

Higher education forestry programs implemented at the Faculty of Forestry, Warsaw University of Life Sciences

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ARTICLE

Abstract

The assumptions and the curriculum of education at the Faculty of Forestry in Warsaw University of Life Sciences (WULS-SGGW) have been presented previously. Two-stage studies introduced in the year 2003/2004, due to a period of learning and student involvement, differ from those conducted in forest departments in Europe. On all types of studies at the Faculty of Forestry one can clearly notice the domination of subjects related to wildlife within the scope of forestry professional subjects. The same four subjects, on all kinds of studies, were most often chosen as the ones in which students performed theses. The most important shortcomings of the curriculum shall be: a short period of learning a foreign language, a relatively-small number of hours of field classes and a short period of study in second degree level. The positive aspect is a large group of subjects related to - Life sciences.

Key words: exercises, hours, subjects, level of study, lectures

Streszczenie

Celem opracowania było przedstawienie generalnych założeń i treści programów studiów na Wydziale Leśnym Szkoły Głównej Gospodarstwa Wiejskiego (SGGW) w Warszawie. Stacjonarne Studia dwustopniowe (SS1 i SS2) zostały wprowadzone w roku 2003/2004. Pierwsi absolwenci Studiów Stacjonarnych I Stopnia byli w roku 2007, a Studiów II Stopnia w roku 2008. W okresie poprzedzającym istniało kilka rodzajów studiów i dwie specjalności. Stacjonarne Studia I Stopnia trwają 7 semestrów, a Niestacjonarne I Stopnia 8 semestrów. Na obu zaangażowanie studentów jest ocenione na 210 punktów ECTS (ang.: European Credit Transfer System). Stacjonarne Studia II Stopnia trwają 3 semestry, a Niestacjonarne II Stopnia 4 semestry (90 punktów ECTS). W stosunku do uczelni w Europie Zachodniej, okres nauki jest inny (dłuższy na studiach I stopnia, krótszy na studiach II stopnia). Na studiach II stopnia przedmioty kontynuowane stanowiły ok. 70% czasu zajęć. Na wszystkich rodzajach studiów, wśród przedmiotów zawodowych dominowały te o charakterze przyrodniczym. Cztery przedmioty: hodowla lasu, ochrona lasu, zoologia i łowiectwo oraz użytkowanie lasu, na wszystkich rodzajach studiów, były najczęściej wybierane jako te, w ramach których studenci wykonywali prace dyplomowe. Według subiektywnych ocen, jako mankamenty programu studiów wskazuje się: za mało zajęć nauki języka obcego, za mało ćwiczeń terenowych (zwłaszcza na studiach II stopnia), zbyt krótki okres nauki (zwłaszcza na studiach II stopnia). Jako pozytywną cechę wskazuje się duży udział przedmiotów o charakterze przyrodniczym.

Introduction

The Faculty of Forestry is one of thirteen faculties existing at the Warsaw University of Life Sciences (WULS-SGGW). Till the beginning of the 1990s, students at the Faculty were trained in 5-

year full-time programs (according to the currently used terms: uniform master programs) and part-time vocational courses (engineer and part-time master courses). In the period of 1990-2008 there functioned such studies as full-time study, evening engineering study specialization 'Nature and Landscape Protection' that converted into an extramural vocational specialty studies in 2002. There were also part-time vocational specialization of 'Multifunctional Forestry', supplementary master studies and complementary master studies with the specialization of 'Nature and Landscape Conservation'. After closing the 'Nature and Landscape Protection' specialization (master studies in 2009, engineer in 2011) 'Multifunctional Forestry' one was not distinguished any more. Currently there are two types of full time studies and two part-time studies.

Basic information about the University and the Faculty of Forestry

Faculty of Forestry is one of the two oldest faculties of WULS-SGGW. Its current relationship with the university dates back to 1919. The Faculty, however, is considered as the successor of institutes and universities of 19th and 20th centuries, which are considered predecessors of the WULS-SGGW. The history of the Faculty of Forestry can be summarized as follows (Grzywacz 2008):

- 1816 establishment of a Specific School of Forestry at the University of Warsaw (first classes in 1818),
- 1816 establishment of the Agronomic Institute in Marymont (first action in 1820, forestry was part of the lectures),
- 1831 closure of a Specific School of Forestry (a consequence of the November Uprising),
- 1831-1833 break in the activities of the Agronomic Institute in Marymont,
- 1840 transformation of Agronomic Institute in Marymont into the Institute of Agriculture and Forestry in Marymont and creation of the Forest Department,
- 1857 closing down of the Forest Department, Institute of Agriculture and Forestry (1861 liquidation of the Institute),
- 1862 establishment of the Polytechnic Institute of Agriculture and Forestry in Nowa Alexandria (nowadays Pulawy) with two departments including the Forestry (1869 start-up, transformation into the Institute of Agriculture and Forestry),
- 1915 evacuation of Institute to Kharkov,
- 1916 establishment of the Higher Courses of Forestry at Scientific Courses Society in Warsaw (activity terminated in 1920),
- 1918 establishment of the Faculty of Forestry at the Royal-Polish Warsaw University of Life Sciences,
- 1919 nationalization of Royal-Polish Warsaw University of Life Sciences and changing name to Warsaw University of Life Sciences (WULS-SGGW); Faculty of Forestry is one of the first two established there,
- continuous activity since 1919 (including underground education during World War II).

Currently, the Faculty of Forestry of the Warsaw University of Life Sciences includes four chairs and three stand-alone departments:

- Chair of Forest Silviculture,
- Chair of Forest Protection and Ecology,
- Chair of Forest Management, Geomatics and Forest Economics,
- Chair of Forest Utilization,
- Department of Forest Botany
- Department of Dendrometry and Forest Productivity,
- Department of Forest Zoology and Game Management.

The organizational structure is quite stable. However, during the past 10 years, following changes were introduced:

- 2009 separation of the Department of Forest Zoology and Game Management from the Chair of Forest Protection and Ecology,
 - 2009 conversion of the Chair of Forest Botany into Department of Forest Botany.
- There are 86 academics and full-time teaching employees (as of 1 November 2011) at the Faculty of Forestry, including:

- 14 with the academic title of professor,
- 16 with the academic degree of habilitated doctor,
- 55 with the academic degree of doctor,
- 1 with the professional title of master.

Additional 21 people of technical staff and 5 administrative workers are employed.

Currently, the Faculty of Forestry in Warsaw University of Life Sciences trains specialists during the following types of study:

- 3.5-year full-time engineer (1st level) SS1,
- 4-year part-time engineer (1st level) NS1,
- 1.5-year full-time master (2nd level) SS2,
- 2-year part-time master (2nd level) NS2,

In total over 1,700 students learn on all types of studies.

Apart from 1st and 2nd level studies, PhD studies are also conducted at the Faculty:

- 4-year full-time PhD study (3rd level) SSD,
- 4-year part-time PhD study (3rd level) NSD.

Full time studies (SS1 and SS2) were introduced in 2003/2004 (the last uniform master programs were held in the academic years of 2002/2003-2006/2007). The first graduates of full time studies of 1st level came in 2007 and of full time study of 2nd level - in 2008.

Methodological assumptions

This study used the data contained on the website. For information about WULS-SGGW <http://www.sggw.pl/> and for information about the Faculty of Forestry: <http://wl.sggw.pl/> were used. In addition, information source in the form of protocols of diploma examinations, located in the Faculty Dean's office. Information about the history of the Faculty of Forestry and previous colleges and faculties were taken from the book edited by Grzywacz (2008).

Results

Full-time study of 1st level lasts 7 semesters. The total number of hours is 2447, including 895 hours of lectures, 1240 hours of tutorials and 312 hours of field classes. In addition 150 hours are allocated for diploma practice and 180 hours for professional practice. The number of implemented courses is 51. The involvement of students is evaluated at 210 ECTS (European Credit Transfer System).

Part-time study of 1st level lasts 8 semesters. The total number of hours is 1480, which represents 60% of the number of hours at SS1 study. The overall time of the course is divided into 595 hours of lectures, 674 hours of tutorials and 211 hours of field classes. 52 subjects are implemented (the difference compared to SS1 is caused by forest management being divided into two parts). The involvement of students is also evaluated at 210 ECTS.

Full-time study of 2nd level lasts 3 semesters, while learning time in the first semester is shorter (10 weeks). The total number of hours is 940, including 455 hours of lectures, 455 hours of tutorials and 30 hours of field classes. In general study time the student has 30 hours of practice reserved for the thesis. 19 subjects are implemented and the involvement of students is evaluated at 90 ECTS.

Part-time study of 2nd level lasts 4 semesters. The total number of hours is 580, which represents 62% of the number of hours at SS2. The overall time of the course is divided into 290 hours of

lectures, 260 hours of tutorials and 30 hours of field classes. In general study time student has 60 hours of practice for thesis. 18 subjects are implemented. The involvement of students is also evaluated at 90 ECTS.

1st level part-time and full-time studies do not differ much from each other as the choice of classes is very similar. The only difference is that NS1 lacks physical education class while there is an integrated field practice class on SS1. 2nd level part-time and full-time studies are very similar with the only exception that NS2 lacks foreign language class. The difference is that the division of time for each semester of classes is more uniform for part-time study (it concerns 1st and 2nd level).

According to the contractual (but sometimes difficult to classify) division of general and vocational subjects with the dominance of technical and natural aspect, the number of hours (not including seminars, specializations, electives) on various types of studies in all cases was more favourable for the latter ones, and varied in the range of 2.6:1 (NS2) to 3,1:1 (SS2) (Table 1).

A large part of vocational subjects (sometimes with different names on different levels) from 1st level study are continued at the 2nd level. Excluding the seminars, electives and complex practices, those relations are as follows:

- Full-time studies: 145 hours of new courses (30%), 345 hours of continued courses (70%),
- Part-time studies: 105 hours of new courses (31%), 235 hours of continued courses (69%).

Based on data from the years 2006-2011 it was found that four subjects (ie. silviculture, forest protection, zoology and hunting and the forest utilization) are most often chosen as the ones in which students performed theses on all kinds of studies (Table 2). This results not only from permanent preferences of students but also partly from the number of potential supervisors of the thesis. *The stability of student interest is the fact that other subjects - though less frequently selected - also enjoyed a similar interest, regardless of the type of study.*

Conclusions

Evaluation of study programs only partly results from numerical data that characterizes the subjects and types of studies. Part of this evaluation is subjective and comes from the opinion of both students and employees - including the discussion and work done in the Didactic Commission. The most important evaluation points are as follows (the evaluation of teaching itself or repetitions of subjects were omitted):

- too little hours of foreign language,
- too little number of field classes (especially in 2nd level - although it was possible to organize those activities in a way suggested by the teacher, as a part of optional courses and specialization),
- too short study period and badly chosen moment of completion of full-time 1st level; too short study period of full-time 2nd level (it would be desirable to add one semester),
- positive evaluation on a large share of vocational subjects (about 75%) with dominant nature aspect.

In relation to universities in Western Europe (for example in Freiburg) involvement of students, evaluated according to ECTS, was greater at the Faculty of Forestry in case of 1st level (210 compared to 180) and smaller at the 2nd level (90 compared to 120). Differences resulted from various study periods for each type of study.

Table 1. Number of hours (and percentage) according to the contractual allocation of the subjects dominated by technical and natural aspects of various types of studies (abbreviations: SS1 - full-time 1st level, NS1 - part-time 1st level, SS2 - full-time 2nd level, NS2 - part-time 2nd level)

Type of study	General subjects	Professional subjects of domination aspect:	
		technical	wildlife
	Number of hours (percentage)		
SS1	450	457 (25,8)	1314 (74,2)
NS1	303	290 (26,8)	792 (73,2)
SS2	60	120 (24,5)	370 (75,5)
NS2		95 (27,9)	245 (72,1)

Table 2. Number (percentage) of individual subjects selected for a thesis in the years 2006-2011 by the type of study (the explanation of abbreviations of study as in Table 1).

Subject	SS1	Type of study		NS2	Total
		NS1	SS2		
		Number (percentage) of theses			
Forest Management	31 (5,6)	22 (4,1)	24 (5,1)	24 (7,0)	101 (5,3)
Geomatics	42 (7,6)	8 (1,5)	29 (6,1)	10 (2,9)	89 (4,7)
Forest Economy	9 (1,6)	33 (6,1)	35 (7,4)	11 (3,2)	88 (4,6)
Forest Utilization	67 (12,1)	97 (18,0)	76 (16,1)	33 (9,6)	273 (14,3)
Forest Protection	83 (15,0)	106 (19,7)	57 (12,1)	97 (28,1)	343 (18,0)
Fithopathology	28 (5,1)	15 (2,8)	17 (3,6)	9 (2,6)	69 (3,6)
Wildlife protection	42 (7,6)	24 (4,5)	41 (8,7)	26 (7,5)	133 (7,0)
Zoology and hunting	87 (15,7)	87 (16,2)	70 (14,8)	55 (15,9)	299 (15,7)
Silviculture	107 (19,3)	105 (19,5)	92 (19,5)	68 (19,7)	372 (19,5)
Botany	18 (3,3)	25 (4,6)	6 (1,3)	7 (2,0)	56 (2,9)
Forest Dendrometry and Productivity	34 (6,1)	9 (1,7)	17 (3,6)	4 (1,2)	64 (3,4)
Outside the Faculty of Forestry	5 (0,9)	7 (1,3)	8 (1,7)	1 (0,3)	21 (1,1)
Total	553	538	472	345	1908

Bibliography

Grzywacz A. (red.), 2008. Od Szkoły Szczególnej Leśnictwa do Wydziału Leśnego Szkoły Głównej Gospodarstwa Wiejskiego. Wydawnictwo SGGW, Warszawa.

<http://www.sggw.pl/>

<http://wl.sggw.pl/>

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