

The course content is divided into 6 Modules. Each module has its own folder on the Canvas website. Each module covers several chapters from the textbook **Molecular Biology: Principles of Genome Function, 2nd Edition, Craig et al., Oxford.**

- Module 1:** Introduction (Ch. 1-2)
Module 2: Methods in Molecular Biology (Ch. 19)
Module 3: Transcription (Ch. 4, 8, 9, 10)
Module 4: Translation (Ch. 11, 12, 13)
Module 5: Genomics (Ch. 18)
Module 6: Replication and DNA repair (Ch. 6, 15, 16)

Please see **Course Overview** on Canvas for additional details

Tentative schedule (topics are subject to change – exam dates will not change)

DATE	TOPIC	READING	PROF
M 8/21	Class objectives and overview Module 1: Introduction	Ch. 1 - 2	Stargell
W 8/23	Module 2: Model organisms	Ch. 19. 1,2	Stargell
M 8/28	Module 2: Methods Part 1	Ch. 19. 3,4	Nyborg
W 8/30	Module 2 Methods Part 1	Ch. 19. 6,7,11	Nyborg
M 9/4	Labor Day		
W 9/6	Module 3: Chromosome structure and function	Ch. 4	Nyborg
M 9/11	Module 3: Chromosome structure and function	Ch. 4	Nyborg
W 9/13	Module 3: Transcription	Ch. 8, 9	Nyborg
M 9/18	Module 3: Regulation of transcription	Ch. 8, 9	Nyborg
W 9/20	FIRST EXAM: material includes content covered on 9/13		
M 9/25	Module 3: Regulation of transcription	Ch. 8, 9	Nyborg
W 9/27	Module 3: Regulation of transcription	Ch. 8, 9	Nyborg
M 10/2	Module 3: RNA processing	Ch. 10	Nyborg
W 10/4	Module 2: Methods Part 2	Ch. 19. 9 -12	Nyborg
M 10/9	Module 2: Methods Part 2		Nyborg
W 10/11	Module 4: Translation	Ch. 11	Nyborg
M 10/16	Module 4: Translation Important: “W” drop date	Ch. 11	Nyborg
W 10/18	SECOND EXAM: material includes content covered on 10/11		
M 10/23	Module 4: Regulation of Translation	Ch. 12	Stargell
W 10/25	Module 4: Regulatory RNAs	Ch. 13	Stargell

M 10/30	Module 2: Methods Part 3	Ch. 19. 8,13-15	Stargell
W 11/1	Module 2: Methods Part 3		Stargell
M 11/6	Module 5: Genomics	Ch. 18	Stargell
W 11/8	Module 5: Genomics	Ch. 18	Stargell
M 11/13	Module 6: Replication	Ch. 6	Stargell
W 11/15	THIRD EXAM: material includes content covered on 11/8		
11/20-24	FALL BREAK		
M 11/27	Module 6: Replication	Ch. 6	Stargell
W 11/29	Module 6: DNA damage	Ch. 15	Stargell
M 12/4	Module 6: DNA repair	Ch. 16	Stargell
W 12/6	Module 2: Overview		Stargell
	FOURTH EXAM: Finals Week. Wednesday, December 13 th ; 11:50 – 1:50 pm. Covers all course material		