

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE- MARIE, ONTARIO

COURSE OUTLINE

Course Title: MINING IN CANADA
Code No.: MNG 125-3
Program GEOLOGY
Semester: TWO
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New X

Revision:

APPROVED

Chairperson



Date



CALENDAR DESCRIPTION

Mining in Canada

MNG 125-3

COURSE NAME

COURSE NUMBER

PHILOSOPHY/GOALS: The student should become familiar with the organization of the Ministry of Natural Resources - Division of Mines. He should be proficient in claim staking, knowledgeable in recording procedures and submittal of assessment work. He should also become aware of the significance of the mining industry to provincial and federal economies and social systems.

METHOD OF ASSESSMENT (GRADING METHOD): There will be:

2 tests (mid-term and semester end) worth a total of	70%
2 assignments (one based on mining in Canada)	15%
(one based on the Ontario Mining Act)	15%
	100 %

Minimum passing grade is 60%. Students obtaining 50-59% will be given an opportunity to re-write.

TEXTBOOK(S):

Pamphlet - The Ontario Mining Act

A. The student should be able to describe the organization of Ministry of Natural Resources - Division of Mines.

- 1, The student should be able to describe the function of the Geological Branch, the Mineral Resources Branch, the Mines Engineering Branch, and the Mineral Research Branch.
- 2, The student should be able to describe the function of the Mining Lands Section of the Division of Lands.
- 3, The student should be able to name the mining divisions in Ontario and to name which offices of the Mining Division are located in the areas.
- 4, The student should be able to outline the functions of the Mining Commissioner.

B. The student should be proficient in claim staking and be knowledgeable in recording procedures, and in submittal of assessment work. Also, the student should:

1. Be able to name examples when a Prospector's Licence is required.
2. Be able to name the different types of Prospector's Licence.
3. To know where licences can be obtained and their expiry dates.
4. To know the rights of a licensee.
5. To know which rights are maintained by a holder of revoked Prospector's Licence and to know his obligations.
6. Be able to name problems which can occur when a Licence is not renewed in time.
7. Be able to name examples of lands open and closed for staking of mining claims.
8. Be able to describe the size and shape of mining claims in surveyed and unsurveyed territory.
9. Be able to give the proper legal description of mining claims in surveyed territory.

10. Be able to stake out on paper mining claims, indicating staking procedure, location and description on regular posts and witness posts.
11. Be able to describe staking procedures using common posts.
12. Be able to describe procedures of making claim lines visible.
13. Know when areas are closed to staking of mining claims -
14. Know the time limits for recording of claims and affixing of metal tags.
15. Be able to submit information on staked claims for the purpose of recording.
16. Be able to submit forms for disputes over mining claims.
17. Know time limits and requirements when a certificate of record can be issued.
18. Be able to know the rights of a Licencess which are obtained by staking of mining claims.
19. Be able to know assessment work requirements.
20. Be able to name work which can be considered for assessment work.
21. Be able to arrange various types of work for submittal as assessment work.
22. Know which type of work and under which conditions can be be transferred among claims.
23. Be able to list requirements to obtain a lease on mining claims.
24. Be able to list length of a lease and fees.
25. Be able to state when a patent for mining lands can be issued.
26. Be able to list the size and shape of mining claims in other Canadian provinces.
27. Know the requirements for obtaining Exploration Licences.

The student should be able to:

1. Outline the activities associated with mining.
2. Outline the history of mining and to describe the development of mining techniques.
3. Outline the Canadian mining history, especially to name major discoveries.
4. Name minerals of which Canada has the largest production in the world.
5. Quote the value of Canada's mineral production in relation to the Gross National Product-
6. Describe the trend of the mineral production in Canada and the world in past years and describe the outlook for future consumption of major minerals.
7. Give a breakdown of the mineral production by provinces.
8. Name nickel production areas in Canada, name the ores used for the final product and to explain the present world market situation for this metal.
9. Name and locate on a map copper, lead, and zinc producers in Canada, and discuss consumption and price trends, name uses and discuss the outlook for these minerals.
10. Name and locate on a map major gold producers in Canada, quote production figures and discuss problems affecting this industry.
11. Discuss the world gold production and consumption and discuss the role of gold in world monetary systems.
12. Name major iron ore producers in Canada and quote production trends of this metal in Canada and in the world.
13. Name the types of iron ores mined in Canada and describe beneficiation, smelting and refining methods employed.
14. Name asbestos producers and discuss Canada's role in the world asbestos market.
15. Name uses for asbestos fiber and discuss safety hazards associated with this material.

16. Name potash producers in Canada and discuss the present economic situation of this industry.
17. Discuss and name uranium and coal producers in Canada, their production trends, prices, shipping problems, etc.
18. Discuss the methods of obtaining energy, the projected shortage, and Canada's role and potential as a supplier of energy.

TOPIC	PERIODS	TOPIC DESCRIPTION
1	2	Organization of the Division of Mines of the Ministry of Natural Resources
2	6	Staking Regulations <ul style="list-style-type: none"> - Prospector's Licence - Lands open and closed to staking - Size and shape of claims - Staking procedure
	3	Recording and Disputes <ul style="list-style-type: none"> - Recording procedures - Disputing procedures
	8	Assessment, Work, Leases and Patents <ul style="list-style-type: none"> - Rules and regulations - Credits and reports - Leases - Patents <p>Introduction to the Mining Industry</p> <ul style="list-style-type: none"> - History and deveipment of the industry - Progress in mining techniques related to mine exploration, development, ore extraction and beneficiation - Influence of politics and economy upon the mining industry with special attention to the present Canadian situation
	20	The Canadian Mining Industry <ul style="list-style-type: none"> - Mine production for the provinces - Production, producers, consumption, usage, prices of the following commodities: nickel, copper, zinc, lead, gold, silver, platinum, cadmium, uranium, potash, asbestos - The fossil fuels