MOOCs3 (Massive Open Online Course 3) Report of 2019
by Assoc. Professor Yoji Kobayashi (Instructor-paced)

Course Name: Introduction to Geochemistry
Course Start Date: Jan. 30, 2020 9:00 UTC
Course End Date: Mar. 19, 2020 23:30 UTC

Total Enrollment: 618
Completed Enrollment: 11
Verified Enrollment: 13 (fee'd)
Verified Completed Enrollment: 11
(Due to change of the edX policy only the fee'd enrolled can respond to the subjects. Hence the number of the Verified Completed Enrollment has decreased)

Enrollment from 90 Countries/Regions in Total
---Top10 Countries---

USA	163
India	41
UK	40
Canada	37
Japan	36
Brazil	32
Indonesia	32
Columbia	19
France	18
Australia	17

Age Group

< 25	31.0 %
25-40	48.7 %
41 <	20.3 %

Syllabus
Week 1: The Formation and Distribution of Elements in Space
Nucleosynthesis I
Nucleosynthesis II
The elements today: chondrites

Week 2: Mineralogy: Just a "Rock" ?
Silicate minerals
Igneous rocks
Metamorphic rocks

Week 3: Distribution of elements on Earth: Igneous processes
What's a trace element ?
Magma and melting
Melting and crystallization

Week 4: Where the fun begins: Radiogenic isotope geochemistry
Dating methods

Tracing methods

Week 5: Stable Isotope Chemistry I (Basics)
Equilibrium fractionation processes, geothermometry
Kinetic fractionation processes, precipitation
Biological processes

Week 6: Stable Isotopes II (Paleoclimatology)
Milankovitch cycles
Paleoclimatology and CO_2 levels

Week 7: Geochemistry and Our Future
Helium as a resource
Terraforming and CO_2