Faculty Sponsors: Marcus Roper (Homelessness Topic), Chris Anderson (Neurology Topic)
Research Mentor: Mike Lindstrom (instructor)
Office: MS 5622
E-mail: mikel@math.ucla.edu

Weekly Group Meetings and Lectures: Mon 6-7 pm (full group) Thurs 4-5pm (Neurology) Thurs 5-6pm (Homelessness)

Course Description: Homelessness: modeling survey mechanisms to estimate the fluidity of the homeless population
Neurology: developing/extending first principles models for the etiology of neurological disorders

Expectations:

Researching and analysis/coding:	3-4 h/week (2 credits)	8-10 h/week (4 credits)
Report Writing:	0-1 h/week (2 credits)	0-2 h/week (4 credits)
Weekly Meetings/lectures:	2 h/week (2 credits)	2 h/week (4 credits)

Grading Scheme: Course assessment is based on

Attendance and Research:	45% (attending meetings, task work and completion)
Oral Exam:	20% (individual questions about the math and work)
Final Presentation:	10% (presenting the work as a group to public audience)
Midterm Report:	5% (group written report of overall findings mid-quarter)
Final Report:	20% (group written paper of overall findings of the work)

Week	Research Activity
1	Research meetings and/or lectures
2	Research meetings and/or lectures
3	Research meetings and/or lectures
4	Research meetings and/or lectures
5	Research meetings and/or lectures
6	Research meetings and/or lectures **M: May 3rd – Midterm report due by 5 pm**
7	Research meetings and/or lectures
8	Research meetings and/or lectures
9	Research meetings and/or lectures
10	Research meetings and/or lectures **R or F: Final presentation**
Exam Week	**M-F: Oral exams** **F: June 11th – Final report due by 5 pm**

* Lecture topics could include: *numerical techniques for differential equations, asymptotic analysis, physical modelling, threaded programming, data science, etc*. Not every week will have a lecture; some of these topics may be covered and others not listed may be relevant.