GEOLOGY MAJOR

Minimum credits for degree: 120 (version: SEPTEMBER 2018)

FAMILY NAME: _____ GIVEN NAME: _____
STUDENT NUMBER: _____ E-MAIL_____
TELEPHONE: _____ DATE PREPARED: _____

PLEASE NOTE: This is a **GUIDELINE ONLY**. You are responsible for checking that you meet all requirements explained in detail in the UBC CALENDAR and with the SCIENCE INFORMATION CENTRE for the most up-to-date regulations!!

For EGBC requirements to become a **PROFESSIONAL REGISTERED GEOLOGIST**, refer to ***https://www.egbc.ca/*** for additional required course content.

To Register for Geology Major (3193) in second year, you will need 2 out of the courses shaded in the table below or their equivalents.

NOTE: Refer to the UBC Faculty of Science "Credit Exclusion lists" in the calendar before completing.

TO REGISTER IN GEOLOGY MAJOR

Requires an application to the Faculty of Science normally prior to registration in the summer following yr1 or, for transfer students, before you first register for courses. Early contact with an EOAS advisor to discuss intended specialization is recommended. **NOTE: YOU must meet all graduation requirements within 180 credits. Those who do not will be required to withdraw from the FoS.**

I) FIRST-YEAR REQUIREMENTS: 2 of 3 shaded required to register for Geology Major in 2nd yr

COURSES	CREDIT	COURSES TAKEN	Total
Communication Requirement*1 100 LEVEL (Communication: 6cr of Communication Requirement required by end of 3rd year)	3		/ 3
PHYS*2 117 (or 101 or 107)	3		/ 3
PHYS*2 118 (or 108 or 102)	3		/ 3
CHEM*3 121 or 111 (Structural Chemistry)	4		/ 4
CHEM 123 or 113 (Organic Chemistry)	4		/ 4
MATH 100 / 102 / 104 or equivalents (Differential Calculus)	3		/ 3
MATH 101 / 103 / 105 or equivalents (Integral Calculus)	3		/ 3
EOSC 110 *4 (Solid Earth: physical geology)	3		/ 3
EOSC 116 *4 (Mesozoic Earth: historical geology)	3		/ 3
EOSC 111 *4 (1st year combined earth, ocean, atm. labs)	1		/ 1
TOTAL CREDITS			**/ 30**

NOTE: You must have two lab-based courses in your first year courses.

***1** ENGL 112 is recommended. A total of 6 credits of coursework are required to meet the Communication Requirement. **All 6cr must be completed by the end of year 3.** For full list of acceptable courses, see Communication Requirement in the UBC calendar. NOTE: Communication courses CANNOT be used towards the 12 Credit Arts Requirement.

***2** Students without credit for Physics 12 must take PHYS 100 prior to any other 100-level PHYS courses. PHYS 100 will count as an elective. Qualified students are encouraged to add PHYS 119 or 109 by decreasing electives in other years by 1 credit. Students may delay taking 3 credits of PHYS 100-level to second year.
***3** Students without Biology 11 or 12 must ALSO take 3 credits of 100-level BIOL.
***4** A total of 3 credits may be deferred until second year. The requirement for these courses may be waived if a student has completed upper-level courses in each of the solid and fluid earth sciences.
NOTE: in addition to the two MATH courses your degree must include an ADDITIONAL 3cr in computational science (MATH / STAT / CPSC / EOSC 211). Can be 100-level if approved as computational credit by FoS.
NOTE: only 3 credits of lower-level requirements may be carried beyond the first 60 credits; MATH 100 (and equivalents) may not be deferred.

PROMOTION BEYOND FIRST YEAR

See the calendar for information on FoS promotion requirements:
http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,1467

In addition you need to consider the following Geology Major specific requirements:

- To register in Geology Major: must have completed 2 out of (or the equivalents of) MATH 101 (or equivalent), 1 of CHEM 121/111, and 1 of PHYS 101/107.

- To be promoted to year 3: 60% (10.8cr) of the 18 credits of named second year credits in the Calendar are required for promotion. Of these, 9 credits must come from EOSC 220, 221, 222, or 223.

- Check that you meet promotion requirements by contacting the FoS Science Information Centre.

- NOTE: YOU must meet all graduation requirements within 180 credits. Those who do not will be required to withdraw from the Faculty of Science.

II) 200-LEVEL EOSC GEOLOGY COURSES: 18 CREDITS

NOTE: 6 credits may be delayed to 3rd year if 300+ courses used (see advisor).
NOTE: EOAS requires 3 out of the 4 shaded courses below for promotion to 3rd year; FOS requires a total of 10.8cr (60%) of all of the following 200-level courses for promotion to 3rd year.

COURSE NUMBER	COURSE NAME
1. EOSC 211*5 **or** GEOB 270	Computer Methods*5 or GIS (circle one)
2. EOSC 212	Topics in the Earth and Planetary Sciences
3. EOSC 220	Introductory Mineralogy
4. EOSC 221	Introductory Petrology
5. EOSC 222	Geological Time & Stratigraphy
6. EOSC 223	Field Techniques
TOTAL	**/ 18**

***5Note: if EOSC 211 not taken, you will need an addition 3 credits of either MATH / STAT / CPSC).**

III) 300+ LEVEL EOSC GEOLOGY COURSES: 33 CREDITS

COURSE NUMBER	COURSE NAME
1. **ALL** of EOSC 320, 321, and 322	Sedimentology / Igneous / Metamorphic
2. **ONE** of EOSC 333 **or** 350*6	Geochemistry / Geophysics (circle one)
3. EOSC 323	Structural Geology

4. EOSC 328	Field Geology
5. EOSC 329	Groundwater Hydrology
6. EOSC 330	Principles of Geomorphology
7. EOSC 332	Tectonic Evolution of North America
8. EOSC (geology) 400+	EOSC 420-425 and EOSC 428-432
9. EOSC (geology) 400+	EOSC 420-425 and EOSC 428-432
TOTAL NUMBER OF CREDITS:	**/ 33**

[*6] may take EOSC 250, but 350 recommended – this slot must still be filled with EOSC 300+

IV). OTHER ELECTIVES:

REMEMBER you still require a total of 48 300+ cr to graduate – see over.

A. ADDITIONAL COMMUNICATION REQUIREMENT
NOTE: All communication requirements (6cr) must be completed by the end of Year 3.

COURSE NUMBER	COURSE NAME and NUMBER
1 Communication: Credit*[1] 1XX	
TOTAL CREDIT	**/ 3 (total of 6 required)**

B. 12 CREDITS ARTS (Communication credits cannot be used for this requirement)

COURSE NUMBER	COURSE NAME and NUMBER
1 ANY 100+	
2 ANY 100+	
3 ANY 100+	
4 ANY 100+	
TOTAL CREDIT	**/ 12**

C. 3 ADDITIONAL EOSC / ATSC / ENVR (NB: make sure courses are for credit in EOAS)

COURSE NUMBER	COURSE NAME and NUMBER
ANY 300+	
TOTAL CREDIT	**/ 3**

D. FoS MAJORS BREADTH REQUIREMENT: 9 CREDITS in additional Arts and/or Science, **CANNOT INCLUDE** EOSC/ENVR/GEOB (may include a mix of Arts / Science, BUT CANNOT BE IN ANOTHER FACULTY). CANNOT include the additional 3 credits of computational science required if EOSC 211 is not taken. See Science Information Centre for more information.

COURSE NUMBER	COURSE NAME and NUMBER
1 ANY 100+ (arts / science only – see restrictions)	
2 ANY 100+ (arts / science only – see restrictions)	
3 ANY 100+ (arts / science only – see restrictions)	

TOTAL CREDIT	/ 9

E. 12 ADDITIONAL CREDITS – MAY BE IN ANY FACULTY
NOTE: Although these can be at 100 level, you STILL need 48 x 300+ credits total

COURSE NUMBER	CREDITS	
	FACULTY OF SCIENCE / ARTS	ANY OTHER FACULTY
1. ANY 100+ *		
2. ANY 100+		
3. ANY 100+		
4. ANY 100+		
SUB TOTALS		
GRAND TOTAL	**/ 12**	

*NOTE: If EOSC 211 not taken, the course in this space must fulfill the FoS Computational Science requirement. See Calendar for details of acceptable courses.

IMPORTANT: FoS REQUIREMENTS

YOU MUST ALSO MEET THE FOLLOWING **F**ACULTY **o**f **S**CIENCE REQUIREMENTS:

NOTE: YOU must meet ALL graduation requirements WITHIN 180 credits.
Those who do not will be required to withdraw from the Faculty of Science.

CREDITS	YOUR COUNT	FoS REQUIREMENTS
TOTAL		**120**
TOTAL 300+ (any subject)		**48* (see note below)**
TOTAL 300+ SCIENCE		**30**
TOTAL SCIENCE		**72**
TOTAL ARTS		**12**
TOTAL COMMUNICATION		**6**
TOTAL COMPUTATIONAL (not in breadth)		**9**
MIN BREADTH (see IV/D)		**9**
MAX NOT IN ARTS / SCIENCE		**18****

**** If this is your 2nd degree, NONE of the 300+ courses from your 1st degree count towards this 48cr***
NOTE: it is at the discretion of the FOS how many (if any) credits will transfer: contact the Science Information Centre for more information if you are in this situation: advising@science.ubc.ca
***** You are not required to have any courses out of Arts or Science, but you may take up to 18cr if you do***

OTHER IMPORTANT NOTES

DIRECTED STUDIES (EOSC 448): topics must be approved by an EOAS department advisor. We would **prefer** a maximum of 6 credits in your geology major taken as 2 x 3 credit courses – please consult your specialization advisors. Note that Directed Studies cannot be used to satisfy the 2 x 400-level Geology courses required (these must be EOSC 420-425 and EOSC 428-432).

EOSC 449 THESIS: Some majors students may take a thesis, **HOWEVER,** strict conditions apply – please see EOAS web site for more information: http://www.eos.ubc.ca/courses/eosc449/eosc449.htm

GRADUATE CLASSES: You may take a maximum of 6 credits of graduate courses (500 level). Permission must be sought from the Faculty of Science AND the Faculty of Graduate Studies (contact the Science Information Centre for info.)

ENGINEERS & GEOSCIENTISTS BC ELECTIVES: You do not have to complete EGBC electives to graduate. However, if considering a career in geology you are advised to choose electives that maximize your compliance with EGBC course requirements. See: **https://www.egbc.ca/. PLEASE NOTE:** although we can discuss registration with EGBC, UBC cannot provide any official advice or decisions regarding registration and compliance. Any uncertainties should be directed to EGBC and are the responsibility of each individual student.

ADVISORS

Please make an appointment to confirm availability. For an emergency, contact the EOAS undergraduate coordinator: Alicia Warkentin: ESB 2020, 604-827-5284, awarkent@eoas.ubc.ca

PLEASE USE E-MAIL to set up appointments or ask general questions. Place 'advising' in the subject field **AND INCLUDE YOUR FULL NAME AND STUDENT NUMBER** on all communications**.**

Geology Major: Dr. James Scoates: jscoates@eoas.ubc.ca: EOS-South 352

Geological Sciences Honours: Dr. Ken Hickey: khickey@eoas.ubc.ca: ESB 5119