Objective
The purpose of the course project is to engage students in the creation of Lisp programs that demonstrate an understanding of symbolic programming ideas and Lisp programming fundamentals. Each 458 student must prepare a project proposal and that proposal must approved by the instructor.

Timeline
The project will proceed according to the following timeline.

4/22 Proposal Deadline
This date is the deadline to submit a proposal for the course project. It should be one to two pages and indicate the problem that will be addressed and the goals for the Lisp solution. Email the instructor in advance of this date if you need ideas or want to see if your idea is satisfactory.

5/6 Accepted proposal
Proposals will be reviewed and feedback provided with proposals resubmitted if necessary. By 5/7, each student should have completed a satisfactory proposal.

5/20 Progress Report
Once a proposal has been accepted, project work should begin. On 5/21, each student should submit a two-page document detailing the current state of the project and remaining milestones for its completion. Revisions of the original project goals should be detailed.

6/10 Final Project Due
Students should submit their final project on the date of the final exam. The submission should include (a) all of the Lisp code that comprises the project, and (b) a five-page write-up of the project including instructions for how the program can be used and discussion of what was accomplished.

Sample Projects
Here are some sample projects that you might consider. Feel free to propose others.

- Write a program that plays a simple card game against the user: Gin, Rummy, Hearts
- Write a program for decrypting simple substitution ciphers.
- Write a rule-based system in some area of your own expertise.
- Extend our polynomials example to a more full-featured symbolic math package (reducing arbitrary equations, differentiation, integration, etc.)
- Write a simple information retrieval system.