	Northumbria University		
Periodic Review Report Template			
Department and Faculty	Applied Sciences Faculty of Health and Life Sciences		
Date of Review	28-29 <sup>th</sup> November 2017		
Review Panel (approved by Academic Registry)	Jonny Hall (Chair), Faculty Associate Pro Vice-Chancellor Learning & Teaching, Faculty of Business & Law Philip Anderson, Director of Programmes, Faculty of Engineering & Environment Ruth Crabtree, Head of International Development, Faculty of Health & Life Sciences Simon Noble, SU Sabbatical Panel member, President SU William Sheldon, retired Head of Department, Sunderland University Ann Macfadyen (Deputy Chair) Academic Development Officer, Academic Registry		
Method of Review	This review was conducted using the periodic review procedure defined in Northumbria's Review Framework available from <a href="https://www.northumbria.ac.uk/sd/central/ar/qualitysupport/reviewframework/">https://www.northumbria.ac.uk/sd/central/ar/qualitysupport/reviewframework/</a>		

#### Notes:

- Review reports are expected to be short and succinct, typically 3 to 4 sides of A4
- Sections highlighted in blue below, together with the header above, make up the published summary of this review. This will be published on the University's Teaching Quality Information web pages (https://www.northumbria.ac.uk/sd/central/ar/qualitysupport/PQI/)

Section 1	Department Context

## Scope of Review

The Department of Applied Sciences in the Faculty of Health and Life Sciences incorporates the former departments of Biomedical Science, Biology, Food Science and Nutrition, and Chemistry and Forensic Science.

The Department has a strong Applied Sciences Foundation Year, through which students can progress onto undergraduate programmes within the department. The foundation year programme has grown significantly with a recruitment of 213 students for 2017/18, and retention and progression from the foundation year is good. The Foundation Year makes a significant contribution to achieving target numbers on the undergraduate programmes.

The undergraduate provision consists of the following degree programmes. BSc Biomedical Science accredited by the Institute of Biomedical Science and approved by the Health and Care Professions Council. BSc (Applied) Biology with pathways in Biotechnology and neurobiology. BSc Chemistry including an integrated masters, accredited by the Royal Society of Chemistry, BSc Forensic Science and BSc Criminology and Forensic Science accredited by Chartered Society of Forensic Sciences, and includes an integrated masters; BSc Food Science and Nutrition, including a pathway in Human Nutrition accredited by the Association for Nutrition. The total number of students on undergraduate degree programmes totals about 1013 for 16/17.

The postgraduate provision is relatively small and consists of MSc Biotechnology, MSc Forensic Science, MSc Microbiology and MSc Nutritional Science with 54 enrolled students (16/17), in addition to the integrated masters in Chemistry and Forensic Science.

The Department has extremely strong international provision, with franchise delivery partnerships for BSc Food Science and Nutrition in VTC/SHAPE Hong Kong and BSc Biotechnology and BSc Biomedical Science in both MDIS, Singapore and BMS, Sri Lanka. All franchise partnerships have reached a mature status and demonstrate consistently good academic performance (394 students in 16/17).

### **Aims of Department**

The primary educational aim of the department is to develop capable and confident goal-orientated science graduates with a relevant and rich skill set, equipped to sustain and manage their continuing development and to secure exciting career and/or study opportunities. The programmes aims to deliver graduates with a strong technical ability in practical skills and laboratory experience, in addition to excellent theoretical knowledge necessary for a profession in science. The Department has an established and well-developed research capacity, with over 90% of staff with doctorates and a strong contribution of 33.4 FTE to REF2014. Research into learning is both current and relevant, with multi- and inter-disciplinary collaboration and delivery in both teaching and research.

#### **Contextual Information**

The Department was formed in 2012, from three separate departments as mentioned above, and currently operates across three subject areas (Biological Sciences, Health Sciences and Analytical Sciences) each with a Head of Subject. The Department has three Directors of Learning and Teaching with responsibilities across thematic areas: Enhancement, Quality, Monitoring & Review, and Student Support & Engagement. There are 55 teaching staff across the department. The provision is across two buildings, teaching and research labs are in Ellison building whilst staff offices are across both Ellison and Northumberland. The teaching labs are well equipped and very well presented, having recently been refurbished, and has good specialist technical support. The City Campus provision includes specialist facilities for analytical and synthetic chemistry, anatomy teaching, food pilot plant, food science lab, histology and microscopy labs, molecular biology and 'OMICS' facilities, an organoleptic lab and a tissue culture lab,. In addition, there is a bespoke crime scene house at Coach Lane Campus. The Department has established links with NHS Trusts and with industry sector, and uses employer liaison committees to help ensure a fit to the needs of employers.

All programmes have gone through PFNA alignment, currently in its second year of delivery. The department is aiming to extend its provision with a new BSc Biochemistry and MRes in development, and a Master Public Health (Nutrition) to be validated for 2018.

Section 2	Judgement Criteria		
Focus of judgements	Judgements		
The setting and maintenance of threshold academic standards	<ul> <li>meets UK and NU expectations,</li> <li>requires improvement to meet UK and NU expectations,</li> <li>does not meet UK and NU expectations.</li> </ul>		
The quality of students' learning opportunities	<ul> <li>commended,</li> <li>meets UK and NU expectations,</li> <li>requires improvement to meet UK and NU expectations or,</li> <li>does not meet UK and NU expectations.</li> </ul>	X	
Information about higher education provision	<ul> <li>commended,</li> <li>meets UK and NU expectations,</li> <li>requires improvement to meet UK and NU expectations or,</li> <li>does not meet UK and NU expectations.</li> </ul>		
The enhancement of students' learning opportunities	<ul> <li>commended,</li> <li>meets UK and NU expectations,</li> <li>requires improvement to meet UK and NU expectations or,</li> </ul>	X	

does not meet UK and NU expectations.

### Section 3

## The setting and maintenance of threshold academic standards

## The Panel identified the following strengths:

- Applied Biology exceeding expectations as evidenced by student experience and feedback, and confirmed by external examiners reports.
- Compliance with PSRB accreditations is a strength.
- Employers' feedback on the standards of student coming from Northumbria as high, praising their ambition and ability.
- Department has high quality relations with CV partnerships resulting in excellent degree outcomes

## The Panel made the following recommendations and timescales for further development:

• External examiners' concerns about the proportional increase in good awards following changes in University classification policy should be considered by the University within this academic year.

#### The Panel made the following observations:

- The department should review programme provision for attracting international students for on campus programmes.
- To maintain the quality of CV partnerships the department should continue to monitor the quality of the moderation at the partner.
- The department should consider its plans for PG growth and CPD/Degree Apprenticeship potential, to reduce risk of dependence on UG and FY provision.

## Section 4

## The quality of students' learning opportunities

## The Panel identified the following strengths:

- Excellent teaching labs which are kept up to date and ahead of the sector. The Department makes full use of the labs, which are well organised and give many opportunities for applied learning.
- The research informed teaching leading into programmes is commended.
- Panel were impressed by the capstone project as an opportunity for research engagement between students and academic staff.
- Staff convey their enthusiasm about their subject, as acknowledged by the students, and want students to succeed.

### The Panel made the following recommendations and timescales for further development:

- Need for on-going monitoring in the consistency of academic staff in ensuring compliance with university policy on assessment (i.e. assessment briefs, scheduling and feedback), to ensure that there is real impact on students (suggest annual report to FEC).
- Need to revisit given the growth in numbers the Foundation Year in regards to streaming students according to prior achievement in science, and to consider introducing small group (seminar) sessions. To present to FEC by January 2018.
- Any further growth in the Foundation Year would require careful planning and resourcing well in advance. Department/FEG decision by January 2018.
- Within Biomedical Sciences programme, review the use of lectures within the learning and teaching strategy, and to support all staff to learn from best practice to deliver high quality and engaging lectures.

# The Panel made the following observations:

The Department may want to reflect on the range of learning activities used, including the use of on-line

### learning.

Students would welcome recording lectures, and the department should debate and form a fully articulated approach, building upon the initiatives started within Biomedical Sciences.

The department should be encouraged to maximise the extent to which final year students to showcase their work.

## Section 5

# Information about higher education provision

## The Panel identified the following strengths:

- The departments STEM work and widening participation activities recognised as a strength.
- Engagement with secondary school teachers recognised.

## The Panel made the following recommendations and timescales for further development:

N/A

## The Panel made the following observations:

Students coming onto the Foundation Year were not always clear about the content of the programme through the open day event.

Stakeholders are involved in provision to an appropriate degree.

#### Section 6

## The enhancement of students' learning opportunities

#### The Panel identified the following strengths:

- The excellent lab equipment in place, and the partnership between technical staff and academic staff in enhancing student learning.
- Where placements exists, these are recognised as providing real enhancement to students.
- The use of STEM ambassadors across the provision.

#### The Panel made the following recommendations and timescales for further development:

- The Faculty should make optimal use of its space to showcase and celebrate its excellence. [By end of academic year]
- The University and Faculty should actively consider co-location of staff, labs and student study space and the space available for it. [To feature within the annual plan and five-year strategy]
- The personal tutoring system appears to have patchy impact across the programmes, there needs to be improved systems in place which ensure a high level of engagement by all members of staff and students to be proactive within the process. [Prior to next academic year].

## The Panel made the following observations:

To attempt to extend the placement provision across the portfolio, and decide upon a strategy for promoting study abroad.

The department should explore strategies for more consistent peer support processes.

Further work is needed to establish the ownership and responsibility for student learning of the senior team following university restructure of responsibilities (Head of Subject, Directors of Learning and Teaching and other Directors).

#### Section 7

## **Further Quality Assurance Monitoring**

This section is copied from the self-evaluation document to acknowledge actions which the

	Department/Faculty has already identified and is already actioning.		
Affirmations <sup>1</sup>	Please list any affirmations identified and accompanying actions (add extra rows as needed)		
	Issue	Action	
	Assessment & Feedback	Improvement through increased monitoring and emphasis, during the moderation process, on the use of clear rubrics and equitable and constructive feedback	
	NSS scores	Bespoke action plans for each programme have been developed and action will be monitored	
	Student voice	Greater communication and clarity/transparency against any actions that have been raised	
Audit Trails	<ol> <li>Development of a Partnership at BMS, Sri Lanka</li> <li>Response to issue raised at SSPC</li> <li>Embedding the Depts assessment structure within PFNA</li> </ol>		
Compliance Checks	Faculty Compliance Checks Report submitted confirms programme documentation up to date and quality assurance processes are in place and evidenced against monitoring compliance.		

Section 8	Department Response to Report		
Short summary response by Department on follow up action for inclusion in published report:			
No details added			

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<sup>&</sup>lt;sup>1</sup> examples of developments, planned or in train which seek to address issues previously identified Y:\QTE\Reviews\Periodic Review\Periodic Review Events (By Department)\01 Applied Sciences\Report\Applied Sciences PR Report Nov17.doc Page 5 of 5