

## Periodic Review Report

<b>School</b>	Applied Sciences		
<b>Discipline Name</b>	Chemistry and Forensic Science		
<b>Date of Review</b>	26 <sup>th</sup> & 27 <sup>th</sup> February 2009		
<b>Review Panel</b> (approved by University Learning and Teaching Committee)	<p><b>Internal Membership</b></p> <p>Dr Rebecca Strachan (Chair) Associate Dean for L&amp;T, School of Computing, Engineering &amp; Information Sciences</p> <p>Tim Howarth Director of Student Affairs, School of the Built Environment</p> <p>Dr Helen Hooper Head of Applied Biosciences, School of Applied Sciences</p> <p>David Wright Northumbria Students' Union President</p> <p><b>External Membership</b></p> <p>Dr Steven Dobrowski Director of Forensic Sciences, School of Life Sciences, University of Bradford</p> <p><b>Facilitators</b></p> <p>Ms Chris Rickelton (Lead) Administrative Support to Panel, Academic Registry</p> <p>Peter Fenwick Administrative Support to Panel, Academic Registry</p> <p>Liz Morrow Administrative Support to Panel, Academic Registry</p> <p>Sally Iles Learning &amp; Teaching Support Adviser, Academic Registry</p>		
<b>Method of Review</b>	This review was conducted using the periodic review procedure defined in Northumbria's Review Handbook (2008 version), available from <a href="http://northumbria.ac.uk/sd/central/ar/lts/review/intrev/">http://northumbria.ac.uk/sd/central/ar/lts/review/intrev/</a>		

## Section 1

## Discipline Aims and Context

This review covers the Chemical and Forensic Sciences (CFS) Discipline area, one of five approximately equal sized Disciplines in the School of Applied Sciences. The following programmes were included in the review:

Award & Programme Title	Number of Students			
	FT	SW	PT	FTE
BSc Hons Criminology & Forensic Science FT/SW		150		135
BSc Hons Forensic Science FT/SW	43	28		68.2
BSc Hons Applied Chemistry FT/PT	6	2	19	17.3
BSc Hons Pharmaceutical Chemistry FT/SW	12	9		20.1
BSc Hons Chemistry with Biomedical Sciences FT/SW	3	3		5.7
BSc Hons Chemistry with Forensic Chemistry FT/SW	7	9		15.1
MChem Applied Chemistry FT/SW	1	7		7.3
HNC Science (Chemistry) PT			21	10.5

The main aims of the Discipline with respect to the programmes covered in this review are to provide a high quality range of vocational and applied programmes of study focussed in the Chemical and Forensic Sciences. The Discipline aims to maintain currency and vocational applicability of its provision through close ties with and accreditation by professional bodies and through collaboration with local industry. A further aim of the Discipline focuses on a commitment to the production of quality outputs from research, enterprise and consultancy activities across its subject areas and these play a vital role in ensuring that research and currency feeds into its taught programmes.

In September 2008 the School of Applied Sciences underwent a structural reorganisation that redefined the previously 5 Divisions into the current 5 Subject Discipline areas. Changes affecting the former Division of CFS were relatively minor. In total the Discipline boasts 15 permanent academic members of staff plus a Royal Society of Chemistry funded Teaching Fellow. These staff are located in Ellison building A-Block where much of the Discipline's specialist teaching facilities are also located.

## Section 2

## Curricula and Standards

### The Panel identified the following strengths:

1. There is robust evidence that the course content of all programmes within the Discipline are at a suitably advanced level. The indicators for this are the accreditation by RSC; consistently good/positive EE reports; the confidence to apply for accreditation of the forensic components of the programmes.
2. The clear vision of the School and the focus on academic Disciplines.
3. The strong and relevant science content across all the undergraduate provision.
4. The applied nature of the programmes and the incorporation of a range of activities that mirror the real world.

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

1. The formalisation of the strategic engagement of industry employers with the Discipline, particularly for curriculum development, graduate jobs and placements.
2. The Discipline should seek accreditation for the forensic components of their programmes. (Forensic Science Society).
3. The Discipline should give consideration to allocating credit for the placement experience and review the strategy for the promotion of the placement year among all students to enable a greater uptake of placement opportunities by students.
4. There should be a review of the progression of undergraduate students to become independent learners. In particular, there should be less emphasis on scripted lab work as they prepare for their Level 6 studies.

## Section 3

## Management Information

### The Panel identified the following strengths:

1. There are systems in place within the School and Discipline to provide accurate and timely management information.
2. The attendance monitoring system and follow up support is robust and to be commended.

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

1. It is incumbent upon the management of the School to press to ensure that the data provided by the Centre is both timely and accurate.

## Section 4

## Student Experience

### The Panel identified the following strengths:

1. There is excellent technical provision and support in labs.
2. The accessibility of academic staff is to be applauded. There is clear evidence that staff have an open door policy across the Discipline, a policy that is welcomed and valued highly by students on the programmes.
3. The programmes provide a student experience that is highly relevant to industry and professional practice.
4. The student feedback mechanisms are effective and the evidence of their impact on module development and the feeding forward of developments from previous years was clearly articulated and is an exemplar of good practice.
5. There is a well established student representative system in place.
6. Student graduates going into employment view their laboratory experience as enriching and

relevant to the workplace. Employers also supported this view.

**The Panel made the following recommendations for further development:**

1. The Discipline should ensure that assessment feedback is timely across all modules and programmes within the Discipline.
2. The Discipline should provide greater support to students to develop their skills in preparation for employment, for example, interview skills, CV practice (perhaps embedding these as formal training in an appropriate module).

**Section 5**

**Enhancement Strategies**

**The Panel identified the following strengths:**

1. The panel was impressed with the range of mechanisms (research led/inspired/real life experience teaching) for the enhancement of learning and teaching and student engagement, especially those show-cased in the SED and during the review. These reveal that there is vitality in the Discipline for creating excellence in the learning environment for students to become equipped with the knowledge and skills needed for their desired profession.

**The Panel made the following recommendations for further development:**

1. Explore and implement mechanisms for the engagement of a wider participation of staff, including technical and administrative, into enhancement activities.
2. The Discipline should consider the use of a student portfolio in which they can learn how to present and articulate their skills base. This has the potential to enable students to learn about self appraisal, build their self confidence and create a basis for an excellent CV.
3. The Discipline should ensure that its enhancement activities are disseminated both within the Discipline and to a wider audience through mechanisms such as NTALE.

**Section 6**

**Discipline Response to Report**

**Short summary response by Discipline on follow up action for inclusion in published report:**

Curricula and Standards:

\* Development area: the formalisation of the strategic engagement of industry employers with the Discipline, particularly for curriculum development, graduate jobs and placements.

*This is already done through the relevant professional body, but more strategic links with key individual employers are being introduced and will be enhanced through a regular forum.*

*Within the Chemical Sciences area, meetings with key employers have commenced (e.g. P&G, Glaxo SK, International Paint). A forensic employers' forum is also being developed.*

\* Development area: the Discipline should seek accreditation for the forensic components of their programmes.

*The Forensic Science Society has recently discontinued its accreditation scheme, but the Discipline will seek SkillsMark accreditation instead. Whilst this accreditation is now in progress, it is under a new banner and a revised process is in operation.*

\* Development area: the Discipline should give consideration to allocating credit for the placement experience and review the strategy for the promotion of the placement year among all students to enable a greater uptake of placement opportunities by students.

*A review of placement processes is partially complete and this has involved a revision of both the process itself and the promotion of the scheme. New placement opportunities are continually being sought, but the current economic climate is impacting.*

\* Development area: there should be a review of the progression of undergraduate students to become independent learners. In particular, there should be less emphasis on scripted lab work as students prepare for their level 6 studies.

*Unscripted laboratory work has been introduced during the 2009/10 academic year, but there are limitations to this owing to H&S policy constraints. Additionally, the Forensic Science programme is planned to be revised for 2010/11. There will be a renewed focus at level 5 on research methods and project/level 6 preparation by the redesign of key modules.*

#### Management Information:

\* Development area: it is incumbent upon the School to press to ensure that central data provision is both time and accurate.

*Meetings with Academic Registry and Finance Dept. have taken place. Where data inaccuracies or confusions emerge, the relevant parties are being notified to take corrective action.*

#### Student Experience:

\* Development area: the Discipline should ensure that assessment feedback is timely across all modules and programmes within the Discipline.

*The Discipline continues to strive to meet and beat the agreed turnaround deadlines for assessment feedback. A detailed review of assessment and feedback methodologies is being undertaken. Additionally, a new receipting and returns process has been introduced.*

\* Development area: the Discipline should provide greater support to students to develop their skills in preparation for employment.

*All students are supported in this via the placement process. Improved signposting of and liaison with available central support services in this area has been explored for 2009/10. The Discipline has arranged several events for final year students dedicated to employment preparation skills and information. This include an employer visit (what employers look for in an application/cv) scheduled for February 2010 + a further study session planned for Semester 2.*

#### Enhancement Strategies:

\* Development area: explore and implement mechanisms for the engagement of a wider participation of staff, including technical and administrative, into enhancement activities.

*The Discipline's Away Day scheduled in Semester 2 focussed on the enhancement of assessment/feedback, the event being supported by the School Enhancement Fund.*

*The Discipline's Staff Development Budget is now refocused specifically towards enhancement and pedagogical activities.*

*A Technical Representative on SEG is now in place.*

\* Development area: the Discipline should consider the use of a student portfolio in which they can learn how to present and articulate their skills base. This has the potential to enable students to learn about self appraisal, build their self confidence and create a basis for an excellent CV.

*There has been a School wide review of PDP process with the aim of producing a 'toolkit' approach including a portfolio.*

\* Development area: the Discipline should ensure that its enhancement activities are disseminated both within the Discipline and to a wider audience through mechanisms such as NTALE.

*APT awards have recently been received by J Perry and S Carr.*

*Dissemination of pedagogic/enhancement activities in the School is now supported through the School Enhancement Fund.*

*Showcase/enhancement/good practice examples are now placed on the School's eLP L&T/Enhancement Site for general viewing.*

*NTALE activity is ongoing.*