

Geoscience teachers' meeting

January 13, 2021, 14:00-15:30

Agenda at a glance

- 1. *"The king is dead, long live the king"***
- 2. *By-gones & upcoming issues***
- 3. *Current covid-situation***
- 4. *What is the FIN-GEO network?***
- 5. *Practical issues of the upcoming WebOodi → SISU -transition***
- 6. *Q&A***

BSc Programme in Geoscience (GeoKandi)
MSc Programme in Geology and Geophysics (GEO²)

Agenda

1. "The king is dead, long live the king"

Management and leadership of the geo-programmes in 2021-2024

2. By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

3. Current covid-situation

4. What is the FIN-GEO network?

A new project to boost the national collaboration in geoscience education

5. Practical issues of the upcoming WebOodi → SISU -transition

Training officer Emmy Pusula will tell us a bit about the new SISU-system and the effects of the transition in early March

6. Q&A

1. *"The king is dead, long live the king"*
Management and leadership of the geo-
programmes in 2021-2024



The king is dead, long live the king

Management and leadership of the geo-programmes in 2021-2024



- 2020 was the last year in the first four-year academic administration term (2017-2020) in the new degree programmes.
- The application rounds for degree programme directors and boards for the 2021-2024 term were conducted in Nov-Dec 2020.
- The dean appointed new directors in late November and new boards in December.
- In this transition, a consolidation of administrative tasks and duties was performed in the GeoKandi and GEO² programmes.

The king is dead, long live the king

Management and leadership of the geo-programmes in 2021-2024



What has changed:

- Both programmes now have the same director
- Some changes were made in the composition and internal delegation of tasks within the boards
- New student representatives (two-year term)
- The programmes will have joint administration (i.e., meetings and meeting documentation), communications, and resource planning (separate budgets still)
- Since November 2020, the degree programmes have representation in both the **Department management group** (*johtoryhmä*) and **Department council** (*osastoneuvosto*)



Geoscience degree programme boards in the 2021-2024 admin term

BSc Programme in Geosciences

Director: University lecturer Aku Heinonen
Secretary: Training officer Emmy Pusula

Board members:

Professor Mikael Fortelius
University lecturer Emilia Koivisto
University researcher Mia Kotilainen
University lecturer Seija Kultti (v.director)
Professor Heikki Seppä
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Student members:

Max Pettinen/Alfredo Nittolo
Meri Wiberg/Kristiina Salonen

MSc Programme in Geology and Geophysics

Director: University lecturer Aku Heinonen
Secretary: Training officer Emmy Pusula

Board members:

University lecturer Anu Kaakinen
University lecturer Emilia Koivisto
University researcher Mia Kotilainen
University lecturer Seija Kultti
Assistant professor Miikka Tallavaara
Professor David Whipp (v.director)

Student members:

Jonna Köhler/Liisa Maunu
Piritta Stark/Aliisa Laakkonen

Overlap in composition



2. By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

GeoKandi in numbers (January 7, 2021). Total number of students = 187

Year	Students				Started	Graduated	Transferred	Credits					Thesis
	Total	Male	Female	Finnish		Graduated overall	to	≥ 30	≥ 60	≥ 90	≥ 120	≥ 150	Bachelor
2020-2021 ↑	82	40 (48%)	42 (51%)	82 (100%)	36	0	45	3	1	0	0	0	0
2019-2020 ↑	30	12 (40%)	18 (60%)	29 (96%)	25	2	5	25	14	2	0	0	2
2018-2019 ↑	41	21 (51%)	20 (48%)	40 (97%)	30	7	11	34	31	23	15	2	8
2017-2018 ↑	34	17 (50%)	17 (50%)	34 (100%)	29	5	3	29	26	26	22	14	11
Total ↑	187	90 (48%)	97 (51%)	185 (98%)	120	14	64	91	72	51	37	16	21

Year	Credits	Bachelors Thesis	Graduated	Credits for studyprogramme majors	Credits for non major students
2021	80.00	0	0	80.00	0.00
2020	2118.00	11	9	1748.00	370.00
2019	2579.00	10	5	2156.00	423.00
2018	2692.00	1	0	2079.00	613.00
2017	676.00	0	0	377.00	299.00

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

GeoKandi in the spring 2020

- **Start of the year was regular.** Period 1 teaching was conducted normally but week two of period 2 covid changed the game and all teaching shifted to remote mode.
- **Change in leadership** (Kirsti Korkka-Niemi → Aku Heinonen) in mid-March at the onset of the epidemic in Finland. Was originally planned to take place at the beginning of April.
- **Field courses were postponed** to the autumn from May but basically everything else was taught with exceptional measures on schedule.

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

2020 entrance examination and student intake

- Entrance examination was **redesigned on-the-go to be taken remotely**. The two-stage exam consisted of a remote independently done material-based phase (56 participants, ca. 200 applicants in total), from which 18 best candidates advanced to the video examination phase. Eight of the 18 were ultimately chosen.
 - In addition, **selection based on matriculation exam** was increased to 26 (regularly 16/30).
- **The largest ever intake of new students**, 34 + 2 through the open university channel. Four additional slots due to the MinEdu Covid-19 campaign, regular intake is 30 (32 still in 2021 & 2022).
- Open university slots (5 on each course of the basic studies now for the second year) have been fully booked. Entrance to the programme is now possible through open university studies.

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

GeoKandi in the autumn 2020

- The autumn semester started with the expectation of **”return to normal”** but the third period courses and most of the fourth period were still taught with limited contact teaching.
- **One course from each year was planned to include contact teaching.** Geological materials, Petrography exercises, and BSc Thesis Seminar (cancelled due to additional restrictions).
- **End-of-the year lockdown** halted some of the contact teaching -based courses entirely.

Field courses postponed from the spring were held with some exceptional measures. Bedrock mapping course was organized in eastern Helsinki.



By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

Other developments in GeoKandi

- Experiences from the previous years and latest at the start of the 2019-2020 academic year showed that **the structure of the degree is too heavy for the amount of teaching staff**. This was also one of the major issues discussed in last year's teachers' meeting.
- Negotiations with the Faculty led to the requirement to map out what can be done to remediate the situation and **plan a "way out"**.
- **Three additional teachers** were allowed to be hired for the year 2020-2021 to help in the teaching arrangements while the planning takes place.

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

A two-stage plan was drafted:

- 1) In 2020:** Map out the **teaching-based measures** that can be taken to change the course of the programme for the remaining two years of the three-year degree span (2021-2022, 2022-2023). Create a plan on how to execute this.
No structural changes!
- 2) In 2021-2023:** Plan a **completely new degree structure** to match the existing teaching resources for years 2023-2026 and beyond.

Mapping of the first stage was conducted in two parts: two-stage teacher interviews and a student feedback based on the starting year (2017, 2018, 2019).

Based on this mapping, **an action plan was drafted** to change the teaching and scale the contents on some courses. The plan was approved by the vice-dean of teaching in late December and it will form the basis of the planning of teaching for the next two academic years.

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

The second stage for the years 2023-2026

- **The planning for the degree structure changes** will commence in the spring of 2021.
- **Goals:**
 1. **"Blank slate"**: Create a completely new curriculum that answers the needs of the modern worklife of geoscience professionals
 2. **Simplify** the degree structure and create more flexibility from the student perspective
 3. **Match the teaching load with the available resources**
- Preparations will start by conducting a **"Study of needs" -survey** in which feedback will be collected from employers, alumni, and experts. The objective is to create a complete picture of the essential expertise required in the worklife.
- From this "big picture" **core geoscientific competencies** will be extracted and these competencies will then feed the planning of individual courses and modules in the structure.

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

Other developments in GeoKandi

- The additional 4 slots in the intake last year were **rewarded by MinEdu** with 6000 €/year/extra slot for five years:
→ 24 000 €/year 2021, 2022, and 2023 for the GeoKandi and 2024 and 2025 for the GEO².

= a grand total of 120 000 € extra funding for the next five years of geoscience education.

- In November GeoKandi was also successful in the **internal funding call** for MOOC and continuous learning development.
→ **11 000 € for the development of "Geological processes MOOC"**.
- The study rights in the old degree programmes ended as the programmes were terminated at the end of the year. **45 students were transferred to the GeoKandi from the old Geology degree programme.**

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

GEO² in numbers (January 7, 2021). Total number of students = 98

Year	Students				Started	Graduated	Transferred	Credits				
	Total	Male	Female	Finnish		Graduated overall	to	≥ 30	≥ 60	≥ 90	≥ 120	≥ 150
2020-2021 ↑	20	10 (50%)	10 (50%)	18 (90%)	13	0	16	2	1	0	0	0
2019-2020 ↑	31	17 (54%)	14 (45%)	28 (90%)	24	3	16	28	15	3	0	0
2018-2019 ↑	25	9 (36%)	16 (64%)	20 (80%)	15	6	20	24	21	12	6	0
2017-2018 ↑	22	7 (31%)	15 (68%)	18 (81%)	15	13	16	20	20	18	11	2
Total ↑	98	43 (43%)	55 (56%)	84 (85%)	67	22	68	74	57	33	17	2

Year	Credits	Graduated	Credits for studyprogramme majors	Credits for non major students
2020	2300.00	13	1797.00	503.00
2019	2766.00	8	2214.00	552.00
2018	2643.00	1	1868.00	775.00
2017	670.00	0	406.00	264.00

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

GEO² in 2020

- **The covid situation** ran its course in a manner similar to the BSc Programme. More individual courses, more organization, but smaller student volumes. Some field courses had to be postponed or cancelled altogether.
- **Winter call** had 65 applicants out of which 23 proceeded to academic evaluation. Ten were approved and two new students started in August 2020.
- Thesis production had a strong positive peak at the end of the year partly due to the degree programme termination.

Programme	Study Track	2020 (total)	2019 (total)	2018 (total)	2017 (total)
Geo ² :	Petrology and Economic Geology	15	7	9	11
Geo ² :	Palaeontology and Global Change	1	2	1	2
Geo ² :	Hydrogeology and Environmental Geology	14	7	10	5
Geo ² :	Solid Earth Geophysics	7	3	1	
	TOTAL	37	19	21	18

“Last chance to graduate”

2017-2020: 95 in total (23.75/yr)

Petrology and Economic Geology:	42
Hydrogeology and Environmental Geology:	36
Solid Earth Geophysics:	11
Palaeontology and Global Change:	6

By-gones & upcoming issues

A brief look at the past (2020) and starting (2021) years in the geo-programmes

Other developments in GEO²

- The same **degree structure planning** will commence in GEO² as in GeoKandi. The "Study of needs" -survey and other planning will be conducted as joint projects.
- **HowULearn 3** (study questionnaire for the first year MSc students) will be implemented for the first time this year.
- Study counseling in the programme will be enhanced by opening of a new **Moodle-platform**.

Especially important GEO² issues

MSc thesis agreement. Must be completed for each thesis project that starts in the GEO²! A signed copy of the agreement needs to be distributed to

1. the student,
2. supervisor,
3. degree programme director,
4. and study office.

Personal study plan. Each MSc student will need a study plan, SISU will not work without it. No plan, no registration for courses.

Two-stage degree system. BSc thesis needs to be completed before enrolment on MSc level courses. Teachers are responsible for screening the prerequisites for their courses.

- Technically, the requirement is a BSc degree, but in order to keep some amount of flexibility between the BSc → MSc transition, the thesis should be kept as a minimum requirement.

3. *Current covid-situation*

Current covid-situation

- **Current lockdown** measures in teaching are in place until January 31st. **No contact teaching.**
- From February onwards, two possible scenarios:
 1. **Restrictions lifted** (similar to recovery stage 2 last year at the start of the autumn semester). Remote teaching still recommended but programmes can allow for some contact teaching on courses that require it.
 2. **Restrictions continue** (current situation). Remote teaching as a norm, any contact teaching needs to be approved by the Faculty level covid taskforce.
- National restrictions guide university policies and at the moment scenario #2 seems more likely due to the "mutated virus situation".

Current covid-situation

→ **Period 3** teachers who have planned for contact teaching have been asked to draft plans for safety measures so that separate permissions can be applied for at the end of January from the Faculty.

No guarantees can be given on getting the permits, so remote options should be considered as well.

Cancellation of courses is the ultimate final option after all others have been exhausted!

→ **Period 4** course teachers need to also mentally prepare for complete ban of contact teaching.

4. What is the FIN-GEO network?

A new project to boost the national collaboration in geoscience education

What is the FIN-GEO network?

A new project to boost the national collaboration in geoscience education

- **FIN-GEO** is a network that was formed in early 2020 in order to discuss the geoscience-related research and education profiles of five Finnish universities: Universities of Helsinki, Turku, and Oulu, Åbo Akademi, and Aalto University.
- **In October 2020** the FIN-GEO education network applied for Ministry of Education funding in order to set up the network collaboration in the coming three-year time period (2021-2023).
- **In December 2020** MinEdu granted 494 700 € to fund the project, which will launch in early 2021. The UH geo-programme boards will coordinate the project and act as advisory members representing the UH geosciences community. Ca. 50 % of the funding will be distributed to the network partners to realize local projects.
- A UH-based **FIN-GEO coordinator** will soon be hired for a three-year period to run and coordinate the project activities.
- **Project and participation to the steering group activities are open to anyone interested in developing any aspect of national education collaboration.**

5. Practical issues of the upcoming WebOodi → SISU –transition

WebOodi will be discontinued at the end of February 2021 and SISU will take over all of its functions

SISU – coming this spring

- Students enroll for the IV period courses in Weboodi at the latest 28.2.
- Weboodi is in reading mode only 1.3.–14.3.
 - You are able to get the enrolment lists for the IV period courses from Weboodi
 - No registrations to student register during this period
- 15.3. SISU age starts

Home > My teaching >

My teaching

Implementations

READY

⌵ ⌚ Ongoing teaching (0)

➤ 📅 Upcoming teaching

➤ ✓ Past teaching

No ongoing teaching

After 15 March, the following will be done in Sisu:

- planning and timing of studies, supervision and tutoring related to study planning
- registration to courses
- transfer of credits based on prior learning
- assessment of studies
- registration of study modules
- application for degree diploma
- application for the extension of study right

Implementation information | Enrolled students | **Evaluation** | Completed credits | Messages

Participants

🌿 = Confirmed and approved attainment
↑ = Can be re-assessed

EVALUATION SETTINGS

Evaluation | Grade distribution | Evaluation data | Verification

Select student

NAME ↓ | STUDENT NUMBER ↓ | GRADE ↓ | ATTAINMENT STATUS ↓

- The III period courses are graded in SISU or in Moodle's assesment book.
 - You can upload an Excel of the students from Sisu, fill it, and import it back to Sisu. The students will receive the grades the next day.
- Kumpula campus Sisu info hour 4.2.
 - Follow your e-mail for invitations for Sisu introductions
- More information from:
 - Instructions for Teachers: <https://teaching.helsinki.fi/instructions/article/sisu-teachers>
 - E-mail: sisu-info@helsinki.fi

6. Q&A and other info

UH geoscience education blog & newsletter

BLOG @: <https://blogs.helsinki.fi/geoscience-edu/>

Monthly newsletter of the blog updates will be sent to the geology-teachers@helsinki.fi -list.

Short news and events related to the geo-degree programmes.

Intended for newsy updates for teacher and external stakeholder communication. Also for the needs of the FIN-GEO project.

If you have some geo education related items, ideas, or thoughts you wish to publish through this channel, contact Aku (aku.heinonen@helsinki.fi).