

LECTURE SCHEDULE

This course is scheduled for two hours. We will have a 10 min snack/walk break during class. Presenter is listed along with assignment for that day. Students are responsible for reading all assigned chapters and papers prior to class. **Please refer to Brightspace for instructions.**

Topic	Lecture	Date	Class Focus	Class Assignment	Reading Assignment (read BEFORE class)
How to be Successful in Graduate School	1	Aug 24	Intro to graduate school by Dr. Tran		https://inchemistry.acs.org/grad-school/how-to-choose-the-right-lab.html
<i>Molecular Biology Part 1</i>	2	Aug 31	Tools Part I: Model Systems, Genetics		
<i>Molecular Biology Boot Camp (Part 2)</i>	3	Sept 7	Tools Part II: Molecular Biology Techniques		
<i>Effective use of PowerPoint</i>	4	Sept 14	Effective use of PowerPoint (lecture and video) Presentation groups will be assigned	TURN in one page summary of assigned papers in class (one page total, 1.5 space, 11pt font.) Turn in your technique choices to Dr. Tran.	Assigned Papers (2): Alon, U. How to Give a Good Talk, Mol Cell 2009 and St. James, Seven Deadly Speaker Sins. 2012
<i>Group Presentations</i>	5	Sept 21	Presentation skills		https://purdue-edu.zoom.us/j/93252034070?pwd=RjlSdEhPZDRlWHhtZmN6ZjRWSGF2QT09
<i>Group Presentations</i>	6	Sept 28	Presentation skills		https://purdue-edu.zoom.us/j/91750519345?pwd=eFpCOWtzMDlLcXVzYmowSUVpZGVkdz09
<i>How to Read a Paper</i>	7	Oct 5	How to Read a Paper	TURN in paper summary using "How to Read a Paper" guide in class	<i>Assigned Reading:</i> Cho et al., 2001 Use "How to Read a Paper" instructions

NO CLASS		Oct 12	FALL BREAK		
<i>Read a Paper</i>	8	Oct 19	How to Read a Paper	TURN in paper summary using "How to Read a Paper" guide in class	<i>Assigned Reading:</i> TBD Use "How to Read a Paper" instructions
<i>Numbers in Science</i>	9	Oct 26	Key Numbers in Biology Bring a LAPTOP to class!	In class bionumbers.org , working as groups in class	Assigned paper: Key Numbers in Biology cheat sheet
<i>Workshop</i>	10	Nov 2	Adobe Photoshop	<i>Youtube lessons. 9 short modules. BRING HEADPHONES TO CLASS.</i>	https://www.youtube.com/playlist?list=PLKq6GUpBc9MDMaYBEhjtegeJtKCnCPxsG
<i>Meet a Scientist</i>	11	Nov 9	Meet Blaine Bartholomew (BCHM Seminar Speaker)	Email Dr. Tran 3 questions for Dr. Bartholomew by 5pm FRIDAY.	In Person
<i>Scientific Fraud</i>	12	Nov 16	Case Studies on Fraud-group presentations (find examples of fraud on your own)		https://purdue-edu.zoom.us/j/92511471541?pwd=R2VCNzZVck56UE5hdE1rYXBZnJBNdz09
<i>NIH Guidelines on Research Integrity</i>	13	Nov 23	NIH Videos	https://www.nih.gov/research-training/rigor-reproducibility/training	z https://purdue-edu.zoom.us/j/99724541371?pwd=Sk1OTG9MdUV6MkczMVJMOFFENTZDZz09
<i>CRISPR Introduction</i>	14	Nov 30	CRISPR introduction (start researching for your debate!) and watch scientific debate link	TURN in one page summary of assigned papers in class (one page total, 1.5 space, 11pt font.)	Assigned Paper: Doudna Cell 2016 review
<i>Genetic Engineering Class Debate</i>	15	Dec 7	CRISPR: Medical Breakthrough or Ethical	Class Debate: Groups will debate the virtues or	https://purdue-edu.zoom.us/j/92291872852?pwd=WG

			Conundrum	problems with CRISPR.	VYYk5nS0J5dUZublZXVkJFINU9mdz09
<i>NO CLASS</i>		Dec 10	Two page research paper (with references) on current scientific controversy of your choice (other than CRISPR)	DUE by 5pm on Dec 14 in BrightSpace	FINAL ASSIGNMENT DUE IN LIEU OF EXAM