Syllabus for BIOL 40011
Genetic Screens in Cell Biology
Spring 2019

Meetings: Firdays 1:00 – 5:00 PM
Instructor: Dr. Derrick Brazill
Office Hours: Mondays 2-4pm (803A)
Email: Brazill@genectr.hunter.cuny.edu

Course documents: available on Blackboard

Learning Outcomes & Classroom Expectations:
As a result of this course experience, students should be able to

1. employ the scientific method to identify problems or questions, develop hypotheses, design experiments to test hypotheses, and reach conclusions.
2. apply knowledge of cell biology and genetics to formulate scientific question and perform experiments to answer them.
3. troubleshoot experiemental problems s they arise.
4. apply relevant current biological literature to scientific enquiry.
5. present original research in both oral and written forms.

Grading:

40% - Participation in performing laboratory experiments.
30% - Final written research report
This will be a formal written report in the style of a scientific journal article with abstract, introduction, materials and methods, results and discussion sections. This will contain all of the data that has been accumulated thourgh student experiementation.
30% - Final oral (PowerPoint) research presentation
This will be a 20 – 30 minute presentation to the class on the results obtained throughout the semester.

Hunter College Academic Integrity Policy: Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical and/ or Learning) consult the **Office of AccessABILITY** located in Room E1124 to secure necessary academic accommodations. For further information and assistance please call (212- 772- 4857)/TTY (212- 650- 3230).

Spring 2019
Fridays, 1:00 pm - 5:00 pm

BIOL 40011 - Genetic Screens in Cell Biology
Instructor: Prof. Derrick Brazill

Date	Room #	Topic/Activity
Fri 1/25	937N	Experimental Design; Genetci Screens; Intro to *Dictyostelium discoideum*
Fri 2/1	937N	Culturing *Dictyostelium* Cells, Examining Development: Spore Viability Assay
Fri 2/8	937N	Examining Quorum Sensing: Low Cell Density Assay Examining Feeding: Plaque Assays
Fri 2/15	937N	Examining Cell Proliferation: Growth Curves and Nuclei Staining
Fri 2/22	937N	Examining the cytoskeleton: F-Actin Staining
Fri 3/1	937N	Examining cell motility: Cell Motility Assay
Fri 3/8	937N	Examining Chemotaxis: Under Agarose Folate Chemotaxis Assay
Fri 3/15	937N	Examining Chemotaxis: Under Agarose cAMP Chemotaxis Assay
Fri 3/22	937N	Examining Vesicle Traficking: Endocytosis Assay
Fri 3/29	937N	Examining Vesicle Traficking: Exocytosis Assay
Fri 4/5	937N	Making and Giving Scientific Presentations Free Lab
Fri 4/12	937N	Free Lab
Fri 4/19	937N	Spring Recess
Fri 4/26	937N	Spring Recess
Fri 5/3	937N	Free Lab
Fri 5/10	937N	Presentations