

**APEGGA**

The Association of
Professional Engineers, Geologists
and Geophysicists of Alberta

GEOLOGY COURSE EQUIVALENTS 2000 Edition

University of Alberta

University of Calgary

2000-GFUND-1a Elementary Calculus I

MATH 113 Elementary Calculus I

OR

MATH 114 Elementary Calculus I

OR

MATH 100 Calculus I

MATH 251 Calculus I

OR

MATH 249 Introductory Calculus

ORAMAT 217 Calculus for Engineers and
Scientists**2000-GFUND-1b Elementary Calculus II**

MATH 115 Elementary Calculus II

OR

MATH 101 Calculus II

MATH 253 Calculus II

OR

AMAT 219 Multi variable Calculus for Eng.

2000-GFUND-2a General Physics I

PHYS 100 General Physics I

PHYS 211 Mechanics

2000-GFUND-2b General Physics II

PHYS 101 Introductory General Physics II

PHYS 223 Intro Electromagnetism, fluids &
thermal physics**2000-GFUND-3a General Chemistry I**CHEM 101 Introductory University
Chemistry I**OR**CHEM 103 Introductory University
Chemistry I

CHEM 201 General Chemistry I

2000-GFUND-3b General Chemistry IICHEM 102 Introductory University
Chemistry II**OR**CHEM 105 Introductory University
Chemistry II

CHEM 203 General Chemistry II

2000-GFUND-4 Differential Equations and Transform Methods

MATH 201	Differential Equations	AMAT 307	Differential Equations for Engineers
OR			
MATH 214	Intermediate Calculus I	OR	
OR		MATH 331	Multivariate Calculus
MATH 215	Intermediate Calculus II	OR	
		AMAT 311	Differential equations

2000-GFUND-5 Linear Algebra and Vector Analysis

MATH 120	Basic Linear Algebra I	AMAT 309	Vector Calculus for Engineers
OR		OR	
MATH 125	Linear Algebra	MATH 353	Calculus IV
		OR	
		MATH 221	Linear Algebra for Scientists & Engineers

2000-GFUND-6 Computing Science

CMPUT 101	Introduction to Computing	CPCS 215	Introduction to Programming
OR		CPCS 231	Introduction to Computer Science I
CMPUT 102	Structural Programming and Data Structures	CPCS 233	Introduction to Computer Science II
OR			
CMPUT 114	Introduction to Computing Science		
OR			
CMPUT 115	Programming with Data Structures		
OR			
CMPUT 201	Practical Programming Methodology		
OR			
EAS 220	Intro to Computational Techniques in Earth & Atmospheric Sciences		

2000-GFUND-7 Thermodynamics

PHYS 211	Thermodynamics and Kinetic Theory	ENGG 311	Engineering Thermodynamics
		OR	
		CHEM 371	Physical Chemistry: Equilibrium Thermodynamics

2000-GFUND-8 Biology

BIOL 107	Introduction to Cell Biology	BIOL 231	Introduction to Biology I
OR		OR	
BIOL 108	Organisms in their Environment	BIOL 233	Introduction to Biology II

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2000-GFUND-9 Physical Chemistry
CHEM 271 Energetics of Chemical Reactions

OR
CHEM 273 Physical Properties of Dynamics of Chemical Systems

OR
CHEM 275 Physical Properties of Dynamics of Chemical Systems

2000-GFUND-10 Organic Chemistry

CHEM 161 Organic Chemistry I

OR
CHEM 163 Organic Chemistry II

2000-GFUND-11 Inorganic Chemistry

CHEM 241 Inorganic Chemistry I

OR
CHEM 341 Inorganic Chemistry II

2000-GFUND-12 Statistics

STAT 141 Introduction to Statistics

OR
STAT 151 Introduction to Applied Statistics

2000-GLGY-1 Mineralogy & Crystallography
EAS 224 Mineralogy I

2000-GLGY-2 Principles of Stratigraphy and Sedimentation
EAS 231 Principles of Sedimentation

2000-GLGY-3 Igneous Petrology
EAS 331 Igneous Petrology

CHEM 371 Physical Chem: Equilibrium Thermodynamics

OR
CHEM 373 Physical Chemistry: Avantum Mechanics & Symmetry

CHEM 341 Elementary Organic Chemistry

OR
CHEM 351 Organic Chemistry I
CHEM 353 Organic Chemistry II

CHEM 331 Inorganic Chemistry: Main Group Elements

OR
CHEM 333 Inorganic Chemistry: Transition Elements

STAT 211 Concepts of Statistics

OR
STAT 213 Introduction to Statistics I

OR
STAT 357 Statistics for the Physical Sciences

OR
STAT 217 Introduction to Statistics II

GLGY 311 Minerals & Rocks

GLGY 381 Stratigraphy and Sedimentation

GLGY 531 Igneous Petrology

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2000-GLGY-4 EAS 322	Sedimentary Petrology Petrology of Sedimentary Rocks	GLGY 461	Sedimentary Petrology
2000-GLGY-5 EAS 332	Metamorphic Petrology Metamorphic Petrology	GLGY 433	Metamorphic Petrology
2000-GLGY-6 EAS 321	Structural Geology Structural Geology	GLGY 341	Structural Geology
2000-GLGY-7 EAS 320	General Geochemistry Geochemistry 1	GLGY 429	Geochemical Thermodynamics
2000-GLGY-8 GEOPH 221	Global Geophysics Physics of the Earth	GOPH 359 OR GOPH 355	Global Geophysics Exploration Geophysics
2000-GLGY-9 EAS 225	Geomorphology Earth Surface Processes and Landforms	GLGY 373 OR GEOG 307	Surficial Geology Landform Processes and Morphology
2000-GLGY-10 EAS 352	Glacial and Quaternary Geology Hydrogeology & Fluvial Landforms	GLGY 673	Quaternary Geology
OR EAS 453	Arctic Environment		
OR EAS 454	Arid & Semi Arid Environment		
OR EAS 455	Alpine Environments		
2000-GLGY-11 EAS 223	Hydrogeology Introduction to Hydrogeology	GLGY 401	Physical Hydrogeology
2000-GLGY-12 EAS 230	Paleontology Introduction to Invertebrate Paleontology	GLGY 391	Paleobiology
2000-GLGY-13 EAS 430	Petroleum and Natural Gas Petroleum Geology	GLGY 577	Petroleum Geology

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2000-GLGY-14	Economic Geology No Course Equivalent		No Course Equivalent
2000-GLGY-15 EAS 433	Metallic Mineral Deposits Metalliferous Mineral Deposits	GLGY 527	Metallic Mineral Deposits
2000-GLGY-16 EAS 330	Stratigraphy of Western North America Stratigraphy	GLGY 587	Stratigraphy & Paleontology of Western Canada
2000-GLGY-17 EAS 435	Geotectonics and Global Geology Geotectonics	GLGY 555	Global Geology
2000-GLGY-18 GEOPH 223	Exploration Geophysics Environmental Monitoring and Mining Exploration Techniques	GOPH 355	Exploration Geophysics
OR GEOPH 224	Geophysical Exploration Techniques	OR GOPH 453	Mining Geophysics
2000-GLGY-19 EAS 232	Optical/Advanced Mineralogy Mineralogy II	GLGY 313	Crystallography & Optical Mineralogy
2000-GLGY-20 EAS 422	Advanced Sedimentology Basin Analysis	GLGY 561	Facies Analyses & Sequence Stratigraphy
		OR GEOG 511	Fluvial Geomorphology & Field Methods
		OR GLGY 655	Evolution of Sedimentary Basins
		OR GLGY 765	Evaporites
		OR GLGY 761	Clastic Sedimentology
		OR GLGY 763	Carbonate Sedimentology

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2000-GLGY-21 EAS 436	Advanced Igneous and/or Metamorphic Petrology Petrogenesis of Igneous and Metamorphic Rocks	GLGY 633	Advanced Iqueous & Metamorphic Petrology
		OR	
		GLGY 737	Seminar in Metamorphic Petrology
		OR	
		GLGY 637	Introduction to Analytical Techniques in Petrology
		OR	
		GLGY 733	Analytical Methods in Petrology
2000-GLGY-22 EAS 420	Advanced Geochemistry Geochemistry II	GLGY 503	Aqueous Geochemistry
		OR	
		GLGY 745	Advanced Topics in Geochemical Thermodynamics
		OR	
		GLGY 679	Petroleum & Environmental Organic Geochemistry
		OR	
		GLGY 729	Sedimentary Geochemistry
		OR	
		GLGY 603	Advanced Aqueous Geochemistry
2000-GLGY-23 CIV E 381 OR MIN E 323	Principles of Geotechnics Introduction to Soil Mechanics Rock Mechanics	GLGY 571	Engineering Geology
2000-GLGY-24 PALEO 318 PALEO 319 OR PALEO 414	Advanced Paleontology Paleontology Biology of the Lower Vertebrates Paleontology Biology of the Higher Vertebrates Paleontology	GLGY 691 OR GLGY 695 OR GLGY 793 OR GLGY 795	Micropaleontology Palynology Topics in Paleontology Stratigraphic Palynology
2000-GLGY-25 EAS 421 OR EAS 541	Advanced Structural Geology Advanced Structural Geology Selected Topics in Structural Geology & Tectonics	GLGY 541 OR GLGY 641 OR GLGY 741	Advanced Structural Geology Advanced Structural Methods Problems in Structural Geology

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2000-GLGY-26 Geostatistics
STAT 151 Introduction to Applied
Statistics I

OR
STAT 222 Applied Statistics
OR
STAT 252 Introduction to Applied
Statistics II

2000-GLGY-27 Advanced Hydrogeology
EAS 425 Contaminant Hydrology
OR
EAS 431 Regional & Petroleum
Hydrogeology

2000-GLGY-28 Reservoir Geology
No Course Equivalent

2000-GLGY-29 Advanced Ore Deposits
EAS 434 Geochemistry of Ore Deposits

2000-GLGY-30 Photogeology and Remote Sensing
EAS 324 Analysis of Aerial Photographs
and Satellite Imagery
OR
EAS 325 Digital Mapping & Terrain
Modelling
OR
EAS 451 Digital Remote Sensing

2000-GLGY-31 Precambrian Geology
EAS 432 Precambrian Geology
OR
EAS 437 Geology of Canada

GLGY 597 Numerical Models and
Geostatistics

OR
STAT 211 **or** STAT 213 **or** STAT 217 **or** STAT 357
(see Gfund-12)

GLGY 505 Contaminant Hydrogeology

OR
GLGY 605 Topics in Subsurface Flow and
Transport

OR
GLGY 601 Advanced Physical Hydrogeology

GLGY 677 Advanced Topics in Oil & Gas
Production

GLGY 627 Ore Deposits

GEOG 333 Mapping & Remote Sensing

OR
GEOG 433 Remote Sensing of the
Environment

GLGY 655 Evolution of Sedimentary Basins

Revised September 2000