



**بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ**

**Kingdom of Saudi Arabia**

**Qassim University**

**Unaizah College of Medicine**

**Academic Affairs – Medical Education Unit**

**Assessment and Evaluation Office**

**Assessment and Evaluation at Unaizah College of Medicine**

**Guide to Medical Student Assessment and Evaluation**

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# Foreword

Assessment of our medical students at Unaizah College of medicine and Applied Medical Sciences (UCM) is one of the ways of affirming our obligation to society in Kingdom of Saudi Arabia and to the public at large around the globe. Through assessment we can ensure that our future doctors have acquired the necessary competency of knowledge, skills and attitude to work as excellent physicians and are capable of meeting the demands of society's healthcare needs.

The competent delivery of healthcare requires not just knowledge and technical skills, but must include other qualities such as communication, counselling, interdisciplinary care, and evidence-based care as it has been clearly stated in the vision and mission of our college. Therefore, our assessment system needs to be comprehensive and robust enough to assess these attributes along with testing for essential knowledge and skills. It is also crucial that our assessment system meets the requisite criteria of a good assessment by properly and effectively addressing the issues of validity, reliability, fairness and transparency.

We believe assessment is a process that should not be taken in isolation; it should be tightly linked to other components of the curriculum (learning outcomes and instructional methods) to facilitate its development and revision and provide a rational basis for making purposeful changes to it. Thus as Vice-Dean of Academic Affairs of this college, we will try our level best to harmonize and implement our assessment system together with these other components, along with continuous update to our faculty members on best practices in assessment and how to make a conscious educated effort in implementing them.

The success of these endeavours depends on easy and concise information on the various methods of assessment and evaluation. The Academic affairs and Assessment and Evaluation office at Medical Education Unit have taken the initiative to write this very practical and needed guide on assessment. This guide will give faculty members at our college the necessary knowledge and confidence to design valid, reliable, fair and transparent assessment for our students.

Assistant Professor of Surgery and Medical Education

Dr. Azzam Alkadi, Vice-Dean of Academic Affairs

Unaizah College of Medicine, Qassim University,

Kingdom of Saudi Arabia, December 2013

## **About this Guide**

The purpose of this Guide is to provide a simple, practical reference to commonly raised questions about assessment instruments to the faculty members at Unaizah College of Medicine and Applied Medical Sciences. In preparing this Guide we have taken into consideration assessment methods that are pertinent to our college UCM. Therefore, we have focused on selected assessment instruments that are now in use or likely to be used in future at UCM.

This Guide is meant for UMC faculty members who are running the assessment of student in their respective departments/programs; it seeks to give them a better understanding of the principles of assessment, as well as an overview of the assessment methods available at UCM. In addition, we believe the Curriculum Committee members will also find this a useful source of information. Proper assessment drives student learning and helps in detecting and filling the gaps in instruction and curriculum by comparing learning objectives (desired learning) to learning outcomes (what actually was learned) and use the information generated by these comparisons to make programmatic changes.

This Guide is divided into five sections: Section 1 of this Guide provides a broad overview of the basic concepts and terminologies used in student assessment, including definition, principles, importance, purpose, types of assessment and criteria of good assessment. Sections 2 focuses upon writing an assessment plan for the academic program/course, and to implement them by using examination blueprint and a model of assessment that explaining range of competencies that should be assessed. Section 3 consist of types of exam questions that are now in use or likely to be used in future at UCM.

Section 4 describes The Marking scheme, Grading System, Examination Rules and Regulations which follows Qassim University Examination Rules and Regulation. Section 5 focuses upon Examination Committee and its roles and procedures. Also includes Evaluation System of course and faculty member and five appendices, namely, Guidelines for the writing of MCQs, Guidelines for the review of MCQs, Interpretation of exam result and grades adjustment policy, Course evaluation form and Instructor evaluation form.

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## Unaizah College of Medicine

### Vision:

Innovative Competency Based Medical School.

### Mission:

To graduate medical doctors at high level of accredited professional competencies through **adopting** an innovative competency based curriculum with international collaboration, **enhancing** scientific knowledge and skills needed to address medical and social responsibilities and quality, and **supporting** scientific medical research.

### Values:

- **Justice:** we seek to achieve justice principles to provide equal opportunity and be fair in dealing with all individuals.
- **Honesty:** we work in sincere way and are committed to professional ethics and morals.
- **Transparency:** we are committed to disclosing procedures and transactions while upholding the principles of accountability and integrity.
- **Quality:** We apply the highest quality standards in all services and tasks to ensure excellence and professionalism for educational outcomes and services.
- **Creativity:** we create an organizational climate supportive to creative thinking and innovative behaviour.
- **Teamwork:** we encourage a culture of intellectual and behavioural teamwork.
- **Scientific Freedom:** We promote scholarly exploration, openness, and collegial interaction with others.

### College Philosophy of Education:

UCM MD curriculum is organized in a way so graduates will obtain an identical MD degree to that granted by USA medical schools. Therefore, UCM graduate will be able to enter Matching Programs for Residency in USA in any medical specialty as he/she will have already passed United States Medical Licensing Examination (USMLE), Step 1, Step 2, and Step 2 Clinical Skills test, and be eligible for the ECFMG certification upon graduation from UCM. Additionally, an innovative medical education approach using Team Based Learning (TBL) will be the main theme for courses. TBL along with all other innovative tools of learning, such as problem-solving, evidence-based medicine, computer-based E-learning and other types of modern principles and tools used in medical schools will be used. Our medical students are coming from various educational backgrounds and the role of our college is to encourage and provide support for self-learning and critical thinking, as well as to enhance personal development. Learning is facilitated in an environment where understanding and mutual respect are valued by our students and faculty members.

### Objectives of Unaizah College of Medicine MD Program:

1. To provide medical education that would achieve medical professional competencies and contributes in applying national and international academic accreditation and quality assurance in all fields.
2. To train and graduate medical students on a high level of scientific knowledge and on the ability of self-education, analytical thinking, and problem solving.
3. To guide and develop scientific research to address social responsibilities.
4. To recruit outstanding local, regional, and international faculty members to improve UCM academic standards.
5. To commit to the values of teamwork, mutual respect, and professional performance in achieving targets.
6. To disseminate health awareness and provide distinct health services to the community.

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# Section 1

### **Definition of Assessment:**

- 1- Process by which knowledge, skills and behaviours may be tested and judgments made about competence or performance.
- 2- Assessment: The process of gathering information to monitor progress and make educational decisions if necessary. An assessment includes a test, observations, interviews, behaviour monitoring, etc.
- 3- "...an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate criteria and standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance.

Angelo (1995)

- 4- "...the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development."

Palomba & Banta (1999)

- 5- Learner assessment: Represents a particular type of educational assessment normally conducted by teachers and designed to serve several related purpose (Brissenden and Slater, n.d.). Learner assessment is best conceived as a form of two-way communication in which feedback on the educational process or product is provided to its key stakeholders (McAlpine, 2002). Specifically, learner assessment involves communication to teachers (feedback on teaching); students (feedback on learning); curriculum designers (feedback on curriculum) and administrators (feedback on use of resources).
- 6- Assessment of student learning is a process to improve the knowledge, skills, and attitudes acquired through study and practice. Through the assessment process, academic programs compare student learning objectives (desired learning) to learning outcomes (what actually was learned) and use the information generated by these comparisons to make programmatic changes.

### **Principles of Assessment at Unaizah College of Medicine:**

- The primary purpose of assessment at Unaizah College of Medicine and applied Medical Sciences (UCM) is improving student learning.
- Assessment of student learning is based on goals and objectives reflected in the College's mission.
- Assessment of student learning must have course and program significance.
- Assessment of student learning depends on clear and explicit learning goals.
- Assessment involves a multi-method approach.
- Assessment results will be used for decision making in planning and improvement processes.
- The results of assessment activities will not be used for the evaluation of individual faculty.
- Assessment data will not be used to make comparison across programs or departments.
- Successful assessment requires College support.

### **Importance of Assessment:**

Assessment is important because it drives students learning (Brissenden and Slater, n.d.). Most students tend to focus their energies on the best or most expeditious way to pass their 'tests.' Based on this knowledge, we can use our assessment strategies to manipulate the kinds of learning that takes place. For example, assessment strategies that focus predominantly on recall of knowledge will likely promote superficial learning.

On the other hand, if we choose assessment strategies that demand critical thinking or creative problem-solving, we are likely to realize a higher level of student performance or achievement. In addition, good assessment can help students become more effective self-directed learners (Angelo and Cross, 1993). As indicated above, motivating and directing learning is only one purpose of assessment.

Well-designed assessment strategies also play a critical role in educational decision-making and are a vital component of ongoing quality improvement processes at the lesson, course and/or curriculum level.

### **Purpose of assessment:**

Purposes of assessment include:

#### **1- For learner:**

- Motivation and support of student learning.
- Diagnosing student weakness and strength.
- Measuring achievement of objectives.
- Testing progress and improvement.
- Measuring competence.
- Self-evaluation.

#### **2- For institution:**

- Showing curriculum effectiveness.
  - Effective teaching.
  - Achievement of objectives.
- Quality assurance.
- Motivation of teachers.
- Predicting future performance.
- Introducing curriculum change.
- Certification and judgment of competency.
- Development and evaluation of teaching programs.
- Understanding of the learning process and student progress.
- Ranking of students and promotion from grade to grade.

### **Criteria of good assessment:**

- **Fair**
  - Fairness in exam content and grading system.
- **Valid**
  - Tests what needs to be tested.
- **Reliable**
  - Results are almost repeated.
- **Motivating**
  - Assessment drives learning.

## **Types of Assessment used at Unaizah College of Medicine:**

Following types of assessments are recommended to be practiced at UCM.

- 1- Formative Assessment.
- 2- Summative Assessment.

### **Formative Assessment:**

- Assessment for learning, no mark/grade in it (e.g. Mock exam, tests, quiz, class work etc.).
- **Aim:** It is process focused.
- **Primary purpose:** is to provide feedback to both student and teacher while the program is still ongoing.
  - **For student;** it provides information about their strengths and weaknesses.
  - **For teachers;** it provides information about the gaps that should be corrected.
- **Feedback:** improves student learning and leads to better performance in summative assessment.
- Helps students and teachers for alignment of the learning process to the intended learning objectives.

### **Summative Assessment:**

- Assessment of learning, marking/grading is the main goal (e.g. mid-course and final exams).
- **Aim:** It is outcome focused.
- **Primary purpose:** is to determine the achievement of the student or the program.
- A measure of an end point achievement.
- Distributed throughout with a bulk by the end of the course.
- Is used primarily to provide information about how much the student has learned.
- Intends to assess all competencies.
- To judge performance.
- Grade/rank.
- Quality assurance: internal & external.

## **What Types of Competencies Should be Assessed?**

Following are competencies recommended to be assessed at Unaizah College of Medicine:

Through comprehensive and robust assessment system we shall ensure that upon completing the Unaizah College of Medicine MD program, the graduate should be able to demonstrate the Saudi MED competencies as follows:

### **I. Scientific approach to Practice**

#### **1. Integration of basic and clinical sciences in medical practice**

- 1.1. Explain the normal structure and function of the body in relation to its major organ systems
- 1.2. Demonstrate the knowledge of human life cycle and its' effect on human body's structure and function (such as pregnancy, birth, growth and development, and aging)
- 1.3. Describe the molecular and cellular mechanisms that are important in maintaining body homeostasis
- 1.4. Explain the pathogenesis of various diseases, namely genetic, developmental, metabolic, toxic, microbial, autoimmune, neoplastic, degenerative, and traumatic factors, and the ways in which they affect the body in various diseases and conditions
- 1.5. Explain the fundamental principles underlying investigative techniques
- 1.6. Demonstrate knowledge of drug actions including therapeutics and pharmacokinetic, side effects, and drug interactions
- 1.7. Discuss the role of nutrition in health
- 1.8. Describe and explain the facts and concepts relevant to common clinical presentations and clinical conditions namely epidemiology, patho-physiology, symptoms and signs, complications, investigations, treatment and prognosis
- 1.9. Demonstrate knowledge of spiritual and Prophetic Medicine
- 1.10. Demonstrate and integrate behaviour and psychosocial principles related to wellbeing
- 1.11. Discuss the principles and efficiency of complementary and alternative medicine

#### **2. Evidence-based medical practice**

- 2.1. Explain the basic principles of evidence-based practice
- 2.2. Construct and apply appropriate Evidence-Based management strategies

## **II: Patient care**

### **3. Demonstration of the essential clinical skills**

- 3.1. Obtain an accurate and comprehensive medical history
- 3.2. Perform a complete systematic physical examination
- 3.3. Perform competently the common clinical procedures
- 3.4. Apply an accurate and appropriate critical analysis of clinical data
- 3.5. Demonstrate effective consultation skills

### **4. Demonstration of clinical reasoning, decision making, and problem solving skills**

- 4.1. Organize and use medical knowledge and reasoning ability to diagnose medical problems.
- 4.2. Formulate and prioritize a differential diagnosis
- 4.3. Select appropriate solution for each problem presented by a patient and develops an appropriate treatment strategy.

### **5. Management of life-threatening medical conditions**

- 5.1. Recognize, assess, and manage life and/or organ threatening conditions.
- 5.2. Appropriately manage patients with an acute medical condition.

### **6. Management of common medical problems**

- 6.1. Demonstrate the importance of psychosocial, spiritual, religious, and cultural factors in patient's management.
- 6.2. Select and apply the most appropriate and cost effective diagnostic procedures and re-analyse the medical problem according to the results.
- 6.3. Recognize the need for multiple therapeutic modalities to address acute and chronic conditions
- 6.4. Demonstrate the ability to select and write an appropriate safe prescription
- 6.5. Apply the principles of amelioration of suffering and disability, rehabilitation, palliative care including appropriate pain management
- 6.6. Make decisions in partnership with patients and/or their carers

### **7. Placing patients' needs and safety at the centre of the care process**

- 7.1. Demonstrate essential knowledge of patient safety
- 7.2. Develop skills in a range of areas related to patient safety including root-cause analysis, safe prescription, and procedures

- 7.3. Be responsible in dealing with the aftermath of errors, in both doctors and patients.
- 7.4. Demonstrate reflection and learning from errors
- 7.5. Understand and manage clinical risk
- 7.6. Demonstrate essential principles of infection prevention, and control.
- 7.7. Disclose any physical or mental ailment that would affect patient care to appropriate authorities.

### **III: Community oriented practice**

#### **8. Understanding healthcare system in Saudi Arabia**

- 8.1 Understand local and regional health care systems including policies, organization and finances.
- 8.2 Be familiar with roles and services that are provided by societies and agencies at the local, regional and national levels and cooperate with them, when applicable.
- 8.3 Critically appraise the health delivery system, and promote its development.
- 8.4 Recognize the importance of biological and non-biological (psychological, social, cultural, and environment factors) determinants that contribute to poor health of diverse populations
- 8.5 Advocate access to healthcare for members of traditionally underserved populations (rural communities, people with disabilities, minorities and others).

#### **9. Advocating of health promotion and disease prevention**

- 9.1 Demonstrate an understanding of principles of epidemiology of common illnesses within a defined population, and the systematic approaches of screening to reduce the incidence and prevalence of those illnesses.
- 9.2 Identify factors that place individuals at risk of disease or injury.
- 9.3 Explain and apply the basic principles of prevention and control of communicable disease in hospital and in community.
- 9.4 Identify factors influencing the health and illnesses patterns and their perception among populations including life style, genetics, demography, and environment, social, economic, psychology, and culture)
- 9.5 Understand the impact of chronic diseases and disabilities on individuals, families and society.
- 9.6 Identify global health issues and the role of international health organizations (including guidelines on management of pandemics)
- 9.7 Plan and participate in patient and community's education
- 9.8 Identify and suggest prevention strategies for societal problems e.g. illicit drugs, violence and abuse.

#### **IV: Communication and collaboration**

##### **10. Teamwork and inter-professional collaboration**

- 10.1 Respect the importance and roles of various healthcare professionals involved in patient's care
- 10.2 Demonstrate the ability to work with other healthcare professionals, and collaborate with them, as team members.
- 10.3 Make clinical judgments and decisions, in partnership with other colleagues as appropriate for the graduate's level of training and experience.
- 10.4 Demonstrate the ability to prevent and resolve inter-professional teams' conflicts.

##### **11. Effectively communicate with patients, colleagues, and other health professionals**

- 11.1 Communicate effectively with patients and their families regardless of their age, gender, social, cultural or ethnic backgrounds.
- 11.2 Demonstrate ability to deal with patients in difficult circumstances.
- 11.3 Break bad news effectively
- 11.4 Demonstrate ability of written communications including core writing skills (patients' record, referral, medical reports)
- 11.5 Communicate professionally with medical and non-medical professions.
- 11.6 Communicate appropriately with community members including the media, legal authorities and other sectors

##### **12. Application of medical informatics in healthcare system**

- 12.1 Make effective use of computers and other information systems, including storing and retrieving information.
- 12.2 Demonstrate the ability to keep accurate, legible and complete electronic clinical records.
- 12.3 Access information sources and use the information in relation to patient care, health promotion, giving advice and information to patients, and education.

#### **V: Professionalism**

##### **13. Adherence to professional behaviour and attitude**

- 13.1 Place patients' interests over one's own.
- 13.2 Uphold honesty, respect and integrity in all interactions with patients, families and colleagues.

13.3 Recognize threats to medical professionalism posed by the conflicts of Interests.

13.4 Respect patients and physician confidentiality, and demonstrate the legal, ethical and medical issues surrounding patient documentation.

13.5 Be accountable at all times with special emphasis on awareness of one's own limitations.

13.6 Cope adaptively and seek appropriate help for stresses, illness, conflicts and problems likely to occur during medical training and practice.

13.7 Adhere to health institutes' rules and regulations.

13.8 Adhere to the principle of quality focus practice

#### **14. Application of Islamic and ethical principles in practice**

14.1 Observe and apply the theories and principles that govern ethical decision-making and major ethical dilemmas in medicine (beneficence, non-maleficence, autonomy, probity, justice).

14.2 Understand and adhere to Islamic professional and ethical principles of clinical

14.3 Understand the Islamic law (Fiqh) in health related issues.

14.4 Demonstrate knowledge of laws and codes of professional regulations relevant to medical practice.

14.5 Obtain informed consent when applicable.

#### **15. Commitment to self-regulation and professional development**

15.1 Accept and exhibit various medical professional roles as a practitioner, teacher, and scientist.

15.2 Demonstrate a commitment to lifelong learning.

15.3 Demonstrate appropriate leadership and management skills.

15.4 Educate education to peers and other health professionals.

## **VI: Research**

### **16. Demonstration of basic research skills**

- 16.1 Demonstrate respect for ethical and governance issues involved in medical ethics
- 16.2 Understand and apply the principles of research methodology.
- 16.3 Use appropriate statistical techniques to analyse research data.
- 16.4 Critically appraise the available research evidence to address issues related to medical practice
- 16.5 Disseminate research for adding to science and improving the health of the population.

# Sections 2

## **Models of Assessment used at Unaizah College of Medicine:**

All honourable faculty members at Unaizah College of medicine are requested to consider the following **Models of Assessment** while carrying out student assessment:

### **1- Bloom's Taxonomy:**

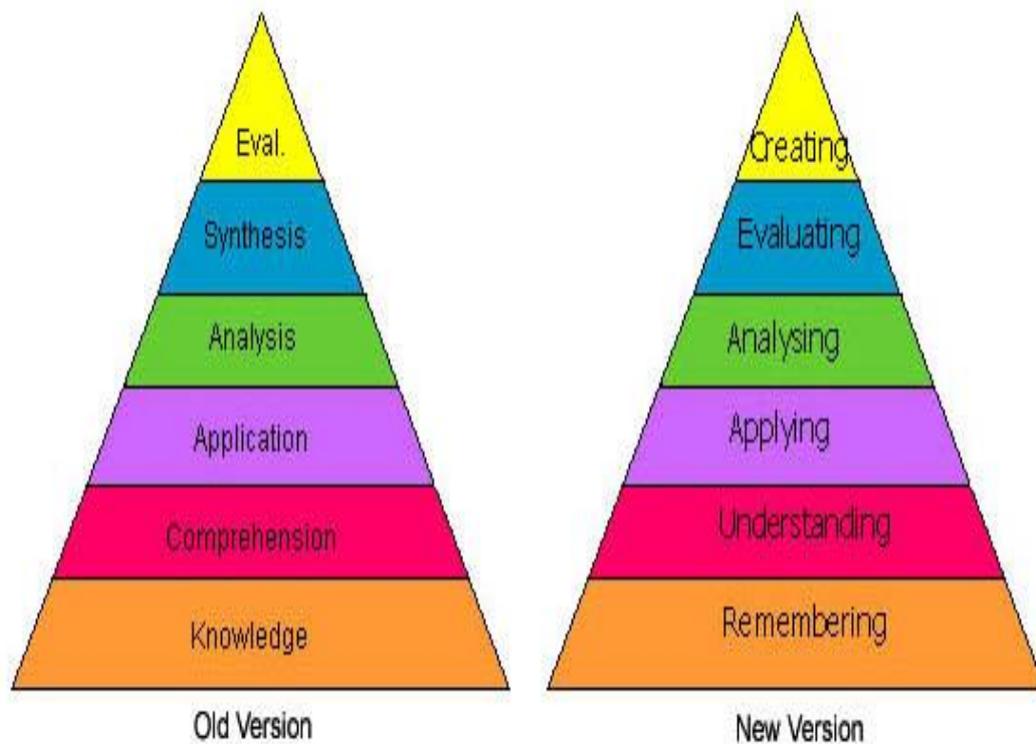
Bloom's Taxonomy should be considered wisely while carrying out student assessment particularly when you plan to assess cognitive domain. Try to specify the weight of questions in each level of Bloom's taxonomy, L1 to L6.

The Bloom's taxonomy can be helpful as you develop assessments by matching course learning objectives at any given level of mastery. When teaching lower division, introductory courses, you might measure mastery of objectives at the lower levels and when teaching more advanced, upper division courses you would most likely be assessing students' abilities at the higher levels of the taxonomy.

Bloom created a learning taxonomy in 1956. During the 1990's, a former student of Bloom's, **Lorin Anderson**, updated the taxonomy, hoping to add relevance for 21st century students and teachers. This new expanded taxonomy can help instructional designers and teachers to write and revise learning outcomes.

Bloom's six major categories were changed from noun to **verb** forms.

**Old and New version of Bloom's Taxonomy:**



**The new terms are defined as:**

Remembering	Retrieving, recognizing, and recalling relevant knowledge from long-term memory.
Understanding	Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.
Applying	Carrying out or using a procedure through executing, or implementing.
Analyzing	Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.
Evaluating	Making judgments based on criteria and standards through checking and critiquing.
Creating	Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.

**Taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of Educational Objectives:**

The Knowledge Dimension	Bloom's Revised Taxonomy Worksheet	Cognitive Process Dimension					
		1 Remember	2 Understand	3 Apply	4 Analyze	5 Evaluate	6 Create
		Recognizing or recalling knowledge, facts or concepts.  <b>Verbs:</b>  define, describe, identify, know, label, list, match, name, outline, recall, recognize, reproduce, select, state, locate	Constructing meaning from instructional messages.  <b>Verbs:</b>  illustrate, defend, compare, distinguish, estimate, explain, classify, generalize, interpret, paraphrase, predict, rewrite, summarize, translate	Using ideas and concepts to solve problems.  <b>Verbs:</b>  implement, organize, dramatize, solve, construct, demonstrate, discover, manipulate, modify, operate, predict, prepare, produce, relate, show, solve, choose	Breaking something down into components, seeing relationships and an overall structure  <b>Verbs:</b>  analyze, break down, compare, select, contrast, deconstruct, discriminate, distinguishes, identify, outline	Making judgments based on criteria and standards.  <b>Verbs:</b>  rank, assess, monitor, check, test, judge	Reorganize diverse elements to form a new pattern or structure.  <b>Verbs:</b>  generate, plan, compose, develop, create, invent, organize, construct, produce, compile, design, devise
	<b>Factual Knowledge</b>  Basic elements used to communicate, understand, organize a subject: terminology, scientific terms, labels, vocabulary, jargon, symbols or representations; and specific details such as knowledge of events, people, dates, sources of information.						
	<b>Conceptual Knowledge</b>  Knowledge of classifications and categories, principles, theories, models or structures of a subject.						
	<b>Procedural Knowledge</b>  Knowing how to do something: performing skills, algorithms, techniques or methods.						
<b>Meta-cognitive Knowledge</b>  The process or strategy of learning and thinking; an awareness of one's own cognition, and the ability to control, monitor, and regulate one's own cognitive process.							

## 2- George Miller Model of Assessment:

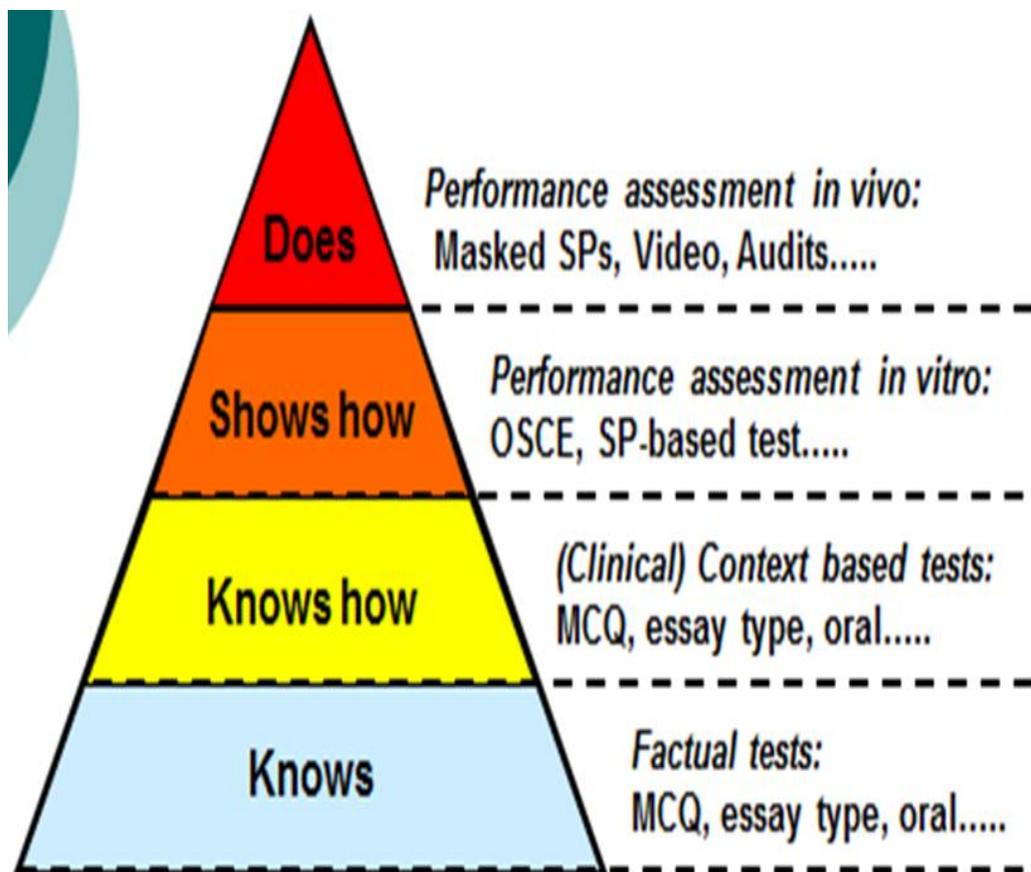
Also faculty members are requested to consider the following **George Miller Model of Assessment** while carrying out student assessment particularly when you plan to assess psychomotor domain (skills). Try to specify the weight of questions in each level of Miller's pyramid.

George Miller (1990) proposed "Miller's Pyramid," which proposes clinical competence in multiple levels: "Knows," "Knows How," "Shows," and "Does".

A candidate "knows" first before progressing to "knows how." In other words, "knows" is analogous to factual knowledge and "knows how" is equivalent to concept building and understanding.

At a higher level, a candidate "shows how" i.e. develops the competence to "perform." At the highest level, the candidate "does" i.e. actually carries out the concerned tasks.

**Dent and Harden** have added a 5<sup>th</sup> level called '**Mastery**' that sits above 'Does' to make the distinction between one who can perform a skill with competence to one who can perform it in a expert or masterful way.



### **Definition of terms used in Miller's Pyramid:**

**Level 1 - Knows:** knows some knowledge.

**Level 2 - Knows how:** knows how to apply that knowledge.

**Level 3 - Shows:** shows how to apply that knowledge.

**Level 4 - Does:** actually applies that knowledge in practice.

**Below are some examples of exam question formats which can be used to assess different levels of Miller's Pyramid:**

#### **Knows and Knows How:**

- Oral Examination.
- Long Essay Question.
- Short Essay Question.
- Multiple Choice Questions.
- Extended Matching Items (EMI).
- Key Features Examination.

#### **Shows How:**

- OSCE.
- Long Case.
- Short Case.

#### **Does:**

- Mini Clinical Evaluation Exercise (mini-CEX).
- Direct Observation of Procedural Skills (DOPS).
- Checklist.
- 360-Degree Evaluation.
- Logbook.
- Portfolio.

In the pyramid, the **lower two levels** only test cognition (or knowledge) and this is the area where inexperienced trainees usually sit: for example, they either 'know' something about a mental state examination or they 'know how' to do a mental state examination.

The **upper two levels** test behaviour: can they apply what they know into practice? e.g. can they 'show' how to do a mental state examination or do they actually 'do' a mental state examination in practice?.

Traditionally, the model has been used to match assessment methods to the competency being tested. So, if you want to see how good a trainee is at 'examination of the knee', offering multiple choice questions might demonstrate they know about it but not that they can actually do it. To test the latter the assessment method of choice might include an OSCE style station to examine the knee or better still, direct observation in the work place itself.

### **Examination Blueprint:**

- Blueprinting refers to the process where test content is carefully planned against the learning objectives.
- It specifies the objectives that are to be tested in the given examination and their relative weight on the examination.
- A proper blueprint is the first crucial step in developing a valid examination and must not be overlooked.
- A proper blueprint will ensure fair representation of all the important curricular objectives in the examination.

### **Simplified step-by-step approach to developing a test blueprint in an integrated curriculum:**

1. Create a table with major systems (cardiovascular, respiratory, etc.) on the top row and physician tasks (history taking, data interpretation, management, etc.) on the left-most column.
2. Determine the major disease or presenting problem of interest for each system.
3. Determine the weight to be assigned to each problem.
4. Map the physician's task against the disease or presenting problem.
5. Make sure that there is a cross-mark for each column and each row.
6. Determine the most suitable method for testing the task (e.g. MCQ or OSCE).
7. Assign faculty member to develop test questions for each task.

**Example of basic science exam blueprints:**

Exam	Mid-Course		OSPE		Final	
	%	No.	%	No.	%	No.
Anatomy	7.5	15	7	7	8	22
Histology	6.5	13	7	7	2.5	8
Physiology	10.5	21	1	1	7.5	21
Biochemistry	4	8	1	1	3.5	10
Pharmacology	6.5	13	2	2	3.5	9
Clinical Skills			7	3		
<b>Total</b>	<b>35</b>	<b>70</b>	<b>25</b>	<b>21</b>	<b>25</b>	<b>70</b>

**Examples of clinical skills exam blueprints:**

**Example 1:**

	CVS	Respiratory	GIT	Renal	CNS
History taking	OSCE		OSCE		
Physical examination		OSCE			OSCE
Data interpretation				Written test	
Disease management			Written test	Written test	
Prevention	Written test				
Pathophysiology		OSCE			
Epidemiology	Written test				

**Example 2:**

	CVS	Respiratory	GIT	Renal	CNS
History taking	Chest Pain		Rectal bleeding		
Physical examination		Breathlessness			Hemi-paresis
Data interpretation				Acute Oliguria	
Disease management			Epigastric pain (PUD)	Dysuria (UTI)	
Prevention	Hyper-cholesterolemia				
Pathophysiology		Asthma			
Epidemiology	Hypertension				

# Sections 3

**Types of exam questions that are used or may be used in future to assess student at Unaizah College of Medicine:**

**Multiple Choice Questions (MCQ):**

**Description:**

The MCQ is a restricted response, objective assessment instrument. It contains:

- A stem or a description of a problem.
- Lead-in or the question.
- Options list.

**Advantages:**

- Assessment of a large amount of knowledge in a relatively short time.
- Contextualization with clinical vignette and scenario to improve validity.
- Can be made reliable and objective.
- Computerized marking is possible.

**Limitations:** Good quality MCQs are relatively difficult to construct.

**Extended Matching Items (EMI):**

**Description:**

EMI is a relatively new format of objective testing which is somewhat similar to the MCQ, except that it is based on a single theme and has a long option list to avoid cuing. It is also known as extended matching question (EMQ).

**Modified Essay Question:**

- Useful in innovative integrated course curriculum.
- It is a problem solving type of essay question.
- It assesses wide spectrum of cognitive levels.
- A short history is given to the student, based on it questions are asked.
- Requires the student to apply what he has learnt, in the context of a given situation.
- The format has questions closely resembling a series of short answer questions than an essay question.

**Example:**

A 3 days old neonate presents with H/o jaundice noted at 48 hours of age. Baby is full term and weighs 3 Kg. On examination, he looks pale & has a palpable spleen. Rest of the examination is normal.

Q1. What are possible causes of this type of presentation? mention 2 causes.

1. ....

2. ....

Q2. Which investigations will you order to arrive at the diagnosis? mention 2 investigations.

1. ....

2. ....

3. ....

Q3. The bilirubin has been reported as 20 mg%. What would be your next line of action? mention 2.

1. ....

2. ....

Q4. If this baby is not managed well what can be the long term sequel? mention 2.

1. ....

2. ....

3. ....

## **Objective Structured Clinical Examination (OSCE):**

### **Description:**

OSCE is an assessment tool in which the components of clinical competence such as history taking, physical examination, simple procedures, patient management problems, communication, and attitude are tested using agreed checklists (a standardized marking scheme specific for each case is used.) and rotating the students round a number of stations some of which have observers with check lists.

OSCE is applicable to any situation where clinical competencies are to be tested. It consists of multiple stations (each station takes around 10 to 15 minutes), where each candidate is asked to perform a defined task as mentioned above.

OSCE stations, some of it might be silent; consist of skill of reading an EKG, Chest X-ray, Laboratory abnormality and/or a picture of abnormal signs etc. Number of silent can be up to 7 stations out of 15 and the remaining are pure clinical examinations.

### **Advantages:**

- An effective alternative to unstructured short cases.
- Allows wider sampling and standardization of cases.
- Greater reliability of marking.

## **Objective Structured Practical Examination (OSPE):**

### **Description:**

OSPE is a new concept in practical assessment of basic medical sciences; it is a tool which is used to assess laboratory skills (e.g. anatomy) of students in the preclinical stage of a medical curriculum. It is more objective, reliable and a valid tool of assessment to assess practical aspects in integrated courses.

In OSPE, multiple stations (usually 13-20, each station takes around 3 to 5 minutes) are designed and each station has a specific objective which needs to be tested.

### **Advantages:**

- Assess higher cognitive skills like clinical application.
- It is objective, reliable, valid and discriminatory.
- All students are exposed to same standardized questions.
- It covers a wide spectrum of learning domains.
- It tests a wide range of skills in a short period of time.

- Learning objectives can be achieved.
- The content and complexity of the exam can be controlled by the examiners.
- Gives a reasonable idea of the achievement of the student in every objective of practical exercises.
- Helps to test the analytical abilities of the students.
- Organization is easy.
- Questions bank can be made.
- Large number of students can be examined in a short time.

**OSPE exam Stations:**

OSPE examination constitutes a series of stations exhibiting:

- Cadaveric parts.
- Dissections.
- Plastinated models.
- Microscopic slides.
- Photomicrographs.
- A radiological/CT images with arrows.

**Spot OSPE examination:**

Pins and tags pointing to specific structures (popularly referred to as “spotters”). At each station, specific questions are then asked about where the pin is placed so as to identify a structure, and a question related to that structure e.g. action of a muscle, branches of an artery, relations of a viscera, functions of a cell etc.

A typical spot examination comprise 20-30 stations each lasting 1 minute and each with an A and B part. Over the years the spotter format has been developed to include other subjects, to reduce the number of ‘ identify’ questions and increase the testing of other areas such as function and application.

**OSPE STATION CARD:**

All honorable faculty members at UCM are requested to use OSPE STATION CARD while formulating OSPE exam questions to ensure a fair, valid and reliable exam.

**OSPE STATION CARD:**

**Discipline**

**Block**

**Topic of the station**

**Specific objective of the station**

**Description of the specimen/content of the station**

**Task for the examinee**

**Model answer with scoring guide**

## **Checklists:**

### **Description:**

Checklists are commonly used in assessments to capture an observed behaviour or action of a student. Generally, rating is by a five to seven point Likert scale (e.g. agree, somewhat agree, neutral, somewhat disagree, disagree). Checklists are usually used at the end of clinical rotations.

### **Advantages:**

- Easy to develop.
- Captures actual action and performed behaviour.

## **Log Book:**

### **Description:**

The candidate or student keeps a record of the patients seen or procedures performed either in a book or in a computer. The program may or may not have a defined target (e.g. number of procedures to be performed, types and number of cases to be seen) for the candidate.

### **Advantages:**

- Documents the range of patient care and learning experiences of students.
- Very useful in focusing students on important objectives that must be fulfilled within a specified period of time.
- Ensures uniformity of students' experience as students may have very different learning experiences even in seemingly similar rotations.

## **Portfolio:**

### **Description:**

A portfolio is a collection of one's professional and personal goals, achievements, and methods of achieving these goals. It may contain items such as one's best essays, written or research projects, log books, letter of reflection and evidence of professional growth, to support individual accomplishment and progression.

### **Advantages:**

- Collects evidence of actual performance in the "Does" level in longitudinal manner.
- Highly valued as a formative assessment and feedback tool.

## **360-Degree Evaluation:**

### **Description:**

A 360-degree evaluation consists of measurement tools completed by multiple individuals in a person's sphere of influence. Usually, it assesses how frequently a behaviour or an action is performed by a candidate using a rating scale (e.g. 1 = frequently, 5 = never). The observation is done by many different individuals, and generally includes the supervising physicians, peers and nurses.

The domain of competency assessed by a 360-degree evaluation is generally restricted to aspects of observable behaviour such as communication skills, interpersonal relationship, and others.

360-degree evaluation is also known as Multi Source Feedback.

### **Advantages:**

- Assessment of actual action and behaviour.
- Assessment by multiple observers.
- Provides evidence, as opposed to impression, about individual.
- Highly valued as a developmental tool.

### **Limitations:**

- Limited research regarding psychometric qualities of 360-degree evaluation.
- Evaluators might hesitate to provide accurate rating in poorly performing candidates.
- Cumbersome data collection and analysis from a large number of raters.

## **Key Features Test (KF):**

### **Description:**

The key features test was originally developed by the Medical Council of Canada (MCC) for its licensing examination. It is a clinical scenario based paper and pencil test. A description of the problem is followed by a limited number of questions, usually two to three that focus only on critical, challenging actions or decisions. Both write-in and short-menu formats can be used in the answer scripts. In the MCC licensing examination, the KF test is implemented along with the more conventional MCQ.

**Long Case:** (long case method is not used at UCM).

**Common Practice:**

It involves the use of a non-standardized real patient. The candidate is usually assessed on one long case and three to four short cases with oral examination. The candidate may or may not be observed during the examination.

**Advantage:**

- Authenticity: it is argued that the long case provides a unique opportunity to test the physician's tasks and interaction with a real patient.

**Short Case:**

**Common Practice:**

Involves the use of three to four non-standardized real patients, with one to two examiners. Usually there is a common marking scheme for all the cases. Often, short case examinations are conducted in conjunction with OSCE exam questions.

**Advantages:**

- Authenticity: provides opportunity for assessment with real patients.
- Allows greater sampling than the single long case.
- Assessment of clinical examination skills in greater detail.
- Good construct validity.

## **Poster Evaluation:**

1- Appropriate Layout and Format (5 marks):

- Posters are to be portrait not landscape.
- Poster boards supplied will be 2.30 m high by 1 m wide.
- Poster's MUST BE OF HIGH QUALITY A4 PAPER.
- Please bring double face tape in order to hang your poster.
- Restrained use of 2 - 3 colours for emphasis is valuable; overuse is not.
- Graphic materials should be visible easily from a minimum distance of 4 feet.
- Every poster should have a "headline" and a "byline":  
Title—in 120-pt font < 10 words, Name and affiliation—in 80 pt.

2- Following the objectives previously divided by your supervisor (2 marks).

3- The first impression of the poster which is simple and easy but effective and informs everyone that looks at just it what they are expected to know without delay (1 mark).

4- The title is equivalent of a newspaper headline—short, sharp, and compelling (1 mark).

5- Keeping the content concise, clear and direct. Everything on the poster should help convey the message (5 marks).

6- Usage of "reader training" to guide the organization of the poster. Most viewers will read from upper right to left and from up to down. Breaking up the story into "columns" (as "newspaper"), putting important points at the top of each column. As people will be looking at the poster while standing, not sitting (1 mark).

7- Usage of headings to guide the viewer through the poster which must be descriptive, concise, parallel, logical and hierarchical (1 mark).

8- Usage of self-explanatory graphics should dominate the poster. One carefully produced chart or graph often says more than hundreds of words (1 mark).

9- Keeping text to a minimum, DO NOT PUT TEXT IN ALL CAPS and avoid long lists, too (1 mark).

10- Team work of the students and their personality must appear on the work beside their names and affiliations (1 mark).

11- All contact information as E-mail, should be written for better communication (1 mark).

12- In summary, a good poster has four key characteristics: eye-catching, readable, well-organized and succinct (total marks = 20).

### **Field Visit Evaluation Report:**

For each field visit activity a checklist or structured report form for assessment of student work will be formulated. The checklist and/or structured report will covers all learning objectives specified for each field visit.

The marks allocated for each field visit will be between 5 to 10 of total marks of the course (out of 100), 1 to 2 marks will be for attendance and the rest of marks will be for the activities carried out by the student during the visit.

Field visit marks earned by students are to be approved by the supervisor in case student visits health care setting under supervision by one of the a college faculty member. In case students are tasked or assigned to visit health care setting independently his/her works should be signed by health personnel in charge of that setting and approved by his/her supervisor.

**Long Essay Questions (LEQ):** (long essay question is not used at Unaizah College of Medicine).

#### **Description:**

Typically a long essay is a piece of prose that varies in length from several paragraphs to several pages. The question stem often contains a phrase such as: "Describe the management of ...". Scoring of the essay questions deserves special attention especially in the context of an examination. Two methods of scoring are generally employed: analytic (point-scoring) method or global scoring method. The analytic method is more useful in focused essay question. In the analytic method, the model answer is broken down into several portions and marks are assigned to each content area. A predetermined structured marking scheme and use of multiple rates further improves the reliability.

In global scoring, the examiner reads the entire essay and makes a global (holistic) judgment about the quality. Global scoring may be in the form of a letter (e.g. A to E) or Likert scale-type (e.g. fail, borderline fail, fair, good, excellent). Cashin (1987) suggested a method of global scoring. According to his suggestion, examiners read all the essays quickly and sort them into piles of different grades. Then the examiner re-reads each pile to ensure that each essay has been accurately (fairly) assigned to that pile.

#### **Strengths of Essay Questions:**

- Assessment of complex learning situations that cannot be assessed by other means.
- Assessment of writing skills and the ability to present arguments succinctly and coherently.

### **Short Answer Questions (SAQ):**

#### **Description:**

A practical alternative to the long essay question, the short answer question is an open ended, semi-structured question format. A structured, pre-determined marking scheme improves objectivity. The questions can incorporate clinical scenarios. A similar format is also known as modified essay question (MEQ) or constructed response question (CRQ).

#### **Advantages:**

- Better content coverage as compared to long essay question.
- Improved objectivity as the marking scheme can be structured and predetermined.
- Less laborious to mark.
- Higher chance for assessment of clinical reasoning.

### **Oral / Structural Oral Examination:**

#### **Description:**

In an oral examination, a candidate faces one or more examiners who ask questions. Examiners might use a blueprint to select content area and a structured marking scheme (Structural Oral Examination). Often, oral examinations are conducted in conjunction with OSCE exam questions. In UCM we prefer Structural Oral Examination to ensure consistency, and fair, valid and reliable assessment to our student.

## **Clinical skills Assessment at Unaizah College of Medicine:**

### **Methods of assessment of clinical skills:**

Assessment is done with every teaching session (formative) and at the end of the clinical teaching course (summative).

### **Objectives and Guidelines for clinical skills:**

1. Clinical Skill is part of the curriculum that deals basically with learning of skills (method of examination).
2. In addition to learning skills it deals with the understanding of the basic concepts of skills and its meaning not only the technical part of the a skill.  
Always ask why?
3. Learning clinical skills is NOT an internal medicine or general surgery session. It is NOT the place for learning etiology, pathogenesis and treatment of diseases.
4. However, clinical skills try to connect basic knowledge that being taught in the class to the real clinical life.
5. Practicing the skill that being taught in the session at home or in a nearby health facility is vital to enforce the teaching process.
6. The skills sessions are arranged in order to go hand in hand with the other parts of the syllabus, so keeping it in the same order is of utmost importance.
7. The sessions of clinical skills are done weekly.

### **Recommended references are:**

1. Tally N. Clinical Examination: A Systemic Guide to Physical Diagnosis. Blackwell.
2. Monroe J. McLeod's Clinical Examination. Churchill Livingstone.

### **A session of clinical skills and its formative assessment:**

1. The students are expected to come prepared about the topic.
2. The session starts with a quiz for 10 minutes.
3. Then a demonstration is given for up to 30 min. on the topic by the staff concerned in the class.
4. All concerned staff and demonstrators are supposed to attend the demonstration so that the methodology is unified amongst all the groups.
5. Students are then divided into groups (average 12 students per group).
6. Each group is attended by a staff member to watch and supervise the students while practicing the skill.
7. The clinical practice sessions are HANDS ON sessions which means that the student (PRACTICE NOT WATCH).
8. A log book will be filled by the supervising staff upon performing the skill properly.
9. You are strongly advised to do some more reading on the topic on the same day after the session and more importantly to do a lot of practice at home or at nearby health facility (you can get a letter from the college to facilitate this).

### **Marks for clinical skills assessment:**

1. The mark of the clinical skills is part of the total course mark.
2. It is considered as 8% of total course mark.
3. The mark is distributed as follows:
  - 20 % quizzes.
  - 30 % log books.
  - 50 % Final clinical examination.

We hope that clinical skills will lay the foundation for your future clinical life.

Proper preparation and practice will ensure that you can get the maximum benefit out of these sessions.

### **Details of the session assessment:**

- Every session starts with a quiz about the topic that is posted on the web site at least 3 days earlier.
- Each quiz consists of 5 MCQ questions and takes about 10 minutes to take it.
- Then after the demonstration and application by the students, evaluation takes place at the end of the session. It takes care of the practical performance of the skill by the students (it involves a log book).
- In session evaluation takes 50% of the clinical skill course mark (20% for the written part, 30% for the skill performance).
- Final examination is done at the end of each block (summative).
- Final examination is a clinical examination only (has no written part) and has the weight of 50% of the total clinical skills mark.
- Final examination is done at the end of each block and consists of 3-5 stations depending on the number of sessions given.
- Stations are usually duplicated (each skill has two stations) to make examination time shorter.
- Each station is 3-5 minutes long depending on the nature of the skill.
- Each station is headed by a staff who most of the time had shared in the teaching of the course.
- The marks of all stations are equally distributed.
- Examination in the station usually demands the student to perform the skill and may be followed by a question or two about the skill.
- Marks during the examination are NOT subjective and are based on a check list that consists of items that has to be fulfilled by the student.
- Each item in the checklist has its own weight in the student evaluation.
- At the end of examination the total mark is calculated out of 100% then calculated out of 8%.
- $100\%=8\%$  (the weight of the clinical skills out of the whole teaching course).

At the end we must say as said by teaching professionals: if you want to change your teaching you must change the method of assessment.

Our students have changed based on the above way of assessment, they usually come prepared to the session and during the day of the session most students are busy asking other staff, reading their references and are usually very active during the clinical session and this has made our session exceed their usual allocated time because our student won't leave till they have truly mastered the skill.

We feel that the results of our clinical skill sessions are very rewarding.

Despite of this we still think that we have to keep reviewing and improving our method of assessment and hence our teaching methods based on the outcome of the teaching process.

**Strengths of clinical skills teaching and assessment at UCM:**

1. Keen students, cooperative faculty members, and open minded college administration help a lot in creating a conducive and supportive learning environment which result in enhancing learning outcomes.
2. Establishment of monitoring bodies in the college i.e. medical education unit to evaluate and discuss all the curriculum and assessment tools.
3. New assessment tools were introduced to clinical skills sessions and made us distinguished among others. i.e. pre-session quiz has been introduced that made our students always prepared and maximized the benefit from the sessions.
4. Involvement of more and more clinicians in the teaching process of clinical skills.
5. Active share from our junior demonstrators who showed a very high competency and enthusiasm in guiding our students in the clinical skills sessions.
6. An active and interactive web site made communication process amongst faculty and between faculty and students very fruitful and rewarding.

Final evaluation of clinical skills will be based on PASS (COMPETENT) or FAIL (NON-COMPETENT) basis. It means that if you pass clinical skill course you get the WHOLE 8%, and if you fail you get ZERO. If you fail the clinical skills you CANNOT PASS THE WHOLE COURSE.

# Sections 4

### **Assessment Communication at Unaizah College of Medicine:**

- Details of the assessment tasks including type of questions e.g. MCQs - OSPE - Clinical Skills etc., required word counts (if appropriate), weighting, due dates and marking criteria will be specified and made available to students in the unit outline.
  
- Requirements necessary for students to pass the unit must be explicitly stated in the unit outline. Requirements for an individual assessment task to be passed should generally link to key course learning outcomes.
  
- Students will be informed as to when and how they will receive feedback on each assessment task.
  
- Where the assessment takes the form of a group task, students must be informed in advance as to how individual marks will be determined. If the allocated group mark is to be modified for any group member to reflect their individual contribution, this process must be communicated clearly to the students in advance, together with information to show how individual marks are calculated.
  
- Assessments may be changed after the publication of the course outline, providing that such changes do not disadvantage student. Under these circumstances students will be notified as soon as is reasonably practicable.

### **Examination Marking Scheme at Unaizah College of Medicine:**

- All examination questions in MCQs format are machine-marked - by a **COMPUTER**.
- For all other formats of examination question e.g. clinical skills, essay etc. a Rubric, Check List and/or Model Answer will be formulated for each exam item to ensure fairness, reliability and validity.

**The course coordinator should conduct a review of the results. This review may comprise one or more of the following methods:**

1. Spot checking a random or selected sample of student work to check for consistent application of marking criteria and standards;
2. Second marking a random or selected sample of student work to compare marks awarded;
3. Second marking student work deemed to be at a borderline (pass/fail or between grade boundaries);
4. Statistical analysis of results to see if there is any substantial variation between markers.

If anomalies are detected, student work will be reassessed and marks adjusted accordingly before work and marks are released to students.

### **Guidelines for Rubric Development at Unaizah College of Medicine:**

A rubric is one of the tools we use for student assessment, which is particularly useful in formative assessment because it helps in providing more consistent and objective assessment and detailed feedback to students. A rubric is scoring scale used to assess student performance along a task-specific set of criteria.

Authentic assessments typically are criterion-referenced measures. That is, a student's aptitude on a task is determined by matching the student's performance against a set of criteria to determine the degree to which the student's performance meets the criteria for the task. To measure student performance against a pre-determined set of criteria, a rubric, or scoring scale, is typically created which contains the essential criteria for the task and appropriate levels of performance for each criterion.

### **Types of rubrics:**

1- Analytic rubric:

Articulates levels of performance for each criterion to assess student performance.

2- Holistic rubric:

Does not list separate levels of performance for each criterion.

### **A four-point rubric:**

It can be 1 to 4 or 4 to 1 style, but both rubric does the same thing.

### **The general description for each level of a four-point rubric:**

1 = poor.

2 = acceptable.

3 = very good standard.

4 = excellent.

Then we write explanation of what we mean by poor, acceptable, very good and excellent. What does excellent mean? With our rubrics, we have to be realistic about what excellence is and what it means. We cannot expect perfection. Our assessments must be achievable and be clarified. Excellent means a high standard or quality moderated by the level of the learner.

### **Why Include Levels of Performance?**

They provide the following:

#### **1- Clearer expectations:**

It is very useful for the students and the teacher if the criteria are identified and communicated prior to completion of the task. Students know what is expected of them and teachers know what to look for in student performance. Similarly, students better understand what good (or bad) performance on a task looks like if levels of performance are identified, particularly if descriptors for each level are included.

#### **2- More consistent and objective assessment:**

In addition to better communicating teacher expectations, levels of performance permit the teacher to more consistently and objectively distinguish between good and bad performance, or between superior, mediocre and poor performance, when evaluating student work.

#### **3- Better feedback:**

Furthermore, identifying specific levels of student performance allows the teacher to provide more detailed feedback to students. The teacher and the students can more clearly recognize areas that need improvement.

## **The Use of Rubric in Assessment of Skills and Knowledge:**

Often, rubrics are associated with skills assessment. However, rubrics are not just for skills, projects, or processes. Rubrics are used for assessing knowledge, writing essays, or the aspects of written assignments.

For example, senior medical students are asked to evaluate the impact or problem an issue has on society. The progression through the rubric goes from lower-order thinking skills to higher-order thinking skills (Bloom's taxonomy):

- Recall: outline, list, define.
- Comprehension: describe, explain.
- Application: interpret, demonstrate.
- analyze: compare, illustrate.
- Synthesis: arrange.
- evaluate: justify, appraise.

## **Steps for Development of rubric:**

**Stage 1:** is for developing rubrics if the task is not already defined.

### **1. What are the learning outcomes?**

The first question to ask is, “What are the learning outcomes and why are we doing this assessment?” If we don't need to do an assessment, then why do it?

### **2. Identify the key elements or components:**

Once the learning outcomes for the assessment have been established, the aspects of the assessment that we are going to assess need to be identified. Are we assessing one aspect of the project development process? Are we addressing other aspects instead, such as knowledge, process, and so on?

## **Listed here are the 4Ds:**

- 1- Define.
- 2- Design.
- 3- Do.
- 4- Debrief.

### **3. Clearly define the task:**

The next three parts of task development are intimately linked together. Here we define the assessment tasks that are linked to the project the students will undertake. Assessment tasks are best when they are straightforward and uncomplicated.

A structure to consider when writing tasks and developing projects is *SMART*.

This is an excellent guideline in an easy-to-remember form, and it covers off the key points that define engaging and relevant tasks. When applying SMART, determine if the task is:

- Specific.
- Measurable.
- Attainable.
- Realistic.
- Timely.

It is best to ask, “Is this a SMART task or goal?”

### **4. Design the task:**

Again, we need to ask key questions:

Is it suitable for the purpose?

Does it link to the curriculum?

Does it link to learning objective?

Is it SMART?

Is it suitable for our student?

Can student at this level achieve at the highest level?

### **5. What are the expected outcomes?**

When we set a task, we need to consider what it is we want to have our students achieve. The best results come when you have an exemplar of the outcomes you expect. If this is not available, **clearly define the standards:**

- Excellent standard.
- Good standard.
- Acceptable standard.
- Poor standard.
- Failing.

## **6. How does the task fit with your core learning objectives or competencies?**

Having defined and designed your task, it is useful to look back and check that it does match your core competencies and learning outcomes.

### **Stage 2: Assessment Mode (Design):** Decide on:

1. Is the task formative or summative?
2. When are you using it?
3. What aspects are you providing feedback on?
4. Who is assessing—self, teacher, peer, or a combination?

### **Stage 3: Assessment Design (Design):**

1. Decide on rubric style.
2. Decide on command terms will be used.

### **Stage 4: Rubric Development (Do):**

1. Write the criteria for excellence.
2. Go from LOTS to HOTS.

### **Stage 5: Use and Evaluate (Debrief):**

Having designed and used the tool, we then need to ask if it was suitable for the student and the purpose. In addition, we can judge using these criteria:

Did it assess the components or elements accurately?

Did it provide suitable feedback?

Did it provide this opportunity for improvement?

Was it easy to use?

Was it easy to understand?

Was it clear, concise, and age appropriate?

Was it accurate?

Overall, was it suitable for the student?

Was it suitable for the purpose?

**In following 3 pages** there is one example of check list and one example of scoring rubric which are recommended to be used at UCM clinical skills examinations.

**Growth and development course (BMS211) Phase I, Premed II**

**Check list for Evaluation of Preclinical Students for Skills in the Assessment of Growth Parameters in Paediatric Examination**

**Check List for scoring of clinical skills at UCM:**

<b>Weight</b>	<b>Marks</b>
washing and warming of hands and instruments	1
gentle handling	1
warm blankets	1
adjustment of balance	1
take weight	1
know average	2
know how to get percentile weight	3
Be familiar with the normal birth weight and the increment in the 1 <sup>st</sup> year.	
<b>Length</b>	
washing and warming of hands and instruments	2
gentle handling	1
warm blankets	1
positioning of the baby	1
2 plane hard (eg books) on the crown and heel or use a sliding scale	1
take length (Need to know the normal length at birth)	1
know average	1
know how to get percentile	2
<b>Height</b>	
washing and warming of hands and instruments	2
gentle handling	1

positioning of the child	1
take height from crown to heel	2
know average	2
know how to get percentile	2
<b>Body Mass index</b>	
washing and warming of hands and instruments	2
gentle handling	1
positioning of the child	1
How to measure weight in kg, stature in m	3
Value = $\text{weight(kg)}/(\text{Height})^2(\text{m}^2)$	3
<b>Upper Segment/Lower Segment</b>	
washing and warming of hands and instruments	2
gentle handling	1
positioning of the child	1
How to measure length, measure lower segment (symphysis pubis to heel), get the value of upper segment (subtract lower segment from length)	3
Value	3

**Phase I, Premed II:**

**Growth and development Course (BMS 211)**

**Rubric for Evaluation of Pregnant lady Clinical Skills Exam**

Items to be fulfilled	Satisfactory			Un-satisfactory		Not Done
	5	4	3	2	1	0
<b><u>General attitude of the student:</u></b> - Greeting the patient. - Introduce himself. - Ask permission. - Wash hands. - Warm hands.						
<b><u>Do General examination:</u></b> 1- Check vital signs (Pulse, BP). 2- Check Body weight. 3- Urine dipstick. 4- Check for pallor and thyroid gland. 5- Breast inspection(No routine palpation) 6- Check for lower limb edema.						
<b><u>Examine the abdomen:</u></b> 1. Inspection for shape Striae etc. 2. Know the landmarks in the abdomen (symphysis pubis, xiphysternum, upper part of uterine fundus). 3. Palpate for fundal height (estimate gestational age) before and after 20 weeks. 4. Do lateral palpation (after 28 weeks of gestation). 5. Pelvic grip for the presenting part of the baby. 6. Examine for fetal heart sounds. 7. Cover the patient.						
<b>Total Mark</b>						
<b>Tutor Signature</b>						

### **Grading System at Unaizah College of Medicine:**

Grading at UCM will be conducted according to Qassim University rules and regulations for examination process and result.

The weight of grade of each exam component i.e. MCQs, OSPE, OSCE, Clinical skills, Labs, TBL etc. differ from course to course, but in general class work score must not be less than 30 percent of the final course grade (range between 30% to 50%).

**The grades earned by students in each course are calculated in a scale of 5:00 as follows:**

<b>Percentage</b>	<b>Grade Significance</b>	<b>Grade code</b>	<b>GPA (out of 5.0)</b>
95 – 100	Exceptional	A+	5.00
90 – 94	Excellent	A	4.75
85 – 89	Superior	B+	4.50
80 – 84	Very Good	B	4.00
75 – 79	Above Average	C+	3.50
70 – 74	Good	C	3.00
65 – 69	High Pass	D+	2.50
60 – 64	Pass	D	2.00
Less than 60	Fail	F	1.00

**The general grade assigned to the cumulative GPA at the time of the student's graduation is based on his/her cumulative GPA and calculated as follows:**

1. Excellent—if the cumulative GPA is no less than 4.50 out of 5.00, or 3.50 out of 4.00.
2. Very good—if the cumulative GPA is 3.75 or higher but less than 4.50 (out of 5.00), or 2.75 or higher but less than 3.50 (out of 4.00).
3. Good—if the cumulative GPA is 2.75 or higher but less than 3.75 (out of 5.00), or 1.75 or higher but less than 2.75 (out of 4.00).
4. Pass—if the cumulative GPA is 2.00 or higher but less than 2.75 (out of 5.00), or 1.00 or higher but less than 1.75 (out of 4.00).

### **The Rules of Implementation for Qassim University:**

The general grade assigned to the cumulative GPA at the time of the student's graduation is based on his/her cumulative GPA in a scale of 5:00 and calculated as follows:

1. Excellent—if the cumulative GPA is no less than 4.50
2. Very good—if the cumulative GPA is 3.75 or higher but less than 4.50.
3. Good—if the cumulative GPA is 2.75 or higher but less than 3.75.
4. Pass—if the cumulative GPA is 2.00 or higher but less than 2.75.

### **The general grade assigned to the cumulative GPA at the time of the student's graduation is based on his/her cumulative GPA and calculated as follows:**

1. Excellent—if the cumulative GPA is no less than 4.50 out of 5.00, or 3.50 out of 4.00.
2. Very good—if the cumulative GPA is 3.75 or higher but less than 4.50 (out of 5.00), or 2.75 or higher but less than 3.50 (out of 4.00).
3. Good—if the cumulative GPA is 2.75 or higher but less than 3.75 (out of 5.00), or 1.75 or higher but less than 2.75 (out of 4.00).
4. Pass—if the cumulative GPA is 2.00 or higher but less than 2.75 (out of 5.00), or 1.00 or higher but less than 1.75 (out of 4.00).

### **The Rules of Implementation for Qassim University:**

The general grade assigned to the cumulative GPA at the time of the student's graduation is based on his/her cumulative GPA in a scale of 5:00 and calculated as follows:

1. Excellent—if the cumulative GPA is no less than 4.50
2. Very good—if the cumulative GPA is 3.75 or higher but less than 4.50.
3. Good—if the cumulative GPA is 2.75 or higher but less than 3.75.
4. Pass—if the cumulative GPA is 2.00 or higher but less than 2.75.

### **Award of Honour Degree at Unaizah College of Medicine:**

**First honours** are granted to the student who has earned a cumulative GPA between 4.75 and 5.00 (out of 5.00) or between 3.75 and 4.00 (out of 4.00) at the time of his/her graduation.

**Second honours** are granted to the student who has earned a cumulative GPA of 4.25 or higher but less than 4.75 (out of 5.00), or 3.25 or higher but less than 3.75 (out of 4.00) at the time of his/her graduation.

The student who is eligible for first or second honours also must meet the following criteria:

A. He/She must not have failed any course completed at the University or any other university.

B. He/She must have completed all graduation requirements within a specified period, the maximum of which is the average of the maximum and minimum limits for completing his/her degree program.

C. He/She must have completed 60 percent or more of the graduation requirements at the university from which he/she is graduating.

### **The Rules of Implementation for Qassim University:**

First honors are granted to the student who has earned a cumulative GPA between 4.75 and 5.00 at the time of his/her graduation. Second honors are granted to the student who has earned a cumulative GPA of 4.25 or higher but less than 4.75 at the time of his/her graduation. Earning first or second honors is contingent upon the following:

1. The student has never failed a course at the university or at any university he attended before.
2. The student has finished all graduation requirements during a maximum period of the average duration between the minimum and maximum periods of study at the college.
3. The student has completed at least 60% of the graduation requirements at Qassim University.

## **Final Results to Students at Unaizah College of Medicine:**

### **Provision of Final Results to Students:**

Students will be provided with access to their final results (final grade, where applicable for each unit completed) after ratification by the concerned Board. Access will be provided at the time specified for results publication by the Course Coordinator. Access to results will be provided on line or through such other means approved by the Course Coordinator.

Access to results will include provision for students to print a copy of their results. All assessment marks provided through any means (e.g. Blackboard) are provisional and are not regarded as final until ratified by the concerned Board and the result publication date for the study period has passed.

### **Assessment Feedback to student at Unaizah College of Medicine:**

Feedback is a crucial component of assessment and considers the heart of formative assessment. Formative assessment requires feedback between the learner and the teacher. For an assessment to be formative, students must take the feedback and use it to adjust their learning. The feedback and assessment therefore must also be timely. You cannot learn, change, and develop if the unit of work has finished when you receive your feedback.

Formative assessments are ongoing, developmental, and progressive. Thus the feedback the student receives is essential; it helps them to detect the weakness and gaps in their study. The better the quality of the feedback, the better the learning outcomes for the student. So, by its very nature, formative assessment is detailed, developmental, timely, appropriate, and transparent. The impact of timely and appropriate feedback is enormous. Without feedback, assessment is NOT a learning activity; it is a compliance task.

High quality feedback will support development and will do more than simply justify the mark given. Thus, feedback forms a critical part of the learning process and should aim to be analytical, constructive and empowering. Feedback can arise in a number of ways (written, verbal) from a variety of sources (peer, tutor).

Students should receive marks, assignments and feedback as soon as practicable, to maximize their opportunity to improve their performance. Research consistently highlights the significant loss of impact to learning when feedback to students is delayed. Ideally, feedback to students for items other than a final examination will be provided under normal circumstances within **2 working days** and no later than **7 working days**.

Feedback that is used to directly support a future assessment task must be returned in sufficient time for it to provide an effective contribution to the subsequent task.

## **Teacher feedback must be:**

### **1- Timely:**

The end of the course is too late. We must provide feedback often and in detail during the process and while the course is ongoing.

### **2- Appropriate and reflective:**

The feedback must reflect the students' ability. It must be understandable.

### **3- Honest and supportive:**

Feedback can be devastating. Our role as teachers is to nurture and shape. We must provide feedback that is honest and supportive in manner and mode. The feedback must provide encouragement for student to continue his learning effectively.

### **4- Focused on learning:**

Feedback must be linked to the purpose of the task.

### **5- Enabling:**

Receiving feedback without the opportunity to act upon it is frustrating, limiting, and counter-productive. Students must be able to both learn from and to apply feedback.

## **Models of feedback to student to be used at Unaizah College of Medicine:**

Developed by **Dr. Jodie Nyquist**

For feedback in higher education

Essentially it has five stages going from weakest to strongest.

### **1. Knowledge of Results (KoR):**

Weak or poor feedback occurs when a student is provided only the Knowledge of their Results (KoR). This could be an examination or test score. For example, if a student scored 57% on the examination, he or she knows the grade, but does not know how to improve on it. This is what often happens with final examinations. Students receive their final grades but they have no opportunity to develop or learn.

## **2. Knowledge of Correct Results (KCR):**

The next stage develops from the previous one. A student is given his or her KoR and is also given Knowledge of Correct Results (KCR). For example, handing back an examination or test with a grade and working through the correct answers with the students. Learners can see the difference between their answers and the correct ones. Only reading out the correct answers is not particularly useful. This is still weak feedback, but better than just giving the student a grade. Although there is some opportunity to learn, it is limited.

## **3. Knowledge of Correct Results and Explanation (KCR + e):**

If the teacher takes the time to provide the student with an explanation of the difference between their results (KoR) and the Knowledge of Correct Results (KCR), this is a more powerful form of feedback. The learner can begin to understand and clarify the differences between what they did and what the expectations were. We call this Knowledge of Correct Results and Explanation (KCR + e).

## **4. KCR + e and Specific Actions to Reduce the Gap:**

The next stage takes the logical progression of having students know the results and the correct answer. The difference between the two has been explained and they are provided with specific actions that they can do to reduce the gap and make improvements.

## **5. KCR + e and Activity:**

The students are provided with KCR + e, specific steps to reduce the gap, and an activity that reinforces the processes, skills, concepts, or learning.

**Nyquist's Model** ties well with Dale's Learning Cone. According to **Nyquist**, the strongest form of feedback is Knowledge of Correct Results and the explanation of why the person's results and the correct results are different. Linking the feedback with an activity to practice by doing or for immediate use engages the student and reinforces the correct outcome.

From Dale's Learning Cone, the strongest activities for the retention of knowledge are using activities with immediacy or teaching others.

## **Examination Rules and Regulation at Unaizah College of Medicine:**

### **1- Attendance and withdrawal:**

1. A regular student is required to attend lectures and laboratory sessions. If his/her attendance is less than the limit (75 % of the lectures and laboratory sessions assigned for each course), the student will be deprived from continuing the course and will be denied entrance to the respective final examination. A student who is denied entrance to the examination due to absences is considered to have failed that course and is given semester work grade and the grade **DN** in the course.
2. College council must approve lists of deprived students.
3. Excuses are not valid when students miss 50% or more of class time.
4. Lists of deprived students are to be announced before final examinations.

### **Exception:**

The College Council or whatever body it delegates its authority to, may exempt a denied student from the provisions of attendance and allow him/her to take the examination, provided that the student presents an acceptable excuse to the council. The University Council determines the percentage of attendance, which must not be less than 50 percent of the lectures and laboratory sessions specified for the course.

### **The Rules of Implementation for Qassim University:**

1. College which offers the course or its behalf may allow a deprived student to enter the final examination if they submit a valid excuse provided that the missed classes are not 50% or more of class time.
2. Students whose excuses are valid take the final examinations with their peer students. College council has the right to make exceptions to this.

### **2- Absence in Examination:**

A student who is absent for a final examination, will be given a zero grade for that examination. His/her grade in the course will be calculated on the basis of the class work score he/she obtained over the semester.

If a student fails to attend a final examination in any course but offers a compelling excuse, the College Council may choose to accept his/her excuse and allow him/her to take a make-up examination. The make-up examination must be taken prior to the end of the following semester. In such cases, the course grade will be given to the student after the make-up examination.

## **The Rules of Implementation for Qassim University:**

1. An excuse of missing the final examination is considered valid in the following conditions:
  - a. The excuse must be presented within one week after it happened
  - b. Valid excuses are only the serious ones like (hospital admissions, car accidents, burn and fire accidents)
2. Makeup exams for the courses that students fail to attend for valid excuses are held within two weeks after excuse is accepted and results are given the week after.

### **3- Inability to Complete a Final Examination:**

Where a student has attempted to sit a final examination in a unit but has not been able to complete the examination or perform as expected due to illness or some other valid reason, the student may apply for an Assessment Extension.

#### **The process for applying for an Assessment Extension:**

- Student should contact invigilator first.
- The invigilator will report this to the chief of invigilation committee to take the decision on the case.
- The chief of invigilation committee should write a detailed report and submit it to the course coordinator, who will convey the matter to the Head of department and Vice Dean of Academic Affairs to assess whether to approve an Assessment Extension or not.

In considering whether to approve an Assessment Extension in these circumstances, consideration will generally only be given to students who:

- A. Do not remain in the examination venue for the full duration;
- B. Do not complete the examination paper; or
- C. Report to the examination supervisor and have their departure from the venue noted, including time of departure and reason for inability to continue.

The report of the examination supervisor will be taken into account when assessing whether to approve an Assessment Extension.

Other factors to be taken into account are:

- D. The student's academic record up to this point; and/or
- E. Any previous instances of applying for an Assessment Extension in similar circumstances.

In all cases, care should be taken to prevent any student from obtaining an unfair advantage over other students by virtue of the availability of having a second examination.

Students with a record of repeated applications for Assessment Extensions should receive appropriate academic counseling and may be refused further approvals.

#### **4- Time limit and examination:**

No student is allowed to enter the examination venue more than 30 minutes after the examination begins or leave before the first 30 minutes of the examination have elapsed.

Based on the recommendation of the relevant department council, the College Council determines the duration of the final written examinations, which should not be less than one hour and not more than three hours.

#### **5- Cheating in examination:**

Cheating in examination or attempting to cheat, or violating instructions, and examination regulations shall render the student to punishment in accordance with the Student Disciplinary By-Laws as issued by the University Council.

#### **6- Assessment (re-grading) Appeals at Unaizah College of Medicine:**

##### **Review of Assessment:**

Any student who has evidence that the mark or result awarded for an assessment task is unfair or incorrect should in the first instance raise their concern with the appropriate member of staff (lecturer or staff member responsible for marking the work). Depending on the circumstances, the student may also need to raise the matter with the course coordinator. It is expected that most situations will be able to be resolved without the need for a formal appeal.

##### **Conditions for submitting the formal re-grading appeal by student:**

1. The student is allowed to make a petition for re-grading for one course only during the semester.
2. The student has never made a petition for re-grading and proven wrong.
3. The Re-grading Appeal form must be filled by student and submitted to the Vice dean of Academic Affairs within **seven days** after announcement of the course result.
4. The committee may recommend that the student be sent to the university disciplinary committee in case they see a reason for that.

##### **Formal Assessment Appeal:**

If after going through this process, the student is still concerned with the process or the mark awarded, the student may write and submit a formal appeal.

In any instance where a student is unable to make timely contact with the lecturer or staff member responsible for marking the work (or the course coordinator), the student may go direct to a formal appeal to the Vice Dean of the Academic Affairs.

The appeal form must be filled by student and submitted to the Vice Dean of the Academic Affairs within **seven days** of the date the result of the course was notified to the student.

**Process of formal Appeal:**

The student must get the appeal form from Student Affair Administration, fill it in writing and then submit it to the Vice Dean of the Academic Affairs within **seven days** of publication of the final result.

**Grounds for a Formal Assessment Appeal:**

Students requesting a review or submitting a formal assessment appeal must demonstrate the grounds on which they feel they were unfairly assessed.

**Determination of Appeal by College Council:**

Where the Vice Dean of the Academic Affairs has been involved in the original assessment of the student in respect of which the appeal has been submitted, he or she must not be involved in determining the appeal. The appeal will be determined by the relevant faculty member or nominee.

On receipt of a formal assessment appeal, the Vice Dean of the Academic Affairs will immediately provide the head of the department with a copy of the appeal and request, who will sent it to respective course coordinator to provide the following:

- A. Comments on the appeal including any information on discussions already conducted with the student;
- B. A recommendation as to how the matter should be determined;
- C. A copy of the assessed work that is the subject of the appeal if this has not been returned to the student;
- D. Details of the criteria used to assess the student's work; and
- E. Any other information relevant to the appeal.

Once in receipt of this information, the Vice Dean of the Academic Affairs will submit it to College Council to assess the appeal and determine if a change of mark or final result is warranted.

The appeal must be determined within **ten working days** of it being received by the Vice Dean of the Academic Affairs.

**Notification to the student:**

Once a decision has been made on the appeal by the College Council, the student must be informed of the outcome immediately by the course coordinator and in any case, no later than **three working days** from the date of the decision.

**Change of Results:**

Where an appeal has been successful and the final result for a student requires amendment, it is the responsibility of the course coordinator to arrange the change of result on the student records system.

The change of result may also require the student's academic status to be reviewed.

**Student Assistance:**

A student may seek assistance and advice from the Academic Advising Services, academic staff, and/or Student Services, in preparing an assessment appeal.

In any discussions regarding review of marks or final results, the student is entitled to be accompanied and assisted by a support person e.g. his Academic Advisor or any other faculty member.

The support person may be another student, a staff member or a person.

**7- Re-sit Exam at Unaizah College of Medicine:**

In general, student will be allowed to retake exam if he/she fails no more than one course per semester.

1. If the student fails in one course he/she has to apply for a re-sit exam within two week from completing the final exam.
2. If the student fails in more than one course, he/she has to repeat the year with the new fresh batch.
3. In re-sit exam, if the student successfully passed the exam, the total exam score is adjusted out of 60 marks whatever the mark gained by the student.

**8- Graduation Requirement:**

A student graduates after successfully completing all graduation requirements according to the degree plan, provided that his/her cumulative GPA is not less than pass. If the student has passed the required courses but his/her cumulative GPA is low, the College Council, on the basis of the recommendations of the council of the department concerned, is entitled to

specify the appropriate courses that the student must complete in order to improve his/her GPA.

**The Rules of Implementation for Qassim University:**

The student must follow the degree study plan for his/her major and complete all the requirements before graduation. The student must maintain a GPA of 2:00 in a 5:00 scale in order to graduate. In case the student graduated with a GPA that is less than 2:00, the college council under recommendation from designated department may make the student take some courses to raise his GPA.

### **Important Information about Examinations at Unaizah College of Medicine:**

1. Preparing and planning for the examinations comprehensively and sufficiently before hand is crucial. Regrettably, many students are content with studying shortly before the examinations. This practice does not suffice for the PYP curricula, which are comprehensive and focus on the skills of a student.
2. All students sit for unified, multiple choice examinations as used for most courses. They are machine-marked later.
3. During mid-term and final examinations, one course is tested a day. There could be some days-off during the finals according to the period of time set for examinations. Furthermore, classes are halted during the midterms in order to allow the students to concentrate and study.
4. The material tested in each examination is announced on the website.
5. The dates and times of examinations are announced on the notice boards of the website. Students should follow them up accurately.
6. A student is strictly forbidden from sitting for an examination if he/ she does not have his/her university ID to prove his/her identity.
7. Using scientific calculators is strictly forbidden in the Mathematics examination and others.
8. Every examination usually consists of four versions.
9. Cell-phones are not allowed inside the examination rooms.
10. Every student should be sure of the examination committee number and location prior to the examinations.
11. The language of instruction and evaluation is English in all courses except for Thinking and Learning Skills.
12. The way students are distributed on examination committees is different from their distribution in classrooms.
13. A student is denied entering the examination room after the examination starts and is not allowed leaving until half an hour passes from the start.
14. A student who cheats, initiates cheating, breaks the rules of the examination, or is undisciplined is dismissed from the examination. He/she is reported to the Students' Discipline Committee to take the suitable action against him/her.
15. A student who does not attend a final examination receives a zero for it. His/her grade for that course is calculated on the basis of his/her semester grade.
16. A student's excuse is accepted if it is compelling, provided that the excuse is presented within one week of its occurrence.
17. The incomplete examination and the recording of its grade are executed within a period not exceeding the end of the following semester.
18. The class work score is evaluated in one of the following ways:
  - a. At least one written examination, plus part or all of the following: oral and practical examinations, research papers, other class activities.
  - b. At least two written examination.

# Sections 5

## **Examination Committee at Unaizah College of Medicine:**

### **Introduction:**

Examination committee has been established under the umbrella of Academic Affairs to ensure high standard of quality of conducting examinations at Unaizah College of Medicine as per college policy/guidelines that meet international standards.

The committee is responsible for overseeing and reviewing the formative exams (mock exams, class works) and summative exams (mid-course, end of the course exams) at Unaizah College of Medicine and Applied Medical Sciences. Also the committee will oversee, scheduling of the exam, the reservation of exam halls, assigning exam invigilators along with other complementary tasks and duties.

### **Purpose:**

#### **The committee will:**

- Ensure high Standard of **quality** of conducting examinations at Unaizah College of Medicine, matching it with the international standards maintained by well-established Medical Colleges in USA.
- **Review** all examination papers including the examination papers of Clinical Skills and will ensure that set guidelines have been followed and uniformity has been observed as per college policy.
- Try their best to ensure that the ultimate **objectives** of the courses have been achieved.
- Set various exams in order to assess learning outcomes and whether students have benefited from the courses as expected or not.
- Evaluate the **fairness, validity** and **reliability** of exam items so as to make the necessary improvements and correction.
- Based on the results of the evaluation of the content of the exams, the committee will give feed-back to the curriculum committee as to how the course materials should be enriched or amended when necessary.

## **Responsibilities:**

### **All members of the examination committee are responsible for:**

- Reviewing the questions of all the exams, sent to them by the concerned course coordinator, as per the approved guidelines.
- Sending back the scrutinized questions to the concerned course coordinator through the coordinator of the examination committee for final typing.
- Following up the typing, where each committee member must proofread the exams in order to avoid typing mistakes.
- Preparing answer keys, which are to be kept in total secrecy until the exams are over. The answer keys should be collected together with the exam papers.
- Ascertaining that the exams are of good quality and meeting international standards maintained by well established college in USA and other leading countries in field of medical education.
- Holding meetings as required.
- Contributing ideas in meetings.
- Carrying out exam related tasks assigned to them as immediately as possible.
- Making sure that exams are prepared well in advance of the commencements of the exam schedules.
- All Examination Committee members will report directly to the Vice Dean Academic Affairs (Chairman of the committee) through the coordinator of the Examination Committee.
- Examination Committee will give regular feedback at the end of each semester to the Vice Dean of Academic Affairs regarding the conduct of examinations, setting of question papers as per set guidelines, assessment strategies/models, examination result, gaps/lacunae found and the ways to improve them.

## **Procedures and Processes:**

Examination Committee will work in the framework of Medical Education Unit as follows:

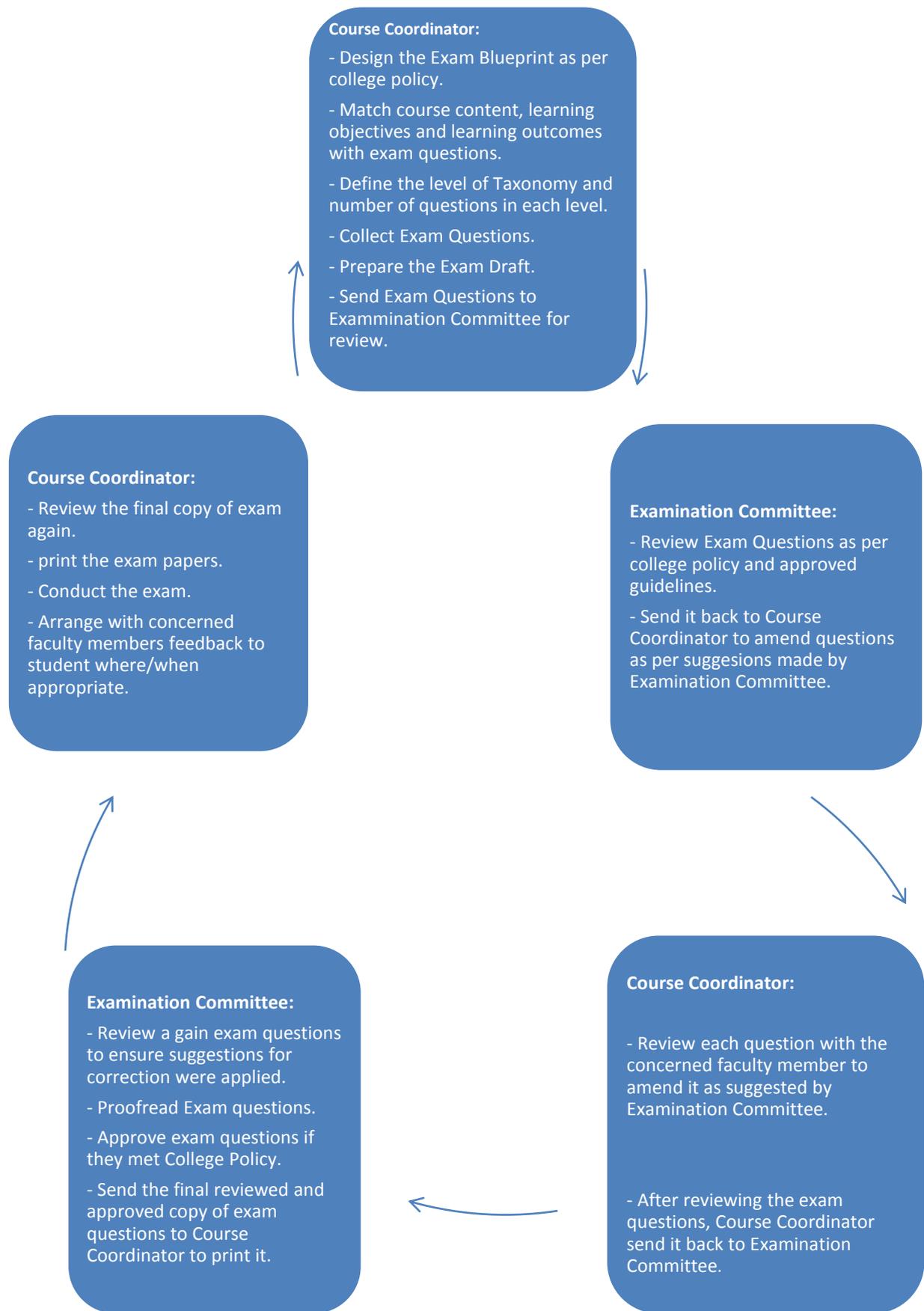
- First, Course Coordinator of concerned Course and/or Clinical Skills will forward examination blueprint specifying the objectives that are to be tested in the given examination as well as their relative weight on the examination, preferably after being reviewed and signed by curriculum officer.
- Then, Course Coordinator should collect exam questions from concerned faculty members (preferably after being discussed within their respective department/unit).
- After collection of exam questions, Course Coordinator should make sure that the test content is carefully planned against the learning objectives by using a proper blueprint. Also he should ensure that the test assesses wide spectrum of cognitive domain (based on revised Bloom's Taxonomy, L1 to L6) not just lower thinking level.
- Course Coordinator of concerned Course and/or Clinical Skills will forward the final form of exam papers to Coordinator of Examination Committee no later than nine days prior to the exam time,
- Who will make the entry/record of the document and will forward it to members of Examination Committee for individual scrutiny,
- Members of Examination Committee will meet (first meeting) for further scrutiny,
- Who after doing the needful and get it scrutinized, it will be send back to course coordinator who will contact the concerned faculty member to apply the required amendment to exam questions,
- The course coordinator will then return it, with detailed report to Coordinator of Examination Committee, who will call again members of Examination Committee for final scrutiny (second meeting) and approval.
- Who after making necessary record and approval, the coordinator of Examination Committee will return it back to concerned Course Coordinator for conducting examination no later than two days prior to exam time.
- After conducting the exam, the course coordinator should provide the examination committee with a detailed report including the statistics of exam result analysis.
- The examination committee should use the statistics of exam result analysis for further improvement of the quality of the exams' questions.

- Examination Committee will pass it to the curriculum office to use it as a tool for improving and developing the curriculum in term of course objectives, instructional methods, course materials, total time of the course, etc.
- Course coordinator should arrange with concerned faculty members to give timely feed back to the student for the mid-course exam, formative assessment (including mock exam, test, quizzes, home work etc.).
- Course coordinator should meet with concerned faculty members to detect and discuss the weakness and gaps and how to solve them.

**Frequency of meetings:**

The committee will hold at least two meeting to review the questions of each exam, first meeting for scrutinization and second meeting for approval of the exam, also will communicate via email, in addition a meeting can be called when requested by the Chairman of Examination Committee when the need arise.

**Below is a chart displaying the process of Examination Committee:**



### **Evaluation of the course and faculty member at Unaizah College of Medicine:**

The aim of evaluation is to make sure we are on the right track and also to ensure good quality of courses that meets the international standards. Evaluation is a set of procedures used to determine whether the course meets preset criteria or not including instruction and faculty members. There will be some forms for evaluation of course and faculty members as well. Forms will be used as tools for this purpose.

#### **What do we mean by evaluation?**

- 1- Evaluation of courses, including learning objectives, support, reading materials, organization, time, quality of instruction, grading systems etc.
- 2- Evaluation of faculty members to ensure whether they are highly qualified as instructor or not.

**APPENDICES:**

**Appendix 1:**



**Qassim University  
Unaizah College of Medicine  
Academic Affairs  
Medical Education Unit  
Examination Committee**

**Date: 15 – 12 – 1434 H / 20 – Oct - 2013**

**Guidelines for the Writing of Multiple Choice Questions (MCQs)**

## **Guidelines for the Writing of Multiple Choice Questions (MCQs):**

**All MCQs** should be of the single best answer type.

### **MCQ CONSISTS OF:**

- A- STEM.
- B- LEAD-IN.
- C- Five OPTIONS (one of which is the keyed or correct response, four of which are DISTRACTORS).

### **STEM:**

- 1- The stem is a short story (short problem, scenario-based) ends with a very clear LEAD-IN (e.g. which one of the following is----).
- 2- **Use** simple and correct language and avoid complex, difficult and strange terms.
- 3- **Use** direct question and not incomplete statements for the stem.
- 4- Eliminate excessive wordiness and irrelevant or unnecessary information.
- 5- The stem must pose a clear question, and it should be possible to arrive at an answer without reading the options.
- 6- The stem should include all the necessary information for the candidate to reason out the clinical problem. These data may include: age, gender, presenting complaint, duration of illness, patient history, physical findings, investigations, treatment etc. (**put figures**).
- 7- The number of words per item (WPI) in item vignette or scenario with detailed data should not exceed 100 WPI, while in simple vignette (less complex data) should not exceed 70 WPI.
- 8- In testing for definitions, include the term in the stem rather than as options.
- 9- **Avoid** using hints in the stem to point out to the correct option.
- 10- **Avoid** using acronyms (e.g. MRI, USG, etc.). If needed, the use of acronyms should follow the full spelling of terms e.g. “magnetic resonance imaging (MRI)”.

### **THE LEAD-IN QUESTION:**

Is the question being asked and should be the last sentence in the stem.

### **OPTIONS (Possible Answers):**

- 1- Make sure that all options are plausible to the stem (not just to complete the list of five options).
- 2- List options in separate lines rather than including them as part of the stem, so that they can be clearly distinguished.
- 3- Keep all options in a similar format (e.g. all are phrases, all are sentences, etc.)
- 4- Make sure that the options are homogeneous ( i.e. all are enzymes, all are hormones, all are drugs, all are diagnoses, all are next step management, all are mechanisms ,all are ions,--etc.)
- 5- Use the capital letters (A, B, C, D, E) rather than the lower-case letters (a, b, c, d, e) in the options.

- 6- The number of words in question line and options together should not exceed 35-40WPI.
- 7- **Avoid** un-necessary, tricky and complex options that need time for reading and understanding.
- 8- Check that all choices are grammatically consistent with the stem.
- 9- Try to make options of the same length.
- 10- **Avoid** the options with: none of the above, all of the above, or except.
- 11- In the options, be careful when using numbers (arrange them in ascending or descending form), don't mix percentages with absolute figures in the same stem.
- 12- **Avoid** giving more information and more details in the correct option (all options are the same).
- 13- **Avoid** using specific inclusive or exclusive determiners such as always, never, or vague terms such as seldom, frequently, etc. Interpretation of these words is different from person to person.

### **DISTRACTORS:**

- 1- Should be homogeneous with each other and with the correct answer.
- 2- Should be grammatically consistent, logically compatible, and relatively the same length as the correct answer.
- 3- Should be plausible and none should stand out as being obviously incorrect.

### **FORMATS AND STYLES TO AVOID:**

#### **A- The "EXCEPT" Format**

Avoid creating questions that ask the candidate to select a wrong answer from among four correct ones.

**E.g.** All of the following statements regarding obstructive jaundice are correct EXCEPT?

In such questions:

- 1- No clinical stem.
- 2- Cannot answer question if options covered.
- 3- Most often a test of factual recall.
- 4- Can be very distracting.
- 5- Can unfairly punish a good candidate.

#### **B- THE "FACTOID" Format**

This form of question simply asks a candidate to recall a single fact. This format is not acceptable.

**E.g.** the axillary nerve supplies which one of the following muscles?

Better to use clinically relevant stem like this:

You are examining a young man who dislocated his shoulder 1 month ago and now complains of muscle weakness and loss of sensation. He is likely to have difficulty with which one of the following actions?

## **DIFFICULTY OF MCQ:**

Examples of irrelevant difficulty

- 1- Options are long, complicated or double.
- 2- Numerical data is not stated consistently.
- 3- Terms in the options are vague (e.g., rarely, usually etc...).
- 4- Language in the options is not parallel.
- 5- Options are in a non-logical order.

## **SOME FAQs:**

- 1- **Can I** create more than one question using the same clinical stem?

**YES**, you can create more than one question using the same clinical stem, but targeting different aspects such as physical examination, diagnostic tests, establishing a diagnosis, treatment, prognosis, complications, education, and or risk factors. (As a general rule no more than three or four questions should be made from one stem as this makes databank management difficult).

- 2- **Can I** use an image in MCQs?

**YES**, Images can be incorporated in items as a vehicle for testing important clinical data interpretation skills. Their use is encouraged. (They must be digitalized. They must NOT be copyrighted and/or must be accompanied by a patient consent if provided from your personal collection).

- 3- **Can I** use the trade name of drugs?

**Refer** to drugs using their generic name. In the event that you feel that candidates will be unfamiliar with the generic drug name, the trade name should be inserted in parentheses.

- 4- **Can I** provide normal values of Laboratory Tests in the stem?

**YES**, the Clinical Laboratory Tests - Normal Values (appended) can be available as a reference to the candidates especially in computer-based examination by clicking on the appropriate icon on the computer but:

- All of the normal values should be provided in the stem, in parentheses.
- More than three laboratory values in a stem should be in table format with an asterisk identifying abnormal values.

**‘Writing MCQs is a challenging and an acquired skill’...MCC.**

## Appendix 2



**Qassim University**  
**Unaizah College of Medicine**  
**Academic Affairs - Medical Education Unit**  
**Examination Committee**

**Date: 17 – 12 – 1434 H / 22 – Oct - 2013**

**Guidelines for Review of Multiple Choice Questions (MCQs).**

## **Guidelines for Review of Multiple Choice Questions (MCQs):**

The following guidelines are recommended for reviewing individual test/exam items at UCM.

### **When you review an item:**

- a. Write your comments about the item indicating your suggested changes.
- b. If you believe an item is not worth retaining, suggest it be deleted.

### **The steps of review:**

#### **1. Consider the item as a whole and whether**

- a. The included item is of the single-best answer type with five options.
- b. This type of item appropriate for measuring the intended learning outcome.
- c. It measures knowledge or a skill component which is worthwhile and appropriate for the examinees who will be tested.
- d. There is a markedly better way to test what this item tests.
- e. It is of the appropriate level of difficulty for the examinees who will be tested.

#### **2. Consider the stem and whether**

- a. It presents a clearly defined single problem or task and providing all the necessary information to the examinee.
- b. It contains unnecessary information.
- c. The stem stated in positive form wherever possible.
- d. The lead-in question the last sentence in the stem?
- e. The item format and grammar usage provide for efficient test taking?
- f. If negative wording is used in the stem, is it emphasized (by underlining caps)?
- g. It could be worded more simply, clearly or concisely.

#### **3. Consider the options and whether**

- a. They are parallel in structure.
- b. They fit logically and grammatically with the stem.
- c. The options are free from any clues to the correct answer.
- d. The incorrect options or distractors are homogeneous and plausible with the key answer (e.g. all are diagnoses, all are therapies or all are investigations etc.).
- e. "All of the above" and "None of the above" have been avoided as options.
- f. The options have been arranged alphabetically.
- g. The options have been numbered with alphabets in caps (e.g. A. B. C. D. E.).
- h. The usage of vague terms like "usually", "often" and "may" has been avoided in the options.
- i. The acronyms used, if any, (e.g. USG, ERCP, MRI) have been written out in full.
- j. They could be worded more simply, clearly or concisely.

- k. Any are so inclusive that they logically eliminate another more restricted option from being a possible answer.

**4. Consider the key (the correct option) and whether it**

- a. Is the best answer among the set of options for the item.
- b. Actually answers the question posed in the stem.
- c. Is too obvious relative to the other alternatives (i.e., should be shortened, lengthened, given greater numbers of details, made less concrete).

**5. Consider the distractors and whether**

- a. There is any way you could justify one or more as an acceptable correct answer.
- b. They are plausible enough to be attractive to examinees who are misinformed or ill-prepared.
- c. Any one calls attention to the key (e.g., no distractor should merely state the reverse of the key or resemble the key very closely unless another pair of choices is similarly parallel or involves opposites).

## Appendix 3



**Qassim University**  
**Unaizah College of Medicine**  
**Academic Affairs**  
**Medical Education Unit**  
**Assessment and Evaluation Office**

### **Interpretation of Exam Result and Adjustment of Grades Policy**

This document is prepared to help instructors at UCM to interpret the statistics reported on the Item Analysis Report and improve the effectiveness of test items and the validity of test scores.

Correct Responses as a Percentage of the Total Group: The proportion of students answering an item correctly indicates the difficulty level of the item. The more students got the item right, the less difficult the item was. Optimally, an item will encourage a widespread distribution of scores if its difficulty index is approximately 0.5 (i.e. 50% of the students got it right).

<b>Percentage Range</b>	<b>Difficulty Index</b>	<b>Interpretation</b>
75%-100%	0.75 – 1.0	Easy
26%-74%	0.25 – 0.75	Average
0-25% (can be up to 30% in some circumstances)	0.25 or below (can be up to 0.30 in some circumstances)	Hard

### **Adjustment of difficulty index:**

Adjustment based on difficulty index and normal curve distribution will be done only for the final written exam (for OSPE, OSCE, Clinical skill and TBL no adjustment based on difficulty index will be carried out).

For OSPE, OSCE, Clinical skill and TBL, validity and reliability tests will be done for each to ensure good quality of assessment.

### **Level of difficulty:**

If the percentage of difficult questions in the exam is 10% or below, based on difficulty index 0.25, it will be considered acceptable and no adjustment will be done, in case distribution of grades is normal in curve.

If the percentage of difficult questions exceeds 10%, then it will be needed to adjust the grades of students by adding the weight of difficult questions over 10 %, e.g. in exam of 100 items questions (100 marks) if the percentage of difficult questions is 15%, 5 marks will be added to students total marks and then marks of students will be calculated accordingly. If still the curve distribution of the grades is not normal, then difficulty index may be raised gradually up to 0.30 (30%) and adjust the grades accordingly till normal distribution of the curve is achieved. In case of adjusting difficulty index up to 0.30 and still the curve distribution is not normal, then matter must be referred to the college council for further consideration and decision.

### **Steps of adjustment:**

Adjustment and calculation must be based on difficulty index 0.25

- 1- Data entry, by using Excel or any other statistical programs.
- 2- Draw the curve.
- 3- Analyse the data.

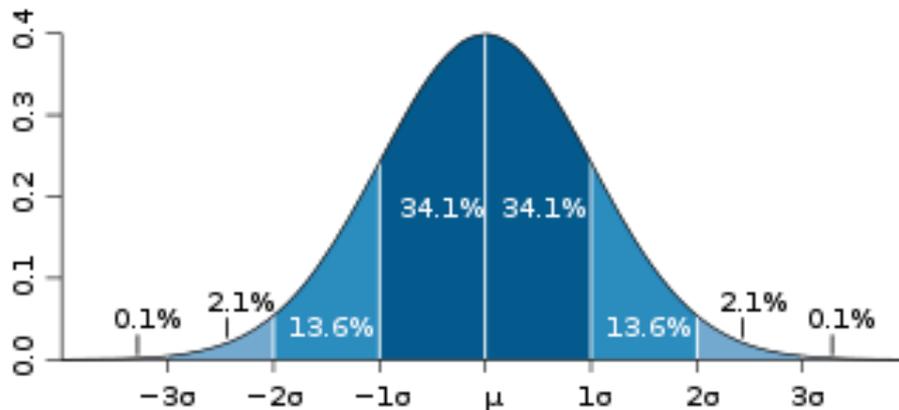
### **Normally distributed data:**

The data consider normally distributed if:

The mean ( $\mu$ )  $\pm$  Standard deviation (SD) give the following result:

- $\mu \pm SD = 68.2$  (68%).
- $\mu \pm 2SD = 95.4$  (95%).
- $\mu \pm 3SD = 99.6$ .
- $\mu \pm 4SD = 0.2$ (not normally distributed).

### Example of normally distributed curve:



### Interpretation:

Good:  $\mu \pm SD = 68\%$

Very good:  $\mu + 2SD = 13.6\%$

Excellent:  $\mu + 3SD = 2.1\%$

Pass:  $\mu - 2SD = 13.6\%$

Failed:  $\mu - 3SD = 2.1\%$

### Skewed curve:

If the curve skewed to the right (positive skewed) this means there were more easily questions and that increase number of higher achievers.

If the curve skewed to the left (negatively skewed) this means there were more difficult questions and that increase the number of low achievers.

**Correct Responses as a Percentage of the Upper/Lower 27% of Group:** The upper and lower 27% rule is commonly used in item analysis based on Kelley's (1939) derivation. The difference between the correct responses as a percentage of the upper 27% and lower 27% of the total group can tell us whether an item has discriminated the high scorers and low scorers on the test. Discrimination Index (Point Biserial) is a much more robust statistic to examine an item's discrimination power.

**Discrimination Index (Point Biserial):** The discrimination index is a statistic which indicates the extent to which an item has discriminated between the high scorers and low scorers on the test. The index is represented as a fraction and varies between -1 to 1. Optimally an item should have a positive discrimination index of at least 0.2, which indicates that high scorers have a high probability of answering correctly and low scorers have a low probability of answering correctly. Items with negative indices should be examined to determine whether the item was flawed.

<b>Discrimination Index</b>	<b>Interpretation</b>
0.30 and above	Good
0.10 – 0.30	Fair
Equal to 0	No discrimination. All students got the item right.
Negative	Poor. The item was flawed.

**Mean score:** The mean score is the average of the test scores for the class. It gives a rough idea of how students performed as a whole. When we compare a student’s score to the mean, we can say that that student did less well or did better than the class.

**Median score:** The median score is the middle test score when all the test scores are arranged in numerical order. Unlike the mean score, the median score is not strongly affected by extreme test scores (outliers). Therefore, it is a better estimate of students’ average performance when some extreme test scores exist.

**Non-Distractors:** Non-distractors are item options that are not chosen by any student. Therefore, they do not provide any information to distinguish different levels of student performance. When an item has too many non-distractors, it needs to be revisited and possibly revised.

**Percentile:** The percentile score is a transformation of the raw score. It is used to demonstrate how much percentage of students in the class scored below a particular corresponding raw score. For example, Jane’s test raw score is 86, and her percentile score is 94%. We can say that Jane’s test score 86 on this test was higher than the scores of 94% of the students in the class.

**Reliability Coefficient (KR20):** Test reliability is an indication of the consistency of the test. It is not an index of quality (“Is this test a good measure of ...?”), but of relative reproducibility (“How repeatable is this test?”). Test reliability tells us how likely it is that a student would obtain the same score when he/she takes the test again. This index can hold a value between 0 and 1. Higher test reliability indicates that the test measures whatever it measures in a consistent manner.

<b>Reliability Coefficient</b>	<b>Interpretation</b>
.90 and above	Excellent reliability. At the level of the best standardized tests.
.80 - .90	Very good for a classroom test.
.70 - .80	Good for a classroom test. There are probably a few items which could be improved.
.60 - .70	Somewhat low. This test needs to be supplemented by other measures (e.g., more tests) to determine grades. There are probably some items which could be improved.
.50 - .60	Suggests need for revision of test, unless it is quite short (ten or fewer items). The test definitely needs to be supplemented by other measures (e.g., more tests) for grading.
.50 or below	Questionable reliability. This test should not contribute heavily to the course grade, and it needs revision.

**Note:** The guidelines used to interpret reliability coefficients for classroom exams are adapted from [http://www.washington.edu/oea/services/scanning\\_scoring/scoring/item\\_analysis.html](http://www.washington.edu/oea/services/scanning_scoring/scoring/item_analysis.html).

**Standard deviation:** The standard deviation is a statistic which tells us how widely the scores are spread from the mean. A large standard deviation means that there is much variability in the test scores of the group (i.e. students performed quite differently on the test). A small standard deviation means that there is little variability amongst the scores (i.e. students performed quite similarly on the test).

**Course Evaluation Form**

Academic year: .....

Course: .....

**Please complete this questionnaire by ticking your response to the statements:**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1- I had the necessary prerequisite knowledge for this course					
2- Pre-course support and information was timely and useful (e.g. booklet)					
3- This course met the stated learning objectives					
4- The organization of this course was good					
5- The pace of sessions was appropriate					
6- Reading materials for the course were relevant to the course content					
7-The quality of instruction was excellent					
8- Course materials were available on the website within two days prior to the teaching session					
9- The laboratory sessions contributed to my learning of the course materials					
10-The TBL sessions contributed to my learning of the course materials					
11- The clinical skill sessions contributed to my learning of the course materials					
12- The grading criteria were clear and applied objectively					
13- Tests, quizzes, and examinations were clearly related to the course materials and Feedback was useful and timely					
14- Total time for whole program was appropriate					
15- The time allotted to each session was appropriate					
16- The overall rating of the course is excellent					

**Comment:**.....  
 .....  
 .....  
 .....

**Unaizah College of Medicine  
Academic Affairs / Medical Education Unit**

**Assessment and Evaluation Office**

**Instructor Evaluation Form**

**Instructor:** .....

**Subject:** .....

**Please complete this questionnaire by ticking your response to the statements:**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1- The Instructor came well prepared for each class session					
2- The Instructor organized class sessions well (sequence)					
3- The Instructor was punctual					
4- The Instructor spoke clearly					
5- The Instructor presented the material well (audio-visual)					
6- The Instructor stated objectives of each session clearly					
7- The Instructor gave clear and concise Examples and Illustrations					
8- The Instructor points out practical applications					
9- The Instructor gave opportunity for discussion / questions					
10- The Instructor stimulated my interest and critical thinking in this subjects					
11- The Instructor was available to students after class					
12- Overall Effectiveness as An Instructor	Excellent	V.Good	Good	Average	Poor

**Comment:** .....  
 .....  
 .....  
 .....

## **Course Specifications (Report)**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications**

**(CS)**

## Course Specifications

Institution	Date of Report
College/Department	

### A. Course Identification and General Information

1. Course title and code:
2. Credit hours
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)
4. Name of faculty member responsible for the course
5. Level/year at which this course is offered
6. Pre-requisites for this course (if any)
7. Co-requisites for this course (if any)
8. Location if not on main campus
9. Mode of Instruction (mark all that apply)
a. Traditional classroom <input type="checkbox"/> What percentage? <input type="checkbox"/>

b. Blended (traditional and online)

What percentage?

c. e-learning

What percentage?

d. Correspondence

What percentage?

f. Other

What percentage?

Comments:

## B Objectives

1. What is the main purpose for this course?

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

## C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours


2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours						
Credit						

3. Additional private study/learning hours expected for students per week. <input type="text"/>
---

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	<b>NQF Learning Domains And Course Learning Outcomes</b>	<b>Course Teaching Strategies</b>	<b>Course Assessment Methods</b>
<b>1.0</b>	<b>Knowledge</b>		
1.1			
1.2			
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1			
2.2			
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1			
3.2			
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1			
4.2			
<b>5.0</b>	<b>Psychomotor</b>		
5.1			
5.2			

**Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching**

<b>NQF Learning Domains</b>	<b>Suggested Verbs</b>

<b>Knowledge</b>	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
<b>Cognitive Skills</b>	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
<b>Interpersonal Skills &amp; Responsibility</b>	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write
<b>Communication, Information Technology, Numerical</b>	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
<b>Psychomotor</b>	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested **verbs not to use** when writing measurable and assessable learning outcomes are as follows:

Consider      Maximize      Continue      Review      Ensure      Enlarge      Understand  
Maintain      Reflect      Examine      Strengthen      Explore      Encourage      Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers,

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech,	Week Due	Proportion of
--	--	----------	---------------

	oral presentation, etc.)		Total Assessment
1			
2			
3			
4			
5			
6			
7			
8			

#### **D. Student Academic Counseling and Support**

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

#### **E. Learning Resources**

1. List Required Textbooks

2. List Essential References Materials (Journals, Reports, etc.)

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

--

**F. Facilities Required**

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
--

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)
---

2. Computing resources (AV, data show, Smart Board, software, etc.)

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

**G Course Evaluation and Improvement Processes**

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

3 Processes for Improvement of Teaching

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

**Faculty or Teaching Staff:**

\_\_\_\_\_

**Signature:** \_\_\_\_\_ **Date Report Completed:**

\_\_\_\_\_

**Received by:** \_\_\_\_\_ **Dean/Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## **COURSE REPORT**

**To be completed by course instructors at the end of each course and given to program coordinator.**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**COURSE REPORT**

**(CR)**

A separate Course Report (CR) should be submitted for every course and for each section or campus location where the course is taught, even if the course is taught by the same person. Each CR is to be completed by the course instructor at the end of each course and given to the program coordinator

A combined, comprehensive CR should be prepared by the course coordinator and the separate location reports are to be attached.

## Course Report

**For guidance on the completion of this template refer to the NCAAA handbooks or the NCAAA Accreditation System help buttons.**

Institution	Date of Course Report
College/ Department	

### A. Course Identification and General Information

1. Course title	Code #	Section #				
2. Name of course instructor		Location				
3. Year and semester to which this report applies.						
4. Number of students starting the course? <input style="width: 40px; height: 20px;" type="text"/>		Students completing the course? <input style="width: 40px; height: 20px;" type="text"/>				
5. Course components (actual total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours						
Credit						

**B. - Course Delivery**

1. Coverage of Planned Program			
Topics Covered	Planned Contact Hours	Actual Contact Hours	Reason for Variations if there is a difference of more than 25% of the hours planned

2. Consequences of Non Coverage of Topics		
<p>For any topics where the topic was not taught or practically delivered, comment on how significant you believe the lack of coverage is for the course learning outcomes or for later courses in the program. Suggest possible compensating action.</p>		
Topics (if any) not Fully Covered	Effectuated Learning Outcomes	Possible Compensating Action

**3. Course learning outcome assessment.**

	List course learning outcomes	List methods of assessment	Summary analysis of assessment results
1			
2			
3			
4			
5			
6			
7			
8			

Summarize any actions you recommend for improving teaching strategies as a result of evaluations in table 3 above.

4. Effectiveness of Planned Teaching Strategies for Intended Learning Outcomes set out in the Course Specification. (Refer to planned teaching strategies in Course Specification and description of Domains of Learning Outcomes in the National Qualifications Framework)			
List Teaching Methods set out in Course Specification	Were these Effective?		Difficulties Experienced (if any) in Using the Strategy and Suggested Action to Deal with Those Difficulties.
	No	Yes	

**Note:** In order to analyze the assessment of student achievement for each course learning outcome, student performance results can be measured and assessed using a KPI, a rubric, or some grading system that aligns student work, exam scores, or other demonstration of successful learning.

**C. Results**

1. Distribution of Grades

Letter Grade	Number of Students	Student Percentage	Explanation of Distribution of Grades
A			
B			
C			
D			
F			
Denied Entry			
In Progress			
Incomplete			
Pass			
Fail			
Withdrawn			

2. Analyze special factors (if any) affecting the results

--

3. Variations from planned student assessment processes (if any) (see Course Specifications).

a. Variations (if any) from planned assessment schedule (see Course Specification)

Variation	Reason

b. Variations (if any) from planned assessment processes in Domains of Learning (see Course Specification)	
Variation	Reason

4. Student Grade Achievement Verification (eg. cross-check of grade validity by independent evaluator).	
Method(s) of Verification	Conclusion

**D. Resources and Facilities**

1. Difficulties in access to resources or facilities (if any)	2. Consequences of any difficulties experienced for student learning in the course.

**E. Administrative Issues**

1 Organizational or administrative difficulties encountered (if any)	2. Consequences of any difficulties experienced for student learning in the course.
--	---

**F Course Evaluation**

1 Student evaluation of the course (Attach survey results report)
a. List the most important recommendations for improvement and strengths
b. Response of instructor or course team to this evaluation
2. Other Evaluation (e.g. by head of department, peer observations, accreditation review, other stakeholders)
a. List the most important recommendations for improvement and strengths



2. List what actions have been taken to improve the course (based on previous CR, surveys, independent opinion, or course evaluation).

3. Action Plan for Improvement for Next Semester/Year

Actions Recommended	Intended Action Points and Process	Start Date	Completion Date	Person Responsible
a.				
b.				
c.				
d.				
e.				

Name of Course Instructor: \_\_\_\_\_

Signature: \_\_\_\_\_ Date Report Completed: \_\_\_\_\_

Program Coordinator: \_\_\_\_\_

Signature: \_\_\_\_\_ Date Received: \_\_\_\_\_

## **References:**

- 1- Study plan, Unaizah College of Medicine, Qassim University, Kingdom of Saudi Arabia, 1435 H.
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