Table num 18

Study plan for the first year Department of Biomedical Engineering

First terr	m										
Course	Course name	Number of weekly hours				Distribution	n of grades	Number	Total	Credit	
ID		lecture	Applicati	ions	total	in-term	Practical	Written	of hours	course	hours
			practice	lab		evaluation	and oral		for the	grades	
									written		
GEN	Mathematics (3)	2	3	-	5	50	-	100	exam 3	150	3
1601	Wathematics (5)	2	5	-	5	50	-	100	5	150	5
GEN	Thermodynamics	2	1	-	3	30	-	70	3	100	2
1602	5										
GEN	Chemical	2	1	-	3	30	-	70	3	100	2
1603	Engineering										
GEN	Human Biology	3	-	1	4	30	30	90	3	150	3
1604	and Physiology	2	2	1	_	40	40	100	2	200	2
POW 1605	Electrical Engineering	2	2	1	5	40	40	120	3	200	3
GEN	Technical English	2	-	-	2	10	-	40	2	50	2
1606	reclinear English	2			2	10		-0	2	50	2
Total number of weekly		13 7 2 22			Number of credit hours					15	
hours											
Second	term										
Course	Course name	Number	of weekly			Distribution	Number	Total	Credit		
ID		lecture	Applicati		total		Practical		of hours	course	hours
			practice	lab		evaluation	and oral		for the	grades	
									written		
GEN	Mathematics 4	2	3	-	5	50	_	100	exam 3	150	3
1607	With the first of	2	5		5	50		100	5	150	5
GEN	Biophysics	2	1	1	4	30	30	90	3	150	2
1608											
GEN	Solid Mechanics	2	1	-	3	30	-	70	3	100	2
1609			_						_		
ELC	Basic Electronics	2	2	2	6	40	40	120	3	200	4
1610 GEN	Engineering	2			2	10		40	2	50	2
GEN 1611	Engineering	2	-	-	2	10	-	40	2	50	2
GEN	Fluid Mechanics	2	1	-	3	30	-	70	3	100	2
1612			1		5			/0		100	2
	Total number of weekly		8	3	23	Number of	credit hours	5	1		15
hours	•										
							Total score1500				

Table num 19

Study plan for the second year Department of Biomedical Engineering

First term											
Course ID	Course name	Number	of weekly			Distribution		Number	Total	Credit	
		lecture	Applicat: practice	ions lab	total	in-term evaluation	Practical and oral	Written	of hours for the written exam	course grades	hours
GEN2601	Mathematics 5	2	2	-	4	50	-	100	3	150	3
ELC 2602	Digital Circuits	2	2	1	5	30	30	90	3	150	3
MEC2603	Engineering Economics	2	1	-	3	30	-	70	3	100	2
GEN2604	Biochemistry	2	-	1	3	20	20	60	3	100	2
GEN2605	Human Anatomy	2	-	-	2	40	-	60	3	100	2
CSE 2606	Data structures in healthcare Delivery	2	1	2	5	30	30	90	3	150	3
Total numb hours	er of weekly	12	6	4	22	Number of credit hours					15
Second ter	m										
Course ID	Course name	Number of weekly hours			Distribution of grades			Number	Total	Credit	
		lecture	Applications t		total	in-term	Practical	Written	of	course	hours
			practice	lab		evaluation	and oral		hours for the written exam	grades	
ELC 2607	Measurement and Measurement Devices	2	1	1	4	30	30	90	3	150	2
MEC2608	Stress Analysis	2	1	-	3	30	-	70	3	100	2
ELC 2609	Advanced Electronics	2	2	2	6	40	40	120	3	200	4
BIO2610	Microprocessor- Based Medical Applications	2	1	1	4	30	30	90	3	150	2
CSE2611	Databases In Healthcare Delivery	2	1	1	4	20	20	60	3	100	2
GEN2612	Environmental Engineering	2	-	-	2	10	-	40	2	50	2
Total numb hours	er of weekly	12	6	5	23	Number of	credit hours	S			14
					1	Total score				1500	

- Summer field training at specialized sites outside the college for four weeks after the second semester exams for the third year.

Table num 20

Study plan for the third year Department of Biomedical Engineering

Course ID	Course name	Number of weekly hours				Distribution	of grades	Number	Total	Credit	
		lecture	Application practice	ons lab	total	in-term evaluation	Practical and oral	Written	of hours for the written exam	course grades	hours
BIO 3601	Statistics	2	1	-	3	40	-	60	3	100	2
BIO 3602	Bio Medical Instrumentation (1)	4	1	-	5	50	-	150	3	200	4
BIO 3603	Medical Pattern recognition	2	1	2	5	30	30	90	3	150	3
BIO 3604	Biomechanics	2	1	-	3	30	-	70	3	100	2
	elective course	2	2	-	4	30	-	70	3	100	3
	Field training									100	
Total number of weekly hours 12			6	2	20	Number of c	credit hours				14
Second term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number	Total	Credi
		lecture	Applications		total	in-term	in-term Practical		of hours	course	hours
			practice	lab		evaluation	and oral		for the written exam	grades	
BIO 3607	Systems Dynamics and Control	2	1	1	4	30	30	90	3	150	2
BIO 3608	Biomedical Instrumentation (2)	4	1	-	5	50	-	150	3	200	4
BIO 3609	Biomedical Signal Processing	2	1	1	4	30	30	90	3	150	2
BIO 3610	Medical laser	2	1	-	3	30	-	70	3	100	2
MEC3611	Project Management	2	-	-	2	10	-	40	3	50	2
	elective course (2)	2	1	-	4	30	-	70	3	100	3
Total number	er of weekly hours	14	6	2	22	Number of c	credit hours			•	15
	•					Total score				1500	

<u>Elective course 1 list</u>: (BIO3605) Biomaterial – (BIO3606) Internet of Things in Medicine

<u>Elective course 2 list:</u> (BIO3612) Rehabilitation Science and Instrumentation – (BIO3613) Software Engineering - (BIO3614) Selected Topics

- Summer field training at specialized sites outside the college for four weeks after the second semester exams for the third year.

1500

Table num 21

First term				2	Ŧ	ment of Bio		6				
							<u> </u>				a ti	
Course ID	Course name	lecture	of weekly Applicat practice		total	Distribution in-term evaluation	of grades Practical and oral	Written	Number of hours for the written	Total course grades	Credit hours	
BIO4601	Biomedical image processing	2	1	1	4	30	30	90	exam 3	150	2	
BIO4602	medical imaging systems(1)	3	1	-	4	50	-	100	3	150	3	
BIO4603	Biomedical Modeling and Simulation	2	1	1	4	30	30	90	3	150	2	
BIO4604	Hospital design	2	-	-	2	30	-	70	3	100	2	
	elective course (3)	2	2	-	4	30	-	70	3	100	3	
	Field training									100		
	Graduation project	-	4	-	4	continuous					2	
Total numb hours	per of weekly	11	9	2	22	Number of credit hours						
Second terr	m Course name		of weekly	hours0	33	Distribution	of grades	Number	Total	Credit		
ID		66+9 lecture	Applicat practice	ions lab	total	in-term evaluation	Practical and oral	Written	of hours for the written exam	course grades	hours	
ELC 4608	Digital Control Systems	2	1	1	4	30	-	70	3	100	2	
BIO4609	Medical Imaging Systems(2)	3	1	-	4	50	-	100	3	150	3	
BIO4610	Advanced Statistics	2	1	-	3	40	-	60	3	100	2	
BIO4611	Clinical Engineering	2	2	-	4	30	-	70	3	100	3	
	Elective Course (4)	2	2	-	4	30	-	70	3	100	3	
BIO4615	Graduation Project	-	4	-	4	100	Discussion	n 100	•	200	2	
Total number of weekly		11	11	1	23	Number of o		15				

Study plan for the fourth year Department of Biomedical Engineering

Total score

Elective course (3) list : Clinical laboratory Instrumentation (BIO4605) - Computer

Aided Diagnosis (BIO4606) - Selected Topics (BIO4607)

hours

Elective course (4) list: Medical information (BIO4612) - Bioinformatics and Genetics (BIO4613) - Selected Topics (BIO4614)

- Elective course: The academic department determines the courses that are added to the list of elective courses.
- The graduation project preparation for fourth-year students continues for 36 hours per week for four weeks, after the second semester exam.

