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# Integrated teaching of BIO-ETHICS

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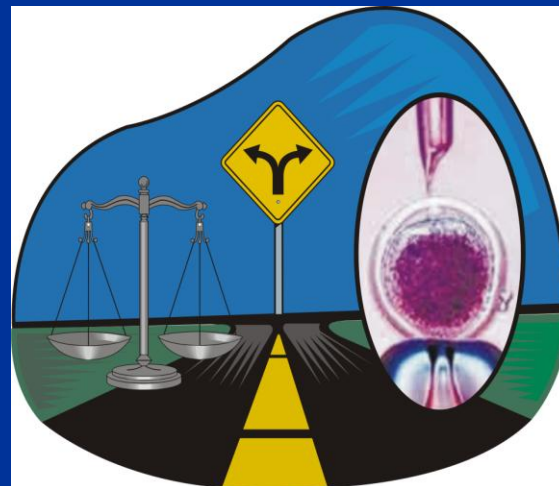
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16<sup>th</sup> December 2008

LIFE  
SCIENCES



Jonathan Hughes

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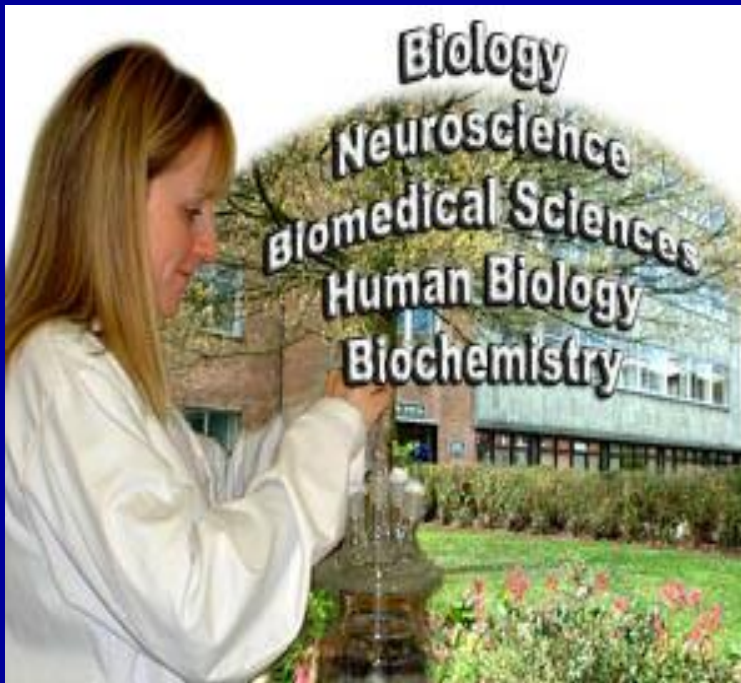
Bioethics Teaching Cambridge



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# Ethical Issues in the Biosciences



Year 1 core module  
Life Sciences  
Pharmacy

Large (~250) student  
cohort

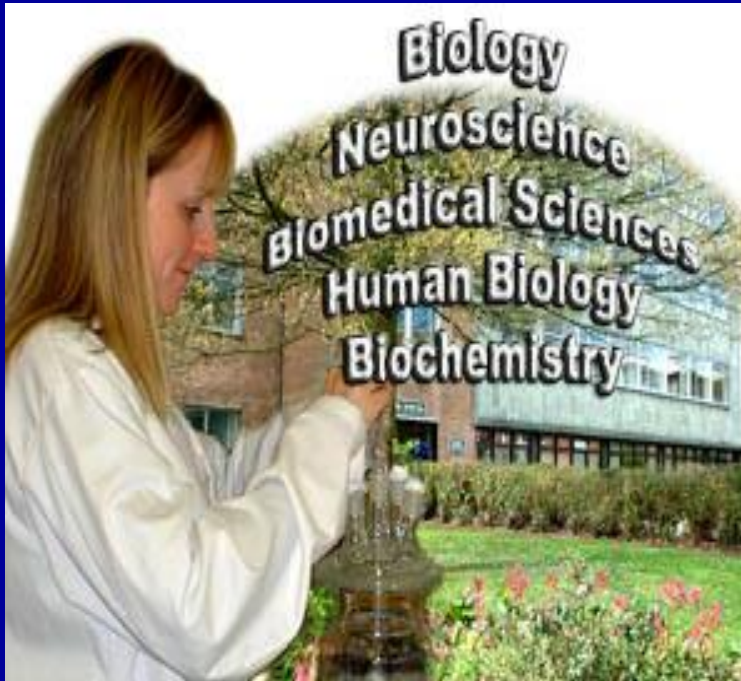
Integrated Bioscience-  
Ethics teaching



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# Teaching challenges



Year 1 core module  
Student engagement

Large student cohort  
Logistics

BIO-ETHICS  
Integration



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# Strategy

## Student engagement

Staff engagement

Topics of interest for all courses

On line threaded ethics discussion

Compulsory Case Discussion Tutorials

## Logistics

Lectures & Tutorials in alternate weeks

Bioscience + Ethics Lecture pair/topic - whole group

Case Tutorials: Course-specific-groups (~25-35 per group)

On line resources



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# Learning Outcomes

## Theoretical approach

Bioscience

Basic principles

Ethics

Moral theories

Application of moral theories

## Applied Ethics approach

Bioscience

Basic principles

Ethics

Ethical thinking

Logical arguing

Referencing & plagiarism



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# Assessment & Feedback

Entirely In Course

Formative + summative with strict feedback schedule

On line Bioscience MCQ class test (20%)

Series of Ethics essays gradually increasing in difficulty

300 words (15%)

500 words (25%)

800 words (40%)



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# Student engagement

Attendance

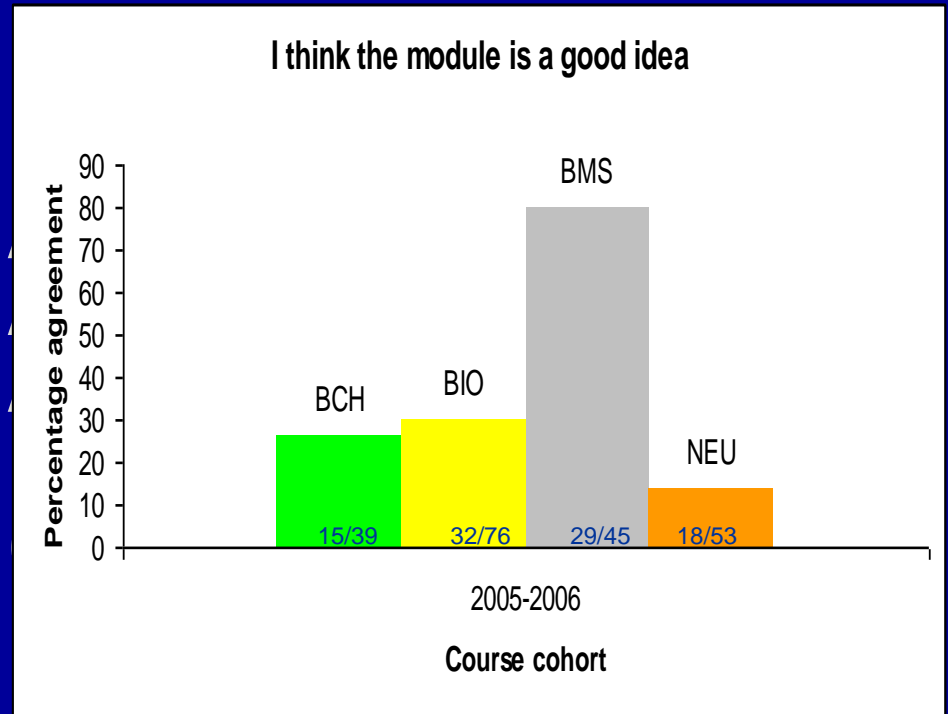
Participation

on line threaded Ethics  
discussion

Teaching Evaluation

I think this module  
is a good idea  
is important for my career

Quality of essays





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# BIO-ETHICS evolution

## Theoretical approach

Bioscience & Ethics non-integrated disjointed lectures

TEQ:

'milk & orange juice don't mix'

## Applied Ethics approach

Finely coordinated lectures & Tutorial cases

TEQ:

'two part lecture programme was very beneficial for gaining an overall insight to the topic'

'tutorials really clarified things'

'were extremely useful for assignments'



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# Summary

Effective BIO-ETHICS integration requires long term collaboration

Student engagement requires Course topic-specific context & Course-specific small group case tutorials

An effective system for teaching & assessing BIO-ETHICS learning in a very large student cohort was developed



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# Bioethics beyond 2009

Year 1 structure change

Embedding approach

Learning outcomes

Bioscience basic principles & ethical awareness

Professional governance

Teaching format & Assessment consonant with new  
LOs