

Cancer Biology Spring 2009

italics are to be videoconferenced to and underlined are to be videoconferenced from UCDHSC.

1. Introduction/ <i>in vitro</i> assays	Liber	1-21
2. Nomenclature/Histology	Ehrhart	1-23
3. Epidemiology	Reif	1-26
4. Dietary soy and breast cancer	Butler	1-28
5. Prevention	Thompson	1-30
<u>6. Apoptosis</u>	<u>Thorburn</u>	<u>2-2</u>
7. Oncogenes	Weil	2-4
<u>8. Stem Cells and Cancer</u>	<u>Roop</u>	<u>2-6</u>
9. Oncogenes / Tumor Suppressors	Weil	2-9
10. Tumor Suppressors	Weil	2-11
<u>11. Cell Cycle and Cancer</u>	<u>Sclafani</u>	<u>2-13</u>
12. Exam (1-11)		2-16
13. <i>Cytogenetics / telomeres</i>	<i>Bailey</i>	2-18
14. DNA repair	Bailey	2-20
15. DNA repair / recombination	Nickoloff	2-23
16. Cytogenetics / general	Ray	2-25
17. Chemical carcinogenesis	Liber	2-27
18. Mutagenesis	Liber	3-2
<u>19. Prostate Ca: Disease & big issues</u>	<u>Lucia</u>	<u>3-4</u>
<u>20. Prostate Ca: Molecular basis</u>	<u>Lambert</u>	<u>3-6</u>
<u>21. Prostate Ca: Role of hormones</u>	<u>Nordeen</u>	<u>3-9</u>
22. Exam (13-21)		3-11
23. Radiation Carcinogenesis	Liber	3-13
SPRING BREAK		
24. Viral Carcinogenesis	Ray	3-23
<u>25. Breast Cancer: Organ and disease</u>	<u>Holt</u>	<u>3-25</u>
<u>26. Breast Cancer: Genetics</u>	<u>Holt</u>	<u>3-27</u>
<u>27. Breast Cancer: Molecular players</u>	<u>Ford</u>	<u>3-30</u>
28. The machinery for metastasis	Bamburg	4-1
29. Mechanisms of breast tumor metastasis	Bamburg	4-3
30. Animal models/ mice	Weil	4-6
31. <i>Animal models/ veterinary</i>	<i>Thamm</i>	4-8
32. Cancer syndromes	Weil	4-10

33. Colon Cancer	Low	4-13
34. Colon Cancer	Low	4-15
35. Tumor Microenvironment	LaRue	4-17
36. Angiogenesis	Thamm	4-20
37. EXAM (24-34)		4-22
38. Chemotherapy	Thamm	4-24
39. Drug discovery	Thamm	4-27
40. Tumor Imaging	Kraft	4-29
41. Clinical staging	Thamm	5-1
42. Tumor immunology	Dow	5-4
43. Tumor immunotherapy	Dow	5-6
44. Radiotherapy and surgery	LaRue	5-8
45. Exam 4 (35-44)		tbd

The textbook will be: The Biology of Cancer; Weinberg; Garland Science; 2006

Evaluation Methods: Essay and objective examinations will be used. There will be three unit examinations, each one measuring your understanding of a specific group of topics. The “final” exam will cover material from unit 4 and will **not** be cumulative.

Exam 1 – 25%

Exam 2 – 25%

Exam 3 – 25%

Final examination - 25%

Instructor: Team taught

Course Coordinator, Howard Liber, howard.liber@colostate.edu 491-0580