



INSTRUCTORS:

BRUNO LAFRANCE, Professor of structural and economic geology at Laurentian University. Internationally recognized expert in the structural controls and modification of gold and base metal deposits.

JOHN AYER, Associate director of MERC and adjunct professor at Laurentian. Internationally recognized expert in Precambrian Geology and Archean ore deposits. Over 25 years of experience in mapping and research within the Abitibi greenstone belt.

HAROLD GIBSON, Professor of Volcanology and Ore Deposits at Laurentian University and MERC Director. Internationally recognized expert in volcanic ore deposits and submarine volcanic processes, deposits and environments.

For information or to register, please contact Chantal Duval at cduval@laurentian.ca
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MINERAL EXPLORATION RESEARCH CENTRE AT THE HARQUAIL SCHOOL OF EARTH SCIENCES

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GREENSTONE GOLD AND BASE METAL MAPPING COURSE:
Exploration Models and Methods
MERC – Laurentian University
Society of Economic Geologists
Student Chapter
Tentative dates: May 23-29, 2017

INSTRUCTORS:

Bruno Lafrance
John Ayer
Harold Gibson



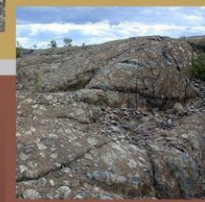
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**ARE YOU NEW TO EXPLORATION?
ARE YOU NEW TO GOLD AND BASE METAL
EXPLORATION IN PRECAMBRIAN SHIELDS?
DO YOU NEED TO UPGRADE YOUR MAPPING
AND CORE LOGGING SKILLS?**



MERC

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TARGET:

Professional geoscientists who have recently entered the exploration sector, or professionals who are new to gold and base metal exploration in Precambrian Shields.

OBJECTIVES:

① RECOGNIZE THE ESSENTIAL LITHOFACIES AND STRUCTURES ASSOCIATED WITH WORLD CLASS ARCHEAN GOLD, VMS CU-ZN-AU AND MAGMATIC NI-CU-PGE DISTRICTS

Recognize the essential components of world class ore systems.

② LEARN OUTCROP MAPPING AND EXPLORATION TECHNIQUES

Recognize and describe rock types, structures, define map units and produce field maps.

③ LEARN EXPLORATION MODELS AND METHODS

Learn geological and geochemical methodologies.

FIELD WORK PLAN:

DAY 1: Lithologic, alteration and structural mapping at the Cote Gold deposit, one of the best studied Archean porphyry gold deposits.

DAY 2: Excursion in the Timmins area as an introduction to the camp's stratigraphy, rock types, structure, and mineralization.

DAY 3: Mapping exercises at the Coniarum Mine, the eastern end of the World Class Hollinger (~30Moz) orogenic gold system.

DAY 4: Mapping of the Wakemac shear-hosted gold mineralization in the West Timmins gold camp.

DAY 5 & 6: Mapping exercises at the exceptionally well exposed Genex VMS deposit in the Kamiskotia area, west of Timmins.

DAY 7: Excursion to study and map komatiitic flow facies associated with komatiite-hosted Ni-Cu-PGE deposits, south of Timmins.

EVENING LECTURES:

DAY 1: Introduction to the Timmins gold and VMS camp, the Greenstone Au model and key exploration criteria. Introduce project areas.

DAY 2: Introduction to Abitibi Greenstone belt VMS and komatiite-hosted Ni-Cu-PGE deposits, the VMS model and key exploration criteria.

DAY 4 & 5: Guest lectures on Gold, VMS and Ni-Cu-PGE deposits and exploration methods.

DAY 6: Presentation of team mapping results.

GROUP SIZE:

24 maximum

COST:

\$3000/person (all inclusive cost, return travel from Sudbury included). MERC member discounts apply.