## 2014-2015 Academic Year, Fall Semester

## Neurobiology of Brain Disorders NEURL-UA 302.001

Faculty: Eric Klann, Ph.D.

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Office hours: by appointment

Prerequisites: Students must have taken/are currently taking Cellular and

Molecular Neurobiology (V80.0210001) or an equivalent course.

Exceptions will be determined by the instructor.

Schedule: All classes will be held in Room 815, Meyer Hall from 9:00-11:00 on Thursday.

**Textbook:** There is no textbook for this course. The lectures will be based on the primary literature.

**Grading:** There will be a mid-term exam and final exam. The mid-term will count for 40% and the final exam will count for 60%.

Syllabus:

- Introduction and Behavioral Measures in Mice
- Basics of Cellular and Molecular Basis of Synaptic Plasticity
- Alzheimer's Disease
- Developmental Disorders: Down Syndrome
- Developmental Disorders: Autism
- Developmental Disorders: Fragile X Syndrome
- No Class Fall Break
- Mid-term Exam
- Developmental Disorders: Tuberous Sclerosis
- Developmental Disorders: Angelman Syndrome
- Developmental Disoders: Neurofibromatosis type 1,
- Coffin-Lowry Syndrome, Rubinstein-Taybi Syndrome,
- Rett Syndrome, Wolcott-Rallison Syndrome
- Schizophrenia
- Parkinson's Disease
- Drug Addiction
- Depression and Bipolar Disorder