Module specification

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Module Code	SCI647
Module Title	Case Studies in Forensic Science
Level	6
Credit value	20
Faculty	FAST
HECoS Code	100388
Cost Code	GAFS

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
BSc (Hons) Forensic Science	Core
BSc (Hons) Forensic Science with Placement Year	Core

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	24 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	**24** hrs
Placement / work based learning	0 hrs
Guided independent study	176 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	10/05/2023
With effect from date	Sept 2023
Date and details of revision	
Version number	1

Module aims

This module aims to provide students with an opportunity to critically review how forensic science is used in real-world criminal investigations. It will cover a variety of forensic science disciplines and how they are used in different types of criminal cases as well as giving students the opportunity to reflect on how the discipline has changed over time. A focus will be given to critical thinking and problem-solving skills through the examination of a variety of case studies including major incidents such as murder and terrorism.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Debate the reliability and validity of forensic science evidence used in a high-profile criminal case.
2	Critically analyse the implications of a high-profile criminal case for the field of forensic science, including its impact on criminal investigations and the legal system.
3	Synthesise information to effectively communicate a balanced argument regarding the use of forensic science evidence.
4	Review the sources utilised, assessing the relevance, quality and how well they support the arguments presented.
5	Critically assess the evidence used to support arguments including any strengths, limitations, and potential biases.

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

Assessment 1 – Oral Assessment (~15 minutes)
Students will produce a podcast on an approved case study

Assessment 2 – Written Assignment (~1500 words)
This will be an annotated bibliography to complement the podcast produced

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1-3	Oral Assessment	60
2	4&5	Written Assignment	40

Derogations

None

Learning and Teaching Strategies

In line with the University's Active Learning Framework, teaching on this module will include:
Case studies: analysing real-world forensic archaeology cases, helping students understand the practical application of the techniques and methods they are learning.
Role-playing scenarios: helping students develop critical thinking and problem-solving skills by placing them in realistic scenarios.

Collaborative learning: encouraging students to work in groups or pairs to analyse data and interpret findings, providing an opportunity for peer-to-peer teaching and learning.
Online resources: using online resources such as videos, podcasts, articles, or discussion boards to supplement classroom instruction and provide additional resources for students to explore.
Self-directed learning: providing students with the opportunity to research and develop their own topics or projects, with guidance and support from the instructor.

Indicative Syllabus Outline

The module will focus on current high profile forensic investigations as well as introducing several significant historic cases from the UK which may include cases related to:

- DNA evidence such as Colin Pitchfork, Joseph Kappen, or the Murder of Stephen Lawrence
- Ecological evidence such as Buck Ruxton, Roger Severs or Robert Young
- Marks and Impression evidence such as Gordon Hay, Harry Jackson, or Andrew Check
- Toxicology evidence such as Alain Baxter, Beverly Allitt, or Georgi Markov
- Other forensic evidence such as Malcom Fairley, Billie-Jo Jenkins, or John Taylor

Other high-profile cases from the UK such as serial murders, terror attacks and other mass fatality incidents will also be introduced such as The Hillsborough Disaster, The Dunblane Massacre, The London 7-7 Bombings and The Whitechapel Murders.

The module will also discuss challenges in forensic case work such as the CSI effect, the role of the media and miscarriages of justice. Alongside this there will be opportunities to explore significant progress made in the accuracy and reliability of forensic testing.

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update.

Essential Reads

Lawless, C. (2022), *Forensic Science: A Sociological Introduction,* United Kingdom: Taylor & Francis.

Other indicative reading

Fraser, J. (2021), *Murder Under the Microscope: Serial Killers, Cold Cases and Life As a Forensic Investigator,* London: Atlantic Books, Limited.

Gallop, P.A. (2022), *How to Solve a Crime: Stories from the Cutting Edge of Forensics,* London: Hodder & Stoughton.

Nic Daeid, P.N. & Black, S. (2018), *30-Second Forensic Science: 50 Key Topics Revealing Criminal Investigation from Behind the Scenes, Each Explained in Half a Minute,* Brighton: Ivy Press.

Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

Core Attributes
Engaged
Enterprising
Creative
Ethical

Key Attitudes
Commitment
Curiosity
Resilience
Confidence
Adaptability

Practical Skillsets
Digital Fluency
Organisation
Leadership and Team working
Critical Thinking
Emotional Intelligence
Communication