

Molecular and Cellular Biology III 2011 Spring (2011-01-01)

Textbook: 4th edition, Molecular Biology, by Robert F. Weaver

Date	Chapter and Topics	
2/22 T	13 chromatin structure and its effect on transcription	Dr. Huang
2/25 F	13 chromatin structure and its effect on transcription	Dr. Huang
3/01 T	13 chromatin structure and its effect on transcription	Dr. Huang
3/04 F	School activity	
3/08 T	14 posttranscriptional events I: splicing	Dr. Huang
3/11 F	14 posttranscriptional events I: splicing	Dr. Huang
3/15 T	15 posttranscriptional events II: capping and polyadenylation	Dr. Huang
3/18 F	15 posttranscriptional events II: capping and polyadenylation	Dr. Huang
3/22 T	16 posttranscriptional events III: other events	Dr. Huang
3/25 F	16 posttranscriptional events III: other events	Dr. Huang

p.359~520 (Total 162 pages)~

3/29 T	17 the mechanism of translation I: initiation	Dr. Yang
4/01 F	17 the mechanism of translation I: initiation	
4/05 T	Spring break	Dr. Yang
4/08 F	Examination I (lecture 2/22 to 3/25)	Dr. Huang
4/12 T	17 the mechanism of translation I: initiation	Dr. Yang
4/15 F	18 the mechanism of translation II: elongation and termination	Dr. Yang
4/19 T	18 the mechanism of translation II: elongation and termination	Dr. Yang
4/22 F	18 the mechanism of translation II: elongation and termination	Dr. Yang
4/26 T	19 ribosome and transfer RNA	Dr. Yang
4/29 F	19 ribosome and transfer RNA	Dr. Yang
5/03 T	24 genomics	Dr. Yang
5/06 F	24 genomics	Dr. Yang

p.521~638, p.770-827 (Total 176 pages)~

5/10 T	20 DNA replication I: mechanism and enzymology	Dr. Lee
5/13 F	Examination II (lecture 3/29 to 5/06)	Dr. Yang
5/17 T	20 DNA replication I: mechanism and enzymology	Dr. Lee
5/20 F	20 DNA replication I: mechanism and enzymology	Dr. Lee
5/24 T	21 DNA replication II: detailed mechanism	Dr. Lee
5/27 F	21 DNA replication II: detailed mechanism	Dr. Lee
5/31 T	21 DNA replication II: detailed mechanism	Dr. Lee
6/03 F	22 homologous recombination	Dr. Lee
6/07 T	22 homologous recombination	Dr. Lee
6/10 F	23 transposition	Dr. Lee
6/14 T	23 transposition	Dr. Lee
6/17 F	Examination III (lecture 5/10 to 6/17)	Dr. Lee

p.639~769 (Total 131 pages)

6/22 W [教師送繳應屆畢業生本學期成績截止](#)

Molecular and Cellular Biology III

一、課程說明 (Course Description)

本課程為分子生物學三 (LS340200) 之延續課程，本課程共分三部份，第一部份涵蓋基因轉錄後之修飾機制。第二部份涵蓋基因轉譯為蛋白質之機制。第三部份涵蓋 DNA replication, recombination and transposition.

二、指定用書 (Text Books)

Molecular Biology by R. F. Weaver 2008. Fourth edition. Publisher: WCB/McGraw Hill

三、參考書籍 (References)

1. Molecular Cell Biology, by Lodish et al. 2003. Publisher: W. H. Freeman and Company.
2. Molecular biology of the gene by Watson et al. 2004, Fifth edition. Publisher: Benjamin Cummings
3. Recent papers related to the chapters in course.

四、教學方式 (Teaching Method)

以指定教科書為主，討論各 topic 之研究方法、結論及其在分子生物學上之重要性。預期學生除結論外，也能瞭解現今之研究方向及實驗之方法。

五、教學進度 (Syllabus)- - page 1

Molecular and Cellular Biology III, LS340200, Spring, 2011

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六、成績考核(Evaluation)

The grade is the average of three examinations.

助教： to be announced

七、可連結之網頁位址

參考書籍置於生科系圖書館，學生可向圖書館小姐借閱。

<http://www.life.nthu.edu.tw/~labcyw/teaching.html>