

NJIT CELL BIOLOGY OF DISEASE: CELLS GONE WILD!

Instructor: Darshan J Desai darshan@njit.edu

Tuesday 6:PM to 8:PM

Central King Building Room 212

Text Books: Medical Cell Biology 3rd Ed (Steven R Goodman) {**required**} &
Biochemistry 6th or 7th Ed (Berg, Tymoczko & Stryer)[**optional or earlier edition**] &

Strunk and White Elements of Style {**required**}

All titles are available in Amazon.com

Lecture/Date	Day	Topic
1 Jan 17	Tuesday	Intro to the course/Objectives
2		Intro Cell biology
3 Jan 24	Tuesday	Intro Molecular Biology
4		Intro to pathology
5 Jan 31	Tuesday	Developmental diseases 1
6		No class
7 Feb 07	Tuesday	Genetic Disease 1
8		Genetic Disease 2
9 Feb 14	Tuesday	Diabetes 1
10		Diabetes 2
11 Feb 21	Tuesday	TBD
12 Feb 28	Tuesday	Liver disease 1
13		Liver disease 2
16 Mar 07	Tuesday	Immunological disease 1
17		Immunological disease 2
<u>Spring Break</u>		
18 Mar 21	Tuesday	Student disease A-1 TBD
19		Student disease A-2 TBD
20 Mar 28	Tuesday	Student disease B-1 TBD
21		Student disease B-2 TBD
22 Apr 04	Tuesday	Student disease C-1 TBD
23		Student disease C-2 TBD
24 Apr 11	Tuesday	Student disease D-1 TBD

25			Student disease D-2 TBD
26	Apr 18	Tuesday	Large Group disease A-1 TBD
27			Large Group disease A-2 TBD
28	Apr 25	Tuesday	Large Group disease B-1 TBD
29			Large Group disease B-2 TBD

Goals & Objective of BIOL628/440

- This is a seminar style course where peer reviewed journals articles and the latest scientific advances will be identified, reviewed and assessed as a class.
- The instructor will only provide background and demonstration in the early portion of the Spring 2023 semester as indicated by the dates above.
- Only if necessary, will the course instructor add to the course materials – once the background/demonstration period is over, students will be solely be responsible for course progression.
- Students are required to utilize various medical, scientific and technology databases (PubMed, Google Scholar, Web of Science) to find articles.
- Students are required to organize presentations view PowerPoint (only) to present their finding to the class- the goal of which is to learn and master how to present these materials to scientific peers and professionals.
- Students will generate mini-reviews, as discussed below and based exclusively on the ALL materials used in their team or individual presentations.
- The course will be administered via CANVAS – you must have access to NJIT CANVAS.

Grading:

- Groups will be graded by both students and the instructor.
- The Instructor will have 45% of value (power points and 3 written mini-review works), with student's evaluation being 15% of complete grade.
Late submission of the critique will result in an automatic 25% reduction in the student's grade.
- A cumulative final will be at the end of the semester during finals period 10%.
- The major final paper is 30% (20 -25 pages – not including bibliography, using journal double column single space format; see sample paper on CANVAS).
- Students will be assigned a unique and anonymous identifier (*known only to the instructor*) to allow for objective and un-restrictive assessment of the presentation and work effort of seminar speaker and teammates. The critiques will be submitted with in **24hrs** of each presentation and will be

used towards their individual course grade. **Late submission of the critique will result in an automatic 25% reduction in the student's grade.**

- **1 week** after the student's presentation, student speakers will have the anonymous critiques from the class and the instructor to allow for use in improvement of successive preparation and presentation—this will be posted on CANVAS.

Presentation:

- Teams of 2 (or 4, if not individuals) will prepare the power points with a lecture length of 45mins, followed by discussion time by audience and instructor.
- Teams or student presenters will have all PDFs of the journal articles and reference materials used to generate the seminar **1 week** prior to the date of the seminar for upload to Moodle and proper review by fellow students and instructor, as well as a 1 page summary paper the student audience to utilize- **Failure to provide materials on schedule will immediately result in a full letter grade reduction. NO EXCEPTIONS**
- Presentations should have a history of the pathology, epidemiology of the pathology, history of the disease, clinical diagnostic/biochemical characterization of the pathology, a detailed biochemical/molecular/biological mechanism of the pathology, current therapeutic options and an emergent therapy.
- As a Writing Intensive/Honors Course, Student presenters will have to submit a 5-10 page mini-review of the topic covered; this is done individually & independently by each student, and is due **1 week** post the student's presentation (**4 writing assignments in total**). **Late submission will not be accepted under any circumstances!! Late submission of the critique will result in an automatic 25% reduction in the student's grade for each day it is late!**
- First drafts of these papers will be submitted to **Turnitin.com** via **CANVAS** for review, edit recommendations, and academic integrity validation. **Any report that has over 20% or higher similarity reports will be characterized as plagiarized and will result in unconditional failure of the assignment, followed by immediate reporting of the incident to department, chairman and dean.** Once students receive the corrected 1st drafts from the instructor, they will re-submit the second edited draft for second review and comments after 1 week, and after a 2nd review, where student will receive further comments and edits, students will resubmit a final version after 1 week to be graded.
- Each student will submit 5 pathologies for a **Final LONG FORM major 20-25 page research paper (NOT INCLUDING**

BILOGRAPHY assignment on **January 31st**. Student must submit 5 pathologies for selection by this date. The instructor will then select which Long Form Paper subject to be written about no later than **February 15th**. This paper will be in a professional "review" format to be clarified by the instructor. This assignment will be **due on April 30, 2023 – 12NOON**.

- If you read and understand this syllabus – you will send me an email by Tuesday, January 17th before 5:00PM with the subject heading " BIOL 628 Sp 23 – I understand this course and read the syllabus." Include your NJIT ID number and email address in the body of the email.

- **A= 90% or higher**
- **B= 80% or higher**
- **C= 70% or higher**
- **D= 60% or higher**
- **F= below 60%**
- **GRADES ARE NOT NEGOTIABLE – DO NOT ASK OR TRY!**

Plagiarism is defined as the act of using another person's words or ideas without giving credit to that person! Even if you cite the work, but copy and paste it – this is STILL considered plagiarism!

Office Hours:

Monday 11am to 12pm & 1pm to 230pm

Wednesday: 11:30am to 2pm

Students must make an appointment to meet! Please use "BIOL 440/628 Sp23" in the subject line when sending any email.

Phone: 973.642.7084

Email: darshan@njit.edu

With regards to responding to email correspondence, I will try to reply to emails with in 24-48 hrs after receiving them. Please include the course number and name in subject line of email (*i.e. BIOL 628 Spring 2023 - I am dying*). If you do not receive a reply from me by then, please email me again including the original email sent!

