

Denver SEM Course (2024)- Agenda

Tuesday 29 October

- 8:30** Venue Safety Induction; SEG Informational
- 8:45** Introduce Presenters and Participants; Course Overview
- 9:30** *Module 1: The Mineral Exploration Business Environment*
- 10:30** Tea
- 11:00** *Module 2: Principles & Philosophies*
- 12:30** Lunch
- 13:30** *Module 2 continued*
- 14:00** Introduce Challenge Exercise, Teams, Tasks 1 and 2 / Team discussions
- 15:00** Tea
- 15:30** *Module 3: Developing an Effective Strategy*
- 16:30** *Module 4: Portfolio Management & Decision Point Planning*
- 17:30** Adjourn to Social Gathering

Wednesday 30 October

- 8:30** Group Discussion – Day 1 Questions/Comments
- 9:00** *Module 5: Mineral Exploration Tactics*
- 10:00** *Module 6: Commercial Risk Management at Operational Scale*
- 10:30** Tea
- 11:00** *Module 6 continued*
- 12:30** Lunch
- 13:30** *Module 6 continued*
- 14:00** *Module 7: Mineral Exploration Targeting – Part I*
- 15:00** Tea & adjourn for the day to allow time for Task #2 preparation

Thursday 31 October

- 8:30** Group Discussion (Task #2 workshop)
- 9:30** *Module 8: Mineral Exploration Targeting – Part II*
- 10:30** Tea
- 11:00** *Module 8 continued*
- 12:30** Lunch
- 13:30** *Module 9: Managing the Exploration Group – Culture & People*
- 15:00** Tea & adjourn for day to allow time for Challenge Exercise preparation

Friday 1 November

- 8:30** Exploration Challenge Exercise Task #1 Presentations
 - 10:30** Tea
 - 11:00** Critique and Discuss Presentations; Winning Team; Course Wrap-up
- LUNCH AVAILABLE FOR THOSE WHO WANT TO STAY**

SEM Course (Denver 2024) – Syllabus

Module 1 (1 hour): *The Mineral Exploration Business Environment*

- The Mineral Exploration Business Cycle
- The Global Context for Mineral Exploration
- Exploration Expenditure Trends
- Discovery Cost Trends
- The Exploration Value Proposition

Module 2 (2 hours): *Principles & Philosophies*

- Key Concepts: Search Space, Base Rate & False Positives, LTOV, Valuing Opportunities
- Fundamental Strategic Principles
- Acquisition Vs Exploration -- Buy or Explore?
- Greenfield Exploration Philosophy
- Brownfield & Greenfield: Characteristics and Balance
- Concepts & Principles Unique to Juniors
- Exploration Technology
- The Basic Role Of R&D In Exploration

Module 3 (1 hour): *Developing an Effective Exploration Strategy*

- Why Develop a Strategy – The Value Proposition
- The Strategic Context
- Exploration Search Space, Strategy, Showstoppers & The Time Factor
- The Strategy Content – Aspirations, Strategic Business Choices,
- The Process of Developing the Strategy

Module 4 (1 hour): *Portfolio Management & Decision Point Planning*

- Goals and the System
- Budget Allocation – Decision Point Planning
- Early Economic Analysis
- Project Ranking
- Gating and Project Scale Review
- Portfolio Scale Review

Module 5 (1 hour): *Mineral Exploration Tactics*

- Prospecting Vs Systematic Exploration
- Effective Vs Successful Exploration
- The Assembly Line – Exploration as A Linear Sequence Of Stages
- Optimising Sampling Density
- The 3D Jigsaw – Building the Contextual Geological Framework

- Stratigraphic Drilling
- Project Scale Search Space Analysis
- Unexplorable Projects
- Recognising Which Anomalies Are Valid Targets
- False Positives and The Characteristics of a High-Quality Target
- Managing Exploration Success

Module 6 (2.5 hours): Commercial Risk Management at the Operational Scale

- Part 1: The Process
 - CRM Pitfalls
 - Stakeholder Management
 - The CRM Role in Project Planning and Risk Management
- Part 2: Negotiating and Documenting Mineral Transactions
- Summary and Workshops (2)

Module 7 (1 hour): Mineral Exploration Targeting – Part I

- Introduction & Overview
- Targeting Science
- The Business Interface
- Deposit Size-Frequency Distributions & Zipf's Law
- Targeting Under Cover

Module 8 (2.5 hours): Mineral Exploration Targeting – Part II

- Applying the Mineral Systems Concept
- Mineral Systems Framework 1
- Mineral Systems Framework 2
- The Importance of Deposit Clustering
- Building Target Models
- Applying Target Models
- Interaction with Data
- Target Ranking

Module 9 (1.5 hours): Managing the Exploration Group – Culture & People

- Performance and Key Success Factors
- Creativity, Innovation, Pattern Recognition and Expertise
- Decision-Making under Uncertainty – Understanding the Heuristics
- Managing the Effects of Heuristics and Biases
- Building & Retaining a High-Quality Team