

## SYLLABUS

### 1. Information about the programme

|                                     |                                               |
|-------------------------------------|-----------------------------------------------|
| 1.1 Higher education institution    | <b>Babeş-Bolyai University of Cluj-Napoca</b> |
| 1.2 Faculty                         | <b>Environmental Science and Engineering</b>  |
| 1.3 Department                      | <b>Environmental Analysis and Assessment</b>  |
| 1.4 Field of study                  | <b>Environmental Engineering</b>              |
| 1.5 Study cycle                     | <b>Bachelor</b>                               |
| 1.6 Study programme / Qualification | <b>Environmental Engineering</b>              |

### 2. Information on the discipline

|                            |                                     |              |          |                         |          |                        |           |
|----------------------------|-------------------------------------|--------------|----------|-------------------------|----------|------------------------|-----------|
| 2.1 Name of the discipline | <b>Fieldwork B-EE</b>               |              |          |                         |          |                        |           |
| 2.2 Course coordinator     | Assistant Prof., PhD Manciuła Dorin |              |          |                         |          |                        |           |
| 2.3 Seminar coordinator    | Assistant Prof., PhD Manciuła Dorin |              |          |                         |          |                        |           |
| 2.4. Year of study         | <b>III</b>                          | 2.5 Semester | <b>6</b> | 2.6. Type of evaluation | <b>C</b> | 2.7 Type of discipline | Mandatory |

### 3. Total estimated time (hours/semester of didactic activities)

|                                                                                  |    |                      |   |                        |       |
|----------------------------------------------------------------------------------|----|----------------------|---|------------------------|-------|
| 3.1 Hours per fieldwork stage                                                    | 90 | Of which: 3.2 course | - | 3.3 seminar/laboratory | -     |
| 3.4 Total hours in the curriculum                                                | 90 | Of which: 3.5 course | - | 3.6 seminar/laboratory | -     |
| Time allotment:                                                                  |    |                      |   |                        | hours |
| Learning using manual, course support, bibliography, course notes                |    |                      |   |                        | -     |
| Other documentation (in libraries, on electronic platforms, field documentation) |    |                      |   |                        | -     |
| Preparation for seminars/labs, homework, papers, portfolios and essays           |    |                      |   |                        | -     |
| Tutorship                                                                        |    |                      |   |                        | -     |
| Evaluations                                                                      |    |                      |   |                        | -     |
| Other activities: practical field activities                                     |    |                      |   |                        | -     |
| 3.7 Total individual study hours                                                 | -  |                      |   |                        |       |
| 3.8 Total hours per semester                                                     | 90 |                      |   |                        |       |
| 3.9 Number of ECTS credits                                                       | 4  |                      |   |                        |       |

### 4. Prerequisites (if necessary)

|                   |                                                                                                                                                                                                                                                                                                             |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.1. curriculum   | The knowledge acquired through in-depth study of the content taught in the curriculum disciplines facilitates the understanding and accessibility of the proposed topics. Students will strengthen their operational conceptual foundation by activating and utilizing their pre-existing information base. |
| 4.2. competencies | The continuous application of acquired knowledge ensures a gradual transition between chapters, closely related to the topics of studied subjects.                                                                                                                                                          |

### 5. Conditions (if necessary)

|                                      |                |
|--------------------------------------|----------------|
| 5.1. for the course                  | Not applicable |
| 5.2. for the seminar /lab activities | Not applicable |

## 6. Specific competencies acquired

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Professional competencies | <ul style="list-style-type: none"> <li>• Understanding the basic theoretical and methodological aspects of contemporary geographic knowledge of the environment;</li> <li>• Integrated knowledge of geological and geographic processes and phenomena and their manifestation in the environment; understanding and using environmental thematic maps;</li> <li>• Analysis of geographic components in the context of regional planning; addressing the geographic terminology used in environmental studies;</li> <li>• Territorial assessment and geographic spatial analysis;</li> <li>• Analysis and interpretation of territorial relationships;</li> <li>• Understanding environmental issues in the field;</li> <li>• Knowledge of types of geographic environments.</li> </ul> |
| Transversal competencies  | <ul style="list-style-type: none"> <li>• Integrated understanding of environmental issues and deepening the methods, principles, and operational paradigms in environmental studies;</li> <li>• Development of skills for interpreting and analyzing environmental issues;</li> <li>• Encouragement of critical thinking and teamwork;</li> <li>• Development of abilities necessary for multidisciplinary cooperation, communication, and building partnership relationships based on the application of acquired knowledge and the development of transdisciplinary scientific reasoning.</li> </ul>                                                                                                                                                                                 |

## 7. Objectives of the discipline (outcome of the acquired competencies)

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1 General objective of the discipline  | <ul style="list-style-type: none"> <li>- Knowledge of the general characteristics of environmental components;</li> <li>- Development of the ability to interpret field investigations;</li> <li>- Knowledge of documentation locations and types, as well as sources;</li> <li>- Acquiring the knowledge necessary to obtain useful information for preparing and drafting an environmental project;</li> <li>- Knowledge of global, regional, and local environmental issues in a geological and geographic context.</li> </ul>                                                                                                                |
| 7.2 Specific objective of the discipline | <ul style="list-style-type: none"> <li>- Development of fieldwork skills to assess the impact of natural and anthropogenic factors on the environment;</li> <li>- Understanding specific aspects of terrestrial dynamics through visualization, and the geological phenomena that generate significant impacts on the environment;</li> <li>- Acquiring principles related to the conservation and protection of species and habitats;</li> <li>- Understanding how different types of energy (nuclear and hydroenergy) are used;</li> <li>- Acquiring concepts and environmental concerns of major industrial objectives in Romania.</li> </ul> |

## 8. Content

| 8.1 Practical activities                                                                                                                                                                      | Teaching methods                              | Remarks                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------|
| Observation, evaluation, and field research activities in the selected study area.                                                                                                            | Field analysis. Group practical applications. | Locations<br>Economic operators/Institutions/NGOs |
| Bibliography:<br>1. Practical application guide developed for students of the Faculty of Science and Environmental Engineering in the field of Environmental Engineering – electronic format. |                                               |                                                   |

## 9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

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|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• The content of the discipline is in accordance with the curriculum of the mentioned specialization;</li> </ul> |
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- From the analysis of opinions expressed by employers regarding the preferred attributes of the specialists' training, a high level of appreciation for their professionalism was observed;
- The structure and content of the discipline provide accurate, comprehensive, and effective information in environmental knowledge.

## 10. Evaluation

| Type of activity | 10.1 Evaluation criteria                                                                                                                                                               | 10.2 Evaluation methods          | 10.3 Share in the grade (%) |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------|
| 10.4 Fieldwork   | Daily attendance at all activities conducted<br>The method of completing the information and the spirit of synthesis found in the field notebooks<br>Response to the final colloquium. | Ongoing assessment<br>Colloquium | 40%<br>60%                  |

### 10.6 Minimum performance standards

Operating with acquired terms and concepts;  
Knowledge of environmental protection activities;  
Understanding the components, processes, and environmental phenomena encountered in the analyzed areas/locations.

Date

Signature of course coordinator

Signature of seminar coordinator

December 2, 2024




Date of approval

Signature of the head of department

December 4, 2024