Line Manager and WBA/Mentor workshop 2023/2024

Healthcare Science Practitioner Years 2 & 3





INTRODUCTIONS

Karen Hold - Programme Lead

Rebecca Lamb - Programme Apprenticeship Lead

Claire Parry - Programme Manager

Georgia Lawrence - Skills Coach

Nikki Lees - Apprenticeship Development Manager

Guest speaker : Andrea Arnold



AGENDA

- Standard refresher
- Programme structure for Year 2 & 3
- Clinical Portfolio
- Portfolio Evidence
- Gateway and EPA
- Supporting apprentices
- Communication

Please ask questions as we go along This session is recorded



HSP APPRENTICESHIP STANDARD



	Skills (24) and Knowledge (28)						
	Person- centered C	Personal and Professional Development (PPD)					
0 th or set	Health, S	Quality		Le	Leadership		
9 themes –	Technical	Clinical Care					
	Audit/Se	Research & Innovation					
	Behaviors and Values						
5 themes	Compassionate	Honest	Consci	ientious	HCPC Standa s of Conduct Performance d Ethics	,	Good Scientific Practice (GSP)

PROGRAMME STRUCTURE: SPECIALIST UNITS

- Highly trained clinical leads/tutors
- Cardiology : Andrea Arnold @ Wythenshawe hospital Respiratory : Martina lambert @ Wythenshawe hospital
 Sleep: Victoria Clare /Nicola Smith @ Trafford general hospital
 Neurophysiology: Caroline Finnegan @ The Walton Centre, Liverpool
- In Years 2 & 3 specialist teaching units are face to face at either Wythenshawe Hospital (Cardiology and Respiratory) or the Walton Centre, Liverpool (Neuro).



PROGRAMME STRUCTURE: YEAR 2

SEMESTER 1

Specialist studies - 1 Unit lead: May Azzawi

Teaching @ specialist hospitals on **Thurs** Core specialist knowledge (Neurology or Cardiology or Sleep/Respiratory -(heavy focus on resp)

Assessments:

Presentation 26th October. MCQ Exam TBC: 8th – 19th Jan 2024

Specialist studies 2 Unit lead: May Azzawi <u>Assessments</u>: Essay: 7th December 2023 Exam TBC: 8th – 19th Jan 2024

SEMESTER 2

Disease processes and statistics Unit lead: Jon Humphries Teaching @ MMU on Thurs <u>Assessments</u>: MCQ exam 9th May Report/Essay 26th April

Professional practice signal processing and instrumentation Unit lead: Karen Hold <u>Assessments</u>: Creative Poster/Essay 18th April Physics coursework. 20th May (+ in class test TBC)



PROGRAMME STRUCTURE: YEAR 3

SEMESTER 1 Teaching on **Fridays**

Professional and reflective practice – Unit lead: Assessment: Essay/reflective portfolio – 8th Jan 2024

Applying specialist studies to practice ASSP1 - Unit Lead: Rebecca Lamb Teaching @ Specialist hospitals on Fridays Assessments: Presentation 15th December 2023. Exam TBC: 8th – 19th Jan 2024

Project Unit Lead: Liam Bagley – continues into semester 2
Work based project - research or clinical audit.
Some teaching incorporated into professional practice and project units. Online Moodle learning

Assessments: Research proposal: 1st Dec 2023.

Project dissertation 3rd May 2024



PROGRAMME STRUCTURE: YEAR 3

Semester 2 Teaching on Fridays

Applying specialist studies to practice ASSP2 - Unit Lead: Rebecca Lamb Teaching @ Specialist hospitals on Fridays Assessments: Essay exam

Healthcare end point assessment unit - Unit lead: Rebecca Lamb Teaching @ MMU on Fridays. Introduction session on <u>26th Jan 2024</u>

Assessments: Readiness to practice test, research presentation, professional discussion. (individual dates TBC: 10th June – 17th June

Project Assessment: Project dissertation 3rd May 2024



PROGRAMME STRUCTURE & DELIVERY:



2 - LEVEL S	IY - THURSDAYS	Semester 1	Specialist Studies 1
			50% Presentation
			50% Exam
			Specialist Studies 2
			50% Essay
			50% Exam
-	/ery day		Disease Processes and Statistics
Year 2			50% MCQ test
	deliv	2	50% Report
		Semester 2	Professional Practice, Signal Processing and Instrumentation
	Norr	me	60% Creative piece (30% poster - 30% essay)
		Se	40% Physics portfolio (physics coursework)
			Year 2 PORTFOLIO SUBMISSION (summative assessment)

		Semester 1	Project (runs over both Semesters)
			20% Research proposal
			Professional and Reflective Practice
			100% Portfolio
	S		Applying Specialist Studies to Practice 1
9	FRIDAYS		60% Written exam
			40% Presentation
	- Ae	Semester 2	Project (runs over both Semesters)
Year 3 - LEVEL	Normal delivery day		80% Research Dissertation
			Applying Specialist Studies to Practice 2
ar	leli		40% Essay
Ye	a		60% Exam
	Norm		Year 3 PORTFOLIO SUBMISSION (summative assessment)
			End-Point Assessment Unit
			Curation of E-Portfolio
			End point assessment

PROGRAMME STRUCTURE: PROJECT

- Taught sessions: eg project design, ethics, statistical analysis
- Additional online resources, eg COSHH regulations
- Line manager (WB project supervisor)/apprentice to propose project title
- Projects are often clinical audits but don't have to be
- Clinical need/building new knowledge
- Good justification clear aims and hypothesis
- Ideally need to produce numerical data, not just yes/no
- Seek advice/approval from Man Met academic supervisor
- Obtain department/trust approval letter
- Submit research proposal to Man Met



PROGRAMME STRUCTURE: PROJECT



- Man Met ethics "ethos" application
- Conduct research in workplace
- Review meetings with apprentice/academic supervisor
- Review meetings with apprentice/work-based project supervisor
- Feedback on draft from academic supervisor/work-based project supervisor
- Marking by academic supervisor/ 2nd marked

PROJECT EXAMPLES



- An audit investigating pacing percentage in permanent pacemakers implanted either due to a complication of transcatheter aortic valve implantation or as prophylactic measure – a single centre experience.
- Identifying the effects reduced ventricular pacing modes and algorithms have on estimated pacemaker battery longevity.
- Automatic-Algorithm vs Manual Scoring of The Nox-T3 Home Respiratory Polygraphy System.
- The adherence of hospital's cardiac investigation unit's transthoracic echocardiography department to guidelines for the diagnostic pathway of heart failure.

CLINICAL PORTFOLIO (LOG BOOK)

BSc (Hons) Healthcare Science Practitioner Training Programme (PTP) Tuesday 31st October 2023

Andrea Arnold Principal Cardiac Physiologist/ Clinical Tutor





Learning Objectives for Session



Understanding requirements of a WBA and Training Portfolio



Sharing Best Practice



Overview of years 2 and 3 and requirements



What markers are looking for

What is your Role in Portfolio Completion

- To support trainees getting in the areas required for their evidence
- Be an advisor it not your portfolio
- To ensure you complete assessments/competency documentation correctly
- Understand difference between learning outcomes competencies DOP's and Observed clinical events
- Ensure you are carrying out competencies at the right level

Clinical Placement Portfolio



Students will be required to submit the portfolio at the end of the work-based placement in years 3 but after the first part of placement in year 2

The Training Portfolio

Logbook/portfolio submission

- Second years will submit log-book in the spring, between placements. Not expected to be fully complete.
- Second and third year portfolio is submitted together in the summer semester
- Apprentices may submit earlier than full time students due to the End Point Assessment (EPA)
- Evidence for this can be collected anytime over the 2 years, however: There are specifics that are need completing for year 2 submission

Cardiac

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Year 2 Cardiac

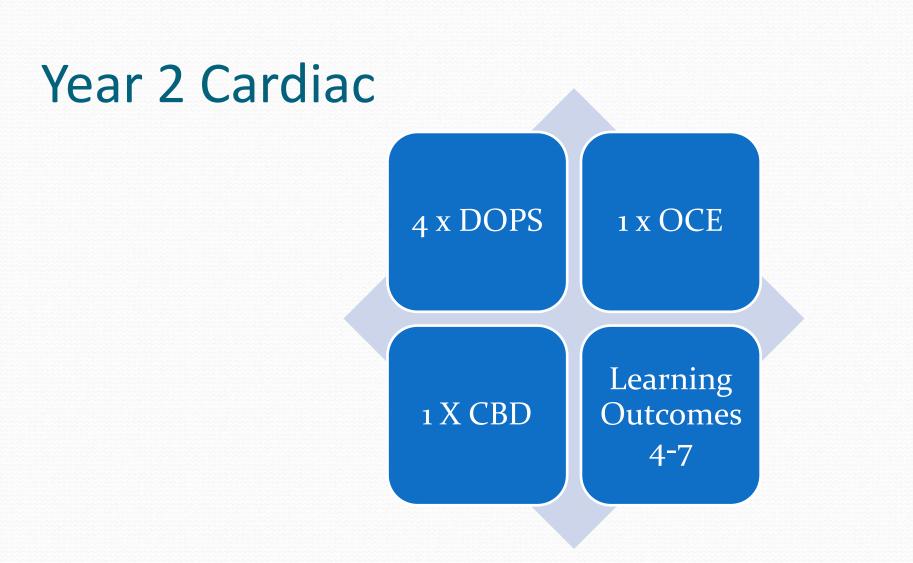
Requirements for Submission

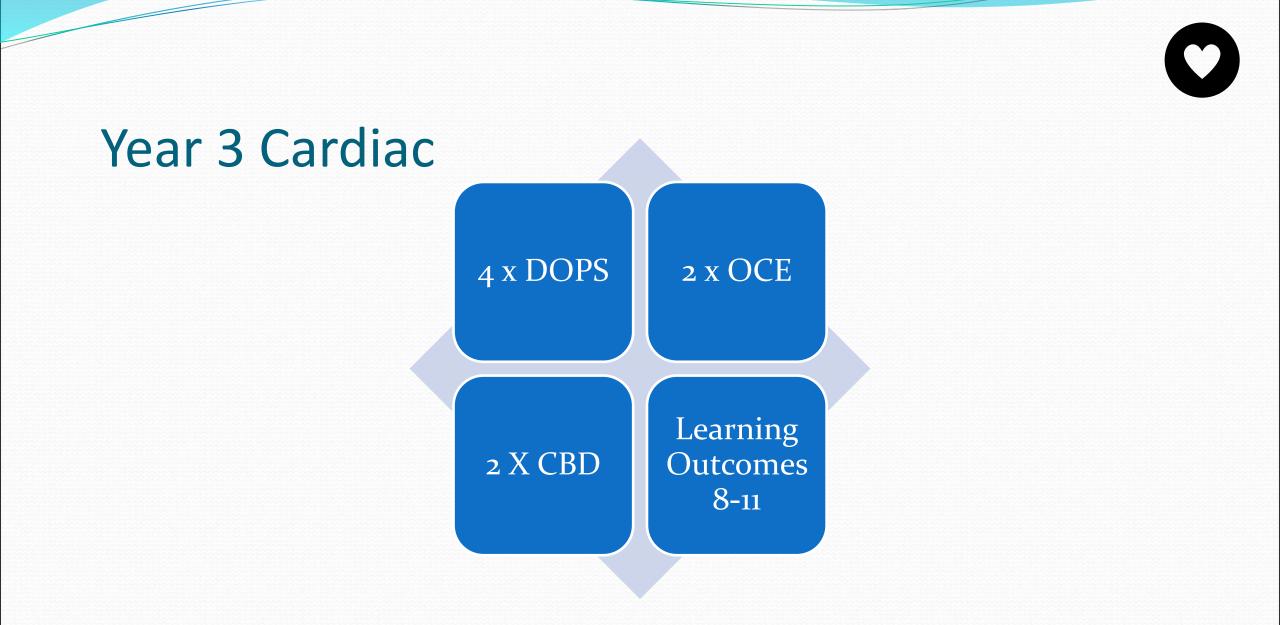
- 30 ECG's with proforma's completed for a range of ECG's
- 14 manual or automatic BP's
- 20 Ambulatory hook up
- 20 Ambulatory analysis with report s by trainee not work place

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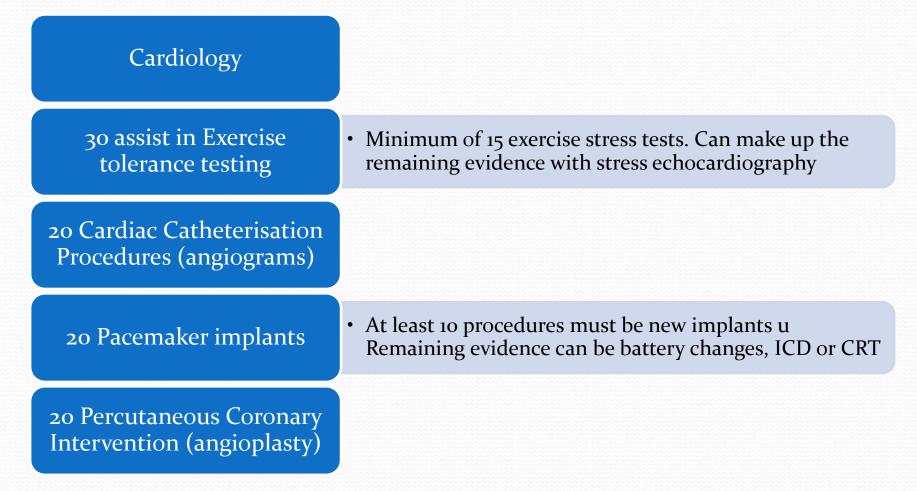
Cardiac ECG Evidence

- 5 Sinus Rhythm
- 10 Bundle Branch Blocks
- 10 Atrial Fibrillation/Flutter
- 5 Hypertrophies
- 5 Myocardial Infarction
- 5 Heart Blocks
- 10 Miscellaneous must not include any from the above categories





Cardiac Year 3 evidence





Respiratory and Sleep



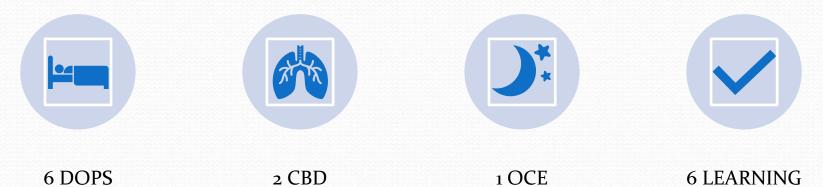
6 LEARNING

OUTCOMES

Year 2 Respiratory

6 DOPS

(3 SLEEP, 3 RESP.)



(SLEEP OR RESP)

2 CBD (1 IN RESP AND 1 IN SLEEP.)



Year 2 Respiratory evidence

Respiratory and Sleep

- 7 Dynamic Lung volumes
- 7 Lung volumes
- 7 Gas transfer
- 7 Bronchodilator therapy
- 20 Calibration and QC data
- 10 Overnight oximetry from any limited channel study.

Year 3 Respiratory 4 x DOPS **2** x OCE Learning 2 X CBD Outcomes 6





Year 3 Respiratory Evidence

Respiratory and Sleep

3 Dynamic lung volumes

3 Lung Volumes

3 Gas transfer

3 Bronchodilator therapy

10 Respiratory sleep studies

• Prepare, issue retrieve and store data

10 CPAP therapy





Neuroscience



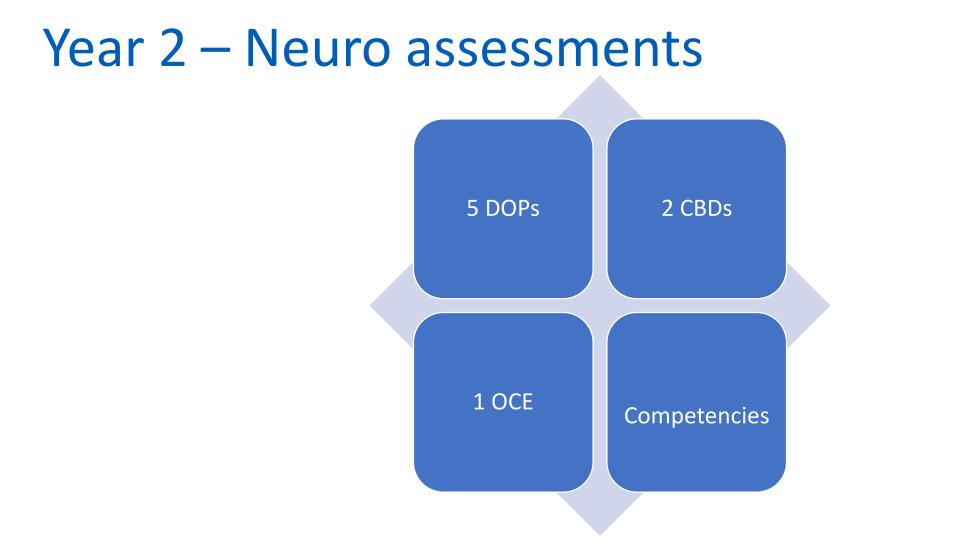
Year 2 Neuro evidence collection



Minimum evidence collection

Diagnostic Area	Patient numbers required*. (Summarise in matrix)
Routine EEG	40
Assist Sleep deprived EEG	5
Assist Portable EEG	5
VEP	10









Year 2 Neuro



DOP 1	DOP 2	DOP 3	DOP 4	DOP 5
Accurately measure a patients head, using 10-20 system, for an adult EEG recording and apply electrodes – accurate to +/- 0.5cm	Accurately measure the head for an adult VEP recording – accurate to +/- 0.5cm	Take clinical history for a routine EEG outpatient and perform the resting EEG recording under supervision	Explain, obtain consent and perform hyperventilation and photic stimulation activation procedures for a routine EEG	Set up and calibrate EEG equipment using external generator (this should include a range of frequency response curves, CMRR, noise and
				linearity)



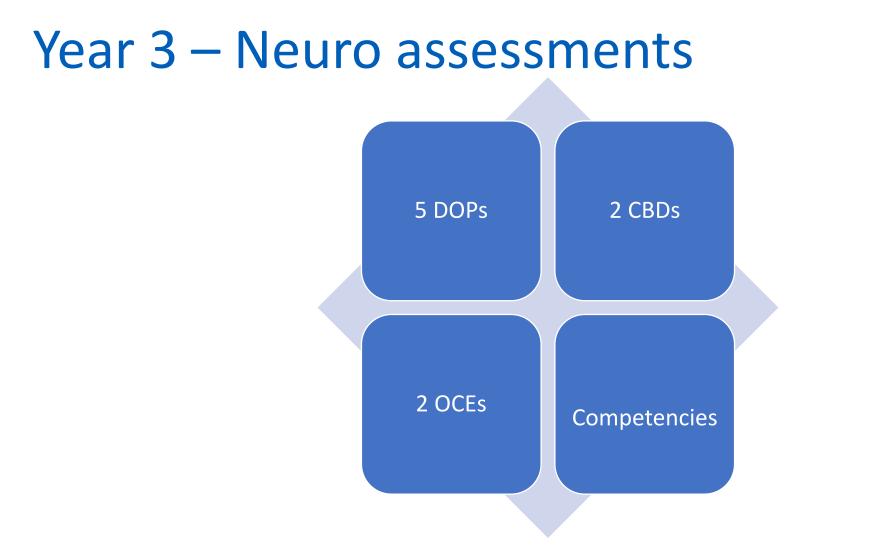
Year 3 Neuro evidence collection



Minimum evidence collection

Diagnostic Area	Patient numbers required*. (Summarise in matrix)
Routine EEG	50
Assist Sleep deprived EEG	5
Assist Portable EEG	5
VEP	12









DOP 1	DOP 2	DOP 3	DOP 4	DOP 5
Complete the factual report for a normal EEG recording	Complete the factual report for an abnormal EEG recording	Obtain patient clinical history for routine VEP	Perform routine EEG under direct supervision (including set up, recording and report)	Perform routine VEP under direct supervision (including set up, recording and report)



Next we will look at:

- Learning outcomes
- DOPs
- Competencies
- OCE
- CBDs
- Why Portfolios fail

Learning Outcomes

- Learning outcomes are not competencies
- Learning outcomes are a log of the training the student has received
- WBA or supervisor in the department must provide training on the relevant content
- Does not need to be formal lectures or training can be practically assessed/observed
- Can be a task
- Don't have to be on the same day
- Cardiac Learning Outcome 3 (Pre-test requirements) needs completing for each area in the learning outcomes ECG/Ambulatory hook up/Analysis/Exercise etc

DOPs

- Direct Observation of Practice
- Can be performed on any procedure or part of a procedure that is relevant to the stage of training
- Supervisor watches the student perform the procedure and provide feedback on their performance
- Can be simulated
- Provide evidence of DOP if available

Competencies

- Assessment of the student's ability to complete a procedure
- Some competencies are for an assist role e.g. pacemaker implant and PCI
- Can be performed on any procedure as long as relevant to course content
- Year 1 competencies are defined
- Year 2 and 3 WBAs can use their own competencies

OCE

- Observed Clinical Event
 - Most confusion out of all assessments students undertake
 - An OCE is a real-life event
 - It is an observed interaction between the student and a patient or the student and other team members
 - OCE paperwork completed but a description of the event should also be included.

OCE Cardiac example

- Patient interaction during a test:
 - Explaining the procedure and completing pre-test check lists
 - What communication barriers were there?
 - How can you improve your communication?
 - Adverse event during a procedure.
 - How did you react?
 - How did you communicate with other team members and the patient?
 - What will you do different next time?



OCE Neuro examples



YEAR 2

• Ability to provide the patient with clear instructions to ensure compliance/ attention when recording an adult VEP/EEG

YEAR 3

- Ability to deal with a clinical event as it occurs, i.e seizure/NEAD
- Ability to adapt communication and language style to meet the needs of the listener

CBDs

- Case based Discussion
- Designed to provide structured teaching and feedback in a particular area of clinical or technical practice. How do we carry out a case-based discussion?
- Work based assessor provides a case or student brings an interesting case forward.
- This may be a real case that the student has performed, or it may be a simulation
- Student is expected to interpret the results and talk through the findings, treatment options etc. Detailing why they acted as they did.
- Student may be asked how they would act if they were present for the case
- Student may be expected to write the case up and submit with assessment form in portfolio



CBD Neuro examples



Examples include:

- > Biological and non-biological artefacts and how to eliminate them.
- Significance of results compared to reason for referral for an interesting patient.
- Importance of consent from patients
- > Additional challenges associated with non-routine patients/investigations
- > The importance of additional investigations in VEP recordings (e.g. Flash and half field VEPs)

Why do Portfolios fail?

- Incorrect analysis
- They need to correctly interpret results and data
- Their interpretation summary at the end is not clinical (it could be or possibly is not acceptable)
- They should write reports that a GP can understand
- Should not use abbreviations

Why Portfolios fail

Patient Data

- DOB is patient data
- Serial numbers and bar codes are patient data

Missing evidence

- Missing paper work for assessments
- Students and WBAs! forget to sign DOP's, OCE's etc
- Feedback forms check if they per annum vs total
- Incorrect assessments eg OCE is a **real life event**. An observed interaction between the student and a patient or student and other team members

Example of Bad Practice

Male / Female Age	Clinical details		
Ward/ Dept (Please state the type of ward rather than just the name)	Medication (if known)		
Heart Rate: 1500 = 55 5pm RAR1020 1.08	Comment on P wave morphology: 2 Square, 2x40= 80M		
Rhythm: Sinces Bradycardea	PRinterval: 5 Squared, 5x40= 200ms. Boarderline ist degree.		
QRS axis: most equiphasic load = 11 QO^{0} to $11 = avL$ $avL + vE = -45^{\circ}$ LAD	QRS duration / QRS morphology: 5-00 4 Squares (V4. 4240 = 160m. Broad GRS. in leads VI to UG.		
QTc Calculate using Bazett's ¹ formula: QTc = QT / \sqrt{RR} int (in seconds)	QT, V3 = 13 ×40= 520m5. QT/QTC = 520/504 QT/QTC = 0.52 - 1.03 QT/QTC = 0.52 - 1057 = 0.504		
Is there evidence of ventricular hypertrophy? If 'Yes' give measurement details (Use Sokolow-Lyon ² criteria LVH: S wave in V1 + R wave in V5 or V6 > 3.5 mV or R wave in V5 or V6 > 2.6 mV RVH: R wave in V1 + S wave in lead V5 or V6 ≥ 1.1 mV)	LUH = Swave VI= 2.000 RVH= R INVI=0.3 R MOUS IN US= 02002 S MARE IN VS=0.7		
Comment on the ST segment	ST segment - elocated in U3, V4, could be related to Left bundle branch block		
T wave abnormalities	T waves seen as peaked appearance in lead v2, v3, v4, may be related to LBBB.		
Any other significant findings?	T WAVE MUERSION & U.S.		
Conclusion	Boarderline 1st degree AU block. Boarderline 1st degree AU block. Broad BRS complex indicating LBBB.		
¹ Bazett HC. Heart 1920;7:353-370 ² adapted from Sokolow M & Lyon TP. Am Heart J 1949;37:161 and Am Heart J 1	may be related to LBBB. ECG Shows		
	LAD, modelies indication for LBBB.		







Training Manual



Assessment techniques



What was good what was bad!!!!

LOG BOOK SUBMISSION DATES

Year 2 Clinical portfolio submission: 1st Feb 2024

Year 3 Clinical portfolio submission: 26th April 2024

Minor corrections: "defer" new submission deadline given.

Major Corrections: "fail" re-submit work in summer resit period (TBC).



PORTFOLIO OF EVIDENCE

PORTFOLIO OF EVIDENCE

- The Portfolio is a repository for work that best demonstrates the application of Knowledge, Skills and Behaviours identified in the apprenticeship standard.
- Evidence the application of knowledge that has been learnt and apply this to the workplace.
- The review process and the Skills Scan's will help to guide apprentices and keep track of Knowledge, Skills' and Behaviours' development and progression over the duration of their Degree Apprenticeship.
- The apprentices will then discuss and reflect on their portfolio during their EPA in year 3.



WHAT EVIDENCE CAN BE USED?

Types of evidence to gather:

- Assignments
- clinical portfolio
- Reports
- Emails
- Presentation
- Patient feedback
- Audits
- Witness statements
- Reflections



PORTFOLIO OF EVIDENCE

- Although there is 28 (K's), 24 (S's) & 3 (B'S) 1 piece of evidence can be used to evidence multiple areas of the standard.
- Knowledge- University learning
- Skills- Practical
- Consider confidential information
- Gather evidence throughout the programme and refine in year 3
- Support with building the portfolio- Skills Coach/ TEL Team



GATEWAY AND END POINT ASSESSMENT

GATEWAY

What is Gateway?

- Passed all academic and clinical units
- Complete all OTJ Hours: 746 hours
- Has passed all clinical portfolio/logbook submissions
- Has a complete portfolio of evidence
- Has obtained Functional Skills L2

When is Gateway?

• 24th May 12pm – Friday 31st May (TBC)

What happens at Gateway?

Gateway Form confirms above.

Signatures required by all named parties via DocuSign (specified timeframe). Progress to EPA.



END POINT ASSESSMENT: WHAT IS IT?

Assessment Plan

Assessment methods:

- Written Readiness for Practice Test (RPT) (1 hour) A type of situational judgement test Must be passed to proceed to step 2.
- Face-to-face Professional Discussion (40 mins)
 Based on the apprentice's record of evidence/portfolio of evidence.
 Takes place between the apprentice and a trained Independent Assessor.
- 3. Presentation of their Research Project (15 mins + 15 questions) Presentation followed by a discussion and review of the presentation content with the same Independent Assessor.



END POINT ASSESSMENT

EPA for 2024: Monday 10th June – 17th June 2024 (TBC)

If you are interested in being an **Internal Verifier** or **End Point Assessor**, please can in touch with Nikki and she can talk you through the process.



SUPPORTING APPRENTICES – A reminder

ESCALATION PROCESS/ THE ENGAGEMENT PROCEDURE



- The Apprentice Engagement Procedure provides a set process which staff follow when supporting apprentices to engage with their apprenticeship.
- This will happen where an apprentice has been identified as not engaging and where non-engagement issues have not been resolved through informal conversations with the apprentice and their line manager.
- Examples of apprentice non-engagement covered:
- Non-attendance of mandatory timetabled face-to-face and online teaching.
- Non-attendance at two consecutive mandatory tripartite reviews.
- Non-engagement with E-Portfolio activities (at least monthly logging of OTJ).
- Failure to undertake sufficient OTJ training activities.
- Assessment non-submission.
- Requests for more than two assessment extensions.



THE ENGAGEMENT PROCEDURE

Action plan

- If there are issues in relation to attendance, OTJ etc., an action plan might be put in place by your skills coach.
- The skills coach will include your mentor within the action planning discussion.
- This is supportive and is designed to help you get back on track with your apprenticeship studies.
- If non engagement continues, this will be escalated to Apprenticeship Unit staff who may need to discuss with employers.
- If non engagement is not resolved this may result in withdrawal from the programme.



STUDY SKILLS SUPPORT

- Study skills workshops
- One-to-one support
- Short courses
- Writing feedback
- Maths and statistics support
- Study skills online
- Preparing to study
- Contact the study skills team

If your apprentice is struggling encourage them to take up this support





ENGAGEMENT WEEKS

Engagement weeks enable you to develop key skills which are relevant to your apprenticeship study. They contribute to your off the job training, but sessions are not compulsory.

There are three engagement weeks running throughout the academic year and take place on MS Teams:

- Week Commencing: 6th November 2023
- Week Commencing: 22nd January 2024
- Week Commencing: 13th May 2024

Sessions will be run by the Learner Development and Library Teams. These have a focus on literacy, numeracy and library skills.



ENGAGEMENT WEEK 1



Time	Mon 6 Nov 2023	Tue 7 Nov 2023	Wed 8 Nov 2023	Thu 9 Nov 2023	Fri 10 Nov 2023
Session 1 10:00 – 11:00	 MS Excel: Fundamental Skills Become familiar with the MS Excel user interface Use functions and formulae Filter large sets of data 	 Planning: How to Know Where to Start Identify strategies for managing competing deadlines Consider stages involved in effective planning Technology to aid planning 	 Introduction to Critical Thinking Describe what critical thinking is, and why it's important Consider strategies for critical thinking Practise applying critical thinking to academic contexts 	 Becoming a More Confident Writer Describe common errors in grammar and punctuation Identify and correct fragmented sentences Explain the purpose and usefulness of paragraphs 	 Finding Academic Sources & Harvard Referencing Use Library Search to find books/eBooks and journal articles Identify why and what you need to cite and reference Understand what elements you need to reference in common types of sources
Session 2 11:15 – 12:15	 MS Excel: Data Manipulation Tips and Tools Use quick 'tips' to navigate large data sets easily Create PivotTables to summarise and interrogate data 	 Planning: Strategies for Reading and Note Making Explore different types of reading such as skimming, scanning, and reading in depth Examine time-saving strategies for reading and note-taking Practice reading strategies with academic text 	 Using Evidence Critically Practise challenging secondary sources Explore the difference between paraphrasing and direct quotation Describe the role of synthesis in effective analysis 	 Writing with Clarity and Concision Describe the importance of using clear and accessible language Identify how to avoid tautology and repetition Practice using shorter sentences for greater impact in your writing 	 Endnote: 11:15 – 12:45 Consider how Endnote might be used in your work Collect references and add them to an Endnote library Convert Endnote references into the Mcr Met Harvard reference style using MS Word

OTHER SUPPORT AT MANCHESTER MET



Disability Advisers

- Assess student need
- Draw up appropriate personal learning plans
- Facilitate applications for Disabled Students' Allowances
- Work with academic depts. to ensure support requirements are met

Student Wellbeing Advisers

- Professional wellbeing support for students with low to moderate mental health and anxiety issues
- A triage service to identify students who need more specialist support
- A proactive approach to wellbeing
- Support for students with specific learning difficulties

Counsellors and Mental Health Advisers

- One-to-one and groupbased counselling
- Management of students with high risk and complex mental health conditions
- Liaison with NHS and other external therapeutic providers

COMMUNICATION

COMMUNICATIONS

- Management information about overall apprentice progress is sent to the **main apprenticeship contact** in the Trust.
- WBAs/Mentors meet apprentices regularly, attend reviews with the skills coach and have access to PICSWeb/Smart Assessor.
- Line Managers have access to PICSWeb/Smart Assessor to gain an overview, or they can talk to the WBA.
- All Managers and WBAs invited to Employer Advisory Boards:
 22 November 2023 and 15 May 2024.
- <u>Employer Resources page</u> contains all key documentation a timetable and any meeting recordings
- Skills coach for apprentice concerns and day to day advice
- Programme Manager for any programme queries or issues



QUESTIONS



THANK YOU



Rebecca Lamb	Programme Lead	R.Lamb@mmu.ac.uk	
Claire Parry	Programme Manager	c.parry@mmu.ac.uk	
Georgia Lawrence	Skills Coach	g.lawrence@mmu.ac.uk	
Nikki Lees	Apprenticeship Development Manager	n.lees@mmu.ac.uk	
Apprenticeship Enquiries	Apprenticeship Unit	apprenticeships@mmu.ac.uk	
TEL Team	Technology Enhance Learning Team	telapprenticeship@mmu.ac.uk	