

Course Project

As you know from reading the syllabus, 20% of the course grade will be comprised of a single, long-term individual project. **The project will be an investigation and mathematical modelling case study of your choice, and your model must involve ordinary differential equations.**

1 Topics

Your writing assignment due on Tuesday, September 27 was intended to get you to explore several topics that might be of interest to you. I will ask each of you for an individual meeting before the end of the day on Friday, September 30, where we'll personally narrow down your focus and discuss approaches to modelling your selected phenomenon.

Please see the “examples” section for samples of student work and—if you haven't chosen a few topics already—potential material for you to expand on.

2 Deadlines

There will be short writing assignments each week to be submitted as part of your notebook/journal grade; these assignments will have specific prompts asking you for concrete steps, and you should use them as opportunities to generate material that will later go into the drafts of your final report. The drafts will be due on the following dates, which can also be found in the syllabus:

- First draft: Thursday, October 13
- Second draft: Thursday, October 10
- Final draft: Thursday, December 8

3 Presentations

On the final day of class (Thursday, December 8), you will be invited to give a 10-15 minute presentation about your work (length of presentation to be determined by the number of volunteers). If you elect to give a presentation, then your project grade will reflect your extra effort. Please let me know on or before Tuesday, December 6 whether you intend to present.

4 Writing Advice

For writing feedback and support, visit MCLA's Writing Studio in Murdock 120. There you will find trained Writing Associates who can help you at any stage of the writing process: from understanding assignments and brainstorming ideas to planning, revising and polishing final drafts. The Writing Associates are available Monday through Thursday, from 6:00 p.m. to 9:00 p.m. For more information and to make an appointment, go to the Writing Studio website at www.mcla.edu/writingstudio.

5 Examples of Case Studies

Please see some examples of successful undergraduate case studies here:

<http://home2.fvcc.edu/~dhicketh/DiffEqns/DiffEqnsprojects.html>

Another good place to begin would be here:

<http://www.maths-in-industry.org/Reports/>

More detailed rubrics will follow closer to the draft deadlines, but in general, your final report should be close in spirit and in quality to those shown at the above web sites.