DEPARTMENT OF MEDICAL EDUCATION
COLLEGE OF MEDICINE & DENTISRY AT THE HILLS
ABBOTTABAD

SDLs Guidebook

2025-26

Year

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Department of Medical Education				
SDLs **Guidebook**				
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ENDORSED BY:				

YOUR PATH TO BECOMING A MASTER LEARNER

NAME	
FATHER NAME	
ROLL NUMBER	
BATCH	
DATES OF ROTATION	

Welcome to SDL Guidebook:

Think of your MBBS degree at the College of Medicine & Dentistry at the hills, Abbottabad, as learning to build a house. Lectures and labs provide you with the bricks and mortar—the essential facts and principles. Self-Directed Learning (SDL) is where you learn the *art and science* of architecture: how to design, problem-solve, and adapt your knowledge to build unique structures for each patient you will one day treat.

Why SDL is Non-Negotiable in Medicine:
Medical knowledge doubles nearly every few years. A doctor who waits to be taught will be obsolete within a decade. SDL is the core skill that transforms you from a student who passes exams into a physician who saves lives and evolves with the science. It's the disciplined practice of intellectual curiosity and personal responsibility, the very hallmarks of a true professional.

2. What SDL Really *Is (And What It's Not)*

- **SDL is NOT:** "Unsupervised free time," "optional homework," or "studying alone without a plan."
- **SDL IS:** A **structured, intentional process** where *you* drive your learning, guided by the curriculum's map.

It is a cycle where you:

1. **Identify your learning gaps** (What don't I know?).
2. **Plan your attack** (How will I learn it?).
3. **Engage with the material actively** (Doing, not just reading).
4. **Check your understanding** (Can I use this knowledge?).

You are in the driver's seat, with faculty as your navigators, providing the map (learning objectives) and pointing out the landmarks (key concepts).

3. The SDL Cycle in Action: A Step-by-Step Guide

Imagine this as your personal learning algorithm. Run this cycle for every module.

Step 1: DIAGNOSE – Find the Gap

- **After a lecture or lab,** ask yourself: "What was the muddiest point?" "What question did the professor raise that I can't yet answer?"
- **Check the module objectives.** These are your targets. Be brutally honest about which ones feel shaky.

Step 2: PLAN – Set Your Mission
Use the **SMART Goal** framework to make your plan concrete.

- **Bad Goal:** "Study Cardiology." (Too vague)
- **SMART Goal:** "This 2-hour SDL session, I will **create a one-page flowchart** that explains the difference between systolic and diastolic heart failure, including **3 key compensatory mechanisms for each.** I will use *Robbins Textbook* and the **Osmosis video on HF** as my resources."

Step 3: EXECUTE – Learn with Purpose
Move beyond highlighting text. Your brain learns by *doing*.

- **For Mechanisms:** Draw them. Use whiteboards or digital tablets. Explain the pathway out loud as if teaching a first-year student.
- **For Diseases:** Create a "One-Pager" for each one with sections for Causes, Symptoms, Key Tests, and First-Line Treatments.
- **For Drugs:** Build a comparison table: Drug Class, Mechanism, Key Uses, Classic Side Effects.
- **Use High-Yield Resources:** Don't just re-read lectures. Use **Pathoma, SketchyMedical, Osmosis, AMBOSS, or OnlineMedEd** for different perspectives.
  Use **PubMed** or **Google Scholar** to find one recent article on a topic.

Step 4: SYNTHESIZE – Make it Yours
This is where knowledge becomes skill. Force yourself to apply the information.

- **Write a Case Study:** Invent a patient with classic and atypical symptoms. What questions would you ask? What would you look for on physical exam?
- **Challenge a Peer:** Explain a complex concept to your study group and invite them to challenge your explanation.
- **Connect the Dots:** How does the physiology from Year 1 explain the pharmacology in Year 2? How does the pathology explain the clinical presentation in Year 3? Write these connections down.

Step 5: REFLECT – Close the Loop
Spend the last 5-10 minutes of your SDL session in reflection.

- **Did I achieve my SMART goal?** Can I now explain the concept without notes?
- **What is my one burning question?** This is your gold for SGDs and faculty consultations.
- **What will I do differently next time?** Was my resource effective? Did I budget my time well?

4. Your Weekly SDL Game Plan (A Template)

Module: Endocrine			
Learning Need	**SMART Goal**	**Resources & Strategy**	**Proof of Learning (Synthesis)**
I don't truly understand the difference between Cushing's *Syndrome* and Cushing's *Disease*.	By the end of this session, I will be able to **create a table** comparing the etiology, diagnostic tests, and treatment for Cushing's Syndrome vs. Disease.	- *Robbins Pathology* chapter. - SketchyMedical video on Cushing's. - Draw the HPA axis.	A filled-out comparison table and a simple diagram of the HPA axis, annotated with where the pathology differs.
I need to memorize the types of insulin.	I will **create a flashcard set** (digital or physical) for all major insulin	- Pharmacology lecture notes. - Drug formulary	A completed flashcard set and a perfect self-

	types, listing their onset, peak, and duration. I will test myself until I get 100% twice.	app.	test score.
Reflection: "*The table helped, but I'm still shaky on the high-dose dexamethasone suppression test. I'll bring this to the SGD.*"			

By embracing this SDL mindset and process, you are not just studying to become a doctor; you are *practicing* the core skill of being one. Welcome to the journey.

5. *Strategic Distribution of Self-Directed Learning (SDL) Hours Across the MBBS Program*

The allocation of 500 Self-Directed Learning (SDL) hours over the five-year MBBS curriculum is a carefully calibrated strategy designed to mirror and support your evolving journey from a foundational scholar to a competent clinical professional. This distribution is not arbitrary; it is directly proportional to the academic weight, complexity, and clinical significance of each module within the spiral curriculum.

The Rationale Behind the Distribution

The total SDL hours are distributed based on a simple yet effective principle: **modules with more teaching weeks are allocated more SDL time.** This ensures you have sufficient dedicated time to grapple with larger volumes of information, master complex concepts, and achieve deeper learning in the most demanding areas of your study. The total of 127 module-weeks across the program forms the basis for this proportional distribution, guaranteeing a fair and manageable workload throughout your academic journey.

A Guided Tour of Your SDL Journey by Year

Year 1: Building the Foundation (90 SDL Hours)
Your first year is dedicated to constructing the bedrock of medical knowledge. The SDL hours are strategically placed to help you master the language and core principles of medicine.

- **Foundation-I** receives the highest allocation (**24 hours**), providing you with the essential time to build strong foundational concepts.
- Core system-based modules like **Blood & Immunology (20 hours)**, **MSK-I (15 hours)**, **CVS-I (15 hours)**, and **Respiratory-I (16 hours)** follow, ensuring you can actively engage with anatomy and physiology beyond the lecture hall. This is where you will build your first concept maps and master foundational pathways.

Year 2: Deepening Systems Knowledge (95 SDL Hours)
The complexity increases as you delve into intricate organ systems. The SDL allocation reflects this, demanding greater independent mastery.

- The extensive **Neurosciences** sequence (IA & IIB) is justifiably allocated **48 hours** in total, acknowledging the depth and detail required to understand the nervous system.
- Modules like **GIT, Hepatobiliary & Metabolism-I (15 hours)**, **Renal (16 hours)**, and **Endocrine-I (16 hours)** require you to integrate knowledge of normal function with the beginnings of pathological reasoning.

Year 3: Integration and Clinical Correlation (90 SDL Hours)
This year marks a critical transition, focusing on the breakdown of normal function and the integration of multiple systems.

- **Foundation II (23 hours)** and **Infection & Inflammation (20 hours)** provide the pillars for understanding disease processes.
- Modules like **Multisystem (16 hours)**, **MSK-II (15 hours)**, and **CVS-II (16 hours)** challenge you to apply your knowledge from the first two years to pathological states, preparing you for clinical rotations.

Year 4: Advanced Clinical Applications (118 SDL Hours)
With a firm grasp of pathology, Year 4 focuses on system-based clinical management. The SDL hours increase to support this advanced application.

- The return of complex modules like **Neurosciences-III (28 hours)** and **GIT and Hepatobiliary-II (20 hours)** requires deep diving into clinical management and diagnostic reasoning.
- The introduction of **EYE and ENT (16 hours)** and advanced modules in **Cardiorespiratory (15 hours)**, **Renal (16 hours)**, and **Endocrine & Reproduction (23 hours)** equips you with the specialist knowledge needed for clinical postings.

Year 5: Synthesis and Preparation for Practice (107 SDL Hours)
Your final year is about synthesizing all previous knowledge and preparing for internship. The SDL hours support this final consolidation.

- Modules often titled **Foundation-IIII (24 hours)** and **Multisystem-II (16 hours)** are crucial for revising core concepts and managing complex, multi-organ diseases.
- The return to **Blood & Immunology-III (20 hours)**, **MSK-III (15 hours)**, **Endocrine & Reproduction-III (16 hours)**, and **Neurosciences-III (15 hours)** at this stage ensures your knowledge is at the forefront, refined and ready for real-world application.

Summary Table for a Quick Overview

Year	Total SDL Hours	Key Focus
1st Year	90	Foundational Principles & Core Systems
2nd Year	95	Deep Dive into Complex Organ Systems
3rd Year	90	Integration of Basic Sciences with Pathology
4th Year	118	Advanced Clinical Management & Specialties
5th Year	107	Synthesis, Revision, and Transition to Practice
GRAND TOTAL	**500**	

Detailed distribution of SDLs across five years of MBBS.

Year	Module	Weeks	SDL Hours
1st Year	Foundation-I	6	24
	Blood & Immunology	5	20
	MSK-I	4	15
	CVS-I	4	15
	Respiratory-I	4	16
2nd Year	Neurosciences-IA	7	28
	Neurosciences-IIB	5	20
	GIT, Hepatobiliary & Metabolism-I	4	15
	Renal	4	16
	Endocrine-I	4	16
3rd Year	Foundation II	6	23
	Infection & Inflammation	5	20
	Multisystem	4	16
	MSK-II	4	15
	CVS-II	4	16
4th Year	Neurosciences - III	7	28
	GIT and Hepatobiliary - II	5	20
	Cardiorespiratory-III	4	15
	Renal - II Module	4	16
	Endocrine and Reproduction - II	6	23
	EYE and ENT	4	16
5th Year	Foundation-IIII	6	24
	Blood & Immunology-III	5	20
	MSK-III	4	15
	Endocrine & Reproduction-III	4	16
	Neurosciences - III	4	15
	Multisystem-II	4	16
Total		**127**	**500**

This structured yet flexible framework ensures that your independent learning is always aligned with the academic demands of the curriculum. By engaging conscientiously with these allocated SDL hours, you are not just studying for exams—you are actively building the enduring knowledge and self-reliant skills that will define your entire medical career.

Template 1: SDL Weekly Planner & Tracker

Use this table at the start of each week to plan your SDL sessions strategically.

Module: _____
Week: _____ SDL Hours Allocated: _____

Learning Need / Module Topic	SMART Goal for this Session	Resources I Will Use	Proof of Learning (My Output)	Hours Planned	Hours Spent	Reflection / Unanswered Qs
e.g., Pathophysiology of Heart Failure	*e.g., "I will create a diagram that explains the 4 key compensatory mechanisms in HF and list one drug class that targets each."*	- Guyton Ch. 22 - Osmosis Video - Lecture Slides*	*A labeled diagram and a brief drug table.*	2	2	*The Renin-Angiotensin mechanism is clear now. Still unsure why vasopressin is activated later.*
Weekly Reflection:						

Template 2: SDL Active Resource Engagement Log

Use this table *during* your SDL session to ensure you're engaging actively with materials, not just passively consuming them.

Topic: _____
Date: _____

Resource Type & Name	Key Takeaway / Summary (In Your Own Words)	Action Taken (What I DID)	Connection to Clinical Practice / Other Topics
Textbook: Robbins Pathology	*Cushing's Disease is a subset of Cushing's Syndrome, specifically caused by a pituitary adenoma.*	*Drew a Venn diagram comparing Syndrome vs. Disease. Created a table of diagnostic test results.*	*Explains why a patient with a pituitary tumor would have different treatment (surgery) than one with an adrenal tumor.*
Video: SketchyMedical - Insulin Types	*Insulins are categorized by their duration of action: rapid, short, intermediate, long.*	*Drew the "insulin tree" from memory. Made flashcards for onset/peak/duration.*	*Crucial for designing a diabetic patient's insulin regimen to match their meals and basal needs.*
Research Paper: [Brief Title]	*The SGLT2 inhibitor Empagliflozin showed significant reduction in heart failure hospitalizations.*	*Wrote a one-sentence "clinical pearl" and summarized the study design.*	*Links diabetes management (pharmacology) to cardiology (heart failure outcomes).*

Template 3: The "One-Pager" Disease Summary

This is a specific output template for synthesizing information on any disease or condition. Completing this forces deep understanding.

Disease/Condition: _____
Key Concept: _____

Category	Your Notes & Synthesis
Core Definition	
Etiology (Causes)	
Key Pathophysiology	*[Draw a simple diagram or flowchart here]*
Classic Presentation (Signs & Symptoms)	
Gold Standard / Key Investigations	
First-Line & Important Treatments	
Potential Complications	
Links to Other Systems	*e.g., How liver failure affects coagulation (Heme) and mental status (Neuro).*
My Clinical Pearl	*One key takeaway you don't want to forget.*

Template 4: Post-SDL Session Reflection Checklist

Use this 5-minute checklist at the end of every SDL block to solidify learning and plan forward.

Session Date: _____
Topic Covered: _____

Reflection Question	Your Response
1. Can I clearly explain the main concepts I learned today without looking at my notes? *(Rate 1-5, where 5 is "I could teach it")*	**Score: ___ / 5**
2. What was the most important thing I learned or clarified?	
3. What is one question that remains unanswered or a concept that is still "fuzzy"?	
4. How will I get this question answered? *(Check one)* [ ] Bring to SGD [ ] Ask a professor [ ] Re-visit this resource: _____ [ ] Find a new resource: _____	
6. Did my study strategy work? What would I do differently next time?	

By consistently using these templates, you will transform your SDL from random reading into a powerful, results-driven engine for medical mastery.