

Code	Subject Title		Cr. Hrs	Semester
ZOOL-312	Analysis of Development		2	VI
Year		Discipline		
3		Zoology		

Cellular Basis of Morphogenesis: Differential cell affinity, cell adhesion molecules; Mechanism of Cellular Differentiation: RNA processing, translational regulation of developmental process, cell-fate by progressive determinants, autonomous cell specification by cytoplasmic determinants, establishment of body axes and mechanism of teratogenesis; Secondary Induction; Organogenesis: A brief account; Origin and Migration of Germ Cells in Vertebrates; Factors controlling Growth and Oncogenesis. Hormones as Mediators of Development; Regeneration in Vertebrates.

## **Textbook**

- 1. Gilbert, S. F., 2008. Developmental Biology, Sinauer Associates, Sunderland, MA.
- 2. Balinsky, B. I., 1985. An Introduction to Embryology, Saunders.

## **Additional Readings**

- 1. Saunders, J. W., 1982. Development Biology, McMillan.
- 2. Oppenheimer, S.S., 1984. Introduction to Embryonic Development, Allen and Bacon.
- 3. Bodemer, C. W., 1968. Modern Embryology. Holt, Rinehart and Winston.
- 4. Ham, R. G. and Veomett, M. J., 1980. Mechanism of Development. C.V. Mosby Co.
- 5. Berril, N. J. and Karp, G., 1978. Development. McGraw Hill.