'396' Undergraduate Research Project Application Form

Version: 200603

Office for Undergraduate Research in Science
Tel.: 514-398-5964 / Fax: 514-398-8102 / Dawson Hall, Room 211
Email: victor.chisholm@mcgill.ca Web: www.mcgill.ca/science/ours/

INSTRUCTIONS FOR STUDENTS

- **All fields are required, unless indicated otherwise.**
- Download and print this form. Complete Section C and sign.
- See "How students can apply" instructions in Section B.
- Your supervisor or department will tell you if you are selected for this project. If so, you will receive a code to register for a '396' course on MINERVA.

SECTION A: SUPERVISOR INFORMATION

Name: Tracy Webb

Email: webb@physics.mcgill.ca

Phone: 514-398-7226

Website: http://www.physics.mcgill.ca/~webb/

Supervisor's Department or Unit: Physics

Course Number: PHYS396

SECTION B: PROJECT INFORMATION

Term: Winter 2007

Project start & end dates: January 3-April 15 2007

Project title: Isolating the galaxy population of the unique high redshift galaxy cluster RCS2319

Project description: This project involves the analysis of spectroscopic data taken with the VLT, an 8m optical telescope. The spectra correspond to a few hundred galaxies which are candidate members of a young redshift z~ 1 galaxy cluster. The project entails (1) extracting the individual spectra from the reduced image and associating each with a physical coordinate, (2) identifying features within the spectra, such as nebular emission lines or broad-band breaks, and (3) using these features to determine the redshift of each galaxy. (4) With this information the student will then separate cluster member galaxies from foreground and background objects, and assemble a cluster catalog, for immediate scientific analysis.

Prerequisites: 1 term completed at McGill + CGPA ≥ 3.0; or permission of instructor.

Grading scheme: 40% participation and weekly assessment of progress; 60% final report

Other:

Status: Mark with an x. This project is…
[ ] Open to applicants
[x] Already taken; no more positions available this term
[ ] Taken, but contact me for other possible projects this term

Ethics, safety, and training Which of the following, if any, is involved? Mark with an x.
[ ] Animal subjects
[ ] Human subjects
[ ] Biohazardous substances
[ ] Radioactive materials
[ ] Handling chemicals
[ ] Using lasers

For undergraduate students, ethics and safety compliance is the supervisor's responsibility.

How students can apply:

SECTION C: STUDENT INFORMATION. (1) PRINT LEGIBLY AND SIGN. (2) SEE "HOW STUDENTS CAN APPLY" IN SECTION B.

Name:

McGill ID:

Email: @mail.mcgill.ca

Phone:

Program: (e.g., B.Sc. Maj. Chem. Minor Biology)

Level (circle one): U0 / U1 / U2 / U3

I have not applied for another 396 course in this term.

Student signature:

Date:

SECTION D: APPROVALS. (1) PRINT NAMES & SIGN. (2) NOTIFY OFFICE FOR UNDERGRADUATE RESEARCH IN SCIENCE. (3) GIVE STUDENT CODE TO REGISTER FOR COURSE ON MINERVA.

Supervisor:

Date:

Unit Chair, Director, or designate - I certify that this project conforms to departmental requirements for 396 courses.

Date: