

**Annex VII - D: Student-centred teaching and learning methods in the subject areas of Health Sciences**

Categories of Learning outcomes	General student-centred teaching and learning methods recommended by SLQF	Specific Student-centred teaching and learning activities in Health Sciences
<b>1. Subject / Theoretical Knowledge</b>	Independent learning activities, interactive lectures, team-based learning, and other small group activities	A basic sciences lecture or a self-learning lesson interspersed with some quizzes (or other such activities) for the learner to self-assess or enhance the theoretical understanding of the learning material.
<b>2. Practical Knowledge and Application</b>	Problem-based learning, team-based learning, inquiry-based learning, practical classes, laboratory sessions, role play	<ul style="list-style-type: none"> <li>(a) A lesson either based on a clinical scenario/s or a lesson incorporating a clinical scenario/s, where the students either individually or in small groups address the issues in the said scenario/s, as if they encountered the said scenario/s in an actual clinical setting.</li> <li>(b) Conducting either a full or a part of a patient encounter.</li> <li>(c) Conducting essential clinical procedures and manoeuvres.</li> <li>(d) Practical sessions in the laboratory or a field session in the community.</li> <li>(e) Research projects.</li> <li>(f) Elective projects.</li> </ul>
<b>3. Communication</b>	Student presentations, role play, debates, dramas	<ul style="list-style-type: none"> <li>(a) Taking and presenting a history in the actual clinical setting or as a role play.</li> <li>(b) Breaking bad news.</li> <li>(c) Delivering health promotion talks or developing health promotion material.</li> <li>(d) Communicating with other healthcare professionals regarding patient management.</li> <li>(e) In-class student presentations/role plays.</li> <li>(f) Writing a referral letter</li> </ul>
<b>4. Teamwork and Leadership</b>	Group projects, industrial training, small group learning; e.g. problem-based learning, games	<ul style="list-style-type: none"> <li>(a) Students working together in a small group learning session such as a PBL.</li> <li>(b) Contributing to the management of a patient in the clinical setting; e.g. monitoring a patient.</li> <li>(c) A group project as an elective or a research activity.</li> </ul>
<b>5. Creativity and Problem Solving</b>	Assignments, projects, small group learning activities; e.g. problem-based learning	<p>Any or all of the following (a-e) performed either individually or within a small group learning session in a simulated (i.e. in-class) or actual clinical setting.</p> <ul style="list-style-type: none"> <li>(a) Discussing the process and cons of different patient management plans.</li> <li>(b) Discussing the best option in an ethical dilemma.</li> <li>(c) Reasoning out the pathophysiological basis for an actual or hypothetical (e.g. paper-based) patient</li> </ul>

		<p>condition.</p> <p>(d) Justifying a clinical diagnosis, ordering of investigations or a treatment plan.</p> <p>(e) Reasoning out the pathophysiological basis for a treatment plan for an actual or hypothetical (e.g. paper-based) patient condition.</p> <p>(f) Research project.</p>
<b>6. Managerial and Entrepreneurship</b>	Group projects, industrial training, small group learning; e.g. problem-based learning, games, simulated training, industrial (workplace-based) training	<p>Any or all of the following performed either individually or within a small group learning session in a simulated (i.e. in-class) setting.</p> <p>(a) Improvising to bring about the best patient outcome in a resource-poor setting.</p> <p>(b) Manage limited resources to prioritize on the most-needy patients.</p> <p>(c) Applications on health economics, medical administration and healthcare systems.</p>
<b>7. Information Usage and Management</b>	Assignments, presentations, projects, case studies	<p>(a) Documentation, access, retrieval and storage related to medical/health records.</p> <p>(b) Conducting a literature search.</p> <p>(c) Practising best-evidence medical care (EBM).</p> <p>(d) Participating in epidemiological studies.</p> <p>(e) Learning from an e-learning module.</p> <p>(f) Preparing and delivering a presentation using multi-media.</p> <p>(g) Preparing and submitting case reports, assignments using an electronic learning system.</p>
<b>8. Networking and Social Skills</b>	Student presentations, role-play, debates, dramas	<p>Any or all of the following performed either individually or within a small group learning session.</p> <p>(a) Responding to or initiating a forum post in the learning management system.</p> <p>(b) Establishing links with experts in the field electronically or face-to-face (e.g. during conferences, symposia or workshops) to engage in professional discussions.</p> <p>(c) Working with patient groups or patient support groups.</p> <p>(d) Conducting health promotion activities in the community.</p>
<b>9. Adaptability and Flexibility</b>	Group projects, industrial training, small group learning; e.g. problem-based learning, role plays, portfolios	<p>Any or all of the following performed either individually or within a small group learning session in a simulated (i.e. in-class) setting or in real-life setting, as the case may be.</p> <p>(a) Customizing a management plan based on the patient needs.</p> <p>(b) Using multiple modalities of learning to suit a given situation; e.g. learning from patients, other healthcare professionals, web searches, etc.</p> <p>(c) Accommodating the needs of other healthcare professionals in managing a patient.</p> <p>(d) Considering multiple options and their</p>

		consequences for a given problem, and changing one's own course of action accordingly
<b>10. Attitudes, Values and Professionalism</b>	Group projects, industrial training, small group learning; e.g. problem-based learning, role play, portfolios	Portfolio entries, workplace learning situations, small group learning activities to show: (a) empathy and emotional intelligence in all clinical and professional activities; e.g. patient management, engaging with other health professionals, engaging with patient relatives. (b) adherence to good medical practice as outlined by professional organizations such as SLMC, GMC.
<b>11. Vision for Life</b>	Portfolios, reflective practice	Portfolio entries, electives or other assignments/projects showing the ability to work towards a common long-term goal related to the learner's own ambition, career-goal or preference.
<b>12. Updating Self / Lifelong Learning</b>	Portfolios, reflective practice	Portfolio entries or other assignments/projects that require the student to identify their own learning needs and achieve those learning needs by systematically going through the steps of an established reflective learning cycle.

**Note:** All the above teaching and learning activities should ideally be observed or monitored (i.e. supervised) by a teacher and feedback given to the student based on their performance.