

Good leadership relies on skills that can be learned.

A good leader...

Sets an example, and clarifies values

Inspires others to work towards a shared vision

Seeks challenges, and is willing to take appropriate risks

Fosters collaboration and builds strength in others

Recognize and celebrate contributors' successes

Develop the attributes, skills, and understanding through the CERTIFICATE IN SCIENCE LEADERSHIP AND COMMUNICATION

See inside for more details!

CERTIFICATE IN SCIENCE LEADERSHIP AND COMMUNICATION

Components – from start to finish

- ETHICS (PHIL 2680 or PHIL 1050*) – a great introduction
- NATURE OF SCIENCE (select from approved list*)
- SITUATING YOUR DISCIPLINE (select from approved list*)
- COMMUNICATION (SCIE 3111 or PSYO 3010)
- LEADERSHIP (SCIE/BIOL 4444) –the capstone
- PORTFOLIO

*see inside and website for details
(www.dal.ca/scienceleadership)

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CERTIFICATE IN SCIENCE LEADERSHIP AND COMMUNICATION

WHAT MAKES A GOOD SCIENCE LEADER?



leaders change the world

visit dal.ca/scienceleadership

WHAT IS INVOLVED?

15 CREDIT HOURS

1. Leadership skills development

SCIE/BIOL 4444: Science Leadership

- 3-credit hour course
- Introduce students to the basic components of effective leadership.
- Students clarify their personal strengths and values
- Apply these in developing a shared vision, understanding change, inspiring others, challenging practices
- Working with others for the benefit of all.

Practicum component where students will develop their leadership skills, as well as hone their disciplinary knowledge, through a variety of experiential activities outside of regular class time.

2. Communicating Science

ONE OF THE FOLLOWING:

SCIE 3111: Communicating science
PSYO 3010: Advanced General Psychology

Both courses have a required **practicum component** where students will serve as mentors for novice students in class settings.

3. Ethics in Science

ONE OF THE FOLLOWING:

PHIL 2680 Ethics in Science (*Students will not be given credit for both PHIL 2680 and PHIL 1050)

PHIL 1050 Ethics in Science

4. Understanding the Nature of Science

ONE OF THE FOLLOWING (*not all offered every year*):

HSTC 2400: Science and the Media

HSTC 2205: Totalitarianism & Science

HSTC 2206: Biopolitics

HSTC 3201: Science and Religion

HSTC 3212: The Biosphere

HSTC 3411: Feminism and Science

HSTC 1801: Technology and Engineering

HSTC 4000: Science and Nature in the Modern Period

HSTC 4301: History of Neuroscience

HSTC 2200X/Y: Intro to History of Science

HSTC 2204: The Darwinian Revolution

PHIL 3420/BIOL 3580: Philosophy of Biol.

PHIL 2660: Understanding Scientific Reasoning

PHIL 2810: Ethics and Health Care

PHIL 2480: Environmental Ethics

ECON 3360: Ethics, Justice & Economics

Once registered in the Certificate, attend meetings as scheduled (no more than twice a year).

*****Email Certificate Coordinators to register.*****

5. Discipline specific courses with a focus on developing an understanding of disciplinary thinking and communication

ONE OF THE FOLLOWING:

BIOC 4510: Medical Biotechnology I

BIOL 3020: Advanced Cell Biology

BIOL 3065: Conservation Biology

BIOL 3601: Nature Conservation

BIOL/MARI 4323: Biologging in Ecology

ECON 2850/PHYC 2850: Science and

Economics of Climate Change

ENVS 3501: Environ. Problem-Solving

ERTH 3500: Geoscience Info. Management.

ERTH 4000: Advanced Field School

MARI 4350: Cutting Edge Marine Scie.

MARI 4664: History of Marine Sciences

NESC 2007: Methods in Exp. Psychology

OCEA 4331: History of Marine Sciences

PSYO 2000: Methods in Exp. Psychology

PSYO 3581: History of Psychology I

PSYO 3582: History of Psychology II

PHYC 3010: Experimental Physics II

***For additional possibilities: contact coordinator**

PORTFOLIO OF LEADERSHIP AND COMMUNICATION DEVELOPMENT

- **Summary of activities** undertaken in each of the courses / components
- **Reflection** on how each of these fits into leadership and communication development in their discipline
- **Reflection on the practicum components**
- **Record of any additional leadership** aspects of employment or science-related volunteer activities