

MGMIHS, Navi Mumbai

# Common Self Directed Learning Guidelines

for
Department of Anatomy / Physiology / Biochemistry

(as per CBME syllabus)

### Introduction

Medical students are need to excel in their performance as doctors and be lifelong learners which is not achieved solely by passive imbibition of information.

Self-directed learning has many advantages for knowledge acquisition, retention, and the development of metacognitive skills. They are an essential component of medical education. There are many types of self-directed learning available for a teacher and a learner.

The teacher has to carefully choose and design a learning resource to train a student. Also, there are various options for self-paced learning for an enthusiastic learner in medical education. The knowledge of each type of learning method and assessment will help in gaining a stronger hold over the concepts in the life-long course of a medical practitioner.

The learner should be flexible and he must be able to plan his learning according to the present requirements. Self-directed learning requires the learner to plan their learning and set task specific goals and it is one of many methods that help in developing metacognitive skills, which help a good learner translate into a good clinician. Thus, development of metacognitive skills during a graduate's learning of various subjects such as Anatomy ,Physiology and Biochemistry of first year of M.B.B.S. program.



### MGMIHS, Navi Mumbai

# Common 'SDL' Conduction guidelines / format for Anatomy, Physiology and Biochemistry

- SDL notice with topic and learning objectives will be given to students
   10 days prior to SDL session by respective Preclinical departments of both the campuses i.e. MGM Medical college, Navi Mumbai and i.e. MGM Medical college, Aurangabad.
- 2. List of resource material required for the SDL topic will be also provided to the students.
- 3. On the day of session (2 hours) SDL is conducted in different formats like TBL, PBL, Quiz, Seminar, Think pair & share, small group discussions/presentations, poster presentation etc.
- 4. Assessment will be done as per chosen format of respective department of Anatomy/Physiology/Biochemistry of both the constituent units i.e. MGM Medical college,Navi Mumbai and Aurangabad .
  e.g. of methods of assessment: After the discussion, the students may be assessed by multiple ways like essay questions,LAQs, SAQs, BAQs, multiple-choice questions, assessment of a skill or a task performed, objective structured clinical examination, objective structured viva examination( OSVE) , objective structured practical examination( OSPE) , case assessments, logbooks, and so on. Another creative method of skill assessment is kinesthetic learning: where the students have to perform a required task or demonstrate a skill to be certified.
- 5. One SDL activity is attached as an example.

## SDL activity as example

### SDL – Heart

**Topic:** Heart

**For:** 1<sup>st</sup> MBBS 2019-20

### **Learning objectives:**

### At the end of the session students should know following

- 1. The pericardium parts, sinuses, blood supply, nerve supply and applied anatomy
- 2. Heart External features weight, anatomical position, parts
- 3. Chambers of heart external and internal features and applied anatomy
- 4. Interatrial and interventricular septa features and applied anatomy
- 5. Names of components of conducting system of heart
- 6. Blood supply of heart
  - a. Arterial supply coronary arteries origin, course, branches
  - b. Venous drainage cardiac veins and coronary sinus
  - c. Applied anatomy

### Learning material

- 1. Essentials of human anatomy, volume 1 A.K.Dutta,  $8^{th}$  edition, chapter 5, chapter 6 (All pages **EXCEPT** development)
- 2. Textbook of Anatomy, volume 1 Vishram Singh, 2<sup>nd</sup> edition, Chapter 20, Pg. no. 256 to 277
- 3. BD Chaurasia's Human Anatomy, volume 1 BD Chaurasia, 7<sup>th</sup> edition, Chapter 18, Pg. no. 263 to 282
- 4. Moore's clinical oriented Anatomy, Keith L. Moore, 6<sup>th</sup> edition, chapter 1(Thorax), pg. no. 133,134 and 151 to 159
- 5. Clinical Anatomy (A problem solving approach), Neeta V. Kulkarni , 3<sup>rd</sup> edition, Chapter 40, Pg. no. 424 to 438

### Session

Time: 2 hours

### **Program** – The program is conducted as follows

- Students are given IRAT Individual Readiness Assurance Test (MCQs) 20 minutes
- 2. Tests are collected back, Students will be allocated to the teams
- 3. GRAT Group Readiness Assurance Test on same MCQs is conducted 30 minutes
- 4. Tests are collected back
- 5. GAP Group Application Problem is conducted on paper case 15 minutes
- 6. Tests are collected back
- 7. Immediate feedback about test responses by using cards on GRAT and GAP 30 minutes