

Forensic Science Courses in the UK and Europe - problems and solutions in course design, content and quality management

*Professor Mike Cole
Department of Forensic Science and Chemistry
Anglia Ruskin University*

Discussion centres on :-

The growth in the number of forensic science courses at all levels in UK and Europe

The philosophy / structure of our course (and most courses based in Science Departments)

teaching structure

staffing

resource allocation

Quality management at local and national level



Proliferation of forensic science courses in the UK (and Europe moving that way)

Possible reasons

Redeployment of physical scientists

CSI effect

Genuine interest



What is studied in the UK at U/G level ?

Forensic Science

Forensic science combined with...

something sensible

“Fish and chips”

Modules within a degree

Single lectures within a module or course

Problems of philosophy...



Philosophy and Courses offered

B.Sc. Single Honours Forensic Science

B.Sc. / B.A. Forensic Science and ...

Taught M.Sc.

M.Sc. in Forensic Practice

M.Sc. in Fire Investigation

Ph.D. - full or part time



Philosophy, aims and objectives.

Good knowledge of theory and practice

Understand UK legal systems

Work in “real world” forensic science



Philosophy, aims and objectives.

Undertake creative research

Problem solving

Presentation of results in different formats

Role of forensic scientist

Graduateness



Class sizes - here the problems start !

Lectures : 1st year 50 - 100

3rd year 10 - 20

Practicals : around 20 to 25

Lecturer + technician

Individual use of specialist eqpt.

Investment - circa £4m to date



Anglia Ruskin
University

Cambridge & Chelmsford

How do we reconcile teaching philosophy,
need to produce employable graduates,
resource implications and quality
management ?



- Integrated course structure
- Relationship of teaching, research and casework / consultancy
- Taught by PRACTITIONERS
 - problems of staff recruitment
 - AVOID the war stories

Entry requirements

High entry grades required (B B C)

Based on philosophy of teaching in Faculty of
Science

If applicants don't meet these - reject them !



Philosophy of assessment

Varies with module - MUST be relevant

Exams

Essays

Lab work and report writing

Project work

Graphical / Oral presentations

Thesis

Moot court



Philosophy - Does it work ?

Evidenced in destination statistics

~19% employed in forensic science related fields

~ 25% continue to Masters or Ph.D. programmes in forensic science

National Average (combined) = 25%

Anglia Ruskin = 44%



Quality management and control

Approval processes (internal)

QAA - DAT's and subject benchmarks

Royal Society of Chemistry Recognition

Forensic Science Society Accreditation

Skillsmark Accreditation

Description and role of each...



- In summary - for success
 - Decisions about the type of course - graduate product
 - Decisions about resource implications - can they be afforded ?
 - Decisions about staffing - MUST be practitioners who are also GOOD academics
 - Decisions about the quality management processes to be adopted