**ZOO 642 ADVANCED CELL BIOLOGY**

**SYLLABUS**

* **Introduction to cells; Energy, catalysis & biosynthesis**
* **Protein structure & function; DNA and chromosomes**
* **DNA replication, repair, and recombination**
* **From DNA to protein: How cells read the genome**
* **Control of gene expression**
* **Manipulating genes and cells; Make-up lecture**
* **Membrane structure**
* **Membrane transport, Intracellular compartments and transport**
* **Cell communication**
* **Cytoskeleton**
* **Cell-cycle control**
* **Cell division and cell death**
* **Project presentation**