



## **Course Outline Form**

## **ODD SEMESTER 2019**

*Dear Student: Course outlines are intended to provide students with an overall plan for a course to enable them to function efficiently and effectively in the course.*

*Academic Programs  
BSc Biochemistry  
EMEA College  
Kondotty*

## Course Outline : BCHD02 Life Style Diseases (2019-2020)

Name of the Stream	Science
Name of the Programme	BSc Biochemistry
Name of the Course	BCHD02 Life Style Diseases
Nature of the Course	Open Course
Semester	Fifth
Lecturer(s)	Rajesh T K N K Zaheera Banu
Name of the Coordinator	Rajesh T K
Year	2019-2020
No of Credits	2
No of Contact Hours	2
Course Description	The course is conducted for students from other departments to have basic awareness about the biochemical aspects of different lifestyle disorders.
Course Objectives	1. To ensure students with a healthy life 2. To aware students on different lifestyle diseases
Course Outcome	on completion of the course, student will be aware of the importance of healthy lifestyle, understand the risk factors associated with life style disorders and how to manage or prevent them.
Assessment Method	Assignments Class Tests Term Exam Seminars
Teaching Methods Used	Lectures Cooperative Learning Collaborative Learning LMS
Textbook	
References	<ul style="list-style-type: none"> <li>• Textbook of Medical Physiology, by Arthur C Guyton, John E Hall Prism Saunders.</li> <li>• Biochemistry – U. Satyanarayana, U. Chakrapani books and Allied (P) Ltd</li> <li>• Cell and Molecular Biology by Gerald Karp John Wiley &amp; Sons,</li> </ul>
Internet Resources	<a href="https://www.medicinenet.com/heart_disease_pictures_slideshow_visual_guide/article.htm">https://www.medicinenet.com/heart_disease_pictures_slideshow_visual_guide/article.htm</a>

### Internal Exam Pattern

Items	Marks/20	Marks/15
Assignment	4	3
Test Paper(s)/Viva voce	8	6
Seminar/Presentation	4	3
Class Room Participation based on Attendance	4	3
<b>Total</b>	<b>20</b>	<b>15</b>

## External Exam Pattern

Question Type	No of Question	Marks/Question	Total Marks
Short Questions(2-3 Sentences)	12	2	Ceiling 20
Paragraph / Problem Type	7	5	Ceiling 30
Essay Type	2 out of 4	10	10
<b>Total</b>			<b>60</b>
<b>Time</b>			<b>2 hrs</b>

**Name of the Course:** BCHD02 Life Style Diseases

### Knowledge

#### Academic and Intellectual Skills

Self Learning

Collaborative Learning

Cognitive Skills

#### Personal Skills

Graduate Attributes

Lifelong Learning

Life Skills

#### Attitude and Values

Social Responsibility

Ethical Commitment

Global Citizen

Nation Building

Secular Outlook

## Course Schedule

Basic biochemistry (Biomolecules- carbohydrates, lipids, proteins, nucleic acids)	Week 1
Biomolecules (vitamins and minerals) Life style, food habits, healthy habits, and unhealthy habits	Week 2
Atherosclerosis Characteristics, risk factors (modifiable & unmodifiable), ischemia, myocardial infarction - definition	Week 3

Atherosclerosis Diagnosis ( electrocardiography , Exercise ECG – Stress test, Echocardiography , Coronary angiography, Intravascular ultrasound, Magnetic resonance imaging),	Week 4
Atherosclerosis Prevention (lifestyle, diet, drugs )	Week 5
Atherosclerosis Management ( drugs, angioplasty, stent, bypass surgery)	Week 6
Hypertension Characteristics, Causes,Diagnosis, Prevention and Management	Week 7
Stroke Characteristics (ischemic and hemorrhagic), Causes, Diagnosis (neurological examination, scanning), Management – (Drugs, Mechanical thrombectomy, Angioplasty and stenting)	Week 8
Diabetes mellitus  Classification – type 1, type 2, gestational, Type 2 diabetes: Glucose level, GTT, Glycatedhaemoglobin	Week 9
Diabetes mellitus Characteristics (polyuria, polydypsia, polyphagia), Causes, Diagnosis, Management (diet, exercise, drugs)	Week 10
Obesity Classification according to BMI, symptoms, causes, diagnosis, treatment and management.	Week 11
Cancer Introduction, Types-(benign, malignant), Metastasis (definition),	Week 12
Cancer Causes, Diagnosis (screening. blood tests, X-rays, CT scans & endoscopy)	Week 13
Cancer Prevention- (Dietary, Medication, Vaccination, Screening-Outline only) Management- (Surgery, Chemotherapy, Radiation, Palliative care).	Week 14
Nephritis Function of kidney, Nephritis, Causes, Symptoms	Week 15
Nephritis Diagnosis (Kidney function test, Significance of Glomerular filtration rate (GFR) , Urine creatinine, Blood Urea Nitrogen, Blood creatinine, Creatinine clearance), Treatment, management (dialysis- peritoneal and hemodialysis).	Week 16
Liver disease Function of liver (brief outline), Liver disease (viral hepatitis, alcoholic liver disease, cirrhosis), symptoms, causes	Week 17
Liver disease Diagnosis (Liver function test- Brief outline of serum bilirubin, serum albumin, serum alkaline phosphatase, Aspartate amino transferase, alanine amino transferase, lactate dehydrogenase, treatment and management.	Week 18

## Contact Details

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Website	

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