

Wydział: **Geologii, Geofizyki i Ochrony Środowiska**
Rodzaj studiów: **stacjonarne II stopnia**
Kierunek studiów: **Górnictwo i Geologia**
Specjalność: **Economic geology**

Wykaz przedmiotów egzaminacyjnych:

- I. Geology, mineralogy and genesis of metaliferous mineral deposits
- II. Exploration
- III. Geology of the World

Zagadnienia egzaminacyjne:

I. Geology, mineralogy and genesis of metaliferous mineral deposits

1. Mineral deposit parameters
2. Characteristics of the mineral deposit processes
3. Copper deposit - and geological characteristics of the different genetic types
4. Zn-Pb deposits and their geological characteristics
5. Geological characteristics of the titanium mineral deposits
6. Classification, genetic types and geological characteristics of the energetic types deposits
7. Geology of the paleochannel uranium deposits
8. Geological model of the unconformity deposit
9. Key parameters of metaliferous mineral deposits
10. Geology and mineralogy of chromite mineral deposits
11. New classification of gold deposit
12. Geology of Ni-sulphides deposits
13. Genesis of Witwatresrand Au-deposit
14. Geological model of MVT-deposit
15. Geology of greenstones gold deposits

II. Exploration

1. Describe an initial stage of exploration
2. Characteristic of soil geochemistry
3. Differences between GIS and RS methods
4. LANSAD bands useful for mineral exploration
5. Describe methods of back ground determination
6. When and way we are doing geochemical exploration
7. Describe differences between panning and stream sediments exploration methods
8. Pathfinders
9. Described differences between green grass and brown field exploration targets
10. What kind of data are collected during hidden stage of exploration
11. Importance of pan concentrates exploration analyses
12. Roles of pan concentration analysis
13. What kind of data are presented on prognostic maps
14. Importance of showing for exploration
15. Importance of the deposit technical parameter for exploration

III. Geology of the World

1. What is the age of the oldest segments of the oceanic crust? Explain why.
2. Give a list of the main features characteristic for the Archaean greenstone belts globally.
3. List the most characteristic features of the Transvaal Supergroup including the one related to the marine life; why was that important globally?
4. What specific global change in weathering style is recorded by the Waterberg Group and its age equivalents present in other ancient continents?
5. Present the features of the deepest portions of the orogenic belts using the Limpopo Belt as the example?

6. Give a set of criteria, which prove the existence and composition of the Gondwana Supercontinent.
7. What is the feature of the India-Asia collision, which resulted in a specific pattern of large-scale deformations.
8. List the main tectonic units of the Himalayas.
9. What is the age of the Grenvillean orogenic belt, where does it occur and what is the name of its age equivalent in the southern hemisphere?
10. Name the main large-scale tectonic units/regions that make up the Asian Continent.
11. Give names of the continental-scale depositional sequences overlying the N American craton; say what type of succession characterizes most of them.
12. Name the orogeny that resulted in the Rocky Mountains and explain: what was its most characteristic feature and how did it influence volcanism (that is commonly associated with orogenic movements)?
13. What metals are mined in the Norilsk deposit and what rock formation is related to the deposit genesis?
14. Name the nappes that form the Alps and make a sketch to show their relations
15. What is the characteristic feature of the volcanic front associated with the Andean orogenic cycle, and what do large-scale strike-slip structures associated with this collision indicate?