# 1 Timeline

Table 1: Timeline of Future Research.

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|---|---|---|
| **Summer2017** | Project 4 | Experimental data collection in Oxford |
| | Project 4 | Produce effective concentration curves for various tether lengths, ligand sizes |
| **Fall2017** | Project 4 | Evaluate circumstances of membrane net enhancement/reduction |
| | Project 4 | Compare surface effects on tethering simulations to data |
| | Project 2 | Continue parameter exploration of electrostatics |
| **Winter2018** | Project 1 | Explore sequential binding for dephosphorylation, reversible phosphorylation |
| | Project 1 | Quantify reversible phosphorylation, create hill plots |
| | Project 2 | Investigate cooperativitiy, sequential binding from electrostatics |
| | Project 4 | Write paper on tethering |
| **Spring2018** | Project 3 | Explore sequential binding of multiple ligands, find dominant sequence |
| | Project 1,2 | Write paper for local structuring and electrostatics |
| **Summer2018** | Project 3 | Begin adding multiple chains, coreceptors to simulation |
| | Project 3 | Find average number of ligands able to bind receptor |
| **Fall2018** | Project 2 | Write paper for simultaneous binding of ligands |
| **Winter2019** | Project 2 | Begin investigating steric constraints of TCR clusters |
| **Spring2019** | Project 2 | TCR Clustering finished, write-up |
| | | Dissertation write-up |
| **Summer2019** | | Defense |
| | | Finish writing dissertation |

Table 2: Timeline of Coursework. Courses in italics do not count towards degree course requirements.

| **Fall 2014** | **Winter 2015** | **Spring2015** | **Summer 2015** |
|---|---|---|---|
| Dev Bio 212 | Dev Bio 212 | Dev Bio 212 | Research |
| Math 227A | Math 227B | Math 227C | |
| Dev Bio 203A | Dev Bio 232 | Dev Bio 203C | |
| Physics 230A | | M&MG 250 | |
| **Fall 2015** | **Winter 2016** | **Spring2016** | **Summer 2016** |
| *Math 205A* | *Math 205B* | *Math 205C* | Research |
| *Math 220A* | *Math 220B* | *Math 220C* | |
| *Math 230A* | *Math 230B* | *Math 230C* | |
| *Math 298A* | *Math 298B* | *Math 298C* | |
| **Fall 2016** | **Winter 2017** | **Spring2017** | **Summer 2017** |
| Dev Bio 212 | Dev Bio 212 | Dev Bio 212 | Research |
| Math 225A | Math 290B | CS 284C | Preliminary Exam |
| MMB 204 | | Physics 230B | Advancement |
| **Fall 2017** | **Winter 2018** | **Spring2018** | **Summer 2018** |
| Dev Bio 212 | Dev Bio 212 | Dev Bio 212 | Research |
| **Fall 2018** | **Winter 2019** | **Spring2019** | **Summer 2019** |
| Dev Bio 212 | Dev Bio 212 | Dev Bio 212 | Defense |