The full Deferral Policy is available at <http://www.mdx.ac.uk/24%2D7/assess/defer.htm#rules>.

This can only be granted where exceptional circumstances prevent a student from completing assessment through no fault of their own and where documentary evidence is supplied.

Deferral requests should be submitted to the School Student Office counter on your base campus by completing the relevant form and attaching supporting documentation, e.g. medical certificates. The final deadline for deferral applications is 2 weeks after the end of the examination period. The deferral form is available at:

<http://www.mdx.ac.uk/24-7/assess/defer.htm>

Requests for deferral of assessment that is due to be submitted up to Learning Week 17 should be submitted to the relevant Assessment Officer by the end of that week. The request will be considered under the usual deferral regulations, and if it is granted the assessment will be deferred until the final module assessment deadline. Module grades for this deferred work will be published in June (for September start students) and July for January start students.

Requests for deferral of assessment for assessment that is due to be after submitted after Learning Week 17 should be submitted to the relevant Assessment Officer by the final assessment deadline. The request will be considered under the usual deferral regulations, and if it is granted the assessment will be deferred until the module reassessment deadline. Module grades for this deferred work will be published in September (for September and January start students).

If students have difficulties accessing resources (eg. access to the University network, library, OASIS etc.) after deferral, contact the web helpdesk at <http://webhelpdesk.mdx.ac.uk>.

Regulations

Assessment and progression regulations for taught Programmes of study can be found in Section E of the University Regulations www.mdx.ac.uk/regulations/. This section covers:

- The calendar of assessment
- Progression of undergraduate and postgraduate students
- Qualifications and classification, including methods of determining classification of qualifications
- The grading scheme
- Reassessment in and deferral of modules
- Publication of results
- Production of certifications and issuing of transcripts. (A transcript will list the student's programme and level of the qualification, the name of the institution responsible for delivering the programme, each module the student has taken, stating the academic year in which the module was taken, the module's credit rating and grade. Where appropriate, it will also state the qualification awarded and the overall classification and title.)

You will find additional guidance in the University Guide, which is available at www.mdx.ac.uk/24-7/assess.

The University Regulations also detail procedures in relation to:

- Infringement of Assessment Regulations – Academic Misconduct (Section F) including collusion and plagiarism
- Appeal Regulations and Procedures (Section G)
- Student Conduct and Discipline
- Student Complaints and Grievance Procedures
- Equal Opportunities

(See www.mdx.ac.uk/regulations/)

Plagiarism

Plagiarism is the presentation by a student, as his or her own work, of a body of material (written, visual or oral), which is wholly, or partly the work of another. In fact, plagiarism extends to cover one's own work previously assessed or published, which is also required to be properly referenced. Taking unfair advantage over other authors, students or oneself in this way is considered by the University to be a serious offence. The University will take serious action against any student who plagiarises whether through negligence, foolishness or deliberate intent. Make sure written material, ideas, theories, and formulae are acknowledged using quotation marks, references and bibliographies. Information on the correct way of acknowledging work from other sources is available from campus learning resource centres. Detailed information can be obtained at www.mdx.ac.uk/24-7/announce/plagiarism.htm.

Feedback to students

All forms of assessment are part of the learning process. You should be provided with either individual or collective feedback on your assessed work.

Feedback on coursework

For each module you will receive written feedback on coursework – for coursework completed during a module, the module leader will generally give out copies of the feedback at a convenient time when he/she sees their students. It can be more difficult for module leaders to get feedback to students who submit coursework after teaching has ended, but if students request their feedback then the module leader will provide it. Please do be proactive in seeing your module leaders and asking for your feedback, as you will gain a lot from seeing how you can improve your coursework. **This is particularly important if you need to resubmit coursework.**

Feedback on examinations

Once the results have been published from exams, module leaders will be available for discussion about your exam performance. You can ask to see your exam script, and go over it with your module tutor to see how you could improve your performance. Again, this is particularly important if you will need to resit the exam.

Comments on examination scripts and marks

Internal and external assessors do not normally write comments on exam scripts.

Proposition modules/dissertations/projects

All dissertations are double-marked. Two internal assessors will mark copies of each dissertation, and once marking is completed they will agree a grade (a third

assessor will be called in if they cannot agree!). Both assessors will write feedback comments on your dissertation, and you can collect this from your programme leader after the publication of results.

Other forms of assessment – minimal requirements

For placements and presentations, you should receive written feedback on your performance.

Viewing scripts

You can view your examination scripts and their marks once results have been published. Please make an appointment with the module leader if you wish to do so, but this should be within six months of the exam.

Return of coursework

Students are expected to keep a copy of their own coursework. The marked copy is not normally returned to you, so retention of a copy is important so that you can relate feedback to your work.

Electronic receipt of coursework

You cannot submit your coursework in electronic form, including emails or files on disk/USB cards.

Marking, second marking and marking moderation

Exam scripts and coursework will be marked by one of the module tutors, and then moderated. During moderation, a second member of staff samples the work to ensure that marking has been fair and consistent. A minimum of 10% of all coursework and examinations is moderated. All coursework and examinations, which are failed work, will be moderated. Following moderation, at least 10% of work (including all failed work) is sent to an external examiner, who is an academic at another Higher Education institute. The external examiner comments on the consistency and quality of marking in relation to the stated assessment criteria, and can suggest alterations to marks to be made to the module leader if any problems are identified.

Copies of past examination papers and other forms of assessment

The 24-7 website provides you with a searchable database of some recent Middlesex University Exam papers at:

www.mdx.ac.uk/cgi-bin/mdx/exam/searchscreenexam.asp. Multiple choice question papers are not available on this database. In some cases, for example where there are copyright restrictions, it may not be possible to publish past examination papers. In this case please ask the relevant Module Leader for information. Many module leaders also place sample examination questions on the OASISplus website for the module.

Attendance requirements

You should attend all scheduled classes and prescribed activities to be eligible for formal assessment. Where your attendance fails to meet the minimum required to meet the learning outcomes of the module (as published) you may be excluded from the assessment and be graded X in the module. The definition of the X grade is “Fail – incomplete without good reason: may not be reassessed”. It is your

responsibility to ensure that your attendance fulfils the published attendance requirements.

The X grade is applied if you fail to participate in the learning processes of a module for which you are registered. It is not a “punishment” for poor attendance but a recognition that you have not been able to prepare yourself for assessment in the content of the module. It is also given when you drop a module without formally removing it from your registered programme of study.

If you receive an X grade you may have the opportunity of taking the whole module again with permission from the Programme Leader, without grade penalty, though you will have to pay the module registration fee. You may only do this at Summer School (if available) or at the end of your programme.

For further guidance on attendance requirements, refer to the section entitled “Attendance & Withdrawal” which is also available at www.mdx.ac.uk/24-7/admin/attend.htm. The formal regulations about attendance can be found in Section C2 of the University Regulations and at www.mdx.ac.uk/regulations/.

Policy on late arrival

Arriving late for classes disrupts the learning experience for you and also for other students. You will miss the first part of the class where learning outcomes are outlined; if you are late for a laboratory you will miss the health and safety instructions, which can put you and other students in danger.

Please arrive punctually for all classes, and be ready and settled before the timetabled start. **If you are 10 minutes or more late then please do not try to enter the class.** The module tutor is entitled to ask you to leave if you try to do so. **If you are at all late for a lab class then you will not be admitted.**

If you do arrive late for class, then please go to the library and study privately before the next timetabled teaching.

Quality assurance of your Programme

To ensure the high standards and quality of Middlesex University provision, all Programmes are subject to the University’s academic quality assurance procedures (which include those procedures related to programme approval, monitoring and review). A key feature of these processes is the input from external subject experts who ensure that awards of Middlesex are comparable to those of other UK universities, and that the programme curriculum, teaching, assessment and resources are appropriate.

Students also have a very important role in enhancing Programmes, feeding back on a regular basis via feedback forms, Boards of Study, and other mechanisms. Student feedback also plays a major role in Programme monitoring and review.

Middlesex University, and its Programmes, are subject to periodic audit or review by external quality agencies such as the Quality Assurance Agency for Higher Education (QAA). These audits and reviews place confidence in the quality and standards of provision as operated at Middlesex University. The most recent audit of quality and standards at Middlesex University was undertaken by the QAA in 2003 and the University was awarded a judgement of broad confidence in the soundness of the University's current and future management of the quality of its Programmes and the academic standards of its awards. This judgement is the highest-level judgement that can be awarded by the QAA. QAA reviews and audits reports can be viewed on the QAA website at: www.qaa.ac.uk.

Feedback from students

Boards of Study

The purpose of the Board of Study is to provide a forum for discussion between you and staff involved in all aspects of your Programme.

You elect student members of the Board at the start of each academic year to ensure that all the various interests on the Programme are adequately represented. For advice and training contact the MUSU Student Representative and Development Co-ordinator on 020 8411 6481.

Each Programme holds regular Boards of Study. The membership includes:

- Student representatives
- Programme leader/Head of Department
- Academic staff aligned to the delivery of the Programme or modules
- Support services representatives

Your student representative represents the Programme or year group and is responsible for notifying the Board of issues which have been brought to them by you. You should be aware of the function of the Board of Study, and should ensure that representatives are alerted in good time to matters of concern, or to suggest initiatives.

Minutes are made of the discussion and decisions of each Board meeting, and these are circulated to members with outcomes. The minutes are included with the Programme Quality/Annual Monitoring Report for consideration by the University. The points raised at the meeting are carefully recorded for issues arising, and the action taken upon them, and are available at www.mdx.ac.uk/24-7.

Your student representative represents the Programme or year group and is responsible for notifying the Board of issues, which have been brought to them by you. You should be aware of the function of the Board of Study, and should ensure that representatives are alerted in good time to matters of concern, or to suggest initiatives.

Terms of reference

Full terms of reference are available in the Learning and Quality Enhancement Handbook (Section 11) at

<http://www.mdx.ac.uk/aboutus/fpr/clge/handbook/docs/section11.doc>

dates, minutes, actions and further information can be found on 24-7 at www.mdx.ac.uk/24-7/campusforums/index.htm

Campus Forums

The purpose of Campus Forums is to optimise the student experience by asking students to raise campus-specific issues relating to the operation of academic, administrative and service support for students, but not to deal with programme-specific curriculum issues which are dealt with by Boards of Study. For clarification please check with your MUSU Campus Sabbatical Officer. (MUSU Representatives please refer to your training kit.)

Campus Forums are usually held once per term. All students are welcome. The membership includes:

- Student representatives (contact the Student's Union or the Campus Director's office if you wish to attend – even if you are not a formal representative)
- Representatives from Campus Team, Campus Facilities, Campus Learning Resource Centre, Estate Services, Computing, Catering, Printing and MUSU
- a representative of each School and each Service based on the campus
- the Campus Director (Chair)

Your student representatives represent your Programme or year group and are responsible for notifying the Forum of issues, which have been brought to them by you.

Terms of Reference and dates

Full terms of reference are available in the Learning and Quality Enhancement Handbook at

<http://www.mdx.ac.uk/aboutus/fpr/clqe/handbook/parta/docs/partasec8.doc> and the dates, minutes, actions and further information can be found on 24-7 at www.mdx.ac.uk/24-7/campusforums/index.htm

Student representatives

Student representatives represent their Programme or year group. Student representatives will already have been selected for students now going into Year 2 and Year 3; we will ask for student representatives in Year 1 to put themselves forward during module contact teaching time in late October.

You may also represent your halls of residence on Campus Forums; for more information and training contact the MUSU Student Representative and Development Co-ordinator on 020 8411 6481.

If you are elected as a student representative your role will be to gather the views and opinions of the students you represent and to represent the views and opinions to either the Board of Study or the relevant Campus Forum and to feed back the results and information to other students following the meeting.

Student representatives should be selected, either by election or self-nomination, by the end of week 2 each year. Training and support throughout the year is provided for student representatives by MUSU – details of times and dates for training can be found on the MUSU website at www.musu.mdx.ac.uk.

As a representative you can receive a certificate that recognises your representational achievement. For the certificate you will have to attend the training sessions and be present at the Board of Study each term, as well as feeding information to both students and MUSU. This is a great opportunity to add value to your CV.

School Board and/or other School committees

The School of Health and Social Sciences School Board is held once per term, all student subject representatives are invited to attend. Opportunities for student representatives to join other School committees may also be available.

Module evaluation forms

Module feedback forms are distributed throughout the academic year. The forms are completely anonymous. The aim of this feedback process is to elicit your views on the quality of modules taken

Module forms examine each module in some detail and invite comment on your module in general.

You can expect to receive a report on any issues that have been identified. The report would also describe the measures taken to resolve any problems. All reports will be an item for discussion during Boards of Study and will, where necessary, be reported upon during the quality/annual monitoring process. The whole feedback process will also be reviewed on a regular basis, to ensure that that it is effective in helping provide a good quality experience for students.

The Students Union and the University also conduct periodic surveys of your levels of satisfaction with various University services. Further information will be available from time to time on MISIS and 24-7.

Other Surveys

From time to time the University will distribute surveys to elicit your views on the quality of the services offered by the University and your student experience on areas other than your programme of study. These surveys will be completely anonymous.

You can expect to receive a report on any issues that have been identified. The report would also describe the measures taken to resolve any problems. All reports will be an item for discussion during Boards of Study and will, where necessary, be reported upon during the quality/annual monitoring process. This process will be reviewed on a regular basis, to ensure that it is effective in helping provide a good quality experience for students.

National Student Survey (NSS)

The Higher Education Funding Councils for England, Wales and Northern Ireland have commissioned Ipsos MORI, a specialist survey company, to ask finalists in all higher education institutions about the quality of their learning experience. The aim of the National Student Survey (NSS) is to gather feedback on the quality of students' courses, to help inform the choices of future applicants to higher education, and to contribute to public accountability. Most final-year undergraduate students at these institutions will be asked a series of questions about the quality of their courses you will be contacted by email, phone or sent a letter and invited to fill in the survey.

Suggestions and Complaints

We welcome your suggestions on how we might improve your experience of university life, even when this takes the form of a complaint about a service, a member of staff or another student.

If you have a suggestion or a complaint about any aspect of university life, raise it with the person concerned in the first instance. If you are not satisfied with the outcome you can progress the matter through informal and formal procedures step by step up the management structure of the university. Full details of these steps are available in the University Regulations (www.mdx.ac.uk/regulations/) within the Student Complaints and Grievance Procedures.

If you are not sure who to speak to, seek advice from a campus student office or advice centre. If the matter is serious, talk directly to your Directors of Resources and Students.

If something goes wrong we aim to put it right as quickly as possible. Your advice and comments are essential.

Middlesex University Students' Union

Middlesex University Students' Union (MUSU) is a democratic organisation, run by students for students, which represents the students of the University at local and national level.

At a national level, MUSU keeps up with national topics that the NUS deals with, for example, campaigns such as "Admission Impossible" and "Black History Month" and other issues which affect students nationally.

On a local level, MUSU is involved in improving the experience of Middlesex students within the University, as well as a wide range of services, including societies, training and development, and welfare/academic advice.

There are six elected sabbatical officers who work full time on behalf of the student body:

President (TP) ext 6763

Vice President Academic (HE) ext 6754

Vice President Student Activities and Communications (CH) ext 5511

You can contact any of these people in order to seek help, advice, or to discuss any issues that concern Middlesex students. With your help MUSU can continue to improve the experience of Middlesex students within the University.

If you would like to become involved with the Students' Union or find out more about the services it provides, simply ring MUSU reception on: 020 8411 6450, or go to: www.musu.mdx.ac.uk

Career opportunities and placement

Careers

The Careers Service provides impartial and confidential guidance and information to Middlesex University students and alumni (for up to two years after graduation) to help them in their career planning and job seeking.

The careers advisers can assist you with planning your academic programme and personal development in relation to your career goals from your first year to final year. This includes exploring career and study options, self awareness and decision making. The advisers can also help you to find full and part-time employment, write CVs, covering letters and application forms, prepare for interviews, psychometric

tests and assessment centres, identify voluntary and work experience opportunities and research postgraduate/further study and funding

Students have access to careers information, individual guidance appointments, drop-in advice sessions, careers seminars and workshops, employer presentations, Careers Fairs and other campus based careers events and alumni links to support students with their career development. The careers advisers also work with tutors to deliver and support careers related activities on course programmes, such as ~ career opportunities for graduates, job study research, the graduate employment market, developing employability skills, sector specific information, pre-placement preparation, job search skills and strategies and post graduate study options.

The main careers libraries are based at Enfield and Hendon and careers advisers are available on most campuses offering a flexible service to support the needs and any specific requirements of all students. To check opening times and availability of careers advisers on your campus or to book an appointment please see the website www.mdx.ac.uk/careers and telephone 020 8411 5523

The Careers Service's website as above (or accessible through the 24-7 website) offers a wide range of information and links to other graduate careers websites. The website contains an on-line job vacancy service, JobsPlus, where opportunities notified by employers for full time, part time, voluntary work or work experience are posted. For students unable to come to see us on campus there is also a link to 'MeG', an e-guidance service, through which you can email your queries to a careers adviser.

Today's job market is full of opportunities but is also rapidly changing and developing to meet the needs of employers in the 21st Century. Gaining work experience and developing the employability skills that employers look for is an important part of your career planning and development and will help towards your future career success. In addition to the help and support available from the Careers Service, you may also want to consider the option of undertaking a work experience placement as part of your degree, a student exchange in another country or undertaking some voluntary work and gaining accreditation for this through the university.

Further advice on placements is available from the placement staff in your school, or speak to your tutors about this. Information links to student exchanges and volunteering opportunities can be found on the 24-7 student portal at www.mdx.ac.uk/24-7

Placements

Work placements are supported across the University by a network of placement offices.

Work experience is one of the most valuable assets you can have in planning a successful career. Placement is a standard part of many programmes and a possibility on many others, giving you the chance to undertake work directly related to your programme of study.

Employers want people, who have developed the ability to be flexible and adaptable, work in teams, communicate with fellow employees and customers, take initiatives and responsibility and, when necessary, take the lead. Many of these qualities can be learned and developed through placements.

Equally important is the fact that these experiences help you develop your own ideas about the career you want, what will suit you best, and perhaps the kind of work or employers you wish to avoid. It is much easier to identify the positive and negative aspects of a particular career if you have experienced it first hand.

The University has responsibilities under the Health and Safety at Work Act 1974 to ensure that risks to health and safety are properly controlled. On placement, you have the same health and safety responsibilities as any other employee in the workplace and you must take reasonable care of your own health and safety and those of other people.

It is therefore essential that no student commences a placement without first having it approved by the Placement Service and as such ensuring that all administrative, health and safety and insurance procedures are carried out prior to the start date. Failure to adhere to this may invalidate your placement.

Further information and guidance notes for students on work placements are available on www.mdx.ac.uk/24-7/placement/health.htm

Placement Procedures and Organisation

To improve their employability, students can take HSS3300 Placement Dissertation instead of BIO3330 Dissertation. As part of HSS3300 Placement Dissertation, a student must spend time with at least one potential employer, who will provide student with the specialist support required for his/her dissertation.

Students are normally required to identify a suitable placement by the end of their second year and liaise with the Campus Placement Office. Ideal placements include sports supplements companies, biochemistry, clinical exercise physiology and human performance laboratories. Suitable students may be placed with the Human Performance Laboratory at Archway Campus. Any offers of a placement from organisations are placed Campus Placement Office's notice board. Students are advised to check this notice board regularly.

Students should be aware that they might need to pass an interview in order to get a placement in an organisation or with a practitioner. Placement Office working with the programme leader can help students with drafting of CV and accompanying letter as well as with interviewing techniques. The placement normally runs one day per week for 24 weeks or two days for 12 weeks.

At the placement, each student is allocated a supervisor, who draws up a negotiated learning agreement with the student, provide the student with learning opportunities and supervises the student's work. A university academic normally visits students on placement at least once during 24 weeks to monitor the student's progress. In addition, programme leader is the university point of contact for both student and supervisor for all academic and personal matters.

At the end of the placement, both the student and supervisor are required to complete a placement evaluation questionnaire.

More details about organisation and management of the placement are available in the module handbook, which is normally issued at the beginning of the second year to students, who choose the placement module.

CRB (Criminal Record Checks)

Students will be encouraged to undertake a CRB check prior to going out on some placements. This Disclosure will be necessary if you are working with vulnerable groups. A CRB form can be obtained from the Sports Development Office and will be undertaken at your own expense. Exceptions will be made for those with current CRB checks (usually valid for 3 years). Sometimes a CRB may be obtained for free as part of a coaching qualification or as part of a coaching in schools voluntary scheme - see Stella Sipple or Martin Bunn in the sports office for information.

The University has two policies, which are relevant to this issue of CRB. Firstly, the Recruitment of Ex-Offenders to Programmes of Study.
<http://www.intra.mdx.ac.uk/core/service/hr/docs/hrps27.pdf>

This Policy confirms the University's commitment to fair treatment regardless of offending background. Prospective students will only be asked about 'unspent' convictions unless the nature of the programme of study or position allows the University to ask about an applicant's entire criminal record (e.g. for placements in rehabilitation). This information will be sought through a Disclosure from the Criminal Records Bureau. If a Disclosure is required, this will be indicated in the recruitment literature. Guidance is provided on assessing a criminal record and with whom the final decision on admission rests.

The second policy involves the Secure Storage, Handling, Use, Retention and Disposal of Disclosures and Disclosure Information.
<http://www.intra.mdx.ac.uk/core/service/hr/docs/hrps28.pdf>

This Policy confirms that Disclosure information must always be kept securely with access strictly controlled by the Counter signatories. It may only be seen by another member of staff of Middlesex University who is entitled to see the information as part of his/her duties. Once the student admission decision or placement decision has been made, disclosure information will not be kept for any longer than is absolutely necessary, generally for a period of up to six months. Disclosure information should be destroyed by secure means such as shredding, No photocopies should be kept. However you may keep a record of the date of issue of a disclosure, the name of the individual, the level obtained, the placement, the unique reference number of the disclosure and the decision taken.

Health and Injury Clinic

There are health and injury clinics located on the Enfield, Trent Park and Archway campuses. These clinics are funded and supported by the Enterprise Initiative Fund, the Sports Development Unit and the Human and Health Care Science academic group. The clinics provide a range of services including; sport rehabilitation, nutrition, strength and conditioning advice, physiotherapy and acupuncture. One of the important functions of the clinics is to provide clinical placement opportunities for students on a range of healthcare programmes. The clinic staff consists of Dr Dan Tan (acupuncturist) and Marcel Salazar (pulse gym supervisor).

Human Performance Lab

The Human Performance Lab (HPL), based at our Archway Campus and managed by Lygeri Dimitriou, is geared to the analysis of sporting performance. It offers a

wide range of testing such as spirometry, respiratory gas analysis, ergometry, remote heart monitoring and 3D motion analysis. The lab provides analysis and support for athletes through musculoskeletal screening, functional capacity evaluation, training and exercise prescription, long-term fatigue evaluation, gait and posture analysis.

You will spend time studying and researching in the HPL. SES2222 Applied Physiology and Biomechanics is timetabled there. Therefore, you will have the opportunity to use this state-of-the-art facility, which will provide you with a wonderful learning opportunity.

The London Sport Institute (LSI)

The LSI, comprising the Sport and Exercise Science academic and technical staff, falls within the Department of Interprofessional Health and Social Care. Many of the LSI staff teaches on the sports biomedicine degree. The Head of the LSI is a leading researcher in the field of sport and exercise science.

Research projects are located within the LSI and draw on research interests across the School of Health and Social Sciences, the entire University as well as University College London. Research projects utilize our Human Performance Laboratory, which is equipped with state of the art facilities and measurement technology thus associating us with a vibrant research institute. <http://www.mdx.ac.uk/sport/>

Web Site

There is a Sport and Exercise Science website which can be accessed on: www.mdx.ac.uk/ses. We are working on making it a site where students can turn for job opportunities and other programme information. All programmes and details about the staff are listed at the website.

Sports Development

Students at Middlesex have the opportunity to take part in a wide range of sport and health/fitness related activities. A range of classes cater for the complete beginner up to the fitness fanatic and the constantly changing programme provides everybody with the chance to find something just right for them. Visit the [Sports Development website](#) to find out more

University teams compete on Wednesday afternoons in the British University Sports Association ([BUSA](#)) and the Southern England Student Services Association ([SESSA](#)). Standards vary from the 'very social based' to our national champions in karate and table tennis. Many students compete for the first time while at Middlesex and we have many links with external clubs to allow you to continue to fulfil your sporting aspirations.

If you want to compete for the University, try a new activity, or improve your fitness, then ring one the numbers below

Competitive Sports Teams: 020 8411 4651 (Speak to Stella Sipple or Martin Bunn)
Club Pulse Enfield: 020 8805 7648

The Burroughs Sports Club Hendon: 020 8411 6343
Trent Park Sports Hall: 020 8411 5699

The Head of Sports Development [Mel Parker](#), 020 8411 5893

Programme advice, educational guidance and student support

Programme Advice

You are expected to be independent and to take responsibility for your own academic and personal life. However there is a lot of help available.

Your tutors will direct your studies and ensure that you know what work you need to cover in any given module. Seek advice from academic staff either after class, during their office hours (published on their doors), by email or telephone.

General Educational Guidance

General educational guidance, clarification of University Regulations and help with planning your programme is available from the student support team's duty/student advisers, who can be contacted by telephone or e-mail or in person on any campus and who normally have regular drop-in hours.

Student Support

You can get a wide range of support, advice and information direct from the student website 24-7 (www.mdx.ac.uk/24-7) where you can also find the telephone numbers and email addresses of student/programme support team staff. If you need personal advice call the School Student Office. If they cannot help you, they will refer you to someone who can.

Do not hesitate to approach the student support team by telephone, email or in person for support services including:

- Changes to your personal record such as address, name, etc. (Alternatively this can be done on-line via MISIS <https://misis.mdx.ac.uk>)
- Using MISIS (Middlesex Integrated Student Information System)
- Programme regulations advice
- Revising or recording module registrations
- Submission of coursework
- Assessment deferral requests
- Recording extenuating circumstances
- Recording reasons for unavoidably being absent
- Arranging to interrupt your studies, change or withdraw from your programme
- Advice on where to make a suggestion or a complaint
- Personal Counselling

Specialist advice is also available from the Disability Support Service, Careers Advice and Placement Services, Accommodation Service, Childcare Service, Sport and Leisure, International Support Services, Money and Welfare Advice Services,

Counselling Services, and Financial Services; and from the Middlesex University Students' Union (MUSU). Ask at your school office for more information.

Middlesex University Counselling Service

During the course of your studies at Middlesex, if you encounter problems concerning your coursework or personal or emotional difficulties, you can consult one of our professional counsellors confidentially. Counselling involves one or more meetings with your counsellor in a safe and confidential setting. You will have the time and space to discuss difficulties in your life which may be interfering with your ability to study and enjoy your time as a student. Students come to counselling for all sorts of reasons but generally it is a good idea to seek help before things start to feel unmanageable. Coming for counselling can give you the opportunity to talk and think things through with someone from outside your social circle. This can feel both supportive and also offer the possibility of developing a fresh perspective on your difficulties.

For more information please go to intranet www.mdx.ac.uk/24-7/counsel

Contacting a counsellor:

Archway & Hospitals - Alison Jefferies

Room 15a Trevor Clay Building, Whittington Hospital & for Royal Free Hospital.

Tel: 020 8411 6152

email: a.jefferies@mdx.ac.uk

Cat Hill & Trent Park

Lindsey Othen-Price

Room 5 Peter Green Building CH

Room 210 The Mansion TP

Tel: 020 8411 5548

email: l.often-price@mdx.ac.uk

Caroline Hallett

Room 5 Peter Green Building CH

Room 210 The Mansion TP

Tel: 020 8411 6421

email: c.hallett@mdx.ac.uk

Hendon

Pete Kerridge, Head of Counselling

Room CG24 College Building

Tel: 020 8411 4719

email: p.kerridge@mdx.ac.uk

Bernard Shapley

Tel: 020 8411 5779

email: b.shapley@mdx.ac.uk

Nadina Al-Jarrah

Room CG25 College Building

Tel: 020 8411 5779

email: n.al-jarrah@mdx.ac.uk

Sandra Primack

Room CG23 College Building

Tel: 020 8411 6169

email: s.primack@mdx.ac.uk

Student exchanges

At Middlesex we offer you the opportunity to study abroad with one of our partner universities as part of your degree. We have over 100 partner universities in Europe, 15 in the US and another 15 across the rest of the world, all carefully selected and many of them prestigious and historic institutions.

An Exchange – so called because we receive students from our Partners in place of those we send out and therefore there are no extra fees to pay - can be for one or two terms. The credits you gain while abroad will be incorporated into your Middlesex degree and in the case of European and American exchanges your actual grades will be converted.

Whether or not you speak another language than English, you can consider an Exchange. Aside from our American, Canadian and Australian partners, many European universities offer courses in English.

Language support is of course available both at Middlesex and at your host university. For example, most of our European partners offer a four week Intensive Language Course prior to the start of each term.

Your studies will benefit from the added perspective to your learning that you will gain through studying abroad. As a Student Exchange graduate, you will have acquired skills and qualities instantly recognisable to an employer.

European exchanges are supported by the Erasmus Programme which is the European Commission's educational programme for Higher Education students, teachers and institutions. It was introduced in 1987 with the aim of increasing student mobility within the European Community, subsequently the European Economic Area countries, and also Turkey. A substantial grant is provided to any students who are citizens of, and going on Exchange to, these participating countries. A UK or EU student going on a full year's Exchange under the Erasmus programme may be eligible for a full fee-waiver for the whole of that year – a significant saving on the cost of your degree.

For more details and information on Exchanges at Middlesex visit us on 24-7: www.mdx.ac.uk/24-7/abroad. The experiences of Middlesex students on exchange are recorded at www.exchangerave.com.

If you go on exchange, you will spend a term or a year in one of our partner universities abroad and the credits gained while you are away will count towards your Middlesex degree. Check with your assistant curriculum leader the best time to go on an exchange. It is a good idea to find out where you can go early on in your programme, as you may be able to widen your choice of exchange if you learn a little of another language. The Languages for All scheme offers tuition in learning weeks in a range of languages and Middlesex Language Centres have self-help materials in many more.

International Student Support

All members of the Student Support Team on each campus are dedicated to supporting international students, who make up over 20% of students in the

university. Check on 24-7 (www.mdx.ac.uk/24-7) or ask the student office if you are unsure who to speak to.

You can join in a varied and exciting social programme organised by the International Student Liaison Manager Chrisy Savva, Ext 5422, c.savva@mdx.ac.uk, who also organises the Welcome to Middlesex Orientation Programme. Look out for the International Newsletter every few weeks.

You can get specialist advice and support, particularly relating to visa renewals, from the International Student Support Co-ordinator, Christine Struwe, who works in collaboration with the Money and Welfare advisers. - Tel /fax 020 8411 5917/6076 and email c.struwe@mdx.ac.uk. If you are requesting a University Enrolment Letter for visa purposes then please email letterrequests@mdx.ac.uk.

Learning Resources

Learning Resources provides facilities, services and support to aid student learning. Full details can be found at <http://www.lr.mdx.ac.uk>

Services

There are libraries at each main campus, providing a range of lending and reference services; enquiry desks and online enquiry services; photocopying and printing facilities; individual and group study areas; IT and audio visual facilities, as well as access to print and electronic information resources. Opening hours vary between libraries and between term time and vacation periods. Further details of these services are available at <http://www.lr.mdx.ac.uk/lib/index.htm>

The Language Centre is based at Hendon and operates across all campuses, providing English Language and Learning Support (ELLS), Pre-Sessional English Courses, Translation & Interpreting courses and IELTS testing. Contact details and further information may be found at <http://www.lr.mdx.ac.uk/lang/index.htm>

Weekly workshops and tutorials run on a variety of language and study topics including essay writing, dissertation writing and study skills. Numeracy support workshops and tutorials are also available. In addition specific help is provided for dyslexic students in conjunction with Disability Support Service: contact the Dyslexia Administration Assistant on 020 8411 6073 or e-mail dystutor@mdx.ac.uk. Further information about the Disability Support Services may be found at <http://www.mdx.ac.uk/24-7/Disability/index.htm>

In addition, each library is equipped with a variety of assistive technologies and services and a disability support representative with whom you can discuss your needs. Contact details and further information may be found at www.lr.mdx.ac.uk/disab/disstaff.htm.

Middlesex is unusual in having a world-class museum right on the doorstep. The Museum of Domestic Design & Architecture (MoDA) supports teaching and learning for students from a wide range of Middlesex courses. Students use the collections in various ways in support of their studies, participate in real life projects or take up work experience opportunities. For more information please see the website: www.moda.mdx.ac.uk

Information resources

Learning Resources provides access to a wide range of materials including over half a million books, a comprehensive selection of journals (the majority of which are available online) and a range of loanable equipment. A wide range of bibliographic and full text databases are available to provide information to support your studies, and the library catalogue is designed to make locating resources straightforward. It can be used to check which items you have out on loan, make renewals and place reservations. The majority of electronic resources are available remotely unless restricted by the supplier, and also include subject gateways, multimedia resources, national and international catalogues and ebooks. Full details of online materials may be found at: <http://www.lr.mdx.ac.uk/lib/eresources/index.htm>.

Programme specific resources

The Learning Resources team is available to provide advice and support for your learning needs and to ensure that services and resources are relevant and of a high quality. The team provides a range of training sessions in information skills and the use of subject specific resources. Contact details of your liaison librarian as well as details of specialist resources available for Biomedical Science may be found at: <http://www.lr.mdx.ac.uk/lib/subjects/index.htm>.

Learning Support

- **Disability Support Service**

If you have any long term medical conditions, sensory impairment, mental health problems or a specific learning difficulty (e.g. dyslexia) and would like information about special educational provision please contact the University's Disability Support Service. You are encouraged to make your situation known at the earliest opportunity to ensure due provision is made. Support can include, but is not restricted to: advice on Programme related study needs, arranging support such as note takers, personal assistants, liaison with tutors and funding authorities and arranging special provision for examinations and undertaking needs assessments for students applying for support through the Disabled Student's Allowance. Confidentiality will be respected and relevant details will only be disclosed with your permission.

For further details contact the Disability Support Service on ext. 4945; e-mail disability@mdx.ac.uk

or see 24-7

<http://www.mdx.ac.uk/24-7/Disability/index.htm>

In addition, each learning resource centre is equipped with a variety of assistive technologies and services and a disability support representative with whom you can discuss your needs. To find out how to contact your disability representative, go to www.lr.mdx.ac.uk/disab/disstaff.htm.

Please also refer to Section 17 of the Programme Specification included in this Handbook which will state whether the programme excludes students with particular disabilities.

- Dyslexia Support**

There is a comprehensive range of services and facilities aimed to specifically support dyslexic students at the University. This includes initial screening, full cognitive assessment and subsequent tutorial support via English Language and Learning Support (ELLS) and a full needs assessment service for students applying for support through the Disabled Students Allowance, obtained via the Disability Support Service. Contact the Dyslexia Support Officer – Tel 020 8411 6285; e-mail Dyslexia@mdx.ac.uk.
- Audio-visual Support/Computer Support**

Staff provide workshops covering a range of software and equipment use to support programme needs. Details of the workshops may be found at www.lr.mdx.ac.uk/learning/index.htm and on notice boards within the LRC.
- English Language and Learning Support (ELLS)**

On each major campus, there is an ELLS lecturer who offers weekly workshops and tutorials on a variety of language and study topics including essay writing, dissertation writing, study skills. English language for overseas students and examination techniques. For information about schedules and how to contact your tutor, visit www.lr.mdx.ac.uk/lang/ells.htm
- Help and Guidance**

In addition to the above services, staff provide a series of help sheets at www.lr.mdx.ac.uk/document.htm and are available to answer your questions at enquiry desks in the LRC. Guidance on a variety of academic tasks may be found at <http://oasis.mdx.ac.uk/public/ELLS01/>.
- Numeracy Support**

If you are having trouble with numeracy, the numeracy support tutor will help you with your specific problems. Contact details and further information may be found at <http://www.lr.mdx.ac.uk/learning/lisnum.htm>
- Programme Support**

Subject Librarians provide workshops in research skills and the use of subject specific resources and are available to meet you personally to discuss individual projects. Details of subject resources and subject librarian responsibilities are found at <http://www.lr.mdx.ac.uk/lib/subjects/index.htm>. To make an appointment, please email the subject librarian responsible for your programme. The subject librarian is Jamie Halstead.

Student Membership of the University

All students following a programme of study leading towards a Middlesex University qualification are student members of the University. When you enrol, you give an undertaking to comply with the University Regulations. As a student member of the University, you have certain rights but also specific responsibilities. Other student members and staff also have rights and responsibilities and are expected to comply with the University Regulations.

Further information on your rights and responsibilities can be found in the University Regulations at www.mdx.ac.uk/regulations/

Health, Safety and Welfare

Information and advice regarding health, safety and welfare is accessible on a University wide basis. www.mdx.ac.uk/24-7, the information resource for Middlesex University students, contains a summary of this advice. On this web site, you will find useful information on:

- Health related issues such as registering with a doctor, dentist or optician. A summary of key infectious disease and a range of health matters such as minor illnesses, alcohol, drugs and travel.
- Health and safety issues such as the University's Health and Safety policy, first aid arrangements, fire procedures, accident reporting procedures and how to raise concerns. Also, several other key health and safety related policies such Alcohol and Substance Misuse and No Smoking.
- Personal safety related issues such as, reporting and dealing with crime. These are supported by useful numbers to contact while on campus or in halls.

The university strongly advises you to register with a local doctor on enrolment if you have moved away from home. More detailed guidance on the above will be brought to your attention at the start of your studies.

Abbreviations and acronyms

Middlesex University Schools and Services

A & E – School of Arts and Education

BS – Business School

EIS – School of Engineering and Information Sciences

HSSc - School of Health and Social Sciences

LR – Learning Resources

MISIS - Middlesex Integrated Student Information System

MUSU – Middlesex University Student Union

The following website contains a glossary of terms used in the University:

<http://www.intra.mdx.ac.uk/core/info/glossary.htm>

Module Information

Learning Narratives: This is what you will be studying. Every attempt has been made to ensure this information is correct at the time of publish however additional information may be provided in the handbook given to you for the specified module. Module handbooks are given out within the two weeks of class and are available on Oasis.

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Table 1: Level 1 Assessment Planner

Module	Code	Year	Credits	Assignment	Examination	Practical	Presentation
Elements of Life	BIO1601	1	30	1. 2 laboratory reports submitted for grading – in chemistry for all students and a second in genetics for biosciences students (30%) 2. Data analysis by week 13 (20%)	2 x 1 hour tests – multiple choice questions, and short answer questions about a case study at weeks 14 and 20 (50%)		
Human Sciences	BMS1515	1	30	Portfolio due the end of the Spring term (100%)			
Laboratory Practice and Skills	BMS1503	1	30	1. Laboratory logbook in week 24. 2. A portfolio comprising up to 8 tasks, not exceeding a total of 1500 words, in the middle of the Spring term (100%)			Group presentation as part of the portfolio by the end of the Spring term
Applied Anatomy and Biomechanics	SES1200	1	30	1. Completion of a coursework containing completion of weekly practical session tasks (Pass/Fail) 2. Completion of 4 questions (500 words each) with two by the end of the Autumn term and two by the end of the Spring term (40%)		Two practical assessments each term (60%)	

Table 2: Level 2 Assessment Planner

Module	Code	Year	Credits	Assignment	Examination	Practical	Presentation
Clinical Sciences	BMS2513	2	30	1. 1000-word problem-solving assignment submitted by week 12 2. 2000-word problem-solving assignment , which is submitted by week 24 (50%)	2-hour exam: short answers and case scenarios (50%)		
Molecular and Metabolic Biochemistry	BMS2113	1	30	1. Two x 1000-word review article assignment at the end of the Autumn term (20%) 2. A 1500-word short laboratory report before the end of the Spring term (20%)	2-hour short answer question paper with case studies at the end of the Spring term (60%)		
Approaches to Experimental Research	BIO2003	2	30	1. Data analysis exercise report of no more than 1500 words (50%) 2. Project proposal -no more than 3000 words (50%)			
Applied Physiology and Biomechanics	SES2222	2	30	1. A 1500-word physiology laboratory report submitted by the end of the Autumn term (50%) 2. A 1500-word biomechanics laboratory report by the end of the Spring term (50%)			Oral presentation on topic related to laboratory report to assess learning (Pass/Fail)

Table 3: Level 3 Assessment Planner

Module	Code	Year	Credits	Assignment	Examination	Practical	Presentation
Clinical Biochemistry	BMS3113	3	30	Practical logbook (50%)	2-hour short answer question examination including case study and data interpretation questions at the end of the module (50%)		
Placement Dissertation	HSS3300	3	30	5000-7000-word dissertation by the end of the Spring term (100%)			
Dissertation	BIO3330	3	30	7500-word dissertation by the end of the Spring term (100%)			
Ergogenic Aids	SES3113	3	30	3000-word essay before the end of the Spring term (25%)	2-hour at the end of the Spring term (50%)		Group presentation by the end of the Autumn term (25%)
Sports Nutrition	SES3188	3	30	A 3000-word evaluative nutritional report by the end of the Autumn term (50%)	2-hour short answer examination comprising problem-based and data analysis questions taken at the end of the Spring term (50%)	Objective structured practical examination by the end of the Spring term (Pass/Fail).	

1.	Short code	BIO1601
2.	Title	Elements of Life
3.	Level	UG 1
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Biological Sciences
7.	Module Leader	Dr. Sandra Appiah
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	Aims	The module provides students with the skill and underpinning knowledge to pursue further studies in biological, biomedical, environmental and health sciences. Particular emphasis is place on chemistry for life sciences and chemistry.
12.	Syllabus	<p>Principles of scientific method Atomic structure, bonding Water, solutions, pH, buffers Organic compounds and major functional groups Natural and Man-made polymers Structure and function of carbohydrates, fats and proteins Characteristics of enzymes Overview of carbohydrate, fat and protein metabolism including energetics and respiration Structure and function of DNA, transcription and translation Outline of principles of genome technology including gene therapy and cloning, ethics of DNA technology Electromagnetic spectrum</p> <p>Pathways:</p> <p>Environmental Health students Energy and natural forces Electrical and nuclear forces, radioactivity Simple dynamics of sound</p> <p>Pathways – Biosciences Students Expression of human genome-unifactorial, multi-factorial and X linked genetic disorders, phenotype and genotype, Mendelian genetics Human genome project Hormonal regulation of metabolism</p>

13.	<p>Learning Outcomes</p> <p>On completion of the module, the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Describe the structure, properties and behaviour of common elements and compounds. 2. Explain the structure and function of biological molecules 3. Discuss the role of enzymes in chemical reactions and factors that influence their activity. 4. Explain the principles of pH, solutions, buffers and conductivity. 5. Outline the main steps in carbohydrate, fat and protein metabolism. 6. Describe the structure of DNA and its function as the basis of hereditary information. 7. Outline the applications and ethical issues of DNA technology. 8. Understand the nature of light and its function in biological systems, application in industry and issues associated with health. 9. Work in teams and individually to collect, use and analyse data in the writing of experimental reports. <p>Environmental Health pathways</p> <ol style="list-style-type: none"> 10. Understand the principles of sound and noise. 11. Discuss the principles of energy, natural forces, electrical and nuclear forces. <p>Biosciences pathways</p> <ol style="list-style-type: none"> 12. Explain how Mendelian and non-Mendelian genetic traits are inherited. 13. Give an account of hormonal regulation of metabolism.
14.	<p>Learning, Teaching and Assessment Strategy</p> <p>The learning and teaching on this module introduces students to a range of fundamental scientific concepts required to underpin studies in biological and biomedical sciences and in environmental health. The module has shared core outcomes with pathways for the bioscience and environmental health students to take specific core knowledge for their specialist areas.</p> <p>Weekly lectures will impart core knowledge and explanations of key concepts.</p> <p>These are underpinned by 12 laboratories to enhance and embed the learning from the lectures demonstrating core practical principles and applications, particularly in relation to learning outcomes 1-5, and 8-12. Students acquire practical skills in the laboratory, develop an understanding of how to collect and use data and work individually and in teams contributing to learning outcome 9.</p> <p>The module is supported by seminars to explore lecture materials through problem solving exercises, debates of current issues, use of visual materials, group exercise. The</p>

<p>seminars are used to review lecture information on a weekly basis and as such review the learning outcomes of the whole module. Within the seminars there will be some taught numeracy aspects to meet part of learning outcome 9.</p> <p>There are online formative assessment activities to support the learning.</p> <p>Assessment Scheme</p> <p>A. Formative</p> <p>a. A formative laboratory report – submitted in week 5. This will be returned with detailed feedback and a guide grade only. Students may submit more than one formative laboratory report only if their first (and any subsequent reports) have a guide grade of less than 40%.</p> <p>b. Online learning tests – there will be 4 online learning tests to meet all of the learning outcomes from the module. These will be graded and give immediate feedback to the students. The on line learning tests are compulsory but not used in the final grading of the module.</p> <p>c. A numeracy exercise completed in class analysing data from enzyme reactions – this will be peer assessed using a template - to meet learning outcome 3 and 9.</p> <p>d. A role play exercise debating ethical issues of genetic engineering. Students will individually prepare a three minute short presentation about a given topical issue – this will be peer assessed to meet learning outcome 7.</p> <p>B. Summative</p> <p>d. 2 laboratory reports submitted for grading – in chemistry for all students and a second in genetics (for biosciences students) and in physical aspects of science (for environmental health students) Total 30%</p> <p>e. Data analysis question to meet learning outcome 9 Total 20%</p> <p>f. Two in-course tests – Test 1: 1-hour test - Students will carry out laboratory test relating to learning outcomes 1-4 and answer short questions to explain their results in week 14 (25%)</p> <p>Test 2: 1 hour – Problem solving exercise will be given in advance- students will be asked short and multiple choice questions testing learning outcomes 2, 3 and 5 in week 20. For the biosciences students this will meet learning</p>	
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	outcomes 12 and 13 for the environmental health students 10 and 11 (50%)								
15.	Assessment Weighting								
	Seen examination					0%			
	Unseen examination					50 %			
	Coursework (no examination)					50 %			
16.	Timetabled examination required					YES			
17.	Length of exam					In-class test			
18.	Learning materials								
	Rossing, T.D., Moore, R.F. and Paul, R.A. (2002). <u>The Science of Sound</u> Benjamin Cummings								
	Alberts, B et al. (2003) <u>Essential Cell Biology</u> Garland Science								
19.	Module run								
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE		
	2007/2008	Autumn		Oct	May	150	EN	FT	PT
	2008/2009	Autumn		Sep	May	150	HE	FT	PT
	2009/2010	Autumn		Sep	May	150	HE	FT	PT
	2010/2011	Autumn		Sep	May	150	HE	FT	PT
20.	Timetabling Information								
	(a) Please indicate which teaching activities will be offered in this module:								
	LECTURE (LEC)					1 hours per week and			
	SEMINAR (SEM)					2 hours per week or			
	LABORATORY/STUDIO (LAB/STU)					2 hours per week			
	WORKSHOP (WRK)					NO			
	TUTORIAL (TUT)					NO			
	OTHER								
	(b) Timetabled					YES			
	(c) Sectioned					YES			
	(d) Is the module to be downloaded for OASIS?					YES			
	(e) Do students need early access to OASIS?					YES			

1.	Short code	BMS1515
2.	Title	Human Sciences
3.	Level	UG 1
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Biomedical Science
7.	Module Leader	Sheila Cunningham
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	<p>Aims</p> <p>This module aims to provide students with the knowledge and understanding of human anatomy and physiology required to underpin their future learning. The unifying theme of homeostasis is used to show how a healthy structure and function are maintained and how failures of homeostasis can result in disease.</p>	
12.	<p>Syllabus</p> <p>Structures and functions in relation to key roles of body structures:</p> <ol style="list-style-type: none"> 1. Organisation of the Human Body from cell to more complex level including anatomy and terminology. <ol style="list-style-type: none"> a. Cells b. Tissues c. Homeostasis and health or disease state 2. Covering support and movement <ol style="list-style-type: none"> a. Skin structure and function b. Bones & Skeleton c. Muscles & movement 3. Regulation and integration of the Body <ol style="list-style-type: none"> a. Nervous control (somatic & autonomic) b. Central and peripheral nervous system and relation to stress c. Special senses d. Endocrine control 4. Maintenance of the body <ol style="list-style-type: none"> a. Cardiovascular functions b. Lymphatic & defence c. Respiratory functions d. Digestion & nutrition e. Elimination & fluid balance 5. Continuity of Humans <ol style="list-style-type: none"> a. Reproduction b. Heredity c. Lifespan <p>1. Contributing to laboratory practicals and exploring methods of collecting information and presenting this</p>	

13.	<p>Learning Outcomes</p> <p>On completion of the module, the successful student will be able to:-</p> <ol style="list-style-type: none"> 1. Outline the organisation and major functions of the human body from cell to more complex level. 2. Explain the structure and function of body surfaces and membranes, support and human movement 3. Identify and describe the regulation and integration processes of the human body focussing on homeostasis 4. Give an account of the maintenance of the body including nutrients, elimination, transportation systems, and fluid balance 5. Describe the key changes during human lifespan including puberty, reproduction and heredity 6. Demonstrate effective engagement with the scientific process by accurately observing, recording and analysing data then reporting and communicating findings and significance.
14.	<p>Learning, Teaching and Assessment Strategy</p> <ol style="list-style-type: none"> I. Weekly seminars will be used to extend the theoretical material using group and practical exercises and problem based learning. II. Supervised practical laboratory work and home assignments will reinforce theoretical material and introduce scientific methodology and techniques. III. Weekly self-study will be used for prior reading and preparation for group work and problem based tasks. IV. Learning and teaching will be supported through the use of OASIS (WebCT), videos and other visual aids as appropriate. V. Weekly workshop or tutorials will be available for students needing additional support with their studies. <p>Assessment Scheme</p> <p>Summative: A portfolio comprising laboratory reports, class or online tests and short assignments to assess learning outcomes 1 to 6 (100%)</p>
15.	Assessment Weighting
	Seen examination 0%
	Unseen examination 0%
	Coursework (no examination) 100 %
16.	Timetabled examination required NO
17.	Length of exam Not applicable
18.	Learning materials

	<p>Essential Marieb, E.N. (2006) <u>Essentials of Human Anatomy and Physiology</u> (8th Edition). Prentice Hall.</p> <p>Recommended Marieb, E.N. (2006) <u>Anatomy and Physiology Coloring Book</u> (8th Edition). Prentice Hall. Godfrey, H. (2003) <u>Understanding the Human Body: Biological Perspectives for Healthcare</u>. Churchill Livingstone. Seigfried, D.R. (2002) <u>Anatomy and Physiology for Dummies</u>. Hungry Minds Inc.</p>									
19.	Module run (NB. These should be set up 4 years in advance):									
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE			
	2006/2007	Autumn		Sep	May	200	EN	FT	PT	
	2007/2008	Autumn		Oct	May	200	EN	FT	PT	
	2008/2009	Autumn		Sep	May	200	HE	FT	PT	
	2009/2010	Autumn		Sep	May	200	HE	FT	PT	
20.	Timetabling Information									
	(a) Please indicate which teaching activities will be offered in this module:									
	LECTURE (LEC)					NO				
	SEMINAR (SEM)					YES				
	LABORATORY/STUDIO (LAB/STU)					YES				
	WORKSHOP (WRK)					YES				
	TUTORIAL (TUT)					YES				
	OTHER									
	(b) Timetabled					YES				
	(c) Sectioned					YES				
	(d) Is the module to be downloaded for OASIS?					YES				
	(e) Do students need early access to OASIS?					NO				

1.	Short code	BMS1503
2.	Title	Laboratory Practice and Skills
3.	Level	UG 1
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Biomedical Sciences
7.	Module Leader	Dr. Darshna Yagnik
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not permitted
11.	<p>Aims This module aims to provide student s with an understanding of the biomedical/bioscience profession and employment opportunities. In addition, the module facilitates development of basic laboratory skills, safe laboratory practice, and appropriate administrative, communication and practical skills required for successful academic and professional progress, and to work in a clinical laboratory environment.</p>	
12.	<p>Syllabus</p> <ul style="list-style-type: none"> • Healthcare scientists: <ul style="list-style-type: none"> • qualifications • role and responsibilities • ethics and professionalism • privacy and confidentiality • employment opportunities • Institute of Biomedical Science accreditation of laboratories • Medical terminology • Laboratory safety • Principles of COSHH & risk assessments • Laboratory calculations • Metric measurements • Weighing; principles and practice of dilutions • Quality assurance in the laboratory • Quality control in the laboratory • General equipment and maintenance • Use and care of laboratory glassware • Microscopy & staining • Radioactive tracers and markers • Safe disposal of biological, chemical and medical waste • Note making and essay writing • Experimental report writing and referencing conventions • Critical reading and thinking • Medical and scientific terminologies and abbreviations • Teamwork • Effective learning and PDP • Information technology 	

	<ul style="list-style-type: none"> • Descriptive statistics • Scientific method and evidence-based practice
13.	<p>Learning Outcomes</p> <p>On completion of the module, the successful student will be able to:</p> <ol style="list-style-type: none"> 1 Discuss the qualifications, role and responsibilities of staff working in biomedical/bioscience laboratories. 2 Describe the laboratory safety rules that must be followed to prevent or deal with biological, chemical and physical hazards. 3 Define medical and scientific terminologies, prefixes, suffixes and abbreviations. 4 Perform laboratory calculations and measurements using the metric system and conversions between conventional and SIU units, including making buffer solutions in accordance with standard protocols. 5 Explain the importance of quality assurance (QA) in laboratories, and perform QA procedures in accordance with laboratory policies. 6 Explain the proper use and importance of maintenance of laboratory equipment. 7 Reflect on his/her own and colleagues' contribution to achieving a goal. 8 Use information technology to retrieve and present information in graphical numerical and text formats. 9 Reflect on own learning to identify knowledge and skills gained and areas requiring further development.
14.	<p>Learning, Teaching and Assessment Strategy</p> <ul style="list-style-type: none"> • Lectures will introduce key concepts in biomedical science. The theory will be reinforced with how it relates to clinical and laboratory practice. • Seminars and small group work will facilitate the student's experiential learning and develop skills in problem-solving and class participation whilst extending the material covered in lectures. • Online quizzes and computer simulations will allow the student to participate in individual and group activities in laboratory practice. • Laboratory-based practicals will promote observational and analytical skills and develop awareness of how to work safely within the laboratory environment. <p>Assessment Scheme:</p> <p>A. Formative Assessment Laboratory logbook, which will assess learning outcomes 2, 4 5 and 6 week 24.</p> <p>B. Summative Assessment A portfolio comprising up to 8 tasks, not exceeding a total of 1500 words, assessing learning outcomes 1 to 9 (100%) in the middle of the Spring term. These would include:</p> <ul style="list-style-type: none"> • A laboratory experiment write-up with results (assessing learning outcomes 4, 6, 7 and 8),

	<p>including a report on risk assessment (learning outcome 2), quality assurance procedures (learning outcome 5) and reflection on skills gained and further development (tests learning outcome 9)</p> <ul style="list-style-type: none"> • An online quiz to test knowledge of roles and qualifications in biomedical/bioscience laboratories, and scientific terminology (tests learning outcome 1 and 3) • A data set to analyse and present graphically (tests learning outcomes 4 and 8) 	
15.	Assessment Weighting	
	Seen examination	0 %
	Unseen examination	
	Coursework (no examination)	100 %
16.	Timetabled examination required	NO
17.	Length of exam	N/A
18.	<p>Learning materials</p> <p>Essential -</p> <p>Reed, R. <i>et al</i> (2003) <u>Practical Skills in Biomolecular Sciences</u> Pearson Prentice Hall</p> <p>Cottrell, S. (2003) <u>The Study Skills Handbook 2nd Edition</u>. Palgrave Macmillan Basingstoke.</p> <p>Rumsey, D. (2003) <u>Statistics for Dummies</u>. Hungry Minds Inc, U.S.</p> <p>Recommended –</p> <p>Walters NJ, Estridge BH, Reynolds AP (2000) <u>Basic Medical Laboratory Techniques</u> Delmar</p> <p>Chalmers, A. (1999) <u>What Is This Thing Called Science?</u>. Open University Press.</p> <p>Cottrell, S. (2005) <u>Critical Thinking Skills: Developing Effective. Analysis and Argument (Palgrave Study Guides)</u>. Palgrave Macmillan.</p> <p>Kaplan LA, Pesce AJ and Kazmierczak SC (2003) <u>Clinical Chemistry: theory, analysis and correlation</u>. 4th Ed Mosby</p> <p>Linne JJ and Ringrund KM (1999) <u>Clinical Science: the basics</u>. 4th Ed. Mosby</p> <p>Adams Dany Spencer (2003) <u>Lab Math: A handbook of measurements, calculations and other quantitative skills for use at the bench</u>. Cold Spring Harbor Laboratory Press.</p> <p>Health and Safety Executive (HSE) (2003) <u>COSHH: a brief guide to the Regulations</u>. HSE</p>	

19.	Module run (NB. These should be set up 4 years in advance):								
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE		
	2007/2008	Autumn		Oct	May	60	EN	FT	PT
	2008/2009	Autumn		Sep	May	60	HE	FT	PT
	2009/2010	Autumn		Sep	May	60	HE	FT	PT
	2010/2011	Autumn		Sep	May	60	HE	FT	PT
20.	Timetabling Information								
	(a) Please indicate which teaching activities will be offered in this module:								
	LECTURE (LEC)						1 hour per week		
	SEMINAR (SEM)						2 hours per week		
	LABORATORY/STUDIO (LAB/STU)						2 hours per week		
	WORKSHOP (WRK)						NO		
	TUTORIAL (TUT)						NO		
	OTHER								
	(b) Timetabled						NO		
	(c) Sectioned						NO		
	(d) Is the module to be downloaded for OASIS?						YES		
	(e) Do students need early access to OASIS?						YES		

1.	Short code	SES1200
2.	Title	Applied Anatomy and Biomechanics
3.	Level	UG 1
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Sport and Exercise Science
7.	Module Leader	Rob Walsh
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	Aims	<p>This module aims to provide students with fundamental knowledge of clinical and functional anatomy. Exploration of the microscopic and macroscopic structure of nerves, muscles, joint and bone and provides a fundamental platform upon which to build understanding of applied biomechanics and human performance, neuro-musculoskeletal disorders and rehabilitation. It is envisaged that the student will develop a critical enquiry inherent in the scientific approach. Students will explore and analyse normal movement, simple activities of daily living and sports activities. The subject matter theoretically and practically and will develop skills including; tissue and organ palpation, joint range of movement and muscle testing, posture, proprioception, gait and movement analysis.</p>
12.	Syllabus	<ol style="list-style-type: none"> 1. Introduction to the tissue types within the body. 2. Exploration muscle and contraction types and how these contribute to joint stability and movement. 3. Specialised characteristics of cardiac and smooth muscle. 4. Muscle, nerve and connective tissue development and morphological differences in childhood, adulthood and old age and the implications for injury risk. 5. Classification, location and structure of bones and joints and implications for tissue injury, pathology and clinical practice. 6. Detailed assessment of how contractile and non-contractile tissues influence and control movement. 7. Introduction to neuro-musculoskeletal assessment, including;; posture, joint range of movement, normal movement, simple activities of daily living and sport, proprioception and gait analysis. 8. Nomenclature of skeletal muscles: identifying the direction of muscle fibres, location of muscle, size, number of attachments, shape and action. 9. Exploration of muscle groups involved in movement of the spine, face, shoulder, elbow, wrist, hand, hip, knee, ankle and foot. 10. Nomenclature of range of movement of the peripheral joints and spinal regions. 11. Palpation of important clinical surface landmarks, ligaments, tendons, blood vessels, organs and muscles. 12. Exploration of the ethical and culturally sensitive medico-legal aspects of

	client assessment, including the culturally sensitive aspects of informed consent.	
13.	<p>Learning Outcomes</p> <p>On completion of this module, the successful student will be able to;</p> <ol style="list-style-type: none"> 1. Discuss the anatomy and clinical implications of normal and injured contractile and non-contractile human tissues. 2. Outline the role of particular muscle groups and joints in movements of the head, upper and lower limbs and trunk during normal gait, simple activities of daily living and sport. 3. Explain proprioception and kinaesthesia, expected joint range of movement and the implications of either reduced or increased range of movement on function and injury risk. 4. Identify, name and palpate the major surface anatomy landmarks, bones, ligaments, organs, muscles, blood vessels, muscle nerve, supplies and nerves of the body. 5. Identify and explain the key ethical, culturally sensitive, medico-legal implications, requirements and considerations involved in client assessment. 	
14.	<p>Learning, Teaching and Assessment Strategy</p> <ol style="list-style-type: none"> i. Weekly, 3-hour workshops where directed learning will be reviewed and where theoretical and practical knowledge and skills will be taught and developed. ii. The workshops will be supplemented by 3 key overarching lectures per term, video and online OASIS teaching and learning support. iii. Additionally students will receive (1 hr of individual tutorial/feedback I support per term). iv. Directed study will foster autonomy in the planning and implementation of own learning and development of research skills and will complement or supplement information covered in class. v. Formative assessment will be used to encourage students to engage with the subject, adequately prepare them for their summative assessment and identify those, who need additional tutorial support. <p>Assessment Scheme</p> <p>A. Formative</p> <ol style="list-style-type: none"> 1. Practical and theory tests and on-line internet quizzes throughout the academic year. <p>B. Summative</p> <ol style="list-style-type: none"> 1. Completion of a course workbook containing completion of weekly practical 	

	session tasks to assess learning outcomes 1-4 (Pass/Fail) 2. Completion of 4 research-based questions (500 words each) to assess learning outcomes 1-3 and 5 with two by week 10 and remaining two by week 20 (40%) 3. Practical assessments at week 6, 12, 18 and 24 to assess learning outcomes 2-5 (60%)									
15.	Assessment Weighting									
	Seen examination									
	Unseen examination					60%				
	Coursework (no examination)					40% Pass/Fail				
16.	Timetabled examination required					NO				
17.	Length of exam									
18.	Learning Materials									
	<p>Abernethy, B et al. (2004) <u>The Biophysical Foundations of Human Movement</u>. Human Kinetics, Europe Ltd.</p> <p>Drake, L.R., Wayne, V., Adam, W.M. (2005) <u>Gray's Anatomy for Students</u>. Elsevier. Human Kinetics, Champaign IL.</p> <p>Carr, I. (1997) <u>Mechanics of Sport</u>. Human Kinetics, Champaign IL.</p> <p>Kingston, B. (2005) <u>Understanding Muscles, A practical Guide to Muscle Function</u>. Chapman and Hall Medical, London.</p> <p>Kingston, B. (2000) <u>Understanding Joints, A practical Guide to Muscle Function</u>. Chapman and Hall Medical, London.</p> <p>Wirhead, R. (1997) <u>Athletic Ability and the Anatomy of Motion</u>. Mosby.</p>									
19.	Module run									
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE			
	2007/2008	Autumn		Oct	May	150	EN	FT	PT	
	2008/2009	Autumn		Sep	May	150	HE	FT	PT	
	2009/2010	Autumn		Sep	May	150	HE	FT	PT	
	2010/2011	Autumn		Sep	May	150	HE	FT	PT	

20.	Timetabling Information	
	(a) Please indicate which teaching activities will be offered in this module:	
	LECTURE (LEC)	3 x 1 hour
	SEMINAR (SEM)	NO
	LABORATORY/STUDIO (LAB/STU)	NO
	WORKSHOP (WRK)	3 hours per week
	TUTORIAL (TUT)	1 hour per week for students needing extra support with their studies
	OTHER	3 hours per week of directed learning
	(b) Timetabled	YES
	(c) Sectioned	YES
	(d) Is the module to be downloaded for OASIS?	YES
	(e) Do students need early access to OASIS?	YES

1.	Short code	BMS2113
2.	Title	Molecular and Metabolic Biochemistry
3.	Level	UG 2
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Biomedical Sciences
7.	Module Leader	Dr. Stephen Butler
8.	Accredited by	Institute of Biomedical Science
9.	Module Restrictions	
	(b) Pre-requisite	
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	<p>Aims</p> <p>The module aims to build on previous modules by giving students a fuller appreciation of the structure, function and regulation of the important molecules and of the human cell. In addition, it provides an overview of catabolic and anabolic pathways and a detailed understanding of the mechanisms by which they are regulated. The importance of molecular techniques and genetic manipulation is considered within the medical, social and cultural context of today.</p>	
12.	<p>Syllabus</p> <p>1. Inheritance and gene transfer: Structure and biological function of DNA and RNA Gene expression, transcription and translation Genotype environment interaction; principles of heredity Dominant, recessive, x-linked and multi-factorial disorders Microbial genetics</p> <p>2. Principles of cell signalling</p> <p>3. Metabolism: Bioenergetics Enzymes I properties and kinetics Enzymes II kinetics, inhibition and regulation Glycolysis-lactic acid TCA cycle Electron transport and oxidative phosphorylation. Glycogen metabolism Fatty acid oxidation; ketone bodies Fatty acid and triglyceride synthesis Lipoprotein and cholesterol metabolism Gluconeogenesis and Cori cycle Amino acid metabolism Integration and control of energy metabolism (fed/fast/starved state/exercise)</p> <p>4. DNA sequencing and analysis: Polymerase chain reaction (PCR)</p>	

	Southern blotting DNA fingerprinting Genome libraries	
13.	Learning Outcomes On completion of the module, the successful student will be able to: <ol style="list-style-type: none"> 1. Review the role of genes with reference to health, disease or athletic ability. 2. Explore and interpret interactions of cells within their environment. 3. Explain the mechanism of enzymatic action and factors that influence enzymatic activity. 4. Carry out enzyme assays; analyse, present and interpret findings. 5. Compare and contrast the aerobic and anaerobic metabolic pathways. 6. Discuss anabolic and catabolic pathways for both lipid and amino acids. 7. Compare the fed, fasted and starved states. 8. Apply knowledge of the metabolic pathways to explain the use of fuel at different levels of physical activity and the main metabolic effects of medical conditions, such as metabolic syndrome and anorexia. 9. Explain the techniques and application of gene manipulation. 	
14.	Learning, Teaching and Assessment Strategy <ol style="list-style-type: none"> i. One-hour weekly lecture to impart core knowledge, explanations of key concepts and examine specific cases and ii. Two-hour seminars to reinforce lecture materials through debate of current issues or simulation exercises or iii. Two-hour laboratory exercise with particular emphasis upon gaining histological skills and techniques gene analysis and manipulation. Assessment Scheme A. Formative <ol style="list-style-type: none"> 1. In-class test at weeks 6, 12 and 18 2. Laboratory reports submitted weeks 8 and 16 to assess learning outcomes 4 and 9 B. Summative <ol style="list-style-type: none"> 1. Two x 1000-word review articles assignment, which assesses learning outcome 1 at the end of the Autumn term (20%) 2. A 1500-word short laboratory report, which assesses learning outcome 4 before the end of the Spring term (20%) 3. 2-hour Short answer question paper including case studies and data analysis questions, which assess learning outcomes 1-8 and 10 at the end of the Spring term (60%) 	
15.	Assessment Weighting	

	Seen examination	0%
	Unseen examination	0%
	Coursework (no examination)	100 %
16.	Timetabled examination required	YES
17.	Length of exam	2 hours
18.	Learning materials	
	<p>Essential</p> <p>Bender, D.A. (2002) <u>An Introduction to Nutrition and Metabolism</u>. Taylor and Francis.</p> <p>Eppstein, R.J. (2002) <u>Human Molecular Biology: An Introduction to the Molecular Basis of Health and Disease</u>. Cambridge University Press.</p> <p>Houston, M.E. (2001) <u>Biochemistry Primer for Exercise Science</u>. Human Kinetics Europe Ltd.</p> <p>Salway, J.G. (2003) <u>Metabolism at a Glance</u>. Blackwell Publishing.</p> <p>Recommended</p> <p>Brown, T. (2006) <u>Gene Cloning and DNA Analysis</u>. Blackwell Publishing.</p> <p>Lewis, R. (2003) <u>Human Genetics – Concepts and Applications</u>. 5th edn. Dubuque McGraw Hill.</p> <p>Sudbery, P. (2002). <u>Human Molecular Genetics</u>. Upper Saddle River Prentice Hall</p>	

1.	Short code	BMS2513
2.	Title	Clinical Sciences
3.	Level	UG 2
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Biomedical Sciences
7.	Module Leader	Dr. Suzanne Docherty
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	<p>Aims</p> <p>The module explores the causes of diseases. In addition, it focuses on physiological and biochemical processes underlying the clinical manifestation of disease. The appropriate laboratory investigations and medical management - including pharmacological intervention, surgical treatment and physical therapy - are outlined for each disease process.</p>	
12.	<p>Syllabus</p> <ol style="list-style-type: none"> 1. The nature of disease 2. Psychological and social aspects of disease 3. Principles of epidemiology 4. The cell and tissue response to injury. The biochemical, structural and clinical effects of injury. Sub-lethal injury, lethal injury and apoptosis. 5. Outcomes of tissue injury. Acute and chronic inflammation. Repair, regeneration, resolution and healing. 6. Nutritional disorders – obesity and anorexia 7. Genetic disorders – unifactorial and multifactorial disorders and chromosomal abnormalities 8. Neoplasia: benign and malignant tumours. The biology of cancer. 9. Circulatory disorders: ischaemia, atheroma, infarction, thrombosis and embolism, haemorrhage. 10. Haematological disorders: anaemia, haematological malignancy, disorders of coagulation. 11. Endocrine disorders 12. Infectious disease: bacterial, fungal and viral infections 13. Immunological disorders: Autoimmunity, hypersensitivity, immunodeficiency 14. Neurological disorders, including Parkinson's Disease and multiple sclerosis 15. Overview of the aetiology and mechanisms of sports injuries 16. Laboratory investigation and medical management including physical activity, medication and surgery 17. Mechanisms of drug action: Pharmacokinetics and pharmacodynamics. 18. Adverse drug reactions, drug interactions and a brief overview of toxicology. Drugs in special situations 	

13.	<p>Learning Outcomes</p> <p>On completion of the module, the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Relate the causes of a disease to its pathological changes. 2. Give specific examples of a particular type of disease. 3. Explain how infectious and non-infectious diseases can evolve, and relate their signs and symptoms to physiological and biochemical changes. 4. Identify the appropriate laboratory investigations, and Interpret clinical data. 5. Specify the appropriate interventions to prevent and treat a particular disease.
14.	<p>Learning, Teaching and Assessment Strategy</p> <ol style="list-style-type: none"> i. Lectures/seminars (2 hr/week) will outline aetiology, pathology, diagnosis and management of the disease. This will be supported by links to additional reading to enhance student learning via Oasis. The lectures/seminar will also provide an opportunity for student debate/discussion in linking the knowledge base with the professional role of a biomedical scientist. ii. Tutorials will provide assessment and feedback regarding formative tests. <p>Assessment Scheme</p> <p>A. Formative Online quizzes. 1000-word problem-solving assignment to assess learning outcomes 1, 4 and 5 which is submitted by week 12</p> <p>B. Summative</p> <ol style="list-style-type: none"> 1. 2000-word problem-solving assignment to assess learning outcomes 1, 4 and 5, which is submitted by week 24 (50%) 2. 2-hour exam: short answers and case scenarios to assess learning outcomes 1-5 (50%)
15.	<p>Assessment Weighting</p>
	<p>Seen examination</p>
	<p>0%</p>
	<p>Unseen examination</p>
	<p>50 %</p>
	<p>Coursework (no examination)</p>
	<p>50 %</p>
16.	<p>Timetabled examination required</p>
	<p>YES</p>
17.	<p>Length of exam</p>
	<p>Two hours</p>
18.	<p>Learning materials</p>
	<p>- Essential</p>
	<p>Springhouse (2005) <u>Pathophysiology</u></p>
	<p>Springhouse Publishing.</p>

	<p>Springhouse (2005) <u>Clinical Pharmacology</u> Springhouse Publishing. Philips J., Kirk P., Murray P (2001) <u>The Biology of Disease</u> Blackwell Science Ltd. - Recommended Kumar P.J., Clark M.L. (2002) <u>Clinical Medicine</u>. Saunders (W.B.) Co Ltd McCane K.L, Huether S.E. (2005) <u>Pathophysiology: The Biologic Basis for Disease in Adult and Children</u>. Mosby. Nieman D.C (1997) <u>The Exercise-health Connection: Physical Activity as Powerful Medicine</u>. Human Kinetics. Peterson L., Renstrom, P., Renstroem P. (2000) <u>Sports Injuries: Their Prevention and Treatment</u>. Taylor & Francis.</p>									
19.	Module run (NB. These should be set up 4 years in advance):									
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g. DE			
	2007/2008	Autumn		Oct	May	80	EN	FT	PT	
	2008/2009	Autumn		Sep	May	80	HE	FT	PT	
	2009/2010	Autumn		Sep	May	80	HE	FT	PT	
	2010/2011	Autumn		Sep	May	80	HE	FT	PT	
20.	Timetabling Information									
	(a) Please indicate which teaching activities will be offered in this module:									
	LECTURE (LEC)					YES				
	SEMINAR (SEM)					YES				
	LABORATORY/STUDIO (LAB/STU)					NO				
	WORKSHOP (WRK)					NO				
	TUTORIAL (TUT)					NO				
	OTHER									
	(b) Timetabled					YES				
	(c) Sectioned					YES				
	(d) Is the module to be downloaded for OASIS?					YES				
	(e) Do students need early access to OASIS?					NO				

1.	Short code	BIO2003
2.	Title	Approaches to Experimental Research
3.	Level	UG 2
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Graduate, transferable and employability skills
7.	Module Leader	Dr. Huw Jones
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	3
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not permitted
11.	<p>Aims</p> <p>The module aims to provide students with the skills necessary to plan, implement, analyse and report project-based work, with the focus on preparation for the final year project module. The module also develops core research skills fundamental to a scientific research design, irrespective of discipline. Specific research skills include analytical techniques appropriate to individual programme requirements.</p>	
12.	<p>Syllabus</p> <p>Design of scientific methodologies to include aspects of design rigour: experimental design, blind/double/triple blind trials, survey and questionnaire development.</p> <p>Approaches to analyses: hypothesis testing, confidence intervals, inferences from samples - analyses of difference, t-tests, ANOVA and non-parametric alternatives.</p> <p>Analyses of relationships; correlation, regression, exposure to data analysis software packages, Minitab, SPSS, Excel. Data presentation and literature research skills. Ethical and Risk assessment issues. Programme specific research skills.</p>	
13.	<p>Learning Outcomes</p> <p>At the end of the module the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Explore the underlying principles of different research approaches with particular regard to experimental design. 2. Explain the rationale and purpose of statistical analysis in relation to experimental research. 3. Highlight underlying mathematical principles behind data analyses. 4. Examine the ethical and risk issues associated with undertaking research. 5. Construct an appropriate research proposal relevant to their program. 6. Communicate quantitative information through appropriate selection of graphical or tabular summaries of data presentation. 7. Select and use appropriate statistical tests to test hypotheses and effectively interpret results. 	

	<p>8. Demonstrate the ability to search and organise a variety of information and literature sources.</p> <p>9. Critically evaluate the strengths and weaknesses of published research.</p>
14.	<p>Learning, Teaching and Assessment Strategy</p> <p>A variety of learning and teaching approaches will be used during this module. Lectures will be used to cover the principles of experimental design, data analysis statistical techniques. Programme-specific lectures to cover relevant subject skills (e.g. biomedical-instrument techniques; environmental health-accident data; biological sciences, field skills).</p> <p>Students to be given worksheets from which to undergo self-directed learning, with fortnightly workshops to review their progress and provide feedback. Blended learning approaches will be employed during the module with self-directed online learning tasks using Oasis. Formative feedback will also be given on a series of on-line data analysis exercises.</p> <p>Further materials to support student learning will be available on Oasis Plus, which will include formative quizzes with immediate online feedback, data notes and workshop material for prior student preparation learning.</p> <p>Assessment Criteria</p> <p>Students will be assessed through a portfolio of evidence, which will not exceed 7500 words.</p> <p>The student's engagement with research methods will form part of a portfolio of graduate skills that will span their undergraduate programme.</p> <p>A. Formative</p> <p>1. Students must demonstrate ongoing successful completion of online exercises in a timed scenario prior to progression to assignment 2 to test learning outcomes (Lo 3 & 8).</p> <p>B. Summative</p> <p>2. Data analysis to assess learning outcomes (Lo 2, 3, 6 7 and 8) (50%; report of no more than 1500 words).</p>

	3. Project proposal to assess learning outcomes (Lo 1, 4, 5 and 9) (50%; no more than 3000 words).								
15.	Assessment Weighting								
	Seen examination					-			
	Unseen examination					50%			
	Coursework (no examination)					50%			
16.	Timetabled examination required					NO			
17.	Length of exam					-			
18.	Learning materials								
	<p><i>Essential:</i> Relevant software packages (Minitab, SPSS)</p> <p>Dytham, C. (1999). <u>Choosing and using statistics: a biologist's guide</u>. Blackwell Science: Oxford.</p> <p><i>Recommended:</i> Cobby, M. and Moore, P. (1998). <u>An introduction to environmental statistics..</u> Prentice Hall. Coolidge, F.L. (2000). <u>Statistics: a gentle introduction</u>. London. Thousand Oaks, California: Sage Publications. Manly, B.F.J. (1992). <u>The design and analysis of research studies</u>. Cambridge: University Press. Rowntree, D. (1991). <u>Statistics without tears</u>. Penguin: Harmondsworth. Rumsey, D. (2003). <u>Statistics for dummies</u>. Wiley. Ryan, B.F. and Jones, B.L (2000). <u>Minitab handbook</u>. (4th ed). Dunbury Press. Schork, M.A. (2001). <u>Statistics with applications to the biological and health sciences</u>. Prentice Hall.</p>								
19.	Module run (NB. These should be set up 4 years in advance):								
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE		
	2007/8	Autumn		Oct	May	60	EN	FT	PT
	2008/9	Autumn		Sep	May	60	HE	FT	PT
	2009/10	Autumn		Sep	May	60	HE	FT	PT
	2010/11	Autumn		Sep	May	60	HE	FT	PT
20.	Timetabling Information								
	(a) Please indicate which teaching activities will be offered in this module:								
	LECTURE (LEC)					YES			
	SEMINAR (SEM)					NO			
	LABORATORY/STUDIO (LAB/STU)					NO			

	WORKSHOP (WRK)	YES
	TUTORIAL (TUT)	YES
	OTHER	
	(b) Timetabled	NO
	(c) Sectioned	NO
	(d) Is the module to be downloaded for OASIS?	YES
	(e) Do students need early access to OASIS?	NO

1.	Short code	SES2222
2.	Title	Applied Physiology and Biomechanics
3.	Level	UG 2
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Sport and Exercise Science
7.	Module Leader	Dr. Lygeri Dimitriou
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	Aims	<p>To understand the physiological basis of human movement from the cortex to skeletal muscle.</p> <p>To understand the mechanical basis of human movement from Newton's laws to the kinematics and kinetics of sport, exercise, and rehabilitation.</p> <p>To understand the chronic physiological adaptations to sport, exercise and rehabilitation.</p> <p>To understand the principles of measurement in muscle, vascular and cardiopulmonary physiology.</p> <p>To understand the principles of measurement in the kinetics and kinematics of human movement.</p>
12.	Syllabus	<ol style="list-style-type: none"> 1. Motor control: cortical to peripheral control of human movement; motor units; neuromuscular basis of human movement; sensory feedback and proprioception; theories of motor learning and performance. 2. Physiological adaptation: cellular, endocrine, connective tissue, neural and cardiovascular adaptations to: (1) endurance training; (2) strength and power training; (3) inactivity / detraining and (4) environmental conditions (heat, humidity, hypoxia). 3. Concepts of motion: describing motion, movement forces, forces within the body, running jumping and throwing. 4. Adaptability of the motor system: warm up effects, flexibility, muscle damage, motor recovery from injury, adaptations with age and reduced use. 5. Measurement and analysis of human muscle, vascular and cardiopulmonary physiology. 6. Measurement and analysis of the kinetics and kinematics of human movement in sport, exercise and rehabilitation.
13.	Learning Outcomes	<p>On completion of the module, the successful student will be able to:</p> <p>Knowledge and Skills</p> <ol style="list-style-type: none"> 1. Explain the physiological and biomechanical basis of human movement. 2. Evaluate the current research evidence about the adaptability of human physiological and motor systems. 3. Debate the value of different exercise and training methods in terms of the

	<p>physiological adaptation and biomechanics of movement.</p> <p>4. Carry out laboratory studies and evaluate findings based on the current body of research evidence and draw appropriate conclusions.</p>	
14.	<p>Learning, Teaching and Assessment Strategy</p> <ul style="list-style-type: none"> i. Lectures introduce key information, concepts, debates and theories. ii. Seminars facilitate student participation, the development of problem solving, presentational and social skills. iii. Practical sessions in human performance laboratory/gym facilitate the development of manual, observational, analytical, literacy and numeracy skills. <p>Assessment Scheme</p> <p>A. Formative Short answer and multiple-choice tests mid-way through the Autumn and Spring terms to assess learning outcomes 1, 2, and 3.</p> <p>B. Summative</p> <ul style="list-style-type: none"> 1. Oral presentation on topic related to laboratory report to assess learning outcomes 2 and 3(Pass/Fail) 2. A 1500-word physiology laboratory report to assess learning outcomes 1 and 4 to be submitted by the end of the Autumn term (50%) 3. A 1500-word biomechanics laboratory report to assess learning outcomes 1 and 4 to be submitted by the end of the Spring term (50%) 	
15.	Assessment Weighting	
	Seen examination	
	Unseen examination	NO
	Coursework (no examination)	100%
16.	Timetabled examination required	YES
17.	Length of exam	
18.	<p>Learning Materials</p> <p>Essential</p> <p>Enoka, R.M. (2002). <u>Neuromechanics of Human Movement (3rd Edition)</u>. Human Kinetics, Champaign IL.</p> <p>Schmidt, R.A. and C.A. Wrisberg (2000). <u>Motor Learning and Performance (2nd Edition)</u>. Human Kinetics, Champaign IL.</p> <p>Wilmore, J.H. and D. L Costill (2005). <u>Physiology of Sport and Exercise (4th Edition)</u>.</p>	

	Human Kinetics, Champaign IL.								
19.	Module run								
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE		
	2007/2008	Autumn		Oct	May	80	EN	FT	PT
	2008/2009	Autumn		Sep	May	80	HE	FT	PT
	2009/2010	Autumn		Sep	May	80	HE	FT	PT
	2010/2011	Autumn		Sep	May	80	HE	FT	PT
20.	Timetabling Information								
	(a) Please indicate which teaching activities will be offered in this module:								
	LECTURE (LEC)					1 hour per week			
	SEMINAR (SEM)					2 hours per week or			
	LABORATORY/STUDIO (LAB/STU)					2 hours per week			
	WORKSHOP (WRK)					NO			
	TUTORIAL (TUT)					Weekly personal tutorials are available on request or for students needing extra support with their studies			
	OTHER					NO			
	(b) Timetabled					YES			
	(c) Sectioned					YES			
	(d) Is the module to be downloaded for OASIS?					YES			
	(e) Do students need early access to OASIS?					YES			

1.	Short code	BMS3113
2.	Title	Clinical Biochemistry
3.	Level	UG 3
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Biomedical Sciences
7.	Module Leader	Dr. Frank Hills
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	BMS2113
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	Aims	<p>The module aims to provide students with a greater knowledge and a deeper understanding of abnormal human physiology, and of the biochemistry of common medical conditions. In addition, it aims to ensure familiarity with chemical laboratory procedures used to diagnose and monitor the effectiveness of the treatments of these conditions and ensure familiarity with normal and abnormal test values.</p>
12.	Syllabus	<p>Specimen collection and processing Laboratory reagent preparation and calculations Quality control for clinical chemistry Electrolytes; acid-base physiology Gastrointestinal and pancreatic function Renal function Bone disease Coronary heart disease and lipid disorders Liver function Endocrinology covering the thyroid, the adrenals, calcium metabolism, growth hormone, and diabetes mellitus The human reproductive system and the foetal-placental unit Principles of therapeutic drug monitoring Examination of urine Overview of clinical nutrition Clinical chemistry at the extremes of age Review of the types of instrumentation and analytical methods commonly used in the clinical laboratory, including UV-visible spectroscopy, ion selective electrodes, point-of-care testing and automated analysis.</p>
13.	Learning Outcomes	<p>On completion of the module, the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Explain the significance or function of each constituent commonly included in blood or urine analysis. 2. Carry out laboratory tests safely, taking into account quality control and assurance issues. 3. Justify the choice of laboratory test to diagnose a medical condition and evaluate the significance of the test results with reference to normal and

	<p>abnormal human physiology and biochemistry.</p> <p>4. Justify the choice of laboratory test to monitor the effectiveness of a medical treatment, and evaluate the significance of the test results with reference to normal and abnormal human physiology and biochemistry.</p>	
14.	<p>Learning, Teaching and Assessment Strategy</p> <ul style="list-style-type: none"> i. One-hour weekly lecture to impart core knowledge, explanations of key concepts, and examine specific clinical cases and ii. Two-hour seminars to reinforce lecture materials through debate of current issues, or simulation exercises iii. Two-hour laboratory exercise with particular emphasis developing proficiency in carrying out bioanalytical techniques and analytical skills. iv. Learning material, including student presentations, will be uploaded onto OASISplus. In addition, OASISplus will be used to assess students and provide student feedback as appropriate. Students will be encouraged to use the discussion board to debate clinical issues. <p>Assessment Scheme</p> <p>A. Formative</p> <ul style="list-style-type: none"> 1. In-class test at weeks 6, 12 and 18 which are peer-assessed 2. Laboratory reports submitted weeks 8 and 16 to assess learning outcomes 4 and 9 3. Group presentation, which is peer assessed, to assess learning outcome 3 by week 24 <p>B. Summative</p> <p>2-hour short answer question examination including case study and data interpretation questions. The examination assesses learning outcomes 1, 3 and 4. (50%)</p> <p>Practical logbook to assess learning outcome 2. (50%)</p>	
15.	Assessment Weighting	
	Seen examination	0%
	Unseen examination	50 %
	Coursework (no examination)	50 %
16.	Timetabled examination required	YES
17.	Length of exam	2 hours

18.	Learning materials									
	<p>- Essential Kaplan LA, Pesce A.J, Kazmierczak SC (2003) <u>Clinical Chemistry Theory, Analysis and Correlation</u> Mosby. Marshall WJ, Bangert SK (2004) <u>Clinical Chemistry</u>. Mosby.</p> <p>- Recommended Fischbach F (2000) <u>Manual of Laboratory and Diagnostic Tests</u>. Lippincott Williams and Wilkins Rayburn SR (1990) <u>The Foundations of Laboratory Safety A Guide for the Biomedical Laboratory</u>. Springer-Verlag Berlin and Heidelberg. GmbH & Co. KG</p>									
19.	Module run									
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE			
	2007/2008	Autumn		Oct	May	80	EN	FT	PT	
	2008/2009	Autumn		Sep	May	80	HE	FT	PT	
	2009/2010	Autumn		Sep	May	80	HE	FT	PT	
	2010/2011	Autumn		Sep	May	80	HE	FT	PT	
20.	Timetabling Information									
	(a) Please indicate which teaching activities will be offered in this module:									
	LECTURE (LEC)							YES		
	SEMINAR (SEM)							YES		
	LABORATORY/STUDIO (LAB/STU)							YES		
	WORKSHOP (WRK)							NO		
	TUTORIAL (TUT)							NO		
	OTHER									
	(b) Timetabled							YES		
	(c) Sectioned							YES		
	(d) Is the module to be downloaded for OASIS?							YES		
	(e) Do students need early access to OASIS?							YES		

1.	Short code	HSS3300
2.	Title	Placement Dissertation
3.	Level	UG 3
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Graduate, transferable and employability skills
7.	Module Leader	Caroline Reid
8.	Accredited by	
9.	Module Restrictions	
	(b) Pre-requisite	
	(d) Programme restriction	
	(e) Level restrictions	3
	(f) Other restrictions or requirements	
10.	Automatic deferral	Not permitted
11.	<p>Aims</p> <p>This module aims to synthesise learning from the students' undergraduate *programme providing an opportunity for students to study independently and investigate a topic in depth. It fosters academic curiosity; an inquiry based approach, the employment and application of research skills thus facilitating the development of a higher level of theorising. Students will select a topic of personal interest, grounded in their placement experience that they wish to study in-depth and will manage their own learning during this module, with the support of an allocated supervisor for this period of independent study.</p>	
12.	<p>Syllabus</p> <p>As the culmination of the student's undergraduate programme the syllabus for this module is a synthesis of their subject knowledge and the application of the research skills they have developed during their programme. This module will also illustrate the student's achievement of the graduate and employability skills of effective learning, communication, teamwork, numeracy, information technology and personal and career development.</p>	
13.	<p>Learning Outcomes</p> <p>On completion of the module, the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Critically appraise the fundamental theories and concepts along with contemporary debates underpinning the subject, illustrating understanding of the relationship between theory and research. 2. Demonstrate the systematic searching, organisation, handling, critical selection, analysis and synthesis of a wide variety of different data and information sources. 3. Critically review and evaluate the arguments evident in the literature and/or alternative sources of evidence pertaining to the chosen topic of study. 4. Articulate the research questions or hypothesis/es, select and justify the choice of research methodology and methods appropriate to conduct such inquiry and consider their scientific rigour in reliability and validity. 5. Exhibit critical insight into ethical concerns which may arise when planning, 	

	<p>conducting and disseminating both primary and secondary research.</p> <p>6. Construct critical and reasoned argument which analyses, evaluates and challenges research findings, justifies propositions and elucidates alternatives.</p> <p>7. Demonstrate the integration of theory and practice critically exploring theory-practice tensions and clearly grounding discussion in practice or placement experience.</p> <p>8. Draw meaningful, logical and informative conclusions with emergent recommendations for the future development of theory, practice or policy and the identification of areas requiring further research. Study, through the dissemination of research findings.</p>
14.	<p>Learning, Teaching and Assessment Strategy</p> <p>This module is the culmination of the undergraduate programme and demonstrates the development of both the students' subject knowledge and graduate skills.</p> <p>The overall learning experience for this module will demonstrate the students' effective learning skills and ability to manage and direct their own learning independently. Facilitation and support for this learning will be largely through individual supervision with an allocated supervisor from the subject team who shares an interest in the topic under investigation.</p> <p>To support the learning process and further facilitate learning from constructive formative feedback a 'learning log' to support the students learning will be utilised throughout the year.</p> <p>The learning log will include a range of formative learning opportunities as detailed below, however, the log itself will form a summative component of the overall module assessment, and is required to be appended in the submission of the summative work.</p> <p>The Learning Log will comprise:</p> <p>Supervision Record: Students will be required to meet with their supervisors on a minimum of five occasions during the module. The process of supervision will be recorded in the learning log detailing what the student has achieved and facilitating the setting of future goals. It clarifies the student and supervisors roles in the development of the work, how the supervisor facilitates the student's learning, and the extent to which the student both requires, and utilises the supervision opportunities available (Lo 1-7).</p>

<p>Specialist Support:</p> <p>As part of the supervision process the supervisor may recommend that the student seeks further specialist knowledge or advice. This may be from a range of sources such as clinical specialists, government agencies, charities, or attendance at specific lectures or seminars. Such specialist support will be detailed in the learning log (Lo 2, 5, 6, 7 and 8).</p> <p>Confirmation of Ethical Approval Confirmation that ethical approval has either been granted or is not required will be documented in the learning log and endorsed by the supervisor or proof of approval from the appropriate ethics committee (Lo 5).</p> <p>Presentation: Students will be given the opportunity to present their developing work to a group of peers from their programme (Lo 1, 3, 4 and 6).</p> <p>Peer Review: The presentations will provide the opportunity for peer review of the students work, and using guidelines provided in the students will offer feedback on the work presented (Lo 1, 4, 5 and 6).</p> <p>Workshops: A programme of subject specific workshops will provide a guide to developing and writing the research project (Lo 1-8).</p> <p>E-Learning: Materials to support student learning in their final year projects will be available on Oasis plus (Lo 1-6 and 8)</p> <p>Assessment scheme</p> <p>One of the following assessments will be utilised to demonstrate achievement of the module learning outcomes.</p> <p>The assessment undertaken may be prescribed or restricted* for different programmes to meet research governance requirements of some Professional, Statutory and Regulatory Bodies.</p> <p><i>* Where this is the case only the available assessments will be indicated in the programme/module handbook</i></p> <p>A 5000-7000 word Dissertation, the title and</p>	
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	<p>methodology of which must be agreed with the supervisor in advance and which may be presented as:</p> <p>1. The preparation of an Article for Publication Prepare an article for publication in an academic journal utilising the Journal's published refereed guidelines, with a supporting critical reflective report detailing the development process and challenges arising.</p> <p>2. Desktop and Secondary Analysis Review of the Literature A critical discussion and review of the literature utilising a rigorous 'desktop' research process in a secondary analysis review of a wide range primary sources pertaining to the subject under investigation.</p> <p>3. Empirical Research Project Undertake an empirical research study on a topic agreed with your supervisor ensuring adherence to research governance processes</p> <p>4. Laboratory Based Experimental Study Undertake a laboratory based experimental project on a topic agreed with your supervisor ensuring adherence to research governance processes</p>						
15.	Assessment Weighting						
	Seen examination					-	
	Unseen examination					-	
	Coursework (no examination)					100%	
16.	Timetabled examination required					NO	
17.	Length of exam					-	
18.	<p>Learning materials</p> <p>Bell.J (2005). <u>Doing your research project</u>. (4th ed). Berkshire: OU Press. Levin.P (2005). <u>Excellent dissertations</u>. Maidenhead: OU Press. Thomson. A (2001). <u>Critical reasoning</u>. London: Routledge.</p> <p>Learning materials specific to the students' individual area of study will be discussed with supervisor as part of the learning process.</p>						
19.	Module run (NB. These should be set up 4 years in advance):						
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE

	2007/8	Autumn		Oct	May	60	EN	FT	PT
	2008/9	Autumn		Sep	May	60	HE	FT	PT
	2009/10	Autumn		Sep	May	60	HE	FT	PT
	2010/11	Autumn		Sep	May	60	HE	FT	PT
20.	Timetabling Information								
	(a) Please indicate which teaching activities will be offered in this module:								
	LECTURE (LEC)					NO			
	SEMINAR (SEM)					NO			
	LABORATORY/STUDIO (LAB/STU)					YES/NO			
	WORKSHOP (WRK)					YES			
	TUTORIAL (TUT)					YES			
	OTHER								
	(b) Timetabled					NO			
	(c) Sectioned					NO			
	(d) Is the module to be downloaded for OASIS?					YES			
	(e) Do students need early access to OASIS?					NO			

1.	Short code	BIO3330
2.	Title	Dissertation
3.	Level	UG 3
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Graduate, transferable and employability skills
7.	Module Leader	Caroline Reid
8.	Accredited by	
9.	Module Restrictions	
	(b) Pre-requisite	
	(d) Programme restriction	
	(e) Level restrictions	3
	(f) Other restrictions or requirements	
10.	Automatic deferral	Not permitted
11.	<p>Aims</p> <p>This module aims to synthesise learning from the students' undergraduate biomedical programme, providing an opportunity for students to study independently and investigate a topic in depth. It fosters academic curiosity; an inquiry based approach; the employment and application of research skills thus facilitating the development of a higher level of theorising. Students will select a topic of personal interest that they wish to study further and will manage their own learning during this module, with the support of an allocated supervisor for this period of independent study.</p>	
12.	<p>Syllabus</p> <p>As the culmination of the student's undergraduate programme the syllabus for this module is a synthesis of their subject knowledge and the application of the research skills they have developed during their programme. This module will also illustrate the student's achievement of the graduate and employability skills of effective learning, communication, teamwork, numeracy, information technology and personal and career development.</p>	
13.	<p>Learning Outcomes</p> <p>On completion of the module, the successful student will be able to:</p> <ol style="list-style-type: none"> 1. Critically appraise the fundamental theories and concepts along with contemporary debates underpinning the subject, illustrating understanding of the relationship between theory and research. 2. Demonstrate the systematic searching, organisation, handling, critical selection, analysis and synthesis of a wide variety of different data and information sources. 3. Critically review and evaluate the arguments evident in the literature and/or alternative sources of evidence pertaining to the chosen topic of study. 4. Articulate the research questions or hypothesis/es, select and justify the choice of research methodology and methods appropriate to conduct such inquiry and consider their scientific rigour in reliability and validity. 5. Exhibit critical insight into ethical concerns, which may arise when planning, 	

	<p>conducting and disseminating both primary and secondary research.</p> <p>6. Construct critical and reasoned argument, which analyses, evaluates and challenges research findings, justifies propositions and elucidates alternatives.</p> <p>7. Draw meaningful, logical and informative conclusions with emergent recommendations for the future development of theory, practice or policy and the identification of areas requiring further research. Study, through the dissemination of research findings.</p>
14.	<p>Learning, Teaching and Assessment Strategy</p> <p>This module is the culmination of the undergraduate programme and demonstrates the development of both the students' subject knowledge and graduate skills.</p> <p>The overall learning experience for this module will demonstrate the students' effective learning skills and ability to manage and direct their own learning independently. Facilitation and support for this learning will be largely through individual supervision with an allocated supervisor from the subject team who shares an interest in the topic under investigation.</p> <p>To support the learning process and further facilitate learning from constructive formative feedback a 'learning log' to support the students learning will be utilised throughout the year.</p> <p>The learning log will include a range of formative learning opportunities as detailed below, however, the log itself will form a summative component of the overall module assessment, and is required to be appended in the submission of the summative work.</p> <p>The Learning Log will comprise of:</p> <p>Supervision Record: Students will be required to meet with their supervisors on a minimum of five occasions during the module. The process of supervision will be recorded in the learning log detailing what the student has achieved and facilitating the setting of future goals. It clarifies the student and supervisors roles in the development of the work, how the supervisor facilitates the student's learning, and the extent to which the student both requires, and utilises the supervision opportunities available (Lo 1-7).</p> <p>Specialist Support: As part of the supervision process the supervisor</p>

<p>may recommend that the student seeks further specialist knowledge or advice. This may be from a range of sources such as clinical specialists, government agencies, charities, or attendance at specific lectures or seminars. Such specialist support will be detailed in the learning log (Lo 2, 5, 6 and 7).</p> <p>Confirmation of Ethical Approval Confirmation that ethical approval either has been granted or is not required will be documented in the learning log and endorsed by the supervisor or proof of approval from the appropriate ethics committee (Lo 5).</p> <p>Presentation: Students will be given the opportunity to present their developing work to a group of peers from their programme (Lo 1, 3, 4 and 6).</p> <p>Peer Review: The presentations will provide the opportunity for peer review of the students work, and using guidelines provided in the students will offer feedback on the work presented (Lo 1, 4, 5 and 6).</p> <p>Workshops: A programme of subject specific workshops will provide a guide to developing and writing the research project (Lo 1-7).</p> <p>E-Learning: Materials to support student learning in their final year projects will be available on Oasis plus (Lo 1-7)</p> <p>Assessment scheme</p> <p>A 5000-7000 word Dissertation, the title and methodology of which must be agreed with the supervisor in advance and which may be presented as:</p> <ol style="list-style-type: none"> 1. The preparation of an Article for Publication Prepare an article for publication in an academic journal utilising the Journal's published refereed guidelines, with a supporting critical reflective report detailing the development process and challenges arising. 2. Desktop and Secondary Analysis Review of the Literature A critical discussion and review of the literature utilising a rigorous 'desktop' research process in a secondary analysis review of a wide range 	
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	primary sources pertaining to the subject under investigation.								
	3. Empirical Research Project Undertake an empirical research study on a topic agreed with your supervisor ensuring adherence to research governance processes								
	4. Laboratory Based Experimental Study Undertake a laboratory based experimental project on a topic agreed with your supervisor ensuring adherence to research governance processes								
15.	Assessment Weighting								
	Seen examination					-			
	Unseen examination					-			
	Coursework (no examination)					100%			
16.	Timetabled examination required					NO			
17.	Length of exam					-			
18.	Learning materials								
	Bell.J (2005). <u>Doing your research project</u> . (4 th ed). Berkshire: OU Press.								
	Levin.P (2005). <u>Excellent dissertations</u> . Maidenhead: OU Press.								
	Thomson. A (2001). <u>Critical reasoning</u> . London: Routledge.								
	Learning materials specific to the students' individual area of study will be discussed with supervisor as part of the learning process.								
19.	Module run (NB. These should be set up 4 years in advance):								
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE		
	2007/8	Autumn		Oct	May	60	EN	FT	PT
	2008/9	Autumn		Sep	May	60	HE	FT	PT
	2009/10	Autumn		Sep	May	60	HE	FT	PT
	2010/11	Autumn		Sep	May	60	HE	FT	PT
20.	Timetabling Information								
	(a) Please indicate which teaching activities will be offered in this module:								
	LECTURE (LEC)					NO			
	SEMINAR (SEM)					NO			
	LABORATORY/STUDIO (LAB/STU)					YES/NO			
	WORKSHOP (WRK)					YES			
	TUTORIAL (TUT)					YES			
	OTHER								
	(b) Timetabled					NO			
	(c) Sectioned					NO			
	(d) Is the module to be downloaded for					YES			

	OASIS?	
	(e) Do students need early access to OASIS?	NO

1.	Short code	SES3113
2.	Title	Ergogenic Aids
3.	Level	UG 3
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Sport and Exercise Science
7.	Module Leader	Sheila Cunningham
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	Aims	<p>The module focuses on the use and abuse of nutritional and pharmaceutical ergogenic aids among elite, recreational, university and school athletes. In addition, it explores in detail the physiological and pharmacological effects of ergogenic aids with reference to dosage and specific goals. The historical, social, legal and ethical issues of ergogenic use in sport and exercise are covered. A key role of the module is to enable students to make sound judgments on the use and abuse of ergogenic agents.</p>
12.	Syllabus	<ol style="list-style-type: none"> 1. Drug use and abuse in sport. Historical perspective, definition of doping and attitude towards doping, legal issues, an investigation of the different classes involved: Stimulants, Narcotic analgesics, Anabolic Steroids, Peptide hormones and analogues, B Blockers, and blood doping. 2. IOC regulations on drugs use in sport. 3. Ergogenic substances not currently regulated e.g. L-carnitine, bicarbonate, creatine, and amino acids. Possible modes of action, risks and benefits. 4. Doping control: history of the development of the drug testing, government policy, drug testing techniques, problems of detection and the reliability of drug testing laboratories, ethics of drug testing.
13.	Learning Outcomes	<p>On completion of the module, the successful student will be able to:</p> <p>Knowledge and Skills</p> <ol style="list-style-type: none"> 1. Debate the historical, social, legal and ethical issues surrounding drug abuse in sport. 2. Critically assess the modes of action of the drugs banned in competitive events, and highlight the possible beneficial and deleterious aspects of each group of drugs. 3. Critically evaluate the IOC regulations with reference to public and athletes' attitudes on doping in sport, using current literature to defend the argument. 4. Evaluate the use of ergogenic substances not currently within IOC regulations. 5. Defend a strategy for adhering to a training regime without resorting to banned substances to increase performance. 6. Critically review the drug testing procedures with reference to government policy, problems with drug detection and reliability of the test results.

14.	Learning, Teaching and Assessment Strategy								
	<ol style="list-style-type: none"> 1. Lectures introduce key information, concepts, debates and theories. 2. Seminars facilitate student participation, the development of problem solving, presentational and social skills. <p>Assessment Scheme</p> <p>Summative</p> <ol style="list-style-type: none"> 1. Group presentation, which is tutor and peer assessed, to assess learning outcome 1 by the end of the Autumn term (25%) 2. 3000-word essay to assess learning outcome 3 before the end of the Spring term (25%) 3. 2-hour examination to assess learning outcomes 2, 4, 5 and 6 at the end of the Spring term (50%) 								
15.	Assessment Weighting								
	Seen examination					NO			
	Unseen examination					50%			
	Coursework (no examination)					50%			
16.	Timetabled examination required					YES			
17.	Length of exam					2 hours			
18.	Learning Materials								
	<p>Essential</p> <p>Antonio, J., Stout RJ (2001) <u>Sports Supplements</u>. Lippincott Williams and Wilkins.</p> <p>Bahrke, M.S., Yesalis, C. (2002) <u>Performance Enhancing Substances in Sport and Exercise</u>. Human Kinetics Europe Ltd.</p> <p>Mottram, D. (1991) <u>Drugs in Sports</u>. Routledge, an imprint of Taylor and Francis Books Ltd.</p> <p>Reents, S. (2000) <u>Sport and Exercise Pharmacology</u>. Human Kinetics, Champaign IL.</p>								
19.	Module run								
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE		
	2007/2008	Autumn		Oct	May	100	EN	FT	PT
	2008/2009	Autumn		Sep	May	100	HE	FT	PT
	2009/2010	Autumn		Sep	May	100	HE	FT	PT
	2010/2011	Autumn		Sep	May	100	HE	FT	PT

20.	Timetabling Information	
	(a) Please indicate which teaching activities will be offered in this module:	
	LECTURE (LEC)	2 hours per week or
	SEMINAR (SEM)	2 hours per week
	LABORATORY/STUDIO (LAB/STU)	NO
	WORKSHOP (WRK)	NO
	TUTORIAL (TUT)	Weekly personal tutorials are available on request or for students needing extra support with their studies.
	OTHER	NO
	(b) Timetabled	YES
	(c) Sectioned	YES
	(d) Is the module to be downloaded for OASIS?	YES
	(e) Do students need early access to OASIS?	YES

1.	Short code	SES3188
2.	Title	Sports Nutrition
3.	Level	UG 3
4.	Credit Points	30
5.	Start Term	Autumn
6.	Subject	Sport and Exercise Science
7.	Module Leader	Dr. Neville Hall
8.	Accredited by	-
9.	Module Restrictions	
	(b) Pre-requisite	None
	(d) Programme restriction	None
	(e) Level restrictions	None
	(f) Other restrictions or requirements	None
10.	Automatic deferral	Not Permitted
11.	Aims	The module is designed to provide students with the theoretical and practical knowledge of how optimal nutrition can help to minimise the risk of sports injuries, enhance performance and promote recovery from injury.
12.	Syllabus	<ol style="list-style-type: none"> 1. Exercise metabolism: mobilisation of macronutrient during exercise; summary of main energy pathways; regulation of energy metabolism. 2. Cultural, physiological, psychological and social factors influencing eating habits. 3. Adherence to exercise and dietary changes: factors influence compliance with dietary advice and Transtheoretical Framework. 4. Health eating and Dietary Reference Values. 5. Macronutrients and micronutrients. 6. Glycaemic index and load. 7. Nutritional supplements and ergogenic aids: including anabolics, anti-catabolics, antioxidants, diuretics, drug nutrients, fat reductions, hormones, non-essential nutrients, and phytochemicals. 8. Fluid and electrolyte replacement. 9. Methods for recording and analysing dietary information. 10. Anthropometry: 2-compartment model of body composition; somatotype, somatotype charts and relationship to sport performance; anatomical landmarks and measure sites; equipment and basic calibration; informed consent and measurement etiquette; other methods of measuring body composition including bioelectrical impedance analyser. 11. Weight control strategies: fat loss and lean tissue gain. 12. Eating disorders: anorexia nervosa, bulimia nervosa and muscle dysmorphia (bigorexia). 13. Medical conditions: including female triad and sports anaemia; hyponatraemia, heat stress and exercise induced hypoglycaemia. 14. Nutritional plans for power sports, endurance sports and combined power and endurance sports. 15. Nutritional support to speed recovery from injury.

13.	<p>Learning Outcomes</p> <p>On completion of this module, the successful student will be able to:</p> <p>Knowledge and Skills</p> <ol style="list-style-type: none"> 1. Identify the nutritional needs of the physically active with particular reference to the metabolic and physiological needs of the activity. 2. Measure height, weight, 8 skinfolds, 5 girths and 2 bone breadths in accordance with the International Society for the Advancement of Kinanthropometry (ISAK) guidelines and calculate body mass index, waist:hip ratio and percentage body fat. 3. Evaluate body composition using a range of anthropometric techniques and analyse dietary intake using a nutritional computer database. 4. Debate the merits of using ergogenic aids to enhance athletic performance. 5. Identify athletes at risk of dehydration and defend choice of hydration or rehydration strategies. 6. Devise individualised nutritional programme for losing body fat and gaining lean tissue. 7. Debate the causes of eating disorders, identify their signs and symptoms and refer the athlete to the most appropriate health professional or agency.
14.	<p>Learning, Teaching and Assessment Strategy</p> <ol style="list-style-type: none"> i. Lectures introduce key information, concepts, debates and theories. ii. Seminars facilitate student participation, the development of problem solving, presentational and social skills. iii. Case histories aid the development of the ability to apply theoretical concepts and knowledge to real scenarios. iv. Practical sessions in human performance laboratory/gym facilitate the development of manual, observational, analytical, literacy and numeracy skills. <p>Assessment Scheme</p> <p>A. Formative Tests by weeks 6 and 18. Group presentations that is peer-assessed between weeks 6 and 18.</p> <p>B. Summative</p> <ol style="list-style-type: none"> 1. A 3000-evaluative nutritional report to assess learning outcomes 1 and 3 to submitted by the end of the Autumn term (50%) 2. Objective structured practical examination to assess learning outcome 2 by the end of the Spring term (Pass/Fail) 3. 2-hour short answer examination comprising problem-based and data analysis questions to assess learning outcomes 1-7 to be taken at the end of the Spring term (50%)

15.	Assessment Weighting								
	Seen examination						NO		
	Unseen examination						50%		
	Coursework (no examination)						50%		
16.	Timetabled examination required						YES		
17.	Length of exam						2 hours		
18.	Learning Materials								
	<p>Essential</p> <p>Recent Journals Articles</p> <p>GSSI Website</p> <p>Antonio, J., Stout, J.R. (2001) <u>Sports Supplements</u>. Lippincott Williams and Wilkins.</p> <p>Bean, A. (2003) <u>The Complete Guide to Sports Nutrition</u>. A and C Black.</p> <p>Burke, E. (1998) <u>Healing Sports Injuries with Good Nutrition. Guide to Optimal Sports Nutrition. Vol. 3</u>. Keats Publishing.</p> <p>Burke, L., Deakin, V. (Ed) (2002) <u>Clinical Sports Nutrition</u>. McGraw Hill.</p> <p>Maughan R (Ed) (2000) <u>Nutrition in Sport</u>. Blackwell Science.</p> <p><u>International Journal of Sport Nutrition and Exercise Metabolism</u>. Human Kinetics.</p> <p>Recommended</p> <p>Benardot, D. (2006) <u>Advanced Sports Nutrition</u>. Human Kinetics.</p> <p>Clark, N. (2002) <u>Sports Nutrition Guidebook</u>. Human Kinetics.</p> <p>Maughan R (Ed) (2004) <u>Food, Nutrition and Sports Performance II: The IOC Consensus Conference on Sports Nutrition</u>. Routledge.</p>								
19.	Module run								
	Academic year	Term	Part of Term	Start date	End date	Max student numbers	Campus/Mode e.g.. DE		
	2007/2008	Autumn		Oct	May	100	EN	FT	PT
	2008/2009	Autumn		Sep	May	100	HE	FT	PT
	2009/2010	Autumn		Sep	May	100	HE	FT	PT
	2010/2011	Autumn		Sep	May	100	HE	FT	PT

20.	Timetabling Information	
	(a) Please indicate which teaching activities will be offered in this module:	
	LECTURE (LEC)	NO
	SEMINAR (SEM)	2 hours per week or
	LABORATORY/STUDIO (LAB/STU)	2 hours per week
	WORKSHOP (WRK)	NO
	TUTORIAL (TUT)	NO
	OTHER	NO
	(b) Timetabled	YES
	(c) Sectioned	YES
	(d) Is the module to be downloaded for OASIS?	YES
	(e) Do students need early access to OASIS?	YES