The aim of this course is to provide a foundation in basic molecular biology through lectures, particularly in the fields related to the central dogma: replication, transcription, RNA processing, translation. We expect the course to help students shift from the notion of science as a series of textbook "facts" to science as a series of imperfect experiments whose results compete to provide most likely interpretations that are integrated into fallible and mutable models. This is accomplished by in depth discussion of key papers. Students defend a research proposal for their final exam.

**Lecturers**
- Joachim Li - joachim.li@ucsf.edu
- Carol Gross - cgrossucsf@gmail.com
- Barbara Panning - barbara.panning@ucsf.edu
- Geeta Narlikar - geeta.narlikar@ucsf.edu
- Raul Andino - andino@cgl.ucsf.edu

**Discussion Leaders**
- Sandy Johnson - ajohnson@cgl.ucsf.edu
- Keith Yamamoto - yamamoto@medsch.ucsf.edu
- Liz Blackburn - elizabeth.blackburn@ucsf.edu
- Wallace Marshall - Wallace.Marshall@ucsf.edu
- David Weinberg - david.weinberg@ucsf.edu

**Teaching Assistants**
- Candace Britton - candace.britton@ucsf.edu
- Jonathan Kuhn - jonathan.kuhn@ucsf.edu
- Rebecca Kim - rebecca.kim@ucsf.edu
- Johnny Rodriguez - johnny.rodriguez@ucsf.edu
- Kelly Crotty - kelly.crotty@ucsf.edu

**Schedule for 2014**
**Lectures:** Mondays and Thursdays (Tuesdays at 9 am when Monday is a holiday)
10:30 am to 12:00 pm in BH 212

**Discussion Sessions:** Wednesday morning
- Discussion Group 1: 9:00am-10:30am (GH-S202) Johnson/Yamamoto/Blackburn
- Discussion Group 2: 10:30am-12:00pm (GH-S202) Johnson/Yamamoto/Blackburn
- Discussion Group 3: 10:30am-12:00pm (BH-209) Marshall/Weinberg

**Review Sessions:** Wednesday at 6:00 pm in GH-S201. Room assignments for sessions on 1/15 and 2/19 TBA.
Monday Jan 6 Replication 1 (Li)
Wednesday Jan 8 Discussion (Replication) Johnson/Marshall
Thursday Jan 9 Replication 2 (Li)
Monday Jan 13 Replication 3 (Li)
Wednesday Jan 15 Discussion (Replication) Johnson/Marshall
Thursday Jan 16 Replication –in class problems (Li)
Tuesday Jan 21 Transcription 1 (Gross) @10:30 am
Wednesday Jan 22 Discussion (Transcription) Johnson/Marshall
Thursday Jan 23 Transcription 2 (Gross)
Monday Jan 27 Transcription 3 (Gross)
Wednesday Jan 29 Discussion (Transcription) Johnson/Weinberg
Thursday Jan 30 Transcription –in class problems (Gross)
Monday, Feb 3 RNA processing 1 (Panning)
Wednesday Feb 5 Discussion (Splicing) Blackburn / Weinberg
Thursday, Feb 6 RNA processing 2 (Panning)
Monday, Feb 10 RNA processing 3 (Panning)
Wednesday Feb 12 Discussion (RNA Processing) Blackburn/Marshall
Thursday, Feb 13 Chromatin 1 (Narlikar)
Tuesday Feb 18 Chromatin 1 (Narlikar) @ 9am
Wednesday Feb 19 Discussion (Chromatin) Blackburn/Marshall
Thursday Feb 20 –in class problems (Panning/Narlikar)
Monday Feb 24 Translation 1 (Andino)
Wednesday Feb 26 Discussion (Translation) Narlikar/Marshall
Thursday Feb 27 Translation 2 (Andino)
Monday March 3 Translation 3 (Andino)
Wednesday March 5 Discussion (Translation) Yamamoto /Weinberg
Thursday Mar 6 –in class problems (Andino)

EXAM WEEK: Monday March 17-Thursday March 20.

GRADING SESSION: Thursday March 20, 3-5pm

Discussion Section Assignments
Section 1: W 9:00 am-10:30 am GH S202 (Johnson/Blackburn/Yamamoto)
Emma Powell
Betsy Martin
Beatriz Osuna
Nathan Gamarra
Jordan Tsai
Jade Sales-Lee
Diana Summers
Jonathan Asfaha
Biochemistry 201A
Bioregulatory Mechanisms
Winter 2014

Section 2: W 10:30 am-noon GH S202 (Johnson/Blackburn/Yamamoto)
Terri Lee
Jonathan Flores
Dan Santos
Leeanne Goodrich
Han Tran
Delsy Martinez
Melanie Silvis
Alex Long

Section 3: W 10:30-noon BH 209 (Marshall/Weinberg)
Kevin Colon-Negron
Frances Hundley
Jessica Sherry
Kate Carbone
Samuel Thompson
Nathan Edwards
Anne Pipathsouk