

FORENSIC PHOTOGRAPHY

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WEST LONDON / WESTMINSTER**

Content

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- What is the module about?
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 - Trying to build an online learning community

Who am I and what am I doing here?

- University of Westminster (since 2007)
 - Various courses in the School of Media & Communication and School of Arts
 - BA Contemporary Media Practice
- University of West London (2020 – 2021)
 - BSc Forensic Science
- Previously: imaging specialist, Forensic Science Service, LGC Forensics
- Currently: forensic imaging specialist

What is this talk about?

The module, Forensic Photography, 20 credit, Level 5 BSc Forensic Science

- 1st run of new module, under Covid restrictions
- Acknowledgements – Laura Hugh (Course Leader), Brian Hook (Lecturer)
- My to do list, Jan 2021:
 - Curriculum design
 - Module Study Guide
 - Timetable: 14 weeks of lectures and practicals
 - Assignment details

Lots to talk about but I'll concentrate on trying to make the most of teaching and learning online

What is the module about?

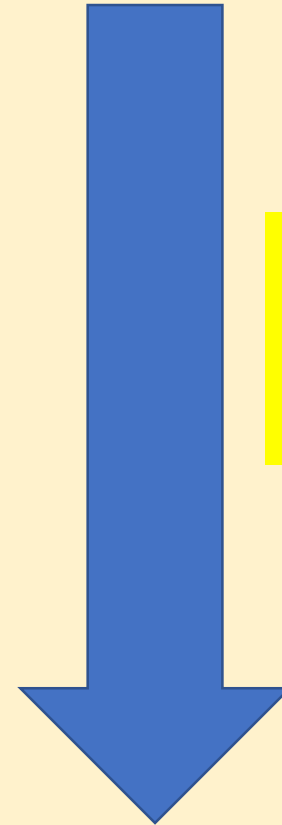
Crime Scene and evidential photography

- Various types of scene, various challenges

Photography

- As a means of documentation
- As a witness
- As a means of communication

Visual presentation of evidence/presentation of visual evidence

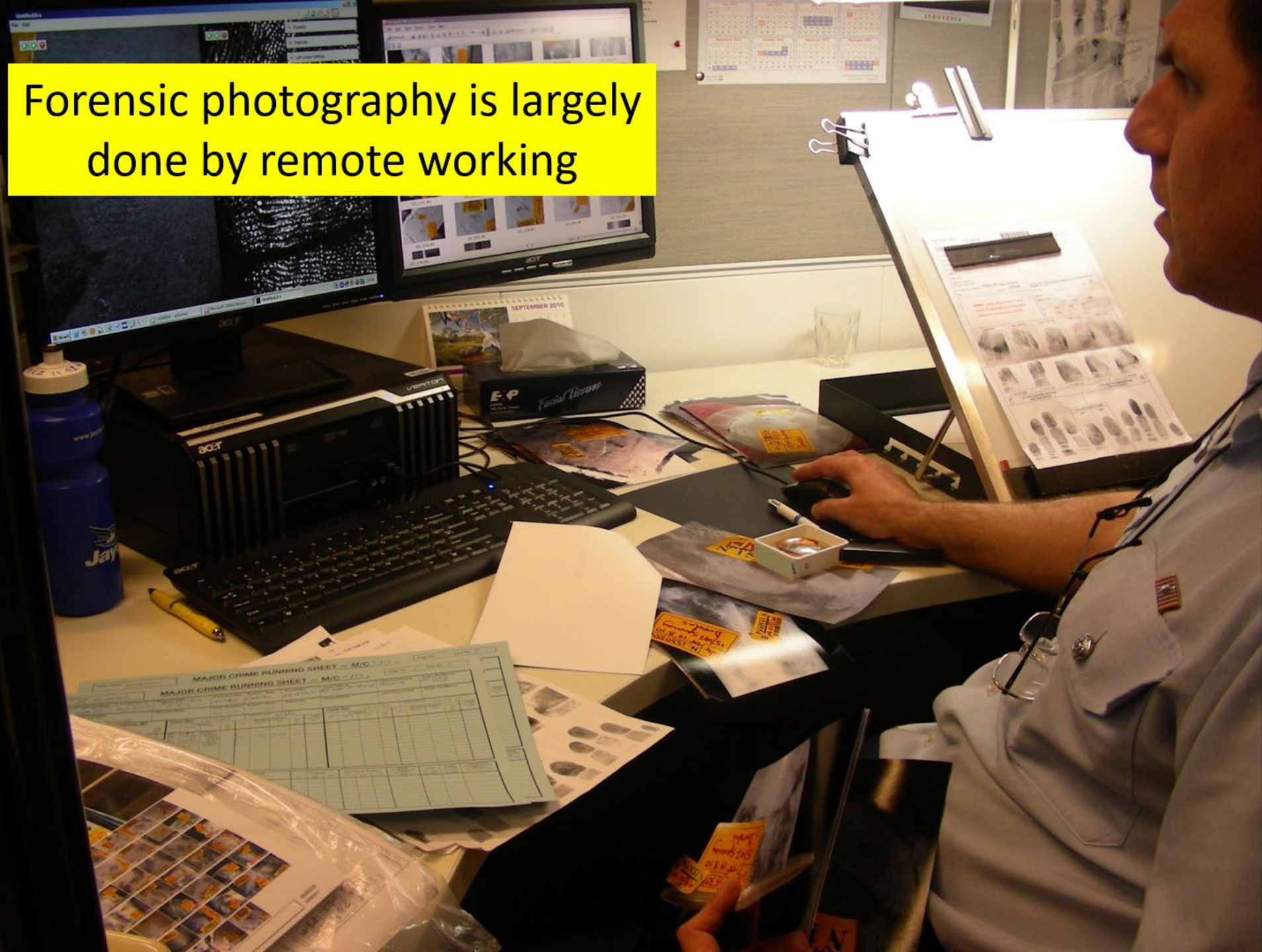


**Crime scene
to court**



Forensic photography is largely done by remote working

Forensic photography is largely done by remote working



What is the module about?

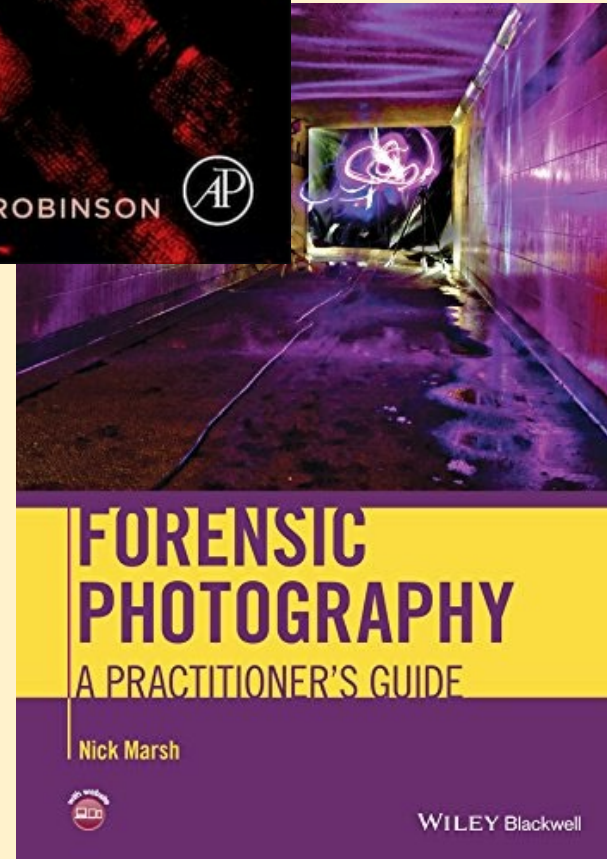
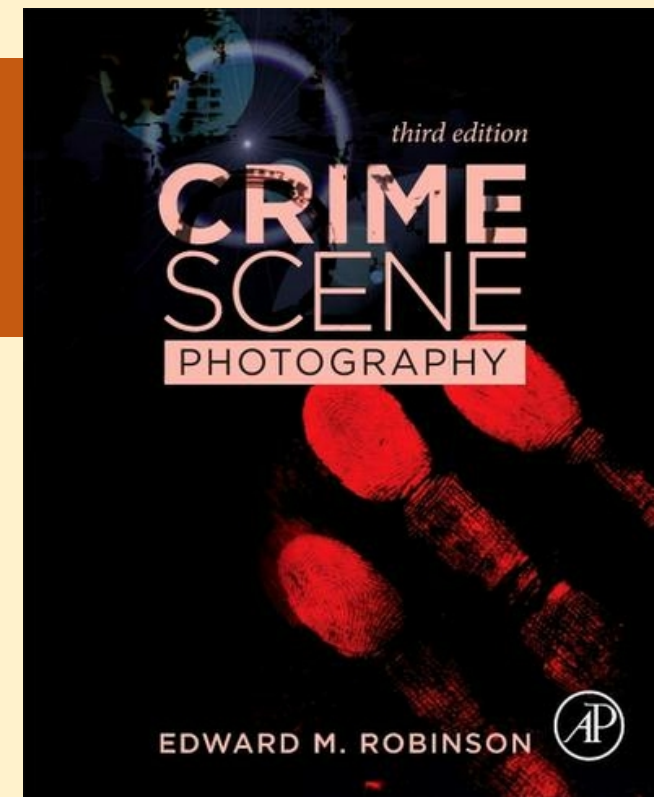
Typical jobs/roles at the crime scene or at the laboratory

- Police
 - Crime Scene Examiner/Crime Scene Investigator
 - Forensic Examiner/Evidence Recovery
 - Fingerprint Development staff
 - Photographer
- Forensic Science Provider
 - Forensic Examiner
 - Reporting Scientist
 - Photographer

Relatively few **photographer** jobs. Far more jobs require a **competency in photography** or an **understanding of visual communication**

Resources (1/2)

- Use existing resources as far as possible
- Survey of student equipment
- Check availability of online texts
- Choose Robinson (2016) as core text, plus Marsh (2014), inc. supporting materials
- Youtube, especially Tiernan Coyle's Forensic Science UK:
<https://www.youtube.com/channel/UC0vEWQ985ztBg1T6sIHudQ>



Resources (2/2)

- Lectures via Blackboard Collaborate
- All key documents as PDFs on Blackboard
- One Drive for student work in shared folders (copied to local hard drive for archive and ease of access)
- Adobe Bridge for work review
- A bit of attention to slide design: style/‘branding’, accessibility (see British Dyslexia Association style guide:
<https://www.bdadyslexia.org.uk/advice/employers/creating-a-dyslexia-friendly-workplace/dyslexia-friendly-style-guide>)

Weekly timetable, version 1

Original plan

Thursday

0900 – 1100: Practical, ½ class

1200 – 1400: Practical, ½ class

Friday

1000 – 1200: Lecture, whole class

Covid-era (lockdown) plan

Thursday

0900 – 1100: Lecture, whole class

Set practical task

1200 – 1400: Tutorial support

Friday

1000 – 1200: Work review

Weekly timetable, version 2

Original plan

Thursday

0900 – 1100: Practical, ½ class

1200 – 1400: Practical, ½ class

Friday

1000 – 1200: Lecture, whole class

Covid-era (eased restrictions) plan

Thursday

0900 – 1400: Practical, ½ class,
alternate weeks

Friday

1000 – 1200: Lecture/work review

PRINCIPLES

What makes forensic photography *forensic*?

- Of equal importance to the documentary photography is the documentation of photography
 - Every photograph must be uniquely identifiable and
 - Traceable, throughout its journey from crime scene to court, to the specific
 - Time, date of capture
 - Location of photography
 - Person who took/captured the photograph and
 - The camera and other equipment used to produce the image...
- ...via any image processing carried out along the way...
- Hence the importance of notes, sketches, plans, SOPs, etc.

The importance of notes, sketches, plans, SOPs, etc.

- It is necessary to prove the provenance and veracity of photographs at any and every stage from crime scene to court
 - Provenance: from where did the photograph originate?
 - Veracity: is it accurate, truthful, reliable?
- Make sure to correctly set the date and time on the camera
- Keep written notes
- Make sketches, simple floor plans, etc.
- Use an appropriate digital file and folder structure
- Make sure you can match your notes to your photographs!

These are fundamental principles that you must adopt for every photograph, for every photography exercise in this module

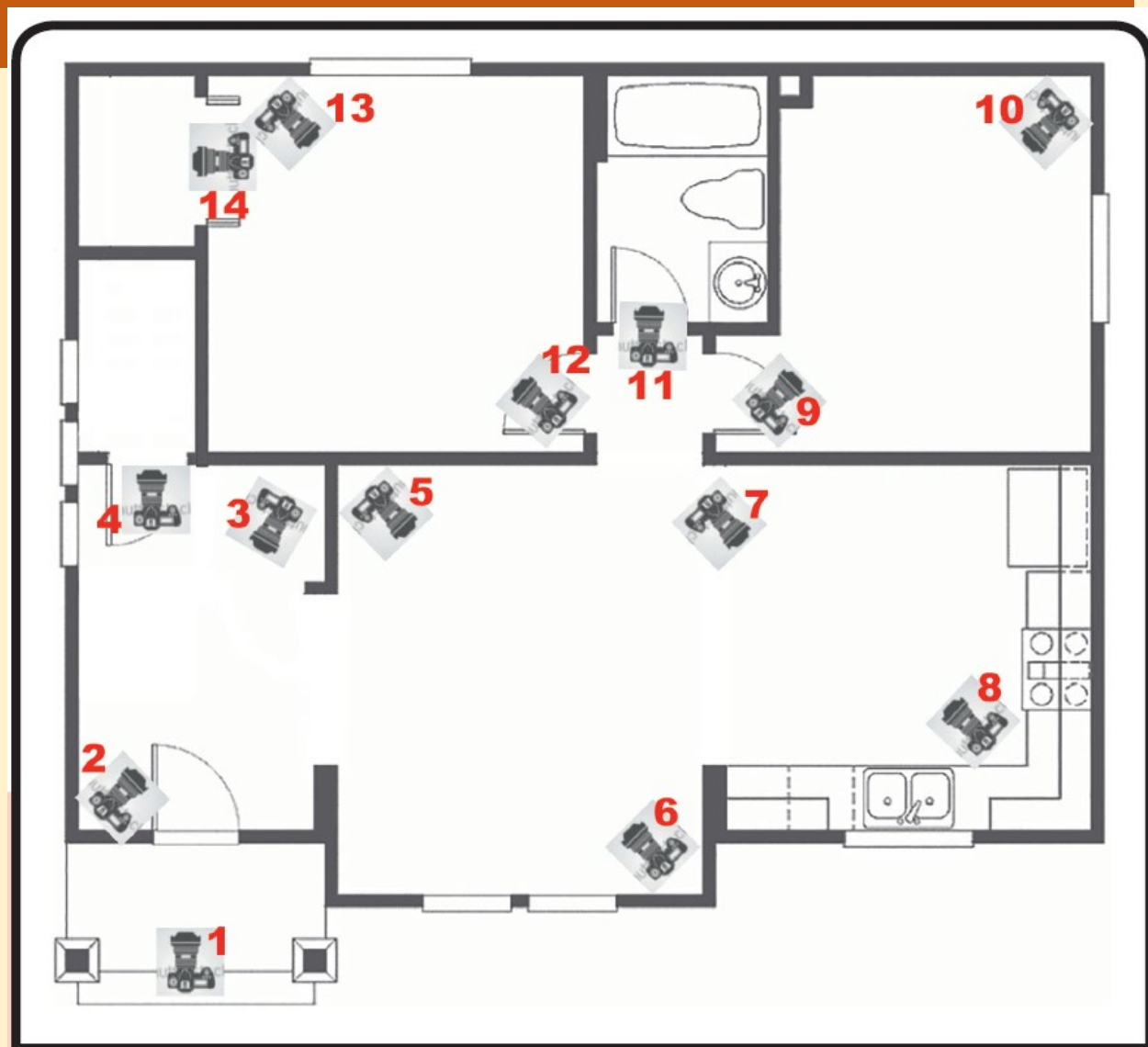
The importance of notes, sketches, plans

Mancini, K. and Sidoriak, J. (2018).
Fundamentals of forensic photography. New
York, NY: Routledge. P76

Include some extra details, e.g.
locations of items, distances

Try Smart Draw:

[https://www.smartdraw.com/
floor-plan/examples/](https://www.smartdraw.com/floor-plan/examples/)



DSLR v smartphone cameras: operation

Smartphone camera

- Ease of use is an advantage
 - We can concentrate on the forensic principles, and work within the limits of what the camera can do

DSLR camera

- Complexity provides versatility but can be confusing
 - In order to get the best results you need to learn how to use many of the functions. This takes time and practice.

It is not what you have, it is how you use it that matters!

DSLR v smartphone cameras: lighting

Smartphone camera

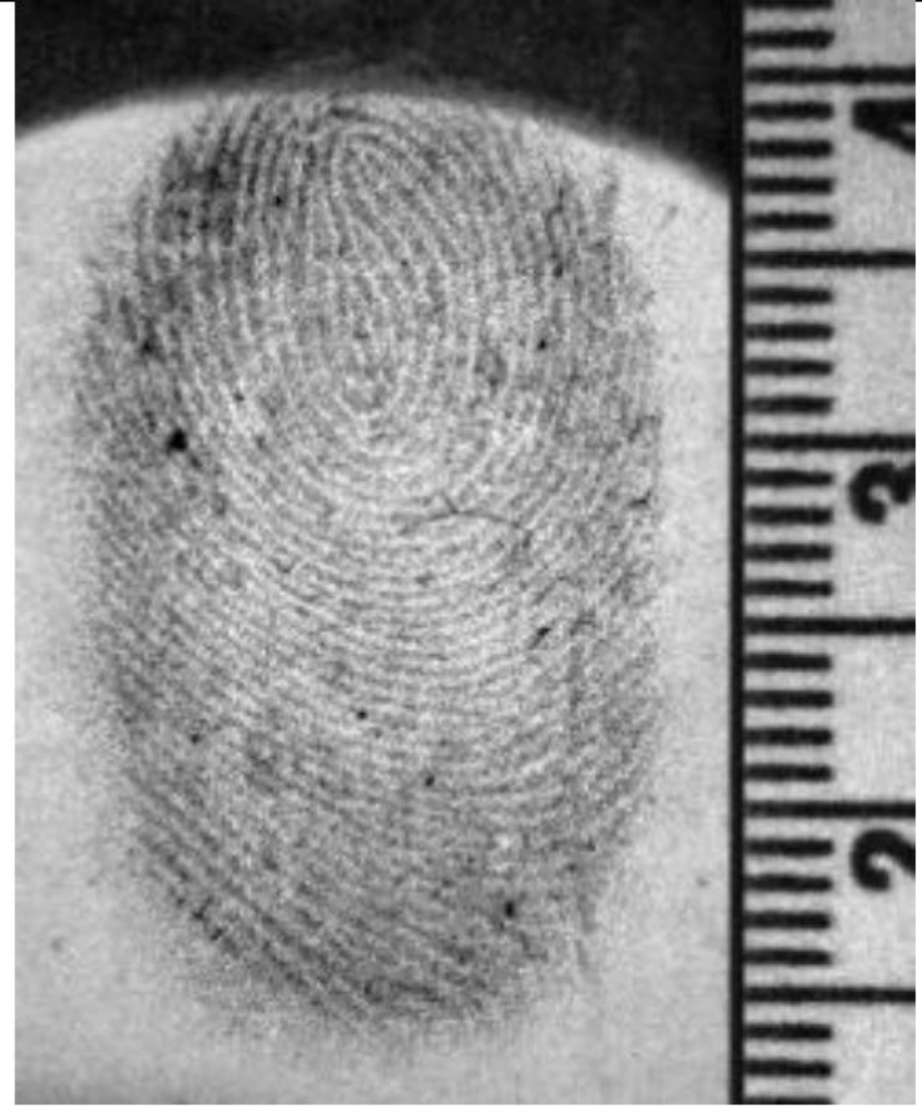
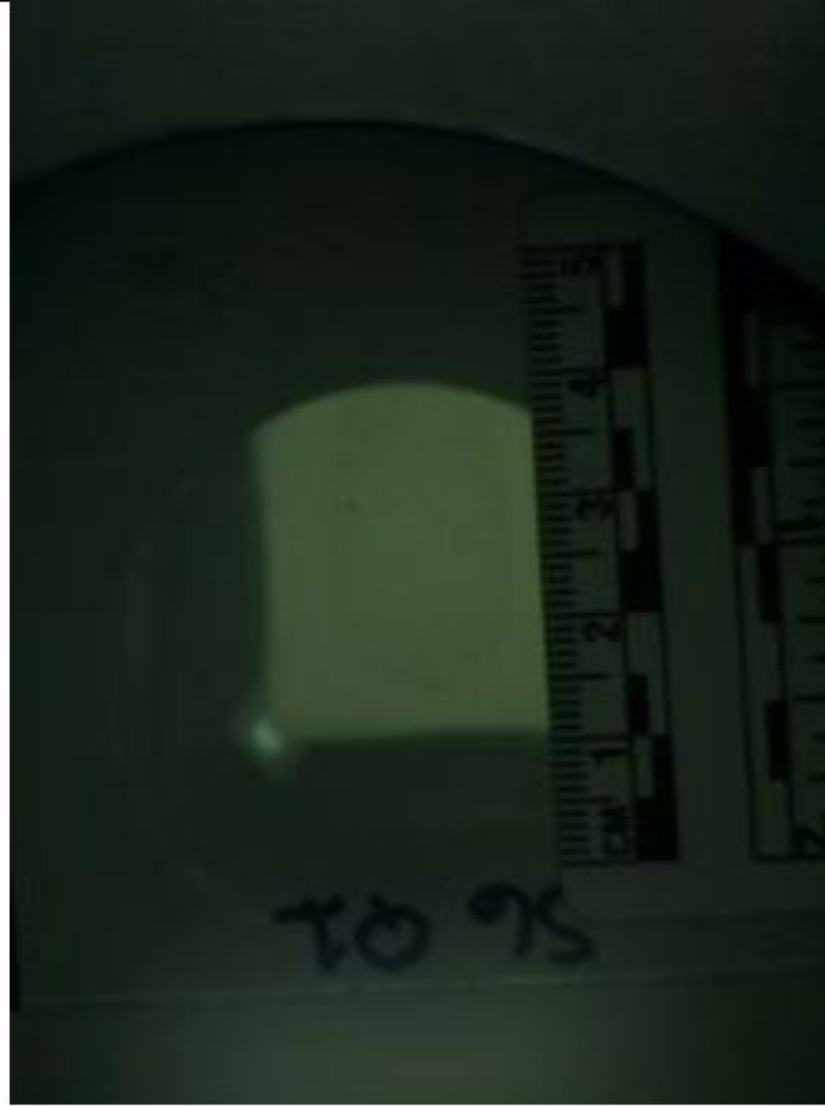
- Limited ability to control camera flash
 - Usually just an LED flash source, close to the camera lens

DSLR camera

- Usually has a built-in flash close to the lens
- Often used with a detachable (off-camera) flash
 - This gives much greater control of lighting

We understand the limitations, we'll work with what we have!

Nick Marsh (Marsh, 2014), 'The camera is irrelevant, it's about light'



It is not what you have, it is how you use it that matters!

Latent fingerprint images from glass substrate captured with a smartphone

Warren, T. (2013) *Smartphone Technology for Capturing Untreated Latent Fingerprints Feasibility Research*

<https://nij.ojp.gov/library/publications/smartphone-technology-capturing-untreated-latent-fingerprints-feasibility>



ACTIVITIES

Week 1: Icebreaker activity

Purpose

- To try out the use of the shared folder for uploading work
- From next week I'll be asking you to do some 'proper' work
- To give us something to talk about tomorrow
 - As a way of introducing ourselves and communicating with images

Week 1: Icebreaker activity

Task

- Take a series of three images documenting 'Thursday afternoon'
 - How you interpret that is entirely up to you
- Create a very simple Powerpoint (or other file) in the format:
 - Title page/slide: your name
 - Pages 2, 3, 4: your three images, one per page
- Name the file with your own name, e.g. 'John Smith.pptx'
- **Upload the file to the shared drive before 0930 tomorrow**
- **Meet in the Bb session at 1000 tomorrow to review the work**

WEEK 2 ACTIVITY

Week 2 activity (1/2)

Task

- Take a series of three to five images documenting a small item in location, e.g. a shoe, pen, mug, small bottle, ...
 - Include at least
 1. An overall image
 2. A mid-range image
 3. A close-up image
- Take notes, make a plan sketch showing
 - Location of item
 - Positions from where images taken

Week 2 activity (2/2)

Task

- Create a very simple Powerpoint in the format:
 - Title page/slide: your name
 - Pages 2: plan sketch,
 - Pages 3, 4, 5 (6, 7,): your images, one per page
 - Start with the 'widest' image/s, then the mid-range, end with the close-up
 - Add an accurate caption to each image
- Name the file with your own name, e.g. 'John Smith.pptx'
- **Upload the file to the shared drive before 0930 tomorrow**
- **Meet in the Bb session at 1000 tomorrow to review the work**

Week 2 work review (feedback in Wk 3 lecture)

My thoughts

- 23 students submitted work: excellent
- ~All were willing and able to discuss it: excellent
- Overall quality of work: very good to excellent
- Best things: engagement, discussion, illustration of practical challenges of a wide variety of scenes, 'real life' scenarios, demonstration of understanding, communication of visual evidence
- Things to improve: a few students didn't quite understand the key principles (hopefully they do after the work review), captions/notes and plan sketches generally need improving, time management – we easily filled two hours, didn't look at everything...

WEEK 3 ACTIVITY

Week 3 activity (1/4)

Task (results submitted as before)

- Document an outdoor 'crime scene', including at least one item of 'evidence' in daytime
- Follow the principles we have covered so far:
 - Photo identifiers
 - Overall views
 - Mid-range views
 - Close-ups, labels, scales (rule, reference object?)
 - Notes, plan sketches, photo log
- How many photos? As many / as few as necessary!

Week 3 activity (2/3)

Task (results submitted as before)

- Outdoor 'crime scene'?
 - Street scene
 - Garden scene
 - Exterior of building
 - Vehicle
- One item of 'evidence'?
 - Think of last week: footwear, hammer, glove, etc.
 - Possible damage to building, entry attempt?
 - Possible damage to vehicle, collision, hit & run?

Week 3 activity (3/3)

Leading on to the coursework assignment

- A portfolio of three different tasks
- This could be one of your choices
- Do it well and it's done
- Do it not-so-well and you can learn from the process and do it again
- That's the idea of the Friday work review

FURTHER ACTIVITIES

Further activities

Leading on to the Portfolio coursework assignment

- Week 4: indoor, daytime 'crime scene', including 'evidence' in situ
 - Week 5: outdoor, night time 'crime scene', including 'evidence' in situ
 - Weeks 6, 7: fingermarks, footwear marks, tyre marks
 - Weeks 8, 9, 10, 11: independent work on Academic Poster assignment
 - Weeks 12, 13: blood stains
-
- Note: the Portfolio required a representative mix of these tasks, not every single task done to completion

USE OF ONE DRIVE

John Smith

- My files
- Recent
- Shared
- Recycle bin

Shared libraries

- Planning
- Process and Forms

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My files > HS50063W > HS50063W Forensic Photography student work

Name	Modified	Modified By	File size	Sharing
Fiji.app	May 6	John Smith	16 items	Shared
Week 1 Icebreaker	March 3	John Smith	27 items	Shared
Week 12 Group A Bloodstains	May 14	John Smith	12 items	Shared
Week 13 Group B Bloodstains	May 20	John Smith	11 items	Shared
Week 14 Practical - Marks and Bloodstains	A few seconds ago	John Smith	8 items	Shared
Week 2 Composition and Cardinal Rules	March 3	John Smith	24 items	Shared
Week 3 Crime Scene Photography	March 3	John Smith	12 items	Shared
Week 4 Indoor Crime Scene	March 11	John Smith	9 items	Shared
Week 5 Outdoor night-time scene	March 16	John Smith	4 items	Shared
Week 6 Group A Fingermarks and FWM	March 26	John Smith	15 items	Shared
Week 7 Group B Fingermarks and FWM	April 8	John Smith	12 items	Shared
UPDATED Practical group sign-up sheet.xlsx	May 28		15.0 KB	Shared

John Smith

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Sort [v] [v] [v] [v]

My files > HS50063W > HS50063W Forensic Photography student work > **Week 6 Group A Fingermarks and FWM**

Name	Modified	Modified By	File size	Sharing
[Folder]	March 26	John Smith	6 items	Shared
[Folder]	March 26	John Smith	49 items	Shared
[Folder]	March 26	John Smith	23 items	Shared
[Folder]	March 26	John Smith	10 items	Shared
[Folder]	March 26	John Smith	16 items	Shared
[Folder]	March 26	John Smith	44 items	Shared
[Folder]	March 26	John Smith	36 items	Shared
[Folder]	March 26	John Smith	28 items	Shared
[Folder]	March 26	John Smith	45 items	Shared
[Folder]	March 26	John Smith	43 items	Shared
[Folder]	March 26	John Smith	13 items	Shared
[Folder]	March 26	John Smith	51 items	Shared

John Smith

- My files
- Recent
- Shared
- Recycle bin

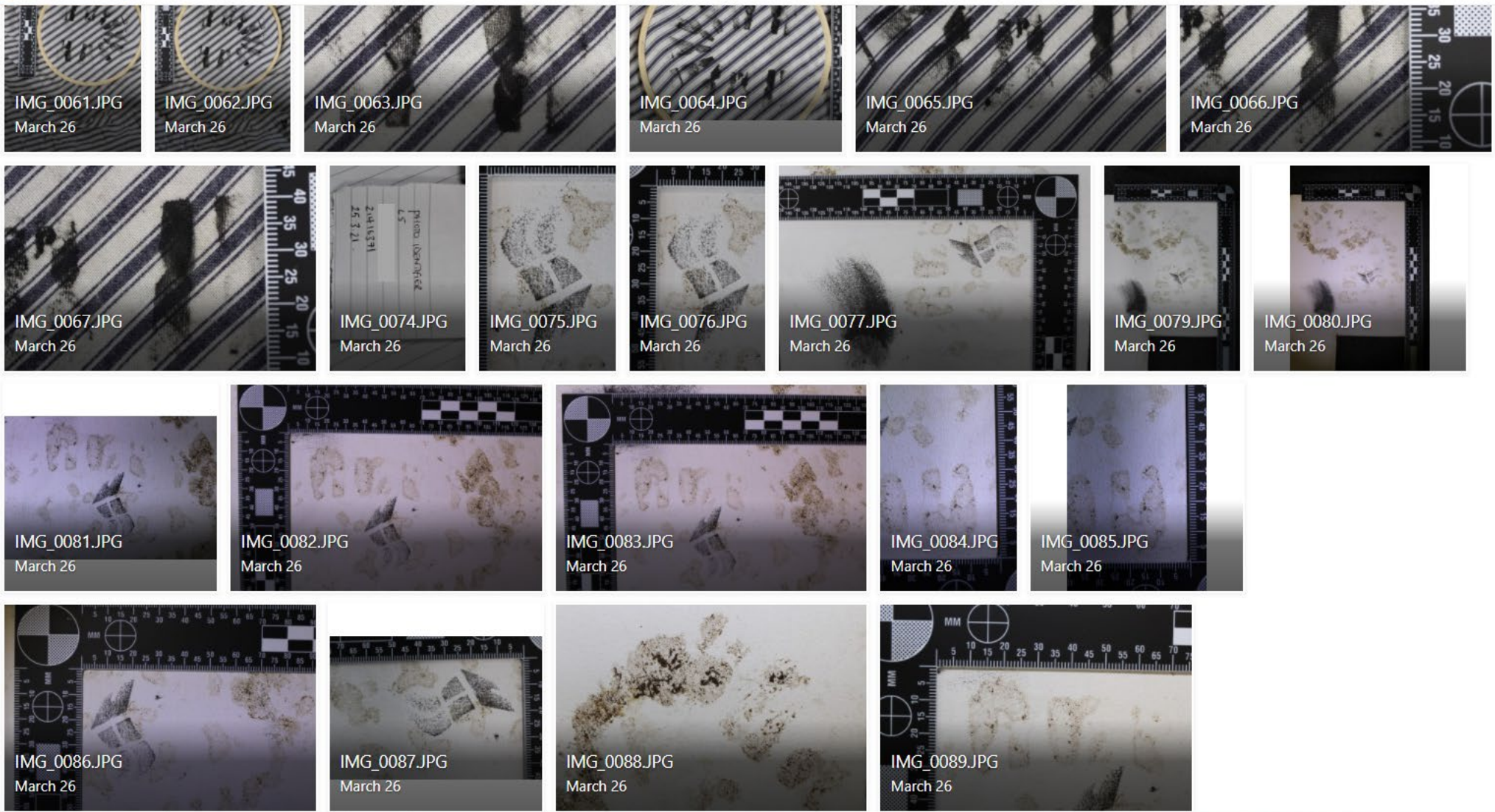
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To end

Pros included

- Worked very well for those who were engaged throughout the module
- I could keep a continuous eye on students' learning and provide ongoing feedback

Cons included

- It didn't work so well for those who, for whatever reason, didn't engage

PLEASE FEEL FREE TO CONTACT

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