


# The importance of communication as a discipline in the bachelor's degree education of forestry in Romania and its legal limitations

Attila FARKAS, Gábor MOLNÁR

Sapientia Hungarian University of Transylvania,  
Faculty of Technical and Human Sciences, Tîrgu-Mureş

# Contents

- The Romanian higher education system
  - The 1st cycle (Bachelor's Degree Programme)
  - Romanian Universities with Forestry in educational offer
  - Quality Assurance in Higher Education
  - The importance of certain disciplines in the bachelor's degree education of forestry in Romania – Questionnaire survey
  - Conclusions
- 




# The Romanian higher education system

- 93 accredited higher education institutions (HEIs):
  - 53 public (state);
  - 34 private accredited HEIs, and
  - 6 private provisionally authorized HEIs.

A HEI authorized to operate on a temporary basis becomes part of the national HE system only after accreditation.

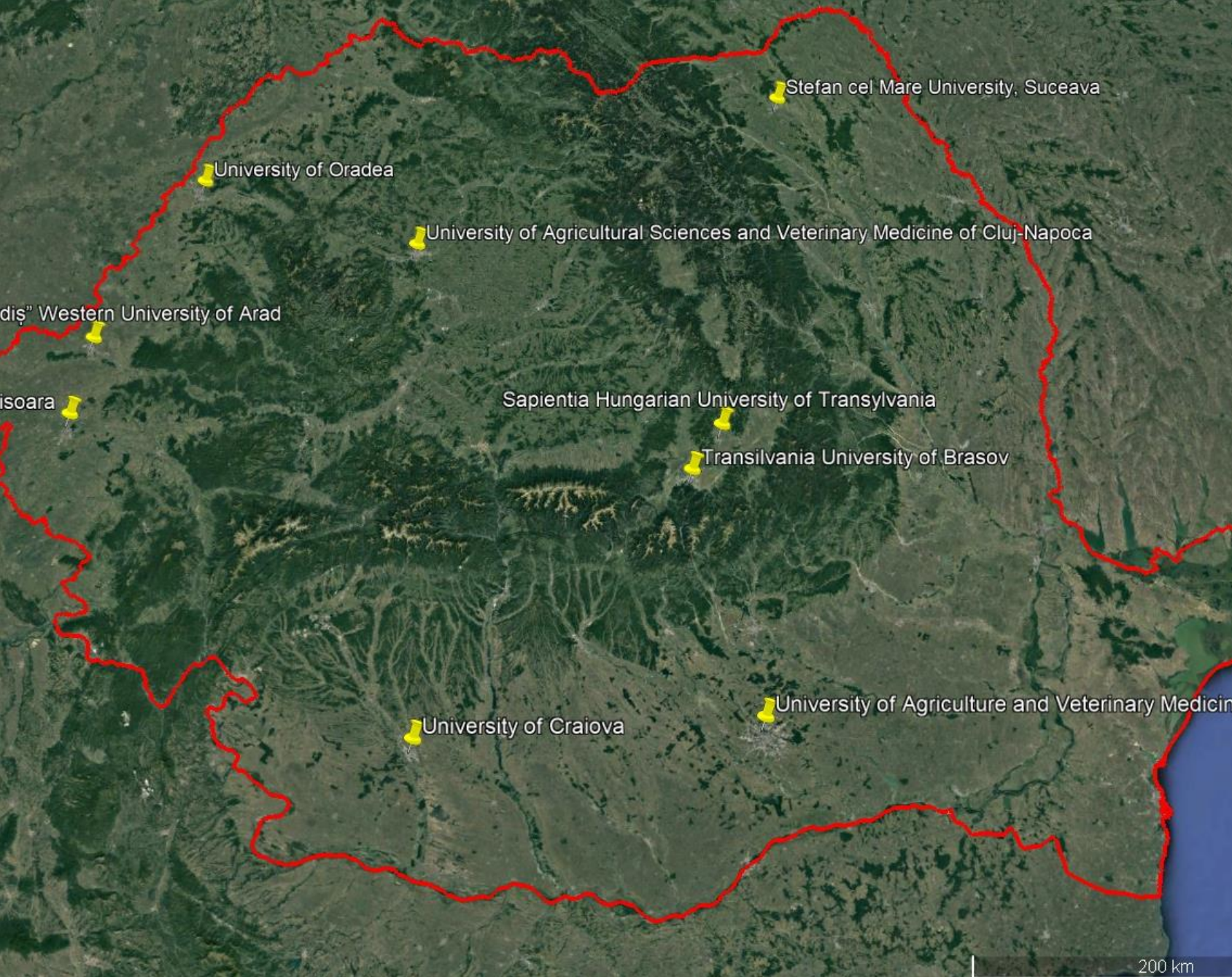
A provisionally authorized HEI has no right to organize graduation exams.



# The 1st cycle (Bachelor's Degree Programme)

---

- Legal framework: The Law no. 288/2004, regulates the organization of the university studies on three cycles, namely Bachelor's Degree Programmes, Master's Degree Programmes, and Doctoral studies.
- The 1st cycle (Bachelor's Degree Programme) includes a minimum of 180 and a maximum of 240 ECTS and is finalised with the level 6 of European Qualifications Framework;
- In Forestry, one year of Bachelor's Degree Programme corresponds to 60 ECTS, while a Bachelor's Degree Programme 4 years to complete in Engineering.



## 9 Universities with Forestry in educational offer

- Transilvania University of Braşov
- Stefan cel Mare University of Suceava
- Western University "Vasile Goldiș" from Arad
- Banat University Of Agricultural Sciences And Veterinary Medicine Timisoara
- University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca
- University of Agriculture and Veterinary Medicine, Bucharest
- University of Oradea
- University of Craiova
- Sapientia Hungarian University of Transylvania

# Quality Assurance

- Romanian Agency for Quality Assurance in Higher Education (ARACIS)
- Standards of the quality assurance authority In Higher Education for BSc level forestry study programme:

Current number	Criteria (out of 21)	Level
1	Duration of studies	4 years = 8 semesters
2	Duration of a semester on teaching activity	14 weeks
3	Number of teaching hours per week	24 – 28 hours
4	Number of hours of organised activity provided for in the curriculum for the whole cycle of undergraduate studies	2988 - 3436 hours
5	Total number of compulsory credits	240 ECTS
6	Number of compulsory credits per semester	30 ECTS
7	Number of subjects (compulsory + optional) per semester	5 – 8
8	Equivalence in hours of an ECTS credit	25 hours

# ARACIS standards regarding disciplines in the curricula (formative categories and optionality)

## Formative categories (61 disciplines)

Type of discipline	Code	Standard (Sapientia)	Legal Offer
Fundamental Disciplines	DF	min 17% (21.0%)	12
Disciplines in the Field of Study	DD	min 35% (42.8%)	18
Speciality Discipline	DS	min 25% (25.2%)	28
Complementary Discipline	DC	max 8% (3.5%)	3
University Choice	OU	max 15% (7.4%)	

## Optionality

Type of discipline	Code	Standard (Sapientia)
Compulsory imposed disciplines	DI	max 93% (88.2%)
Compulsory optional disciplines	DO	min 7% (11.8%)
Freely chosen or optional disciplines	DF	
Total		100% + DF

Higher education institution	U.T. Braşov	U.S.M. Suceava	U.S.A.M.V. Cluj-Napoca
<b>Number of disciplines with identical or equivalent title</b>	<b>59</b>	<b>53</b>	<b>57</b>
<b>Degree of overlap among compared Forestry study programmes with that offered by Sapientia University (%)</b>	<b>90,77</b>	<b>81,54</b>	<b>87,69</b>

Degree of similarity of the Forestry bachelor's degree study program of Sapientia University (65) with similar study programs of other universities in Romania





# The importance of certain disciplines in the bachelor's degree education of forestry in Romania – Questionnaire survey - Methods

- Google Forms – March 2023;
- Multiple choice – 61 disciplines from ARACIS standard + 7 of Sapientia University's choice
- Questions: In your opinion, how necessary is the teaching of the discipline "X" (e.g. Mathematics) in the bachelor's degree training of forestry engineers?
- Possible responses:
  - No need to provide training. 0 hours per week required (0 hours);
  - It should be made compulsory (optional). A subject with a similar content should be taken in any case. At least 3 or 4 hours per week should be devoted to it (3.5 hours \* 14 weeks);
  - It is a very important discipline. It should be compulsory (imposed) with at least 4 or 5 physical lessons per week (4.5 hours \* 14 weeks);
  - It's such an important subject that it should be compulsory, with a high number of physical hours per week (minimum 5) and split into two semesters (5 hours \* 2 \* 14 weeks).
- Interpretation of results:
  - Firm position – simple or absolute majority (50%<);
  - Divided position – some kind of necessity, cumulated above 75%.

# The importance of certain disciplines in the bachelor's degree education of forestry in Romania – Questionnaire survey - Results

- Firm positions: (with 10 weeks = 300 hours duration of practice = 2946 hours of organised activity vs. 2988 - 3436 hours in ARACIS standard –  $39/8=4.87$ )
- 3 out of 17 Fundamental disciplines should be made compulsory (optional) with average 3.5 physical lessons per week: Mathematics, Experimental technique, Biochemistry (Average 63.33%; Min 60.00%; Max 66.70%);
- 3 out of 17 Fundamental disciplines should be made compulsory (imposed) with average 4.5 physical lessons per week: Biostatistics, Meteorology and climatology, Ecology and environmental protection (Average 55.53%; Min 53.30%; Max 60.00%);
- 3 out of 18 Disciplines of the field should be made compulsory (optional) with average 3.5 physical lessons per week: Forestry constructions, Forestry economy, Photogrammetry (Average 61.10%; Min 53.30%; Max 66.70%);
- 2 out of 18 Disciplines of the field should be made compulsory (imposed) with average 4.5 physical lessons per week: Machines and equipments, Forest sites (Average 56.65%; Min 53.30%; Max 60.00%);
- 6 out of 18 Disciplines of the field should be made compulsory with minimum 5 physical hours per week and split into two semesters: Forest management planning, Dendrology, Dendrometry, Wood harvesting, Afforestations, Silviculture (Average 74.43%; Min 60.00%; Max 90.00%);
- 15 out of 28 Specialty disciplines should be made compulsory (optional) with average 3.5 physical lessons per week: Green space landscaping, Chinology, Preservation of game trophies, Intensive farming of salmonids, Intensive game farming (enclosures), Game ethology, Management of game species and salmonids, Microbiology and micropropagation, Animal nutrition, Ornithology, Wildlife pathology, Fish farming, Work science and ergonomics, Wildlife assessment techniques, Forest transportation, (Average 61.55%; Min 53.30%; Max 76.70%)
- 3 out of 28 Specialty disciplines should be made compulsory (imposed) with average 4.5 physical lessons per week: Forest works mechanisation, Wood processing, Study of wood, (Average 54.43%; Min 53.30%; Max 56.70%)
- From the Complementary disciplines Foreign language (namely English) should be compulsory at least in the first 4 semesters;
- 2 out of 7 University choice disciplines should be made compulsory (optional) with average 3.5 physical lessons per week: Research in forestry, Forestry monitoring (Average 71.70%; Min 66.70%; Max 76.70%);
- 1 out of 7 University choice disciplines should be made compulsory (imposed) with average 4.5 physical lessons per week : Biodiversity conservation and protected areas (53.30%).

The importance  
of certain  
disciplines in  
the bachelor's  
degree  
education of  
forestry in  
Romania –  
Questionnaire  
survey - Results

---

Divided positions: (with 10 weeks = 300 hours duration of practice = 4833 hours of organised activity vs. 2988 - 3436 hours in ARACIS standard –  $58/8=7,25$ )

---

14 out of 17 Fundamental disciplines are considered to be important in some extent by more than 75% of respondents (Average 93.33%; Min 76.70%; Max 100.00%);

---

18 out of 18 Disciplines of the field are important in some extent by more than 75% of respondents (Average 96.86%; Min 86.70%; Max 100.00%);

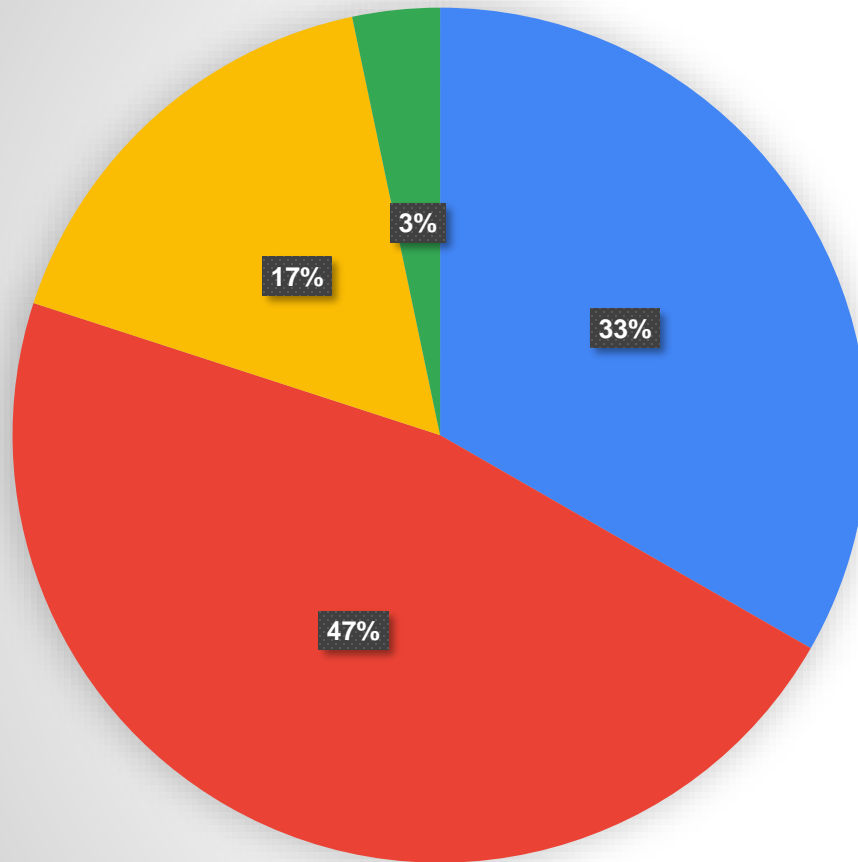
---

18 out of 28 Specialty disciplines are important in some extent by more than 75% of respondents (Average 88,90%; Min 76.70%; Max 100.00%);

---

6 out of 7 University choice disciplines are important in some extent by more than 75% of respondents (Average 87,78%; Min 76.70%; Max 100.00%).

# The importance of „Communication and public relations” (Complementary discipline)



■ No need to provide training

■ It should be made compulsory (optional)


■ It should be compulsory (imposed)

■ Should be made compulsory with minimum 5 physical hours per week and split into two semesters



# Conclusions

- Although the number of participants in our questionnaire survey was small (30) all of them could be considered as competent (university lecturers, forestry engineers, forestry students);
- There is a tendency not to specialize, but rather to teach a wide range of disciplines to forestry students;
- The importance of communication is not neglected in BSc level higher forestry education, but it is almost impossible to include a specific subject on communication in the educational offer, in addition to the many important technical disciplines;
- We recommend that, for as many disciplines as possible, lecturers incorporate lessons that specifically address the communication of the discipline to the general public.



Thank you for  
your attention!