

EXTERNAL REVIEW REPORT OF NEW PROGRAMMES

1.	Title of Programme:	BSc (H) in Sport and Exercise Science				
2.	School / Centre:	Science & Computing				
3.	Duration:	4 years				
4.	NFQ Level:	8				
5.	Type of Review:	New Programme:	Yes:	<input checked="" type="checkbox"/>	No:	<input type="checkbox"/>
		Differential Validation:	Yes:	<input type="checkbox"/>	No:	<input type="checkbox"/>
6.	Date of Review:	19 February 2016				
7.	Delivery Mode:	Full-time	<input checked="" type="checkbox"/>	Part-time	<input type="checkbox"/>	Blended
8.	Panel Members:	Dr Joe McGarry (chair) Dr Sheila Coe, Uni Sector Dr Michael Hall, IT Sector Ruth Kilcawley, Industry Michael Hannon, Secretary & VP for Academic Affairs & Registrar				
9.	Proposing Staff:	Dr Seamus Lennon Dr Des Foley Dr Sean Duignan Yvonne Slattery Mary Mc Grath Louise Cannon Dr Sheila Faherty Dr Lisa Ryan Jeff Lynskey, Galway Community College				
10	Programme Rationale:	<p>Sport and Exercise Science is the application of scientific principles in order to understand and enhance sport and exercise performance and health and well-being. The programme is designed to provide students with a sound grounding in the scientific method in the context of sport and exercise science. Key areas of study include the three main disciplines of Sport and Exercise Science: physiology, psychology and biomechanics, but also strength and conditioning, motor control, nutrition and performance analysis. The scale of the sports sector can be gauged from the fact that more than 38,000 people are employed in this industry in Ireland, with 270,000 volunteers active across all sporting codes. Furthermore, with the increased number of the population suffering from, or at risk of developing, lifestyle-related chronic diseases, more individuals require assistance with training and physical activity. As a result, there is an urgent need for suitably qualified individuals to work in the sports and health sectors. Sport and Exercise Science has been gaining popularity as an area of study to meet this growing demand.</p>				
11.	Potential Demand for Entry:	"The demand for sport scientists is growing in line with the ever-increasing focus within the sporting world on achieving the best				

		<p>results possible.” This statement from Smart Futures encapsulates the emerging area of Sports Science. Smart Futures is a collaborative government-industry-education programme promoting science, technology, engineering and maths (STEM) careers to second-level students.</p> <p>The second justification is that no similar programme exists in the North/North west cluster. We shall see later that the lack of an academic programme is a significant drawback for sporting organizations in the region in supporting their athletes.</p> <p>Thirdly, the general area of sport, exercise, and healthy society is emerging, though not matured in Ireland. In this regard, as outlined earlier in the document, it is intended to build a coherent structure in the Institute in this area and an undergraduate offering is pivotal to this development.</p> <p>The programme fits well with other programmes running in the Institute and the School in the general areas of health sciences (e.g. Medical Science, Nursing, Biopharmaceutical Science) and skills education in Sports (e.g. Outdoor Education and Leisure).</p>
12.	Stakeholder Engagement:	<p>Professional and non-professional sporting clubs as well as public health experts were contacted to discuss the outline of the programme as well as the graduate profile; in particular the desirable characteristics of the graduate, as they see it. A consistent key message emerging from the consultation process was the lack of access to sport and exercise science professionals and routes to study in the West/North West region.</p> <p>Connacht Rugby and Galway GAA, as local groups with a strong interest in this programme, each met with the Programme Board on three separate occasions to allow for detailed discussion.</p>
13.	Graduate Demand:	<p>There is scant mention of the area of Sport and Exercise Science in Expert Skills Group reports. It is more instructive to peruse the opportunities in various vacancy databases which present some indications of where graduates may find opportunity. Websites such as www.sportsjobs.ie have been established to service the sports jobs market including sport and exercise science. Job opportunities have included sports development, sport science, strength and conditioning and sport coaching across a range of employers.</p>
14.	Entry Requirements:	<p>Access to the programme will be in accordance with Code of Practice No. 4, “GMIT Policies - Access, Transfer and Progression”. It is anticipated that the majority of students will enter through the CAO system but there is also an opportunity to explore articulation arrangements from Further Education in line with Institute policy.</p>
15.	Programme Management:	<p>The management of the programme is set out in Code of Practice No. 2 “Validation, Monitoring and Review”.</p>

16.	Module syllabi:	Refer to Appendix 1.
17.	LTA:	<p>Pedagogically, the design features of this programme and its constituent modules may be represented thus:</p> <ul style="list-style-type: none"> • lectures will be designed to provide the student with the fundamental knowledge of the given syllabi • practical classes will provide the student with the opportunity to apply the theory, concepts and principles in practice • group work, workshops and discussions will facilitate peer-supported learning and team-working • projects, scenarios and case studies will provide the student with the opportunity to gain an understanding of the practical application of theory in a cross-functional setting • student presentations will facilitate the building of student confidence and self-esteem through the deployment of effective communication techniques <p>Assessment tasks are chosen in accordance with their appropriateness to assess specific learning outcomes. Criteria for assessing student performance relate to the module learning outcomes, the national standards, and where applicable to recognised professional certification (BASES).</p> <p>Both formative and summative assessments are used within the programme. Students are regularly required to undertake tasks, the sole purpose of which is to give students feedback in relation to their learning, so they can identify areas for improvement. Summative assessment involves some element of continuous assessment and a terminal examination as indicated by the Approved Programme Schedule.</p>
18.	ATP:	<p>Graduates will be eligible to pursue research MSc/PhD programmes in Sport and Exercise Science and related areas as well as taught master's programmes in cognate areas. The School of Science and Computing intends to develop in-house taught master's programmes for Sport and Exercise Science graduates.</p>
19.	Resource Implications	<p>Human</p> <p>The programme has been designed so that Year 1 uses a number of existing modules with the addition of two new modules only and therefore could commence with the addition of one staff member. Year 2 would require one additional staff member and years 3 and 4, a further additional staff member. A dedicated technician would be necessary to assist with setting up practicals and maintaining equipment.</p> <p>Information Technology</p> <p>There are 42 designated IT laboratories and approximately 1,100 PCs available for students across the Institute. GMIT uses Moodle as its learning management system which allows students and staff to view course information including lecture notes and</p>

		<p>assignments online. Staff in the School are users of Moodle with increasing levels of sophistication and interaction each year. It is envisaged that Moodle will be a key part of this programme. The main campus has over 100 PC's on open access in the Learning Centre for those who do not have their own laptops or home PCs.</p> <p>Library Students will have access to GMIT library facilities.</p> <p>Equipment Ideally the programme needs a dedicated performance analysis laboratory with the latest technologies. Examples of the analysis required:</p> <ul style="list-style-type: none"> • Anthropometry and Assessment of Body Composition • Assessment of Strength, Power, and Local Muscular Endurance • Assessment of Blood Lactate Responses during Exercise • Field Testing • Flexibility/Range of Movement Analysis • Haematological Screening (e.g. haemoglobin, glucose, lipids, cholesterol) • Maximal Oxygen Uptake Assessment • Assessment of Energy expenditure and Substrate Utilisation • Hydration analysis • Nutritional Profiling • Maximal Intensity Exercise (e.g. Wingate) Testing • Sports Specific (e.g. KingCycle) Testing • Testing of Special Groups (e.g. disabled athletes, children, the elderly) <p>Initial start-up costs to facilitate the development of the above analysis are estimated at €200000 and this amount has been set aside by the Institute to fund this aspect of the programme. The Institute is consulting with local sporting organisations to use existing facilities close to the Institute and it is anticipated that agreements will be in place prior to commencement of the programme.</p> <p>In addition, students will study general science subjects and these will be catered for within the existing laboratory capacity within the School.</p>
20.	Findings and Recommendations:	<p>Recommendations of the panel in relation to award sought:</p> <ol style="list-style-type: none"> 1. A member of staff should be appointed to anchor each of the three themes. 2. The programme should be reviewed to ensure it meets BASES accreditation requirements, prior to submission for such accreditation. 3. Repeat assessment strategy for modules with 100% CA needs to be articulated in the Module Descriptors.

		<p>4. Review module assessment strategies, e.g. metrics/rubrics for assessing debates.</p> <p>5. The APS needs to reflect the assessment breakdown of modules.</p> <p>6. Include introductory sectoral information into the LIS module to contextualise the programme for 1st years.</p> <p>7. Consider introducing an earlier placement.</p>	
		Special conditions attaching to approval (if any):	
		<p>1. One staff member to be recruited for year one and two additional staff members to be recruited for years 2, 3 and 4.</p> <p>2. A contract for services from the GAA or other provider(s) must be formalised for approval by the Executive Board.</p> <p>3. L7/6 embedded awards need a greater vocational dimension, such as short term certification for specific employable skills, for example: a coaching course; first-aid; being well module (HSE).</p>	
21.	FAO: Academic Council:		
		Approved:	
		Approved subject to recommended changes:	√
		Not approved at this time:	
	Signed:		
		Chair	Secretary

Approved Programme Schedule - Stage 1

Programme GA_SSPOR_H08 Bachelor of Science (Honours) in Sport and Exercise Science

Stage 1

Delivery	Code	Title	Level	Credit	ME	FT	PT	CA	PJ	PC	FE	Total
Semester 2	BIOL06024	Fundamentals of Sport and Exercise Science	06	05	M	4.00	0.00	20	0	40	40	100
Year	MEDI06008	Fundamentals of Biomechanics and Anatomy	06	15	M	5.00	0.00	70	0	0	30	100
Year	BIOL06002	Cell Biology/Genetics	06	10	M	4.50	0.00	20	0	40	40	100
Year	BIOL06004	Human Physiology	06	05	M	1.00	0.00	40	0	0	60	100
Semester 1	EDUS06007	Learning Innovation Skills	06	05	M	2.00	0.00	100	0	0	0	100
Year	MATH06005	Mathematics/Statistics	06	05	M	3.00	0.00	30	0	10	60	100
Year	CHEM06002	Chemistry	06	15	M	6.00	0.00	20	0	40	40	100
Semesters Per Stage	2											
		Elective Rules	0									60
		Credits Required										

ME - Mandatory or Elective, FT - Fulltime Average Weekly Hours, PT - Parttime Average Weekly Hours,

CA - Continucus Assessment Percentage, PJ - Project Percentage, PC - Practical Percentage, FE - Final Exam Percentage

Approved Programme Schedule - Stage 2

Programme GA_SSPOR_H08 Bachelor of Science (Honours) in Sport and Exercise Science

Stage 2

Delivery	Code	Title	Level	Credit	ME	FT	PT	CA	PJ	PC	FE	Total
Semester 3	BIOL06028	Human Nutrition and Metabolism	06	10	M	6.00	0.00	50	0	0	50	100
Semester 3	BIOL06029	The Biomechanics of Human Movement	06	10	M	6.00	0.00	40	0	0	60	100
Semester 4	BIOL06025	Nutrition, Physical Activity and Health	06	05	M	3.90	0.00	50	0	0	50	100
Semester 4	BIOL06026	Introduction to Sports Psychology	06	05	M	3.00	0.00	100	0	0	0	100
Semester 4	THES06001	Research Methods for Sport and Exercise Science	06	10	M	6.00	0.00	100	0	0	0	100
Semester 4	MEDI06009	Exercise Instruction	06	10	M	6.00	0.00	0	0	50	50	100
Semester 3	BIOL06027	Sport and Exercise Physiology	06	10	M	6.00	0.00	50	0	0	50	100
Semesters Per Stage	2	Elective Rules	0	Credits Required								60

ME - Mandatory or Elective, FT - Fulltime Average Weekly Hours, PT - Parttime Average Weekly Hours,
 CA - Continuous Assessment Percentage, PJ - Project Percentage, PC - Practical Percentage, FE - Final Exam Percentage

Approved Programme Schedule - Stage 3

Programme GA_SSPOR_JH08 Bachelor of Science (Honours) in Sport and Exercise Science

Stage 3

Delivery	Code	Title	Level	Credit	ME	FT	PT	CA	PJ	PC	FE	Total
Semester 5	BIOL07029	Applied Sport and Exercise Psychology	07	10	M	5.00	0.00	100	0	0	0	100
Semester 5	BIOL07032	Sport and Exercise Biomechanics	07	10	M	6.00	0.00	50	0	0	50	100
Semester 5	EDUS07005	Sport and Exercise Pedagogies	07	10	M	5.00	0.00	100	0	0	0	100
Semester 6	BIOL07030	Advanced Laboratory Techniques for Sport and Exercise Science	07	10	M	6.00	0.00	100	0	0	0	100
Semester 6	BIOL07031	Applied Sport and Exercise Nutrition	07	10	M	5.50	0.00	50	0	0	50	100
Semester 6	BIOL07033	Sport and Exercise Prescription and Training	07	10	M	6.00	0.00	100	0	0	0	100
Semesters Per Stage	2	Elective Rules	0	Credits Required								60

ME - Mandatory or Elective, FT - Fulltime Average Weekly Hours, PT - Parttime Average Weekly Hours,
CA - Continuous Assessment Percentage, PJ - Project Percentage, PC - Practical Percentage, FE - Final Exam Percentage

Approved Programme Schedule - Stage 4

Programme GA_SSPOR_H08 Bachelor of Science (Honours) in Sport and Exercise Science

Stage 4

Delivery	Code	Title	Level	Credit	ME	FT	PT	CA	PJ	PC	FE	Total
Semester 7	MGMT08051	Sports Management	08	05	M	2.00	0.00	100	0	0	0	100
Semester 7	BIOL08021	Contemporary Issues in Sport and Exercise Science	08	05	M	2.00	0.00	100	0	0	0	100
Semester 7	BIOL08022	Applied Sport and Exercise Physiology	08	10	M	5.00	0.00	50	0	0	50	100
Semester 7	THES08010	Current Research in Sport, Exercise and Nutrition	08	10	M	4.00	0.00	50	0	0	50	100
Semester 8	THES08011	Research Project in Sport and Exercise Science	08	15	M	0.00	0.00	100	0	0	0	100
Semester 8	PLAC08004	Professional Skills in Sport and Exercise Science	08	15	M	1.00	0.00	100	0	0	0	100
Semesters Per Stage	2	Elective Rules	0	Credits Required								60

ME - Mandatory or Elective, FT - Fulltime Average Weekly Hours, PT - Parttime Average Weekly Hours,

CA - Continuous Assessment Percentage, PJ - Project Percentage, PC - Practical Percentage, FE - Final Exam Percentage