

## Editorial

### How to design a timetable for the integrated program

#### ( Personal experience )

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Before, timetables in the faculties of medicine were similar to life, i.e. simple and easy to deal with. For decades, there was only one timetable for each year which was repeated weekly all over the academic semester or even the academic year (Table 1). This timetable was prepared easily by one responsible employee in the Faculty. Now, on using the new program of teaching, the integrated system based learning, it is not an easy job at all, and it requires the cooperation of the module coordinator and the semester or year coordinator together with the participants staff members of the different departments.

**Table 1: Ordinary weekly timetable of the old ordinary system**

Day	8-10	10-12	12-2	2-4
<b>Sunday</b>	Biochemistry Practical 5,6 Anatomy Practical 1,2	Physiology Lecture	Anatomy lecture	Biochemistry Practical 1,2 Physiology Practical 9,10 Anatomy Practical 7,8 5,6
<b>Monday</b>	Biochemistry Practical 9,10 Physiology Practical 3,4	Physiology Lecture	Biochemistry Lecture	Physiology Practical 7,8 Anatomy Practical 3,4 9,10
<b>Tuesday</b>	Histology Practical 1,2 Anatomy Practical 3,4 5,6	Histology Lecture	Anatomy lecture	Behaviour Science Lecture
<b>Wednesday</b>	Histology practical 7,8 Anatomy Practical 1,2	Physiology in exchange with Biochemistry Lecture	Biochemistry practical 7,8 Physiology Practical 1,2 Histology Practical 5,6	Human Rights Lecture
<b>Thursday</b>	Anatomy Practical 7,8 9,10	Histology Practical 3,4	Biochemistry practical 3,4 Physiology Practical 5,6 Histology practical 9,10	Student activity

Designing a good timetable is necessary to control the implementation of the new system properly; otherwise we will go back to the old system; especially with the hard resistance we face while applying the new system. In the following we will try to summarize the necessary steps to design a suitable timetable.

1. The map of the year (Table 2), should be available and show the distribution of teaching weeks according to the included modules. There are main modules, which are implemented separately or together in blocks of weeks, and there are other modules, which run longitudinally all over the semester, e.g. English language and elective courses. Timetables are prepared according to the main modules.

**Table 2: Map of the First-Semester (2018-2019)**

<b>Week Number</b>	<b>Starting Date</b>	<b>Modules Blocks</b>	<b>Longitudinal modules</b>
	<b>15.9.2018</b>	<b>Orientation Week</b>	
<b>1</b>	<b>23.9.2018</b>	<b>Normal Human Body (7 CH)</b>	<b>-Professionalism [Medical Ethics] (1 CH)</b>
<b>2</b>	<b>30.9.2018</b>		
<b>3</b>	<b>7.10.2018</b>		
<b>4</b>	<b>14.10.2018</b>		
<b>5</b>	<b>21.10.2018</b>		
<b>6</b>	<b>28.10.2018</b>		
<b>7</b>	<b>4.11.2018</b>		
<b>8</b>	<b>11.11.2018</b>	<b>Principles of Disease Mechanism and Drug Therapy (4 CH)</b>	<b>-English Language And Medical Terminology (1 CH)</b>
<b>9</b>	<b>18.11.2018</b>		
<b>10</b>	<b>25.11.2018</b>	+	<b>-Quran Kareem (1 CH)</b>
<b>11</b>	<b>2.12.2018</b>		
<b>12</b>	<b>9.12.2018</b>	<b>Biomedical Sciences (4 CH)</b>	<b>-Fikh (1 CH)</b>
<b>13</b>	<b>16.12.2018</b>		
<b>14</b>	<b>23.12.2018</b>	+	<b>-Elective (1 CH)</b>
<b>15</b>	<b>30.12.2018</b>	<b>Cellular And Molecular Biology and Principles of Genetics (2 CH)</b>	
<b>16</b>	<b>6.1.2019</b>		
<b>17</b>	<b>13.1.2019</b>		
<b>18</b>	<b>20.1.2019</b>	<b>Final-Semester Exams</b>	
	<b>26.1.2019</b>	<b>Mid –Year Holiday</b>	
	<b>3.2.2019</b>	<b>(26.1.2019-9.2.2019)</b>	

- CH = Credit hour

2. The Timetables of other teaching of different years activities using the same places, e.g. teaching room and laboratories should be available to avoid any overlap.

3. Official national holidays should be free of any teaching activity, to exclude these days from the very beginning.

4. There is different timetable for each week (Table 3).

**Table 3: Timetable of Normal Human Body Module (IMP-07-10103) for First Year (2019/2020), 1<sup>st</sup> semester (Week 1)**

Time	Sunday 22.9.2019	Monday 23.9.2019	Tuesday 24.9.2019	Wednesday 25.9.2019	Thursday 26.9.2019
08:00-08:50	<b>Introduction to module (L)</b> Module coordinator and Staff members sharing in the module	<b>Histology (L)</b> Cell structure Dr. ...	<b>Anatomy (L)</b> Locomotor system (1): bone and cartilage Prof. ...	<b>Biochemistry (L)</b> Carbohydrate: Disaccharides Dr. ...	<b>Physiology (L)</b> Body fluids Dr. ...
09:00-09:50	<b>Anatomy (L)</b> Anatomical position Prof.	<b>Biochemistry (L)</b> Carbohydrate: Monosaccharides Dr.	<b>Physiology (L)</b> Homeostasis Prof.	<b>Histology (L)</b> Cell membrane Prof.	<b>Anatomy (L)</b> Locomotor system (2): muscles and joints Prof.
10:00-10:50	SDL	SDL	SDL	SDL	SDL
11:00-11:50	Computer	Soft skills	Feqh	English language	Elective
12:00-12:30	Break				
12:30--02:30	<b>Anatomy (P) Group A</b> Axial skeleton <b>Histology (P) Group B</b> Microscopic techniques <b>Biochem. (P) Group C</b> Glucose tests interpretation <b>Anatomy (T) Group D</b> Systems of the body (1) <b>Physiology (T) Group E</b> Tissue fluid formation	<b>Anatomy (P) Group B</b> Axial skeleton <b>Histology (P) Group C</b> Microscopic techniques <b>Biochem. (P) Group D</b> Glucose tests interpretation <b>Anatomy (T) Group E</b> Systems of the body (1) <b>Physiology (T) Group A</b> Tissue fluid formation	<b>Anatomy (P) Group C</b> Axial skeleton <b>Histology (P) Group D</b> Microscopic techniques <b>Biochem. (P) Group E</b> Glucose tests interpretation <b>Anatomy (T) Group A</b> Systems of the body (1) <b>Physiology (T) Group B</b> Tissue fluid formation	<b>Anatomy (P) Group D</b> Axial skeleton <b>Histology (P) Group E</b> Microscopic techniques <b>Biochem. (P) Group A</b> Glucose tests interpretation <b>Anatomy (T) Group B</b> Systems of the body (1) <b>Physiology (T) Group C</b> Tissue fluid formation	<b>Anatomy (P) Group E</b> Axial skeleton <b>Histology (P) Group A</b> Microscopic techniques <b>Biochem. (P) Group B</b> Glucose tests interpretation <b>Anatomy (T) Group C</b> Systems of the body (1) <b>Physiology (T) Group D</b> Tissue fluid formation
02:30--04:30	<b>Histology (P) Group B</b> Ordinary & Special stains	<b>Histology (P) Group C</b> Ordinary & Special stains	<b>Histology (P) Group D</b> Ordinary & Special stains	<b>Histology (P) Group E</b> Ordinary & Special stains	<b>Histology (P) Group A</b> Ordinary & Special stains

- (L) =Lecture, (P)=Practical, (T)=TUTORIAL, (SDL)= Self-directed learning

5. First lecture should be delivered by the module coordinator so as to introduce the module and explain the methods of teaching and examination according to the study guide. It is better that teaching staff members attend and share in this opening lecture.
6. **THE GOLDEN RULE:** Two lectures/day are more than enough. This rule is the most important one as it controls the teaching process and prevents trial to go back to the old system. In the integrated system, lectures should be between 40 and 50% of the whole teaching hours. This can be achieved by simply applying the aforementioned rule.
7. Time of each lecture is 50 minutes only followed by 10-minutes break. Some faculties allocate 45 minutes only for each lecture without in-between breaks to shorten the academic day. It is not allowed to extend the time of the lecture.
8. The weekly time of other longitudinal modules should be fixed, e.g. English language every Monday at 11 am all over the semester.
9. Title of each teaching activity, name of the tutor, and his(her) department should be mentioned.
10. In case of having 2 successive lectures in the same discipline or subject, especially if they are delivered by the same tutor, they should be separated by another teaching activity.
11. There should be lunch break every day for half an hour at least; preferably at noon.
12. The title of the timetable should have the name of the module(s), its code, and the order of semester and week.
13. Final exam at the end of the module should be preceded by one day free of any teaching activity.
14. It's better to have one timetable for lectures, and another timetable for other activities. This is easier for the students especially if you design the timetable of activities other than lecture according to the groups of students (Table 4).
15. Another timetable should be designed for the small group activities as a supplement for the main timetable. For each group of students, the timetable should have the time and date of each teaching activity, its place, its title, and the name of the tutor and his department (Table 5).
16. Timetables could be made by using suitable software.
17. Timetables should be revised with other timetables of different grades in the faculty and they should be accepted by the sharing tutors, and finally it is much recommended to be revised by a staff member other than the one who made them.
18. Timetables should be available before the beginning of the academic year
20. Suitable font and different colors can be used to write the tables.

**Table 4: Timetable of Activities Other Than Lectures: Normal Human Body Module (IMP-07-10103) for First Year (2019/2020), 1<sup>st</sup> semester (Week 1)**

Groups	Time	Sunday 22.9.2019	Monday 23.9.2019	Tuesday 24.9.2019	Wednesday 25.9.2019	Thursday 26.9.2019
A	12:30-2:30	<b>Anatomy (P)</b> Axial skeleton	<b>Physiology (T)</b> Tissue fluid formation	<b>Anatomy (T)</b> Systems of the body (1)	<b>Biochem. (P)</b> Glucose tests interpretation	<b>Histology (P)</b> Microscopic techniques
	2:30-4:30	-	-	-	-	<b>Histology (P)</b> Ordinary & Special stains
B	12:30-2:30	<b>Histology (P)</b> Microscopic techniques	<b>Anatomy (P)</b> Axial skeleton	<b>Physiology (T)</b> Tissue fluid formation	<b>Anatomy (T)</b> Systems of the body (1)	<b>Biochem. (P)</b> Glucose tests interpretation
	2:30-4:30	<b>Histology (P)</b> Ordinary & Special stains	-	-	-	-
C	12:30-2:30	<b>Biochem. (P)</b> Glucose tests interpretation	<b>Histology (P)</b> Microscopic techniques	<b>Anatomy (P)</b> Axial skeleton	<b>Physiology (T)</b> Tissue fluid formation	<b>Anatomy (T)</b> Systems of the body (1)
	2:30-4:30	-	<b>Histology (P)</b> Ordinary & Special stains	-	-	-
D	12:30-2:30	<b>Anatomy (T)</b> Systems of the body (1)	<b>Biochem. (P)</b> Glucose tests interpretation	<b>Histology (P)</b> Microscopic techniques	<b>Anatomy (P)</b> Axial skeleton	<b>Physiology (T)</b> Tissue fluid formation
	2:30-4:30	-	-	<b>Histology (P)</b> Ordinary & Special stains	-	-
E	12:30-2:30	<b>Physiology (T)</b> Tissue fluid formation	<b>Anatomy (T)</b> Systems of the body (1)	<b>Biochem. (P)</b> Glucose tests interpretation	<b>Histology (P)</b> Microscopic techniques	<b>Anatomy (P)</b> Axial skeleton
	2:30-4:30	-	-	-	<b>Histology (P)</b> Ordinary & Special stains	-

- (P) = Practical, (T) = Tutorial

- Courtesy of Dr. Wagih Mansour, Histology Department, Head of Medical Education Unit, Al-Azhar Faculty of Medicine, Cairo.

**Table (5): Timetable of small-group discussion of Principles of Disease Mechanism and Drug Therapy, Biomedical Sciences (IMP-07-10105) and Cellular & Molecular Biology and Principles of Genetics (IMP-07-10106) Modules for First Year (2018/ 2019), 1<sup>st</sup> term**

<b>Weeks</b>	<b>Topic</b>	<b>Date</b>	<b>Time</b>	<b>Tutor</b>	<b>Group number</b>	<b>Room number</b>
<b>9</b>	<b><u>Microbiology</u> Standard precautions in Microbiology lab. Laboratory hazards</b>	<b>Saturday 17.11.2018</b>	<b>12:30-2:30</b>	<b>Dr. ...</b>	<b>C1</b>	<b>Pathology 1</b>
				<b>Dr. ...</b>	<b>C2</b>	<b>Pathology 2</b>
				<b>Dr. ...</b>	<b>C3</b>	<b>Pathology 3</b>
				<b>Dr. ...</b>	<b>C4</b>	<b>Forensic 1</b>
				<b>Dr. ...</b>	<b>C5</b>	<b>Forensic 2</b>
<b>9</b>	<b><u>Parasitology</u> Zoonosis (definition, types) + Fasciola sp and Babesia</b>	<b>Saturday 17.11.2018</b>	<b>2:30-4:30</b>	<b>Prof. ...</b>	<b>A1</b>	<b>Para. 1</b>
				<b>Prof. ...</b>	<b>A2</b>	<b>Para. 2</b>
				<b>Prof. ...</b>	<b>A3</b>	<b>Para. 3</b>
				<b>Dr. ...</b>	<b>A4</b>	<b>Community 1</b>
				<b>Dr. ...</b>	<b>A5</b>	<b>Community 2</b>
<b>9</b>	<b><u>Biochemistry</u> Free nucleotides of biological importance</b>	<b>Saturday 17.11.2018</b>	<b>2:30-4:30</b>	<b>Prof. ...</b>	<b>E1</b>	<b>Biochemistry 1</b>
				<b>Prof. ...</b>	<b>E2</b>	<b>Biochemistry 2</b>
				<b>Prof. ...</b>	<b>E3</b>	<b>Biochemistry 3</b>
				<b>Prof. ...</b>	<b>E4</b>	<b>Anatomy 1</b>
				<b>Prof. ...</b>	<b>E5</b>	<b>Anatomy 2</b>
				<b>Prof. ...</b>	<b>E5</b>	<b>Anatomy 2</b>
<b>9</b>	<b><u>Microbiology</u> Standard precautions in Microbiology lab. Laboratory hazards</b>	<b>Sunday 18.11.2018</b>	<b>2:30-4:10</b>	<b>Dr. ...</b>	<b>D1</b>	<b>Pathology 1</b>
				<b>Dr. ...</b>	<b>D2</b>	<b>Pathology 2</b>
				<b>Dr. ...</b>	<b>D3</b>	<b>Pathology 3</b>
				<b>Dr. ...</b>	<b>D4</b>	<b>Forensic 1</b>
				<b>Dr. ...</b>	<b>D5</b>	<b>Forensic 2</b>
<b>9</b>	<b><u>Parasitology</u> Zoonosis (definition, types) + Fasciola sp and Babesia</b>	<b>Sunday 18.11.2018</b>	<b>2:30-4:30</b>	<b>Prof. ...</b>	<b>E1</b>	<b>Para. 1</b>
				<b>Prof. ...</b>	<b>E2</b>	<b>Para. 2</b>
				<b>Prof. ...</b>	<b>E3</b>	<b>Para. 3</b>
				<b>Prof. ...</b>	<b>E4</b>	<b>Community 1</b>
				<b>Prof. ...</b>	<b>E5</b>	<b>Community 2</b>