Syllabus for Mathew Lab Research Internship

Course Description: This research experience provides hands-on training in *Drosophila* larval navigation, olfactory behavior, and molecular neuromodulation. The goal is to move from supervised training to independent investigation.

Learning Objectives:

1. Master lab protocols and molecular biology techniques as needed for your specific project.
2. Engage with primary neuroscience literature
3. Attend weekly lab meetings.
4. Develop professional communication and data management skills.

Weekly Requirements & Expectations:

- **Time Commitment:** Minimum of 15 hours per week. Consistency is mandatory for biological experiments.
- **Lab Meetings:** Attendance is required. You are expected to have contributed something you did in the lab during the previous week and something you plan to do in the upcoming week.
- **Communication:** All routine coordination happens via Slack. Check Slack daily during the work week.
- **Response Window:** Expect responses from the PI within one working day. You are expected to adhere to the same 24-hour professional window.

Rubric:

Category	Exceeds Expectations (A-Level)	Needs Improvement (Below A)
Reliability & Initiative	Arrives on time; completes "Most Important Tasks" (MITs) before being asked; troubleshoots minor issues independently.	Inconsistent attendance; requires constant reminders for routine tasks; "waits to be told" what to do next.
Data Integrity	Updates lab notebooks and spreadsheets daily; samples are labeled clearly and organized perfectly.	Records are incomplete or updated weeks late; samples are difficult for others to locate.
Communication	Uses Slack effectively; provides 24-hour notice for absences; asks clarifying questions before starting tasks.	Fails to respond to messages within 24 hours; disappears for days; does not communicate when a protocol is unclear.
Intellectual Engagement	Identifies the "next step" in an experiment; participates actively in Journal Club discussions.	Performs tasks mechanically without understanding the "Why"; remains silent during lab discussions.