

BICD 130 — Embryos, Genes, and Development

Winter 2014

Posakony

Lectures: Tuesday/Thursday, 2:00-3:20 p.m., LEDDN AUD

Required Text: Scott F. Gilbert, *Developmental Biology*, Tenth Edition (2014)

<u>Lecture #</u>	<u>Day/Date</u>	<u>Topic</u>	<u>Book Chapter(s)</u>
1	Tu Jan 7	Introduction/Fertilization	4
2	Th 9	Fertilization/Cleavage	4
3	Tu 14	Cleavage	5, 6, 7, 8, 9
4	Th 16	Gastrulation I	6, 7
5	Tu 21	Gastrulation II	8, 9
6	Th 23	Development of vertebrate embryos I	10
7	Tu 28	Development of vertebrate embryos II	11
8	Th 30	Development of vertebrate embryos III	12, 13
9	Tu Feb 4	Cell adhesion, cell migration, and morphogenesis	3
	Th 6	MIDTERM EXAM (Lectures 1-8)	
10	Tu 11	Differential gene activity I	2
11	Th 13	Differential gene activity II	2, PART TWO*
12	Tu 18	Cell-cell communication	3, PART TWO*
13	Th 20	Axis specification and pattern formation I	6
14	Tu 25	Axis specification and pattern formation II	6, 8
15	Th 27	Limb development	14
16	Tu Mar 4	Sex determination and dosage compensation	15
17	Th 6	The germ line	17
18	Tu 11	Medicine and development	18, PART THREE**
19	Th 13	Evolution and development	20

*Introduction to PART TWO: Specification (pp. 107-115)

**Introduction to PART THREE: The Stem Cell Concept (pp. 319-331)