

LS 638- EUKARYOTIC GENE EXPRESSION II
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S. No	Topics	Contact hours
1.	Eukaryotic gene structure; core promoters, enhancers	2
2.	Nucleosome structure and genomic organization of chromatin	2
3.	Covalent modification of chromatin structure and regulation of gene expression	2
4.	Remodeling of chromatin structure and regulation of gene expression	2
5.	Transcriptional activation and repression by transcriptional regulators	2
6.	Epigenome and epigenetic control of transcription	2
7.	Control of gene expression by non-coding RNA	2
8.	Integration of extracellular signals with transcription machinery by signaling kinases	2
9.	Gene expression and disease- SNPs in gene expression control; transcription factors and chromatin	2
10.	Co-transcriptional and Post-transcriptional events in gene expression	2
11.	Translational control of gene expression	2
12.	Studying gene expression control	2

Suggested Reading:

1. Principles of Genome Analysis and Genomics: SB Primrose and R M Twyman
2. Molecular Biology of the Cell: Alberts et al. 5th Ed.
3. Genes X by Lewin
4. Reviews/research articles.