	National University of Sciences and Technology
	Course Description

Course Title	Course Code	Credit Hours
Molecular Neuroscience	BMES-823	3 – 0

TEXT BOOK:

- Principles of Neural Sciences: by Eric Kandel, James Schwartz, Thomas Jessell: 6th Edition (latest edition).
- Neuroscience: by Dale Purves: Third Edition 2004

REFERENCE BOOK

- N/a

COURSE OBJECTIVES:

This course will provide fundamental concepts and understanding of biology of neurons and synapses. Collectively neurons are responsible for controlling the cognitive function which makes us different from other animals. This course will provide understanding of the neural processes and molecular level organization of the synapse, mechanism of the neurotransmitter release and the advance concepts in molecular biology of the nervous system.

COURSE OUTLINES

- Anatomy of Nervous System
- Cytology of Nervous System
- Electrophysiology of the Nervous System
- Role of genetics in the function of the Nervous System
- Transport mechanisms in neurons
- Neurotransmission
- Synapses
- Studying the Nervous System and its disorders

ASSESSMENTS

Description	Percentage Weightage (%)
Assignments	05-10%
Quizzes	10-15%
Mid Semester Exams	30-40%
End Semester Exam	40-50%