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Geoethics syllabus: a proposal to teach in higher education

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Abstract

To respect the Earth system is an ethical responsibility as much as a necessity. Geoethics can contribute to build a more knowledgeable and responsible society. Geoethics is an emerging field of knowledge, considering that less than a decade has passed since its formal definition and publication of a significant number of books, chapters and articles (Wyss and Peppoloni, 2014; Gundersen, 2017; Peppoloni et al., 2017; Bohle et al., 2019).

An in-depth preparation and training in Geoethics will help young and early career geoscientists to find acceptable and responsible solutions in their geoscience activity and to understand the importance of accurately informing society about negative and positive repercussions of any possible intervention on the environment (Bobrowsky et al., 2017). . The integration of Geoethics values, methods and applications as an integral part of the educational training will allow to get geoscientists more aware of their social role and capability to intervene on the Earth system in a more responsible way, to respect life on the planet in all its forms, and to better serve society, looking at its safety and health (Bobrowsky et al., 2017). Within this theoretical framework, the members of GOAL Erasmus Project elaborated a syllabus to be used in a Geoethics Curricular Unit in higher education. The syllabus can be applied in all courses in the wide area of Earth System Sciences or whenever the knowledge about Geoethics values is required. The syllabus (and complementary educational resources added) was developed to be used in any country and mainly in a curricular unit of Geoethics within a higher education course (GOAL, 2019). However, each module can be partially added and explored within other curricular units where the geoethical approach may be relevant. This syllabus aim is to narrowly contribute to improve the capacity of all geoscientists to think and act (geo)ethically so that future generations can be proactive citizens, by promoting a geoethical understanding and thinking of our planet, and playing an important role in creating conditions for a sustainable human life on Earth.

References

- Bohle, M. (Ed.), Peppoloni, S., Di Capua, G., Bilham, N., Marone, E., Preiser, R. (2019). In M. Bohle (ed.) Exploring Geoethics, Ethical Implications, Societal Contexts, and Professional Obligations of the Geosciences (25-70). Switzerland: Palgrave Pivot. ISBN 978-3-030-12009-2.
- GOAL, 2019. Geoethics' Syllabus. Available at <https://tinyurl.com/rc8ggvx>
- Peppoloni, S., Di Capua, G., Bobrowsky, P., Cronin, V. (Eds.) (2017). Geoethics at the heart of all geoscience. *Annals of Geophysics*, 60, Fast Track 7, doi: 10.4401/ag-7473
- Wyss, M., and Peppoloni, S. (Eds.) (2014). *Geoethics, Ethical Challenges and Case Studies in Earth Sciences*. p. 450. Amsterdam: Elsevier. ISBN 978-0127999357.

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