# Student Handbook

# 2019



# University of Health Sciences, Lahore

**Welcome to the Certificate in Medical Teaching programme 2019 at the University of Health Sciences, Lahore.**

This programme is for teachers with little or no experience, working in medical and dental colleges in the Punjab. It aims to give you the basic knowledge, skills and competence for a successful start to your teaching career. It will also provide an appropriate foundation to further studies in medical education.

The programme will be taught in two blocks, of four days each. Between the teaching sessions you will be expected to carry out a series of activities and gather evidence of your teaching practice. The requirements are specified in this Handbook under *Assessment Requirements*. You must complete these requirements successfully in order to receive a Certificate in Medical Teaching from UHS. Please note that if you need confirmation of your attendance at the teaching days this may be provided separately but will not constitute a Certificate in Medical Teaching.

Initially Dr Ian Willis and Dr Janet Strivens from the University of Liverpool, UK, supported by colleagues from Pakistan, started the programme. These Pakistani colleagues have now taken over as **facilitators** responsible for the delivery of the programme. A **mentor** will be appointed for each student who will be able to support you between contact sessions. You may contact the mentor if you have any queries or need to discuss anything, and the mentor will also contact you to check your progress. Your facilitators will assess your portfolio of evidence of your teaching practice.

## Certificate in Medical Teaching: Syllabus

### 1ˢᵗ Contact Session:

Learning outcomes: At the end of this study period participants will be able to:

- Distinguish between different learning theories and beliefs about how students learn
- Explain the importance of the evidence-based practices in medical teaching and learning
- Design a lecture with a clear structure and appropriate content for the time available, level and stage of course
- Deliver an effective lecture using appropriate communication and use of presentation technology
- Describe strategies for increasing student engagement in lectures in accordance with Gagne` 9 steps for lesson planning
- Plan an effective tutor- or student-led discussion and team activity
- Describe a range of strategies for engaging disengaged students
- Describe some uses of technology to enhance student learning

### *Day One:* **How students learn**

Topics:

- What is to be learned: differentiating knowledge, its application, skills and values
- Teachers' beliefs about learning and how these beliefs affect their practice
- The definitions of behaviorism, cognitivism, constructivism, and humanism theories of learning and their practical application in teaching and learning
- Learning outcomes with reference to Bloom's taxonomy
- The nature of the evidence-based practice in education: indicators of learning/achievement

### *Days Two and Three:* **Planning and delivering lectures to large groups**

Topics:

- Write learning outcomes with reference to Bloom's Taxonomy
- Features of good communication
- Opportunities and constraints of lecturing to large groups
- Active learning in large lectures
- Designing and using resources to support learning in lectures
- Using technology to enhance learning from lectures
- Practice: mini-lectures/feedback

[NB. Participants should come prepared to deliver a ten-minute lecture. This could be the first ten minutes of a lecture they are already required to deliver, or a self-contained topic prepared specifically for this exercise. Laptop/projector facilities will be available and you are encouraged, but

not required, to make use of them. If you wish to produce an accompanying handout please **make 7 copies.]**

*Day Four:* **Learning in small groups**

Topics:

- Group dynamics
- Strategies to encourage participation in group work e.g. questioning/student preparation
- Practice: leading a group discussion
- Characteristics of effective teams
- Problem-based and team-based learning as group methods in medical education
- Technology for collaboration

**[There will be an interval of approximately three months between Days 1-4 and Days 5-8]**

**2<sup>nd</sup> Contact Session**

Learning outcomes: by the end of this study period participants will be able to:

- Explain characteristics of a good examination such as validity, reliability, fairness, and feasibility
- Develop a table of specifications in one's area of interest
- Identify methods to make credible judgments with the help of standards
- Describe a range of purposes of assessment used in medical education
- Select appropriate assessment methods for different learning outcomes from all learning domains with reference to Miller's triangle
- Explain the role of feedback in student learning
- Demonstrate sandwich technique of giving feedback
- Use technology to enhance assessment practices
- Select appropriate evaluation methods for short, medium and long-term feedback
- Use evaluation data as an evidence for the effectiveness or otherwise of innovations in learning and teaching
- Explain the role of quality assurance in programme improvement
- Discuss some major educational issues and trends in medical education at a national and international level

*Days Five and Six:* **Assessment: Principles and Practice**

Topics:

- Nature and purposes of assessment
- Making judgment and setting standards

- Assessment methods – MCQs/EMIs, Essays, SEQs, OSCE/OSPE, Long/short case, workplace-based assessment.
- Align assessment methods with relevant learning outcomes
- Role of constructive feedback in learning – assessment for learning
- Assessment in the workplace – in-vivo assessment of clinical skills and professional behaviour
- Designing effective MCQ and EMI tests
- Designing an effective OSCE station

*Day Seven:* **Evaluation\* and Innovation**

Topics:

- The role of evaluation in the educational cycle
- Identify sources of data collection for teacher's evaluation
- Designing an educational intervention
- Current trends and issues in medical education
- Searching and reviewing the literature of medical education

\*Please note that 'evaluation' here refers to the various processes and means of getting feedback on our teaching (following the UK usage of the term and NOT the US usage where evaluation means th same thing as assessment).

*Day Eight:* **Workshop on educational technology**

In this workshop you will be introduced to a wide range of technology applications which are available (usually free) in Pakistan and ways to use them to enhance your students' learning.

## Assessment Requirements

In order to achieve the Certificate in Medical Teaching of the University of Health Sciences, Lahore, students will need to gather a portfolio of evidence of their teaching practice and their reflections and plans in relation to this practice. The evidence will be based on specified activities to be carried out between the two blocks of teaching.

*Activities:*

- Keep a journal of your teaching practice. This must have at least one entry a fortnight. The entry should comment on what teaching sessions have been carried out, how they were planned, what went well and what went less well, and how you might change what you did in a future session. You may keep the journal on paper but you are encouraged to keep your journal electronically.
- Interview three students from different groups about their experiences of learning and learning strategies they have developed. Questions for the interview will be suggested during the teaching days.
- Complete Teacher Beliefs Inventory. Find two colleagues willing also to complete it & one by yourself.
- Observe three lectures of different colleagues, guided by an observation proforma provided and discussed during the teaching days.
- Have two lectures observed by designated mentor or approved other observer, followed by a discussion/dialogue with that observer.
- Complete a self-assessment proforma provided and discussed in the teaching days for three group sessions.
- Design a set of 10 MCQs for formative feedback, using technology if possible
- Take part in at least one other type of assessment activity e.g. giving essay feedback, assessing an OSCE station etc.
- List assessment methods currently used on course/programme on which most of your teaching takes place; analyze strengths and weaknesses; identify possible alternative methods
- Use at least two evaluation methods i.e. ways to gain feedback on your own teaching
- Choose and implement an innovative strategy in your teaching that you have not previously used, and provide evidence to support practical application of your strategy

*Assessment evidence for portfolio:*

1. At least eight journal entries (covering the whole period of the programme).

Part 1:

2. Notes from the student interviews plus a summary of main points (x3)
3. Copies of completed Teacher Beliefs Inventory plus aggregated results (x3)
4. Observation proformas for observed lectures of colleagues (3) & yourself (x2)
5. Documentation for own observed lecture: slides/handouts, plan, observation proforma completed by mentor/observer, your own **reflective commentary** following dialogue
6. Completed self-assessments for small group sessions (x2)

Part 2:

7.  A set of 10 MCQs/EMIs with formative feedback (approx. 10)
8.  3 OSCE station or rubrics for an alternative assessment method
9.  A short critical evaluation of the assessment methods currently in use in your own practice
10. Documentation of evaluation methods used by you and within your institution and data gained, together with recommendations for changes /improvements drawn from these data
11. Brief report on one topic which (a) demonstrates your innovative practice and (b) refers to at least one source drawn from published literature in medical education.

There will be opportunities to discuss and clarify these requirements during the teaching days with a designated mentor who will maintain contact with you between the contact sessions.

Notes:

a)  You are provided with a coversheet/'first page' for your portfolio which you should complete, indicating that all the required items are present (see Appendix).
b)  Journal entries (Item 1) should take the form of a narrative account of a teaching episode, an encounter with a student or any other event you have experienced which has caused you to stop and think about your teaching practice. Describe what happened and then, having reflected on it, say why it was significant, what questions it raised, what aspect of CMT it is related to.  DO NOT present filled-in self-assessment proformas as journal entries.
c)  For Item 5, if possible your designated mentor should be invited to observe your teaching. If this is not possible, the CMT leader will approve an alternative observer from your institution.
d)  Each MCQ must have a key and a justification supporting the key. Imagine what you would say to the student who gets it wrong!
e)  The documentation of evaluation methods (Item 10) refers to any processes you use or your institution uses to obtain feedback on the effectiveness of your own teaching. It is not the same as Item 9 which refers to the methods used to assess your students.
f)  For Item 11 you are expected to do something different in your practice. It can be something quite small but it should be something you have not tried before.  Your account of what happened (which does not need to have been successful!) has to be accompanied by at least one reference from the medical education literature. You should give a brief account of the main points of your source IN YOUR OWN WORDS. This means that you should NOT 'cut and paste' from an existing article. If you quote from the article directly you should use standard academic referencing conventions e.g. Harvard. Failure to observe this may result in attribution of plagiarism or academic misconduct which is regarded as a serious professional offense and may lead to your portfolio being rejected.
g)  Portfolios will be checked for similarity index with each other and with published sources using Turnitin® software. Any indication of plagiarism throughout the portfolio will be taken seriously.  Please be aware that it may lead to your portfolio being failed.

**Submission requirements:**

All participants are required to submit soft and hard copies of their portfolios to the CILT department for viva and record keeping, 15 days prior to final viva examination.

**Soft Copy:**

- One soft copy must be emailed (in zip form) to CILT at cilt@uhs.edu.pk
- Second soft copy must be submitted on CD.

**Hard copy:**

- One hard copy is for assessment during examination. This copy may be taken away by the participant after viva.
- A second copy is for CMT record. It should be a book binding. Spine of bound portfolio should show CMT on the top of width of spine. Name of candidate in the middle along the length of spine and year of submission across the width at the bottom.
- Lettering on spine should fit perfectly in font size 18 and in bold. The front of binding should have the same identification all across the width. The sample of the book binding will be demonstrated in second contact session of CMT.

**Viva:**

- If the portfolio is found to be incomplete i.e. there are sections missing or clearly inadequate, the examiners will not conduct the viva. The candidate must complete or re-do the missing sections and re-present him or herself at the next opportunity for examination.
- The purpose of the viva is twofold: to check that the portfolio is the candidate's own work and to allow the candidate the opportunity to demonstrate deep understanding of the topics covered in the CMT. Therefore, make sure that you attend the viva prepared to discuss and answer questions on the experiences you have recorded in your portfolio. Showing in discussion that you have understood and are able to apply the learning from the programme may increase your marks.
- Viva examination possible outcomes
  - **Pass**
  - **Minor modifications** required: in this case, modifications may be submitted to one of the examiners by the set date for approval. Where possible this will be in time for the candidate's name to be included on the Pass list for his or her Batch.
  - **Major modifications** required: in this case a new viva examination must be taken at the next opportunity and the candidate will not appear on the Pass list until the next Batch.
  - **Fail**

**Appendices**

1. Portfolio cover sheet (to be completed before submission and included with portfolio)
2. Suggested questions for student interviews
3. Teaching Observation Form (to be used by you for observing your colleagues' lectures, and also by your mentor for observing you giving a lecture)
4. Self-Assessment Questions for Guidance (to be used by you to reflect on your own lecture(s) and small group teaching sessions)
5. Examiners' form for use in final viva

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**Portfolio Coversheet**

**Candidates' Name …………………………………………………………………………………………………………..**

| Item | Candidate's check | Mentor's check |
|---|---|---|
| 1. Journal entries (at least <u>8</u>) | | |
| 2. Notes from student interviews (x3) and summary | | |
| 3. Teacher Beliefs Inventory (x3) | | |
| 4. Observation proforma for lectures of others (x3) | | |
| 5. Documentation /reflection  for own lecture (x2) | | |
| 6. Small group self-assessment (x3) | | |
| 7. MCQs/EMIs with feedback (x10) | | |
| 8. OSCE station or alternative work-based assessment | | |
| 9. Critical evaluation of assessment methods | | |
| 10. Documentation of evaluation methods | | |
| 11. Brief report of innovation practice | | |

**Overall grade:**

**Assessor ………………………………………………… Date…………………………………………………………**

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**Appendix B: Questions for student interviews**

**Rationale:** The purpose of this task is for you to get an insight into how your students approach their learning. What strategies do they use? Are these likely to be effective? When they start a learning task do they think about whether they are supposed to remember, understand or apply knowledge?

**How to proceed:** The students <u>must</u> be volunteers, willing to talk to you. Give them an idea of how long it will take – no more than 10 minutes each or 15 if they are all together. <u>Reassure them that what they say to you will be completely confidential and will have absolutely no effect on their grades or results.</u> Explain that it is for your benefit, to get a better understanding of what students actually do when they are asked to learn something. Tell them that you will be making some notes about what they say and check that they are happy with this. DO NOT give them the questions in a written form or ask them to write anything down.

If the students are comfortable with you talking to them separately it will make it easier for you to take notes, but if they prefer to talk to you together, that is fine too. They may help each other to remember things. Your aim is to get them talking freely, not just answering your questions as briefly as possible.

When you ask a question, give them some time to think about their response. If their response is very short, try prompting gently with phrases like 'Could you explain that a little more?' and 'Can you tell me why you did that?' Try repeating back what they said, with a phrase like 'Tell me if I've got this right – what I think you're saying is....'.

Here are some useful questions to get started. **You can develop your own too**. However, remember that you will get more useful information if you ask the students about **specific tasks or a specific time** when they tried to learn something, rather than just allowing them to give general answers.

- Q. Think about some studying you have done this week.
    - When did you do it?
    - Where did you do it? (Describe the surroundings. Did you choose to study here?)
    - Were you alone? If you were with a friend, did you talk while studying? About the work, or about other things? Did you have music on while you studied, or have any other distraction (email, Facebook etc.)?
    - How long did you study at one time? Is this typical for you?
    - Describe to me what you were trying to learn. How did you go about it? Is this what you usually do?
    - What resources did you use (eg a recommended textbook, another study guide, your lecture notes, handouts, the internet, a specific website, a journal article etc)
- Q. Think about a lecture you have attended this week.
    - Did you take notes? What kind of notes? Have you looked at your notes again? What do you plan to do with them now?

Q. What do you think you have learned so far about how to study effectively?

Q. What were your reasons for coming on this course? (why this course, why this college?)

Q. (If you remember) did you have specific expectations about
   o content
   o workload
   o contact with staff

   and have your expectations been fulfilled or not?

Q. Thinking about your specific circumstances, do you see yourself as a 'typical' student on this course? Why or why not? How well was the course adapted to your specific circumstances? (explore here issues such as whether students lived at home with family, in lodging or in hostels, whether they felt well-prepared by their previous academic background, whether they had been previously educated within a different educational culture, whether they are comfortable learning in English. Students may spontaneously bring up disability issues but best not to ask this question otherwise).

Q. Which parts of the MBBS/BDS course have you enjoyed most so far? Why?

Q. (If at the end of the course) how well do you think the course has prepared you for your future career? (in relation to knowledge, in relation to skills, in terms of experiences and opportunities)

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**Teaching Observation Form (for Item 4: your observations of colleagues teaching. Also by your mentor or another approved observer for Item 5)**

| |
|---|
| Name of individual observed *(leave blank if the person does not wish to be identified)* <br><br> Date of observation <br> Department: <br> Year of study   1    2    3     P/G <br> Type of session: Lecture / Seminar / Workshop / Practical / Tutorial Other (please state) <br> Length of session:                    Length of observation: <br><br> Class size: |

| |
|---|
| What are the intended learning outcomes of the session? *(Ask the person observed beforehand)* <br><br><br><br><br><br> |

*Please use these questions to assist your observation. If any of the sections are not appropriate for the observation situation, please just leave them blank, or substitute another heading*

| Area of Practice | Observer comments |
|---|---|
| **Preparation:** <br> Was the session well organised? | |
| **Content:** <br> Was the content pitched at an appropriate level? Too much info? Too little? | |

| | |
|---|---|
| Were students challenged to think and reflect? | |
| **Methods:**<br><br>What teaching methods were used? Were they appropriate for the topic, and students?<br><br>Were students asked to complete required tasks?<br><br>Did students receive any feedback? Was any feedback offered constructive and helpful? | |
| **Pace:**<br><br>Was the session well paced? Was there room for questions , discussion? | |
| **Use of examples:**<br><br>Did the use of examples enhance student understanding?<br><br>Were student examples asked for?<br><br>Were links made to previous learning? | |
| **Teaching environment:**<br><br>How effective was the use of the teaching environment?<br><br>Were specialist equipment and teaching materials used successfully?<br><br>Were the needs of students with a disability (or other possible barriers to learning) taken into account?<br><br>Were any safety issues highlighted? | |

| | |
|---|---|
| **Resources:**<br><br>Were visual aids, artefacts, and information and / or communications technology used?  Did these enhance or detract from the learning? | |
| **Overall:**<br><br>In what way was this a learning experience from which the students were able to understand, learn and apply new skills /knowledge?<br><br><br><br>Was there particularly innovative or excellent practice?<br><br><br><br>To what extent were the learning outcomes achieved? | |

Name: of observer: _____

Date of observation : _____

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**Self-assessment form and questions for guidance for reflecting on your own lecture and small group sessions**

*Complete first two boxes __before__ the session starts*

College:

Department:

Year of study   1      2      3     4     5     P/G

Class size:

Type of session: Seminar / Workshop / Practical / Tutorial/Other (please state)

Length of session:

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What do you intend to achieve in this session? What is your plan?

Have you written learning outcomes for the session?  If so, write them below.

Do you intend to share the session learning outcomes with the students at the start of the session?   YES/NO

If no, why not?

*Use these questions to assist your self-assessment. If any of the sections are not appropriate for the situation, feel free to substitute another heading/different questions*

| Area of Practice |
| --- |
| **Preparation:** <br><br> Is this the first time that you have done this session? <br><br> How did you prepare for the session? <br><br> Did you arrive on time? Did students arrive on time? If students were late, how was this handled? <br><br> What learning activities did you use? What were students expected to do? <br><br> Do you think now that the activities were appropriate for the topic, and students? |
| **Content:** <br><br> Was the topic and activities pitched at an appropriate level? <br><br> Were students challenged to think and reflect?  How? |
| **Timing:** <br><br> Was the session well paced? Was there enough room for students' questions and discussion? Did you cover everything you intended to cover? How would you change the timing next time? |
| **Feedback:** <br><br> Did students receive any feedback? From you or from each other? Was the feedback constructive and helpful? Could the session have incorporated more feedback? |
| **Teaching environment:** <br><br> How appropriate was the teaching environment for the activities you intended?  Was there anything you could do to improve this? <br><br> Were specialist equipment and teaching materials used successfully? <br><br> Were there any safety issues? If so, were these highlighted? |
| **Resources:** <br><br> Were visual aids, artefacts, and information and / or communications technology used?  Did these enhance or detract from the learning? |
| **Overall:** <br><br> Reflecting on your experience of this session, do you think that the students were actively learning?  What went well? What went less well? What would you do differently next time? <br><br> Was there any innovative practice which you were trying out? How well did it work? How could it have been done more effectively? <br><br> To what extent were your learning outcomes/intentions for the session achieved? <br><br> Do you have any evidence for this? |

# DECLARATION

I, the undersigned declare that the submitted portfolio is my original and genuine work. It has

not been copied, borrowed or written by someone else. If my work is found to be plagiarized,

the Centre for Innovation in Learning & Teaching (CILT) at University of Health Sciences

will have the authority to debar me from the course.