Semester:	Department of	Basirhat College	Session:

## Lesson Plan for Course:... Endocrinology Code: ZOOADSE03T Credit.....04

- Course coordinator: Subharaj Paul
- Course Outcome:
- ➤ CO1: The basic objective of this DSE is to deliver the information to new comers on endocrine system with emphasis on the chemical structure of hormone, mechanism of hormone action, endocrine glands and their disorders.
- ➤ CO2: To understand the structure of hypothalamus and anterior pituitary and the associated hormones and the related disorders will be explained.
- ➤ CO3: Students learn the concepts of endocrine systems and homeostasis and 2 bioassay methods.
- > CO4: Students also learn about the reproductive cycle of primates and non-primate mammals.

## Course planner:

Sl	Course Topic	Teacher	Class-	Remarks*
Jul	Unit1: General idea of Endocrine systems, Classification, Characteristic and Transport of Hormones.	SP	hour 01	Online classroom method and PPT presentation, youtube video- https://www.youtube.com/watch?v=KSclrkk_Ako
Aug	Neurosecretions, and Neurohormones	SP	01	
	Unit 2: Structure of pineal gland, Secretions and their functions in biological rhythms and reproduction.	SP	03	
	Schedule for class exam on 28 <sup>th</sup> Aug on <b>Unit</b> -1 in Google classroom.		01	Qu- Answer method.
	Structure and functions of hypothalamus Hypothalamic nuclei.	SP	02	Study through E-Book (pdf format)
	Regulation of neuroendocrine glands, Feedback mechanisms; Structure of pituitary gland.	SP	04	Online Lecture method and PPT presentation.
	Pituitary Hormones and their functions, Hypothalamo- hypophysial-portal	SP	03	

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	system. Disorders of pituitary gland.			
Sep	Unit 3: Peripheral Endocrine Glands: Structure, Hormones, Functions and Regulation of Thyroid gland,	SP	03	
	Parathyroid	SP	02	Study through E-Book (pdf format)
	Pancreas,	SP	02	Lecture method and PPT presentation.
	Schedule for class exam on 25 <sup>th</sup> Sept on <b>Unit</b> -2 in Google classroom.		01	Qu- Answer method.
	Adrenal.	SP	03	
	Assessment: Mid- term Test			
Oct	Ovary and Testis;	SP	03	Oct 22 <sup>nd</sup> to 17 <sup>th</sup> Nov
	Hormones in homeostasis, Disorders of endocrine glands.	SP	02	Puja vacation.
	Schedule for class exam on 19 <sup>th</sup> Oct on <b>Unit</b> -3 in Google classroom.		01	Qu- Answer method.
	Unit 4: Mechanism of action of steroidal hormone		01	https://www.youtube.com/watch?v=m9jOXiYdMeY
Nov	Unit 4: Mechanism of action of nonsteroidal hormones with receptors.	SP	02	Study through E-Book (pdf format)- https://www.youtube.com/watch?v=Nt2r5R0ZO5U
	Bioassays of hormones using RIA.	SP	01	Online lecture method and PPT presentation. <i>Bookimmunology by Kuby</i> <a href="https://www.youtube.com/watch?v=hJ8AYS5rpyU">https://www.youtube.com/watch?v=hJ8AYS5rpyU</a>
Dec	Bioassays of hormones using ELISA.	SP	01	
	Estrous cycle in rat and menstrual cycle in human;	SP	04	
	Multifaceted role of	SP	02	

Assessment: End-term Test	Total: 43 Hrs	
classroom.		
Unit-4 in Google		
exam on 21st Dec on		
Schedule for class	01	Qu- Answer method.
parturition		
regulation of		
Hormonal		
Oxytocin;		
Vasopressin &		

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## Resources:

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- 1. Books: Guyton 11<sup>th</sup> edition, Ganong W. Review of medical physiology, Kronenberg\_-\_Williams\_Textbook\_of\_Endocrinology\_11e, endocrinology by Hadley, mammalian endocrinology by Ashoke Kr. Boral.
- 2. Other resources: internet source such as-Wikipidia, <a href="www.britannica.com">www.britannica.com</a>, youtube.com

## \*Remarks will specify

- The nature of the class-topic (viz. Theoretical, Practical, and Tutorial).
- Methodology of teaching (whether using ICT, engaging students in group discussion, quiz etc. etc.)
- Different modes of assessment. (Please check UGC evaluation reforms).