# Competition Brief

## Competition title

Forensic Science

## Competition overview

The Forensic Science Competition is designed to assess your understanding and knowledge of Forensic Science and its use within the United Kingdom criminal justice system.

Competitors will be required to complete a 'Special Property' (SPR) forensic examination exercise, demonstrating the ability to maintain integrity and continuity throughout the examination, ensuring appropriate examination techniques and procedures are conducted in accordance with the National Occupational Skills (NOS) competency framework.

**The competition requires individuals to:**

- Understand processes and systems used in the Forensic Science industry
- Identify evidence
- Understand evidential significance
- Use specialist equipment
- Use appropriate recovery and preservation methods
- Utilise time management skills
- Consider all personal safety measures when working with crime scenes

This competition will take 2.5 hours

## Entry criteria

This is a team competition (team of 2).

Those wishing to enter this competition should be:

- Studying or enrolled on a level 3 programme OR
- Have achieved a level 2 qualification in the last 12 months (so could currently be on the first year of a level 3 programme having completed a qualification at level 2 within the last 12 months).
- Entrants for this Skills Competition Wales should be aged 16+

Competitors must work in pairs (2 people in 1 team).

## Number by location/organisation

**Maximum number of entries by location/organisation:** 1 team of 2 competitors per organisation

**Capacity for the competition as a whole:** 2 heats (North + South Wales) with 5 teams max per heat

## Brief

A crime scenario will be issued on the day to competitors.

The challenge will be based on a crime scenario where forensic opportunities exist to support the investigation. Competitors will be challenged to correctly identify those opportunities and show how these are recorded and abstracted from the scene in a way that ensures the integrity of the sample and the continuity for evidential purposes. Within the assessment criteria, participants will be expected to have knowledge of actual crimes where evidence similar to that now being recovered has been used in court proceedings. This may include examples of where a failure to deal with forensics appropriately has resulted in a miscarriage of justice.

Competitors will be required to complete a 'Special Property' (SPR) forensic examination exercise, demonstrating the ability to maintain integrity and continuity throughout the examination, ensuring appropriate examination techniques and procedures are conducted in accordance with the National Occupational Skills (NOS) competency framework

The competitors must be mindful of the rules of evidence, chain of continuity and cross contamination

All exhibits identified must be recovered using standard processing, recording and recovery techniques. In the event of different teaching systems, the judges will have the ability to make decisions to approve or not those systems

All exhibits will be entered onto Scene Logs/Lab Books as provided

All exhibits/evidence correctly packaged, together with the scene logs, will be presented to the judges at the end of the examination.

The use of outside influences or conferring with other competitors during this stage of the competition will result in disqualification.

The competitors are required to maintain full continuity of exhibit handling throughout the process, by means of completing the special property continuity form, detailing date, time and exhibit details of items removed from SPR, ensuring they sign the departments log to demonstrate chain of custody.

The correct opening of exhibit bags must be appropriately practiced, with subsequent appropriate methods of re-signature sealing of the bags, ensuring continuity labels are signed and dated.

During the exhibit examination process, the competitors are responsible for drawing an inference on the most appropriate methods of examination and techniques applied to achieve best evidence.

## Infrastructure List

All equipment, including protective clothing, will be provided and competitors will have the opportunity to familiarise themselves with the equipment before the event. A full list will be made available before the finals in order that competitors can speak to course leaders and ensure they are aware of the equipment and its use should they not be familiar with it.

## Competition rules

**Generic competition rules**

- Mobile phones to be switched off during competition activity.
- Listening to music via headphones is not permitted during competition activity.
- Any questions during competition activity should be addressed to the competition judging panel.
- Competitors should not communicate with other competitors during competition activity.
- It is the responsibility of each competitor to arrive on time for each competition session. No additional time will be allowed if you arrive late.
- Technical failure of your equipment should be reported immediately to the judging panel. Additional time will be allocated if the fault is beyond the control of the competitor.

## Marking and assessment

The competition requires individuals to:

- Understand processes and systems used in the Forensic Science industry
- Identify evidence
- Understand evidential significance
- Use specialist equipment
- Use appropriate recovery and preservation methods
- Utilise time management skills
- Consider all personal safety measures when working with crime scenes

Full recording techniques must be used to describe the scene presented.

A scene brief will be provided in the project pack, prior to the activity (deliverable on the day of competition).

The scene log/laboratory notebook needs to be completed with as much detail as possible, in English and in ink. It must be legible and all pages must be numbered with the total number of pages being inserted onto the bottom of each page. You will be handed this during the brief at the start of the competition.

Brief breakdown of marking and assessment.

| Aspect | Criterion | Max Mark |
|---|---|---|
| Planning + Teamwork | Team work to plan roles, Equal sharing of ideas and tasks, continual sharing of information and ideas, sharing information about evidence selection | **4** |
| Organisation | Using correct paperwork for roles, clear understanding of correct use of logs, clear understanding of order of events | **4** |
| Evidence Selection | Ability to identify all the available forensic opportunities from the crime scene | **20** |
| Collection technique | Correct use of PPE, correct use of tools, correct use of available equipment and recovery of the items | **30** |
| Packaging | Correct selection of packaging, completion of labels before evidence sealed into bag, correct sealing of packaging | **30** |
| Chain of Custody | Correct completion of labels before leaving crime scene. Maintenance of evidence continuity throughout the exercise | **4** |
| Rough Sketch | Date, time, names, location, measurements or log, clear sketch, key | **4** |
| Crime Scene Photos | Comprehensive coverage of the crime scene | **4** |
| | **Total marks** | **100** |

## Feedback and recognition

Individual and Group verbal feedback will be provided at the end of the competition. (Written feedback will not be provided)

No results or awards will be awarded on the day as marking will be quality assured.

Certificates of Participation will be issued on the day.

Medallists will be invited to a Celebration Event which will be held on 19th March 2020 at Sophia Hall, Sophia Gardens, Cardiff CF11 9XR from 12pm to 5 pm, where the First, Second and Third Awards will be presented. https://www.sophiagardens.wales/venue/the-sophia-hall.html

## Competition Lead

**Lead Contact:**

Rona Griffiths - rona.griffiths@cambria.ac.uk or 07730192700 / 01978 267337

**Expert Contacts:**

Chris Beasley - Chris.beasley@cambria.ac.uk or 01978 267585

# Briff y Gystadleuaeth

| Teitl y gystadleuaeth |
|---|
| Gwyddoniaeth Fforensig |
| **Trosolwg o'r gystadleuaeth** |
| Bydd y gystadleuaeth hon yn para 2.5 awr<br>Bwriad Cystadleuaeth Gwyddoniaeth Fforensig 2019-2020 yw asesu eich dealltwriaeth a'ch gwybodaeth o Wyddoniaeth Fforensig a'i ddefnydd yn system cyfiawnder troseddol y DU.<br>Bydd angen i'r cystadleuwyr gwblhau ymarfer archwiliad fforensig 'Special Property' (SPR), gan ddangos y gallu i gadw cywirdeb a dilyniant drwy gydol yr archwiliad, gan sicrhau y caiff technegau a gweithdrefnau archwilio priodol eu defnyddio yn unol â fframwaith cymhwysedd y Safonau Galwedigaethol Cenedlaethol (NOS).<br>**Cymwyseddau craidd:**<br>Mae'r gystadleuaeth hon yn gofyn bod unigolion yn:<br>• Deall y prosesau a'r systemau a ddefnyddir yn y diwydiant Gwyddoniaeth Fforensig<br>• Nodi tystiolaeth<br>• Deall arwyddocâd tystiolaethol<br>• Defnyddio offer arbenigol<br>• Defnyddio dulliau casglu a gwarchod priodol<br>• Defnyddio sgiliau rheoli amser<br>Ystyried pob mesur diogelwch wrth weithio gyda safleoedd trosedd |
| **Meini prawf cystadlu** |
| Cystadleuaeth tîm yw hon (i dimau o 2)<br>Dylai pobl sydd eisiau ymgeisio yn y gystadleuaeth hon fod:<br>• Yn astudio neu wedi cofrestru ar raglen lefel 3 NEU<br>• Wedi cwblhau cymhwyster lefel 2 yn ystod y flwyddyn ddiwethaf (felly gallen nhw fod ym mlwyddyn gyntaf rhaglen lefel 3 ar ôl cwblhau cymhwyster lefel 2 yn ystod y flwyddyn ddiwethaf).<br>Mae'n rhaid i ymgeiswyr y Gystadleuaeth Sgiliau Cymru hon fod yn 16+ oed. Mae'n rhaid i Gystadleuwyr weithio mewn parau (2 berson mewn 1 tîm). |
| **Nifer fesul lleoliad/sefydliad** |
| **Capasiti ar gyfer yr holl gystadleuaeth:** 2 gymal (Gogledd a De Cymru) Uchafswm o 5 tîm ym mhob cymal |

| |
|---|
| **Uchafswm o geisiadau fesul lleoliad/sefydliad:** 1 tîm o 2 gystadleuydd o bob sefydliad |
| **Briff** |
| Caiff senario o drosedd ei roi i bob cystadleuydd ar y diwrnod.<br>Bydd yr her yn seiliedig ar senario o drosedd ble mae cyfleoedd fforensig yn bodoli i helpu'r ymchwiliad. Caiff cystadleuwyr eu herio i nodi'r cyfleoedd hynny'n gywir a dangos sut y caiff y rhain eu cofnodi a'u halldynnu o'r safle mewn modd sy'n sicrhau cyfanrwydd y sampl a'r dilyniant er pwrpasau tystiolaethol. O fewn y meini prawf asesu, bydd disgwyl bod gan y cystadleuwyr wybodaeth ynghylch troseddau go iawn ble mae tystiolaeth debyg i'r hyn sydd nawr yn cael ei chasglu wedi cael ei defnyddio mewn achosion llys. Gallai hyn gynnwys esiamplau o ble mae methiant i ddelio â thystiolaeth fforensig yn briodol wedi arwain at gamwedd cyfiawnder.<br>Bydd angen i'r cystadleuwyr gwblhau ymarfer archwiliad fforensig 'Special Property' (SPR), gan ddangos y gallu i gadw cywirdeb a dilyniant drwy gydol yr archwiliad, gan sicrhau y caiff technegau a gweithdrefnau archwilio priodol eu defnyddio yn unol â fframwaith cymhwysedd y Safonau Galwedigaethol Cenedlaethol (NOS).<br>Mae'n rhaid i gystadleuwyr fod yn ystyriol o'r rheolau tystiolaeth, cadwyn cystodaeth a chroes-halogi. Mae'n rhaid casglu pob arddangosyn a nodir gan ddefnyddio technegau prosesu, cofnodi a chasglu safonol. Os defnyddir systemau dysgu gwahanol, caiff y beirniaid benderfynu cymeradwyo'r systemau hynny ai peidio.<br>Mae'n rhaid cofnodi pob arddangosyn yn y Cofnodion Safle/ Llyfrau Labordy a ddarperir<br>Mae'n rhaid pecynnu'r holl dystiolaeth/arddangosion yn gywir, ynghyd â'r cofnodion safle, a'u cyflwyno i'r beirniaid ar ddiwedd yr archwiliad.<br>Bydd defnyddio dylanwadau allanol neu ymgynghori â chystadleuwyr eraill yn ystod cam yma'r gystadleuaeth yn arwain at waharddiad.<br>Gofynnir i'r cystadleuwyr gynnal dilyniant llwyr trafod arddangosion drwy gydol y broses, drwy lenwi'r ffurflen dilyniant eiddo arbennig, sy'n nodi manylion y dyddiad, amser, arddangosion yr eitemau a gasglwyd o SPR, gan sicrhau eu bod yn arwyddo'r cofnodion adran er mwyn dangos y gadwyn cystodaeth.<br>Dylid ymarfer agor y bagiau arddangosion yn gywir, yn ogystal â dulliau priodol o ail-selio ac arwyddo'r bagiau, gan sicrhau bod y labeli dilyniant wedi eu harwyddo a'u dyddio.<br>Yn ystod y broses archwilio arddangosion, y cystadleuwyr sy'n gyfrifol am benderfynu ar y dulliau archwilio mwyaf priodol i'w defnyddio i gael y dystiolaeth orau. |

## Rhestr Seilwaith

Darperir yr holl offer, gan gynnwys dillad diogelwch a chaiff y cystadleuwyr gyfle i ymgyfarwyddo â’r offer cyn y digwyddiad. Bydd rhestr lawn ar gael cyn y rowndiau terfynol fel y gall cystadleuwyr siarad ag arweinwyr cwrs a sicrhau eu bod yn ymwybodol o’r offer a’i ddefnydd os nad ydyn nhw’n gyfarwydd ag ef.

## Rheolau’r gystadleuaeth

**Rheolau penodol y gystadleuaeth**

(Gweler y briff uchod)

Rheolau cyffredinol y gystadleuaeth

- Dylid diffodd ffonau symudol yn ystod y gystadleuaeth.
- Ni chaniateir gwrando ar gerddoriaeth gyda chlustffonau yn ystod y gystadleuaeth.
- Dylid cyfeirio unrhyw gwestiynau yn ystod y gystadleuaeth at y panel beirniaid.
- Ni ddylai’r cystadleuwyr gyfathrebu gyda chystadleuwyr eraill yn ystod y gystadleuaeth.
- Cyfrifoldeb pob cystadleuydd fydd cyrraedd ar amser ar gyfer pob rhan o’r gystadleuaeth. Pe baech yn cyrraedd yn hwyr, ni roddir amser ychwanegol ichi.
- Pe bai rhyw wall technegol ar eich offer, dylid rhoi gwybod i’r panel beirniaid yn syth. Bydd amser ychwanegol yn cael ei roi os bydd y gwall y tu hwnt i reolaeth y cystadleuydd.

## Marcio ac asesu

Gofynnir i bob cystadleuydd:

- Ddeall y prosesau a’r systemau a ddefnyddir yn y diwydiant Gwyddoniaeth Fforensig
- Nodi tystiolaeth
- Deall arwyddocâd tystiolaethol
- Defnyddio offer arbenigol
- Defnyddio dulliau casglu a gwarchod priodol
- Defnyddio sgiliau rheoli amser
- Ystyried pob mesur diogelwch personol wrth weithio gyda safleoedd trosedd

Mae’n rhaid defnyddio technegau cofnodi cyflawn i ddisgrifio’r safle a gyflwynir.

Darperir briff o’r safle yn y pecyn prosiect, cyn y gweithgaredd (i’w gasglu ar ddiwrnod y gystadleuaeth).

Mae’n rhaid llenwi’r cofnod safle/llyfr labordy gyda chymaint o fanylion â phosibl, yn Saesneg ac mewn inc. Mae’n rhaid iddo fod yn ddarllenadwy ac mae’n rhaid rhifo pob tudalen a rhoi cyfanswm nifer y tudalennau ar waelod pob tudalen. Caiff hwn ei roi i chi yn ystod y sesiwn briffio ar ddechrau’r gystadleuaeth.

Manylion cryno o’r marcio a’r asesu.

| Elfen | Maen Prawf | Marc Mwyaf |
|---|---|---|
| Cynllunio a Gwaith Tîm | Gweithio fel tîm i gynllunio swyddogaethau, rhannu syniadau a thasgau'n gytbwys, rhannu gwybodaeth a syniadau'n barhaus, rhannu gwybodaeth ynghylch dewis tystiolaeth | **4** |
| Trefnu | Dewis y gwaith papur cywir ar gyfer swyddogaethau, dealltwriaeth glir o'r defnydd cywir o gofnodion, dealltwriaeth glir o drefn digwyddiadau | **4** |
| Dewis Tystiolaeth | Gallu nodi'r holl gyfleoedd fforensig sydd ar gael yn y safle trosedd | **20** |
| Techneg casglu | Defnyddio PPE yn gywir, defnyddio tŵls yn gywir, defnyddio'r offer sydd ar gael yn gywir a chasglu'r eitemau | **30** |
| Pecynnu | Dewis y pecynnau cywir, cwblhau'r labeli cyn selio tystiolaeth yn y bag, selio'r pecynnau'n gywir | **30** |
| Cadwyn Cystodaeth | Cwblhau'r labeli'n gywir cyn gadael y safle trosedd. Cynnal dilyniant y dystiolaeth drwy gydol yr ymarfer | **4** |
| Braslun | Dyddiad, amser, enwau, lleoliad, mesurau neu gofnod, braslun clir, allwedd | **4** |
| Lluniau o'r Safle Trosedd | Lluniau cynhwysfawr o'r safle trosedd | **4** |
| | **Cyfanswm y marciau** | **100** |

## Adborth a chydnabyddiaeth

Bydd adborth llafar, yn unigol ac mewn grŵp, yn cael ei roi ar ddiwedd y gystadleuaeth. (Ni roddir adborth ysgrifenedig)

Ni fydd unrhyw ganlyniadau na gwobrau'n cael eu dyfarnu ar y diwrnod oherwydd bydd angen sicrhau ansawdd y marcio.

Bydd Tystysgrifau Cyfranogi'n cael eu dosbarthu ar y diwrnod.

Bydd enillwyr medalau'n cael eu gwahodd i Achlysur Dathlu a gynhelir ar 19 Mawrth 2020 yn Neuadd Sophia, Gerddi Sophia, Caerdydd CF11 9XR rhwng 12pm a 5pm, lle y bydd y Gwobrau Cyntaf, Ail a Thrydydd yn cael eu cyflwyno. **https://www.sophiagardens.wales/venue/the-sophia-hall.html**

## Arweinwyr y Gystadleuaeth

**Prif Gyswllt:**

Rona Griffiths - rona.griffiths@cambria.ac.uk neu 07730192700 / 01978 267337

**Cyswllt Arbenigol:**

Chris Beasley - Chris.beasley@cambria.ac.uk neu 01978 267585